

# Kelton Wells McMahon, Ph.D.

Associate Professor Graduate School of Oceanography University of Rhode Island Narragansett, RI 02882

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# **Education**

2011	Ph.D. (Biological Oceanography) Massachusetts Institute of Technology-Woods Hole
	Oceanographic Institution Joint Program in Oceanography
	Dissertation Title: "Functional connectivity of coral reef fishes in a tropical seascape
	assessed by compound-specific stable isotope analyses." Advisor: Dr. Simon Thorrold
	(Biological Oceanography)

# 2005 B.Sc. (Biology) Bates College, Summa Cum Laude

Honors Thesis Title: "The impact of a changing food supply on Arctic benthos: digestibility of ice algae and phytoplankton" *Advisors: Dr. William Ambrose Jr. (Biology)* and *Dr. Beverly Johnson (Geology)* 

# Professional Appointments

Associate Professor: Graduate School of Oceanography, University of Rhode Island, Narragansett, RI USA
Senior Fellow: Coastal Institute, University of Rhode Island, Narragansett, RI USA
Assistant Professor: Graduate School of Oceanography, University of
Rhode Island, Narragansett, RI USA Assistant Research Faculty: Institute of Marine Science, University of
California, Santa Cruz, Santa Cruz, CA USA Faculty Lecturer: Ocean Sciences Department, University of California,
Santa Cruz, Santa Cruz, CA USA Postdoctoral Scholar: Ocean Sciences Department, University of
California, Santa Cruz, Santa Cruz, CA USA
Supervisors: Dr. Mathew McCarthy and Dr. Thomas Guilderson
<b>Guest Investigator</b> : Biology Department, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
<b>Postdoctoral Fellow</b> : Red Sea Research Center, King Abdullah University of Science and Technology, Thuwal, Kingdom of Saudi Arabia <i>Supervisors: Dr. Michael Berumen (KAUST)</i>

# *Publications* (<sup>#</sup>student author, \*postdoctoral author)

39. McMahon KW (Accepted) Lipid extraction alters amino acid composition and bulk, but not amino acid, carbon and nitrogen isotope values. *Rapid Communications in Mass Spectrometry* 



- 38. <sup>#</sup>Michelson CI, Polito MJ, Wunder MB, Emslie SD, McCarthy MD, Patterson WP, McMahon KW (2023) Holocene climate change shifted Southern Ocean biogeochemical cycling and predator trophic dynamics. *Limnology and Oceanography*. 68:2642-2653.
- 37. <sup>#</sup>Stahl A, Rynearson T, McMahon KW. (2023) Amino acid carbon isotope fingerprints are unique among eukaryotic microalgal taxonomic groups. *Limnology and Oceanography* 68:1331-1345
- 36. \*Ramirez MD, Avens L, Meylan AB, Shaver DJ, #Stahl AR, Meylan PA, Clark JM, Howell LN, Stacy BA, Teas WG, McMahon KW (2023) Dietary plasticity linked to divergent growth trajectories in a critically endangered sea turtle. *Frontiers in Ecology and Evolution* 11:1050582
- 35. Robinson RS, Smart SM, \*Cybulski JD, McMahon KW, <sup>#</sup>Marcks B, <sup>#</sup>Nowakowski C (2023) Insights from fossil-bound nitrogen isotopes in diatoms, foraminifera, and corals. *Annual Review of Marine Science* 15:407–30
- 34. <sup>#</sup>Glynn, D. S., McMahon, K. W., Sherwood, O. A., Guilderson, T. P., & McCarthy, M. D. (2022). Investigating preservation of stable isotope ratios in subfossil deep-sea proteinaceous coral skeletons as paleo-recorders of biogeochemical information over multimillennial timescales. *Geochimica et Cosmochimica Acta* 338:264-277.
- 33. <sup>#</sup>Kristan AK, Maiti K, McMahon KW, Dance MA, Polito MJ (2022) Biological and geochemical proxies in sediment cores reveal shifts in marine predator population dynamics relative to historic anthropogenic exploitation and recent climate change at South Georgia Island. *Polar Biology* 45:1379-1389
- 32. \*Ramirez M, <sup>#</sup>Besser A, Newsome SD, McMahon KW (2021) Meta-analysis of primary producer amino acid δ<sup>15</sup>N values and their influence on trophic position estimation. *Methods in Ecology and Evolution* 12:1750-1767 (Cover of Issue 10)
- 31. McMahon KW, Ambrose Jr. WG, Reynolds MJ, Johnson BJ, Whiting A, Clough LM (2021) Arctic lagoon and nearshore food webs: Relative contributions of terrestrial organic matter, phytoplankton, and phytobenthos vary with consumer foraging dynamics. *Estuarine, Coastal and Shelf Science* 257:107388.
- 30. McMahon KW, <sup>#</sup>Michelson CI, Hart T, McCarthy MD, Patterson WP, Polito MJ (2019) Divergent trophic responses of sympatric penguin species to historic anthropogenic exploitation and recent climate change. *Proceedings of the National Academy of Sciences* 116:25721-25727 (Cover of Issue 51)
- 29. <sup>#</sup>MacDonald C, Bridge TC, **McMahon KW**, Jones GP (2019) Alternative dietary strategies and altered carbon pathways facilitate broad depth ranges in coral-obligate reef fishes. *Functional Ecology* **33**:1962-1972.
- 28. <sup>#</sup>Glynn DS, McMahon KW, Guilderson TP, McCarthy MD (2019) Major shifts in nutrient and phytoplankton dynamics in the North Pacific Subtropical Gyre over the last 5000 years revealed by high-resolution proteinaceous deep-sea coral δ<sup>15</sup>N and δ<sup>13</sup>C records. *Earth and Planetary Science Letters* 515:145-153
- 27. <sup>#</sup>Brault EK, Koch PL, Costa DP, McCarthy MD, Huckstadt LA, Goetz K, McMahon KW, Goeble ME, Karlsson O, Teilmann J, Harkonen T, Harding K (2019) Trophic position and foraging ecology of Ross, Weddell, and Crabeater seals revealed by compound-specific isotope analysis. *Marine Ecology Progress Series* 611: 1-18 (Feature article)



- 26. Hobson KA, Wassenaar L, Bowen G, Courtiol A, Trueman CN, Voight C, West J, McMahon KW, Newsome S (2019). Outlook for using stable isotopes in animal migration studies. In: *Tracking Animal Migration with Stable Isotopes 2<sup>nd</sup> Edition* (eds. Hobson KA, Wassenaar L) Elsevier, Burlington MA
- 25. McMahon KW, Newsome S (2019). Amino acid isotope analysis: The next frontier in studies of animal migration and foraging ecology. In: *Tracking Animal Migration with Stable Isotopes 2<sup>nd</sup> Edition* (eds. Hobson KA, Wassenaar L) Elsevier, Burlington MA
- 24. Williams B, McMahon KW, "Barnes S, "Parks D, "Kim E, "Srebotnjak T, Etnoyer P (2019) Impact of skeletal heterogeneity and treatment method on interpretation of environmental variability from proteinaceous skeletons of deep-sea gorgonian octocorals. *Chemical Geology* 526:101-109
- 23. Whiteman JP, Kim SL, **McMahon KW**, Koch PL, Newsome SD (2018) Amino acid isotope discrimination factors for a carnivore: physiological insights from leopard sharks and their diet. *Oecologia* **188**:977–989
- 22. <sup>#</sup>Brault EK, Koch PL, **McMahon KW**, <sup>#</sup>Broach K, <sup>#</sup>Rosenfield AP, <sup>#</sup>Sauthoff W, Arrigo KR, Loeb V, Smith W (2018) Carbon and nitrogen isoscapes in Western Antarctica reflect oceanographic transitions. *Marine Ecology Progress Series* **593**:29-45.
- 21. **McMahon KW**, Williams B, Guilderson TP, <sup>#</sup>Glynn DS, McCarthy MD (2018) Calibrating amino acid  $\delta^{13}$ C and  $\delta^{15}$ N offsets between polyp and protein skeleton to develop proteinaceous deep-sea corals as paleoceanographic archives. *Geochimica et Cosmochimica Acta* **220**: 261-275
- 20. Ohkouchi N, Chikaraishi Y, Close HG, Fry B, Larsen T, Madigan DJ, McCarthy MD, McMahon KW, Nagata T, Naito YI, Ogawa NO, Popp BN, Steffan S, Takano Y, Tayasu I, Wyatt ASJ, Yamaguchi YT, Yokoyama Y (2017) Advances in the application of amino acid nitrogen isotopic analysis in ecological and biogeochemical studies. Organic Geochemistry 113:150-174 (authors in alphabetical order after first)
- McMahon KW, McCarthy MD (2016) Embracing variability in amino acid δ<sup>15</sup>N fractionation: Mechanisms, implications, and applications for trophic ecology. *Ecosphere* 7:e01511 (Special issue on Biomarkers in Trophic Ecology)
- McMahon KW, Thorrold SR, Houghton LA, Berumen ML (2016) Tracing carbon flow through coral reef food webs using a compound-specific carbon isotope approach. *Oecologia* 180:809-821 (Cover of Issue 3)
- McMahon KW, Guilderson TP, Sherwood OA, Larsen T, McCarthy MD (2015) Millennialscale plankton regime shifts in the subtropical North Pacific Ocean. Science 350:1530-1533
- McMahon KW, Elsdon T, Thorrold SR, McCarthy M (2015). Trophic discrimination of nitrogen stable isotopes in amino acids varies with diet quality in a marine fish. *Limnology and Oceanography* 60:1076-1087
- 15. McMahon KW, Polito M, Abel S, McCarthy MD, Thorrold SR (2015) Carbon and nitrogen isotope fractionation of amino acids in an avian marine predator, the gentoo penguin (*Pygoscelis papua*). Ecology and Evolution 5:1278-1290
- 14. <sup>#</sup>Schiff JT, Batista F, Sherwood OA, Guilderson TP, Hill TM, Ravelo AC, <sup>†</sup>McMahon KW, McCarthy MD (2014) Compound specific amino acid δ<sup>13</sup>C patterns in a deep-sea proteinaceous coral: implications for reconstructing detailed δ<sup>13</sup>C records of exported primary production. *Marine Chemistry* 166:82-91



- 13. <sup>†</sup>**McMahon KW**, <sup>#</sup>Hamady L, Thorrold SR (2013) Ocean ecogeochemistry A review. *Oceanography and Marine Biology: An Annual Review* **51**:327-374
- 12. **\*McMahon KW**, **#**Hamady L, Thorrold SR (2013) A review of ecogeochemistry approaches to estimating movements of marine animals. *Limnology and Oceanography* **58**:697-714
- 11. <sup>†</sup>McMahon KW, Berumen ML, Thorrold SR (2012) Linking habitat mosaics and connectivity in a coral reef seascape. *Proceedings of the National Academy of Science* **109**:15372-15376
- 10. #McMahon KW, Berumen ML, Mateo I, Elsdon TS, Thorrold SR (2011) Carbon isotopes in otolith amino acids identify residency of juvenile snapper (Family: Lutjanidae) in coastal nurseries. Coral Reefs 30:1135-1145 (2011 Best Paper Award finalist)
- 9. #McMahon KW, Fogel ML, Johnson BJ, Houghton LA, Thorrold SR (2011) A new method to reconstruct fish diet and movement patterns from δ<sup>13</sup>C values in otolith amino acids. *Canadian Journal of Fisheries and Aquatic Sciences* 68:1330-1340
- 8. #McMahon KW, Fogel ML, Elsdon T, Thorrold SR (2010) Carbon isotope fractionation of amino acids in fish muscle reflects biosynthesis and isotopic routing from dietary protein. *Journal of Animal Ecology* 79:1132-1141
- 7. Elsdon T, Ayvazian S, <sup>#</sup>McMahon KW, Thorrold SR (2010) Experimental evaluation of stable isotope fractionation in fish muscle and otoliths. *Marine Ecology Progress Series* 408:195-205
- 6. Graham BS, Koch PL, Newsome SD, <sup>#</sup>McMahon KW, and Aurioles D (2010) Using isoscapes to trace the movements and foraging behavior of top predators in oceanic ecosystems. In *Isoscapes: Understanding Movement, Pattern and Process on Earth Through Isotope Mapping* (eds. West J, Bowen GJ, Dawson TE, Tu KP). pp. 299-318, *Springer*, New York
- Skomal GB, Zeeman SI, Chisholm JH, Summers EL, Walsh HJ, <sup>#</sup>McMahon KW, Thorrold SR. (2009) Mesopelagic trans-equatorial migrations by basking sharks in the western Atlantic Ocean. *Current Biology* 19:1019-1022 (Cover of Issue 12)
- Carroll M, Johnson B, Henkes G, <sup>#</sup>McMahon KW, Voronkov A, Ambrose W, Denisenko S. (2009). Bivalves as indicators of environmental variation and potential anthropogenic impacts in the southern Barents Sea. *Marine Pollution Bulletin* 59:193-206
- Ambrose WG, Carroll ML, Greenacre M, Thorrold SR, <sup>#</sup>McMahon KW. (2006) Variation in bivalve growth in a Norwegian high-Arctic fjord: Evidence for local- and large-scale climatic forcing. *Global Change Biology* 12:1595-1607
- <sup>#</sup>McMahon KW, Ambrose WG, Johnson BJ, Sun M-Y, Lopez GR, Clough LM, Carroll ML (2006) Benthic community response to ice algae and phytoplankton in Ny Ålesund, Svalbard. *Marine Ecology Progress Series* 310:1-14 (Issue's feature article)
- #McMahon KW, Johnson BJ, Ambrose WG. (2005). Diet and movement of the killifish, *Fundulus heteroclitus*, in a Maine salt marsh assessed using gut contents and stable isotope analyses. *Estuaries* 28:966-973

# **Publications In Review** (#student author, \*postdoctoral author)

a. \*Ramirez MD, **McMahon** KW, Rooney N, El-Sabaawi RW, Baum JK (in revision). Robust trophic pathways in carnivorous reef fishes across a major human disturbance gradient. *Proceedings of the Royal Society B* 



- b. <sup>#</sup>Nash ALN, Newsom SD, McMahon KW (in revision). On precision and accuracy: A review of the state of compound-specific isotope analysis of amino acids. *Organic Geochemistry*
- c. <sup>#</sup>Haskell H, Suckling CC, Gomez-Chiarri M, **McMahon KW**, Preziosi B, Davies AJ (in revision). Eastern oyster (*Crassostrea virginica*) shows physiological tolerance to polyester microfibers at environmental concentrations. *Journal of Experimental Marine Biology and Ecology*
- d. <sup>#</sup>Santos N, <sup>#</sup>Langan JA, <sup>#</sup>Mayer C, McMahon KW (in review) Strong diet and trophic niche overlap of Atlantic cod (*Gadus morhua*) and black sea bass (*Centropristis striata*) in warming southern New England waters. *Marine Ecology Progress Series*

# Research Grants and Fellowships

- 2023 The Nature Conservancy (Lead PI, \$11,731)
- 2022 Revive and Restore (Lead PI, \$303,055)
- 2022 URI-GSO Philanthropic Donner Funds (Lead PI, \$120,000)
- 2022 Rhode Island Endeavor Program: Spring 2023 nine-day research cruise (Lead PI, Chief Scientist)
- 2021 Rhode Island Research Alliance: Science and Technology Advisory Council (Lead PI, \$79,948)
- 2021 URI-GSO Philanthropic Donner Funds (Lead PI, \$13,500)
- 2021 National Science Foundation Biological Oceanography (Lead PI, \$739,133)
- 2020 NOAA Climate Variability and Predictability (Co-PI, \$568,182)
- 2020 Fisheries and Oceans Canada (DFO) Atlantic Salmon Research Joint Venture (Co-PI, \$20,968)
- 2020 The Nature Conservancy (Lead PI, \$11,180)
- 2019 Rhode Island Research Alliance: Science and Technology Advisory Council (Co-PI, \$79,891)
- 2019 NSF Major Research Instrumentation (Co-PI, \$390,679)
- 2019 RI SeaGrant (Co-PI, \$292,830)
- 2018 URI Council for Research: Proposal Development Grant (Lead PI, \$13,558)
- 2018 Rhode Island Research Alliance: Science and Technology Advisory Council (Lead PI, \$76,224)
- 2016 Instituto Antarctico Chileno: XXI National Project Competition Antarctic Scientific and Technological Research (Co-PI, \$57,000)
- 2015 Ocean Science and Technology Packard Endowment Research Grant (Co-PI, \$19,817)
- 2015 National Science Foundation: PLR Antarctic Organisms & Ecosystems (Lead PI \$399,273)
- 2012 King Abdullah University of Science and Technology Postdoctoral Fellowship research grant (Lead PI \$25,000)
- 2008 International Society for Reef Studies/Ocean Conservancy Coral Reef Research Fellowship (Lead PI, \$14,546)
- 2008 Ocean Life Institute Student Research Grant (Lead PI, \$2,340)
- 2008 Isoscapes Conference Travel Grant (Lead PI, \$400)
- 2006-9 National Science Foundation Graduate Research Fellowship (Lead PI, \$121,500)
- 2005-6 Ocean Life Fellowship (Lead PI, \$28,446)
- 2005 Howard Hughes Travel Grant (Lead PI, \$500)



- 2004-5 Howard Hughes Summer Fellowship (Lead PI, \$3,000)
- 2004 Bates College Student Research Grant (Lead PI, \$3,000)
- 2004 Howard Hughes Student-Faculty Research Grant (Lead PI, \$12,000)
- 2004 Howard Hughes Travel Grant (Lead PI, \$500)
- 2003 Bates College Student Research Grant (Lead PI, \$3,000)

# Academic Honors and Awards

- 2011 Coral Reefs Volume 30 Best Paper Award finalist
- 2009 Best Student Paper Award at the 4th International Otolith Symposium
- 2009 Sally Richardson Best Student Paper Award at the 33<sup>rd</sup> Annual Larval Fish Conference
- 2005 Summa Cum Laude at Bates College
- 2005 Honors Distinction in Biology at Bates College
- 2005 Phi Beta Kappa Honor Society
- 2001-5 Dean's Honors List at Bates College (8 consecutive semesters)

### Teaching Experience

- 2024 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (18 students)
- 2024 **Instructor**, University of Rhode Island, BES550 Advanced Ecology, BES core course (17 graduate students) Overall teaching evaluation:
- 2024 **Instructor**, University of Rhode Island, OCG106G You Me, and Life in the Sea, (Fall 60 undergraduate students) Overall teaching evaluation:
- 2023 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (17 students)
- 2023 **Instructor**, University of Rhode Island, OCG550 Environmental Isotope Geochemistry, (Spring: 9 graduate students)
- 2022 **Instructor**, University of Rhode Island, BES550 Advanced Ecology, BES core course (17 graduate students) Overall teaching evaluation: 4.6 out of 5 (65% response rate)
- 2022 **Instructor**, University of Rhode Island, OCG106G You Me, and Life in the Sea, (Fall 61 undergraduate students) Overall teaching evaluation: 4.9 out of 5 (86% response rate)
- 2022 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (22 students)
- 2021 **Instructor**, University of Rhode Island, BES550 Advanced Ecology, BES core course (12 graduate students) Overall teaching evaluation: 4.8 out of 5 (50% response rate)
- 2021 **Instructor**, University of Rhode Island, OCG106G You Me, and Life in the Sea, (Spring: 60 undergraduate students, Fall 61 undergraduate students) Overall teaching evaluation for Spring: 4.7 out of 5 (88% response rate), for Fall: 4.8 out of 5 (92% response rate)
- 2021 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course) (17 graduate students)
- 2020 **Instructor**, University of Rhode Island, OCG550 Environmental Isotope Geochemistry, graduate students (10 students) Overall teaching evaluation: 5.0 out of 5 (50% response rate)
- 2019 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (16 students)



- 2019 **Instructor**, University of Rhode Island, OCG106G You Me, and Life in the Sea, introductory undergraduates (Spring: 80 students, Fall: 62 students) Overall teaching evaluation for Spring: 4.4 out of 5 (87% response rate), for Fall: 4.2 out of 5 (97% response rate)
- 2018 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (16 students)
- 2018 **Instructor**, University of Rhode Island, OCG106G You Me, and Life in the Sea, introductory undergraduates (Spring: 75 students, Fall: 128 students) Overall teaching evaluation for Spring: 4.3 out of 5 (86% response rate), Fall Section 1: 4.3 out of 5 (80% response rate), Fall Section 2: 4.6 out of 5 (87% response rate)
- 2017 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (17 students)
- 2017 **Instructor**, UC-Santa Cruz, OCEA-80A: Life in the Sea, introductory undergraduates (122 students) Overall teaching evaluation 4.7 out of 5 (90% response rate)
- 2016 **Instructor**, UC-Santa Cruz, OCEA-80A: Life in the Sea, introductory undergraduates (110 students), Overall teaching evaluation 4.7 out of 5 (93% response rate)
- 2015 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (30 students)
- 2014 **Instructor**, UC-Santa Cruz, OCEA-01: The Oceans, introductory undergraduates (151 students), Overall teaching evaluation 4.6 out of 5 (62% response rate)
- 2014 **Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (30 students)
- 2010 **Teaching Assistant**, MIT/WHOI Joint Program: 7.43: Biological Oceanography, graduate students (15 students)
- 2009 **Instructor**, Woods Hole Oceanographic Institution: Developed and co-taught three week course "Human Impacts on the Marine Environment," advanced undergraduates (5 students)
- 2005 **Co-instructor**, Hillview Head Start Program, Lewiston, ME, developed and taught afterschool activity program for K-12 Head Start Program (35 students)
- 2004-5 **Technical Writing Assistant**, Bates College: Biological Principles, Ecology, Cellular and Molecular Biology, undergraduate students
- 2004-5 Academic Tutor, Bates College: Organic Chemistry I and II, Calculus I and II, Biological Principles, Ecology, undergraduate students
- 2003-5 **Teaching Assistant**, Bates College: Organic Chemistry I and II, Biological Principles, Ecology, undergraduate students

### Academic Advising

### **Postdoctoral Advisor:**

Current: Dr. Jonathan Cybulski; Dr. Connor Love; Dr. Stephane Martinez Former: Dr. Matthew Ramirez; Dr. Kerri Smith

### Ph.D. Advisor:

Current: Benjamin Charo; Audreyana Nash; Joshua Pi; Lauren Romeiro; Lauren Zane Former: Chantel Michelson; Catherine Nowakowski

### M.S. Advisor:

Current: Lindsay Agvent; Alexander Rubin Former: Nina Santos; Angela Stahl



### M.O. Advisor:

Current:

#### Former: Rizkie Utama Thesis committee member or chair:

Current: Sarah Davis, Ph.D. thesis committee member, URI; Kayla Grace Gardner, Ph.D. thesis committee member, MIT-WHOI Joint Program; Taylor Lindsay, Ph.D. thesis committee member, URI; Rebecca Venezia, Ph.D. thesis committee member, URI
Former: Daniel Daye, M.S. defense chair, URI; Pascale Eisenmann, Ph.D. thesis committee member, Griffith University, Australia; Dounia Elkhatib, Ph.D. defense chair, URI; Victoria Fulfer, Ph.D. thesis committee member, URI; Danielle Glynn, Ph.D. thesis committee member, Bates College; Hannah Haskell, M.S. thesis committee member, URI; Izak Hill, M.S. thesis committee member, URI; Basia Marcks, Ph.D. thesis committee member, URI; Tori Mezebish, Ph.D. comprehensive exam chair, URI; Briana Michaud, Ph.D. thesis committee member, Memorial University; Katie Nickles, M.S. defense chair, URI; Alexa Runyan, M.S. defense chair, URI; Maddie Sachs, M.S. thesis committee member, URI

### *Conference Presentations* (<sup>#</sup>*student author,* \**postdoctoral author*)

- **31. McMahon KW**, \*Radice VZ, \*Cybulski J, Barshis DJ, Baker D, Martinez S, Arosemena R, Sum Leung K. Multi-metric isotope tools to explore mixotrophy in coral holobionts. 13<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2024, Fredericton, Canada
- 30. McMahon KW, \*Radice VZ, \*Cybulski J, Barshis DJ, Baker D, Arosemena R, Sum Leung K. Resolving mixotrophy patterns in depth-specialist and depth-generalist corals across shallow to mesophotic reefs. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 29. McMahon KW, \*Ramirez MD, <sup>#</sup>Besser AC, McCarthy MD, Newsome MD. "Embracing variability in amino acid δ<sup>15</sup>N fractionation: β and TDF variability in trophic position estimation. International Symposium on Isotope Physiology, Ecology, and Geochemistry, Aug 2022, Sapporo, Japan (Keynote Address)
- 28. McMahon KW, Ambrose, Jr. G, Reynolds MJ, Johnson BJ, Whiting A, Clough LM. Oral Presentation: "Terrestrial organic matter is an important organic carbon source across a five trophic level coastal Arctic food web" Ocean Sciences Meeting, February 2022, Honolulu, HI, USA
- **27. McMahon KW**. Invited Oral Presentation: "Exploring trophic responses of sympatric penguin species to historic anthropogenic exploitation and climate change using molecular isotope geochemistry." 2<sup>nd</sup> International Symposium on Low Temperature Science, November 2021, Sapporo, Japan.
- 26. McMahon KW, <sup>#</sup>Michelson CI, Hart T, McCarthy MD, Patterson WP, Polito MJ. "Divergent trophic responses of sympatric penguin species to historic anthropogenic exploitation and recent climate change." 11<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, May 2021, Virtual



- **25. McMahon KW**, <sup>#</sup>Michelson CI, Polito MJ. "Divergent trophic responses of sympatric penguin species to historic anthropogenic exploitation and recent climate change." Ocean Sciences Meeting, February 2020, San Diego, CA, USA
- 24. McMahon KW, <sup>#</sup>Michelson CI, Christensen S, McCarthy MD, Polito MJ. Oral Presentation: "Amino acid isotopes in penguin feathers reveal a history of climate change and historic whaling in the Antarctic Peninsula." 11<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2018, Vina del Mar, Chile
- **23. McMahon KW**, <sup>#</sup>Michelson CI, Polito MJ. Oral Presentation: "Developing compoundspecific stable isotope analysis of archival penguin tissues to reconstruct past Antarctic ecosystem responses to climate change and anthropogenic disturbance" Ocean Sciences Meeting, February 2018, Portland, OR, USA
- 22. McMahon KW, McCarthy MD, Guilderson TP, Sherwood OA, Williams B, Larsen T, #Glynn D. Oral Presentation: "Amino acid stable isotope applications to deep-sea corals: A molecular geochemistry approach to reconstructing past ocean conditions" American Geophysical Union Fall Meeting, December 2017, New Orleans, LA, USA
- **21. McMahon KW**, Berumen ML, Thorrold SR: Oral Presentation "Ontogenetic migration of snapper links food webs across a tropical seascape in the Red Sea" 13<sup>th</sup> International Coral Reef Symposium, June 2016, Honolulu, HI USA
- **20. McMahon KW**, McCarthy MD. Oral Presentation "Embracing variability in amino acid  $\delta^{15}$ N fractionation: Mechanisms, implications, and applications for trophic ecology." 10<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, April 2016, Tokyo, Japan
- **19. McMahon KW**, Guilderson TP, McCarthy MD, Sherwood OA, Larsen T, Williams B. Oral Presentation: "Millennial-scale plankton regime shifts in the subtropical North Pacific assessed by  $\delta^{13}$ C and  $\delta^{15}$ N compound-specific stable isotope analysis of deep-sea corals." Ocean Sciences Meeting, February 2016, New Orleans, LA, USA
- 18. McMahon KW, Williams B, McCarthy M, Etnoyer P. Oral Presentation: "Developing bioproxies of past ocean ecosystem change through compound-specific stable isotope analysis of proteinaceous deep-sea corals." American Geophysical Union Fall Meeting, December 2015, San Francisco, CA, USA
- **17. McMahon KW**. Invited Oral Presentation: "Compound-specific stable isotope analysis in population and community ecology: theory, development, and a call for more laboratory experiments." Ecological Society of America, August 2015, Baltimore, MD, USA
- 16. \*McMahon KW, McCarthy MD, Guilderson TP. Oral Presentation: "Decadal to century scale changes in North Pacific Ocean phytoplankton communities assessed by δ<sup>13</sup>C compoundspecific stable isotope analysis of deep-sea corals." Ocean Sciences Meeting, February 2014, Honolulu, HI, USA
- 15. \*McMahon KW, Berumen ML, Thorrold SR. Oral Presentation: "Unraveling carbon flow pathways on coral reefs with compound specific stable isotope analysis." 8<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, August 2012, Brest, France
- 14. \*McMahon KW, Berumen ML, Thorrold SR. Oral Presentation: "Seascape connectivity in a Red Sea coral reef ecosystem." 12<sup>th</sup> International Coral Reef Symposium, July 2012, Cairns, Australia



- **13.** \***McMahon KW**, Berumen ML, Thorrold SR. Oral Presentation: "Functional connectivity of coral reef fishes in a Red Sea coral reef seascape assessed by compound specific stable isotope analysis." Ocean Sciences Meeting, February 2012, Salt Lake City, UT, USA
- 12. \*McMahon KW. Oral Presentation: "Functional connectivity of coral reef fishes in a Red Sea tropical seascape." Living Oceans Foundation Symposium on Coral Reef Conservation in the Red Sea, January 2012, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia
- 11. \*McMahon KW. Oral Presentation: "Ontogenetic migration and trophic dynamics." Red Sea Research Center Symposium, April 2011, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia
- **10.** <sup>#</sup>**McMahon KW**, Fogel ML, Thorrold SR. Poster Presentation: "A new tool for inferring trophic interactions and fish movement using stable carbon isotope analysis of otolith amino acids." Ocean Sciences Meeting, February 2010, Portland, OR, USA
- 9. <sup>#</sup>McMahon KW, Fogel ML, Mateo I, Thorrold SR. Oral Presentation: "Stable carbon isotope analysis of amino acids in otolith protein: a new tool for tracking fish movement." 4<sup>th</sup> International Otolith Symposium, August 2009, Monterey, CA, USA (Best Student Paper Award)
- 8. <sup>#</sup>McMahon KW, Fogel ML, Elsdon TS, Thorrold SR. Oral Presentation: "Carbon isotope fractionation of amino acids of a marine fish." 33<sup>rd</sup> Annual Larval Fish Conference, July 2009, Portland, OR, USA (Sally Richardson Best Student Paper Award)
- 7. <sup>#</sup>McMahon KW, Fogel ML, Elsdon TS, Thorrold SR. Oral Presentation: "Patterns in carbon isotope fractionation of amino acids between diet and consumer in a model fish species." 6<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, August 2008, Honolulu, HI, USA
- **6. \*McMahon KW**, Thorrold SR. Poster Presentation "Ocean ecogeochemistry applied to connectivity analyses in marine populations." Isoscapes Conference, April 2008, Santa Barbara, CA, USA
- 5. <sup>#</sup>McMahon KW, Ambrose WG Jr., Johnson BJ, Sun M-Y., Lopez GR, Clough LM, Carroll M. Oral Presentation: "The impacts of a changing food supply on Arctic benthos: digestibility of ice algae and phytoplankton." 34<sup>th</sup> Annual Benthic Ecology Meeting. April 2005, Williamsburg, VA, USA
- **4. \*McMahon KW**. Oral Presentation: "The Impacts of a changing food supply on Arctic benthos." Mount David Research Symposium, March 2005, Lewiston, ME, USA
- 3. <sup>#</sup>McMahon KW, Johnson BJ, Ambrose WG Jr. Poster Presentation: "Contributions of local food items to the diet of *Fundulus heteroclitus*: analysis of δ<sup>13</sup>C/δ<sup>15</sup>N and gut contents." 33<sup>rd</sup> Annual Benthic Ecology Meeting. March 2004, Mobile, AL, USA
- 2. <sup>#</sup>McMahon KW. Poster Presentation: "Contributions of local food items to the diet of *Fundulus heteroclitus*" Mount David Research Symposium, March 2004, Lewiston, ME, USA
- \*McMahon KW, Warren RS, Fell PE. Poster Presentation: "Impacts of *Phragmites* control on selected ecological functions within tidelands of the Lieutenant River." Connecticut College Research Symposium, August 2003, New London, CT, USA

*Coauthored Conference Proceedings (<sup>#</sup>student author, \*postdoctoral author)* 



- 84. Lindsay T, Dunster W, McMahon KW, Prada P. CSIA-AA reveals tightly coupled, bidirectional metabolite exchange between a temperate coral and its symbionts. 13<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2024, Fredericton, Canada
- 83. \*Ramirez MD, McMahon KW, Rooney N, El-Sabaawi RW, Baum JK. Robust trophic pathways in carnivorous reef fishes across a major human disturbance gradient. 13<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2024, Fredericton, Canada
- 82. <sup>#</sup>Pi J, \*Martinez S, Rulmal J Jr, Crane NL, Paddack MJ, McMahon KW. Characterizing the functional roles of Micronesian fishery species targeted via spearfishing. 13<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2024, Fredericton, Canada
- 81. <sup>#</sup>Nash A, Newsome S, McMahon KW. A review of the precision and accuracy of compound-specific isotope analysis of amino acids. 13<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2024, Fredericton, Canada
- 80. \*Martinez S, <sup>#</sup>Pi J, Rulmal J Jr, Crane NL, Paddack MJ, McMahon KW. Assessing heterotrophy in mixotrophic corals using multiple isotope metrics. 13<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2024, Fredericton, Canada
- 79. \*Cybulski JD, Smith-Guzman NE, Sánchez Herrera LA, McMahon KW, Sharpe AE. Investigating human subsistence strategies in Panamá during the Late Holocene. Society for American Archaeology. April 2024, New Orleans, LA USA
- 78. \*Ramirez MD, <sup>#</sup>Intemann-Milligan J, Avens L, Godfrey MH, Barco SG, McMahon KW. Evaluating resource use partitioning and patterns in relation to changing prey abundance in co-occurring sea turtle species using molecular isotope geochemistry. International Sea Turtle Society Symposium 42, March 2024, Pattaya, Thailand
- 77. <sup>#</sup>Willis C, Llopiz J, **McMahon KW**, Houghton L, Hare J, McCarthy MD, Thorrold SR. Decadal-scale changes in the Georges Bank ecosystem: evidence from bulk and compound-specific stable isotope analyses of fish scales. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 76. \*Smith KJ, **McMahon KW**, Trueman CN, Wimmer T, Ponnet S, Chen SM, Sherwood OA. Natural history archives provide critical insight into wildlife ecology: A case study of enigmatic blue whale migration. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 75. \* Ramirez MD, **McMahon KW**, Rooney N, El-Sabaawi RW, Baum JK. Robust trophic pathways in carnivorous reef fishes across a major human disturbance gradient. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 74. <sup>#</sup>Pi J, <sup>#</sup>Toledo CB, Rumal Jr. J, Tasopulu M, Trevino-Pena M, Paddack MJ, Crane NJ, McMahon KW. Reflections, Perceptions, and Practices of Spearfishing Among Ulithian Communities in Ulithi, FSM and Hawai'i, USA. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 73. <sup>#</sup>Nowkowski C, Stamieszkin K, Sherwood O, **McMahon KW**. Multidecadal molecular isotope records of pelagic plankton bioarchives and deep-sea corals indicated strong



pelagic-benthic coupling through microbial pathways in the Gulf of Maine. Ocean Sciences Meeting, February 2024, New Orleans, LA USA

- 72. \*Martinez S, Brooks AJ, Bernardi G, Crane NK, Paddack MJ, Rulmal Jr J, **McMahon KW**. Collaborating with communities in the outer Islands of Micronesia to develop a photogrammetric-based coral reef monitoring program. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 71. <sup>#</sup>Kristan AK, Maiti K, **McMahon KW**, Dance MA, Polito MJ. Biological and geochemical proxies in sediment cores reveal shifts in marine predator population dynamics relative to historic anthropogenic exploitation and recent climate change at South Georgia Island sub-Antarctic. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 70. <sup>#</sup>Ferraro R, <sup>#</sup>Moore R, <sup>#</sup>Agvent L, <sup>#</sup>Nowakowski C, **McMahon KW**. Using Isoscapes to Track Seasonal Shifts in Biogeochemical Cycling in the Northwest Atlantic Ocean. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 69. \*Cybulski J, O'Dea A, Duprey N, Foreman A, Sharpe AI, Connolly S, Smith-Guzman NE, Martinez-Garcia A, Dillon EM, Vonhof H, de Garcia B, Aizpurua II, Sanchez Herrera LA, **McMahon KW**. Using marine paleoecological proxies and archaeological evidence to investigate human-environment-ecosystem interactions in the Tropical Eastern pacific through the late-Holocene. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 68. <sup>#</sup>Agvent L, <sup>#</sup>Truesdale C, <sup>#</sup>Piccone S, **McMahon KW**. Testing the Ontogenetic Migration Hypothesis in the emerging Rhode Island Jonah crab (Cancer borealis) fishery using stable isotope analysis. Ocean Sciences Meeting, February 2024, New Orleans, LA USA
- 67. \*Radice VZ, **McMahon KW**, Barshis DJ. "Trophic ecology of depth-specialist and depthgeneralist corals across shallow to mesophotic reefs". Gordan Research Conference. February 2023, Ventura, CA, USA.
- 66. <sup>#</sup>Zicari S, Gourlay A, <sup>#</sup>Truesdale C, <sup>#</sup>Agvent L, Omand M, Fischer G, **McMahon KW**, Bayer S. "Effects of Acoustic Tag Attachment on Jonah Crab Molting, Growth, and Mortality." American Fisheries Society SNEC Conference. January 2023, Boston MA.
- 65. <sup>#</sup>Moore RB, <sup>#</sup>Nowakowski C, <sup>#</sup>Agvent L, **McMahon KW**. "Modeling geospatial variation in carbon and nitrogen isotopes along the US Northeast Continental Shelf: Isoscape development for studies of movement and trophic ecology." American Fisheries Society SNEC Conference. January 2023, Boston MA
- 64. <sup>#</sup>Pi J, Crane NL, McMahon KW. "Assessing the herbivory status of nominally herbivorous coral reef fishes using amino acid δ<sup>15</sup>N and δ<sup>13</sup>C analysis." Goldschmidt, July 2022, Honolulu, HI, USA
- 63. \*Smith KJ, Wimmer T, **McMahon KW**, Sherwood OA. "Reconstructing the spatial and trophic ecology of the stranded Sambro blue whale." Ocean Frontier 2022 Climate Action Conference. Halifax, May 2022, Nova Scotia, Canada
- 62. <sup>#</sup>Stahl AR, Rynearson TA, **McMahon KW**. "Identifying Novel Isotopic Tracers of Marine Primary Production to Study Food Web Carbon Cycles." Ocean Sciences Meeting, February 2022, Honolulu, HI, USA
- 61. \*Ramirez MD, <sup>#</sup>Besser AC, Newsome SD, **McMahon KW**. "Re-examining primary producer amino acid nitrogen isotope values and their influence on trophic position estimation in aquatic systems." Ocean Sciences Meeting, February 2022, Honolulu, HI, USA



- 60. <sup>#</sup>Intemann-Milligan J, \*Ramirez MD, Avens L, Godfrey M, Barco S, McMahon KW.
   "Evaluating resource use patterns in relation to changing prey abundance in co-occurring sea turtle species using molecular isotope geochemistry." Ocean Sciences Meeting, February 2022, Honolulu, HI, USA
- 59. <sup>#</sup>Nowakowski C, Stamieszkin K, **McMahon KW**. "Food web dynamics of two juxtaposed copepods (*Calanus finmarchicus* and *Centropages typicus*) reflect variations in environmental ocean states over a multi-decadal time series." Ocean Sciences Meeting, February 2022, Honolulu, HI, USA
- 58. <sup>#</sup>Pi J, Crane NL, McMahon KW. "Assessing the herbivory status of nominally herbivorous coral reef fishes using amino acid δ<sup>15</sup>N and δ<sup>13</sup>C analysis." Ocean Sciences Meeting, February 2022, Honolulu, HI, USA
- 57. \*Ramirez MD, Avens L, Goshe LR, Clark JM, Meylan AB, Teas W, Shaver DJ, Godfrey MH, Howell L, McMahon KW." Molecular isotopes reveal divergent energy flow pathways in a critically endangered spongivorous turtle." 151<sup>st</sup> American Fisheries Society Annual Meeting, November 2021, Baltimore, MD
- 56. <sup>#</sup>Michelson, CI, Polito MJ, **McMahon KW**. Divergent trophic responses of sympatric penguin species to shared historic environmental change. American Ornithological Society Virtual Conference, August 2021, Virtual
- 55. <sup>#</sup>Stahl AR, Rynearson TA, **McMahon KW**. "Identifying Novel Isotopic Tracers of Marine Primary Production to Study Food Web Carbon Cycles." 11<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, May 2021, Virtual
- 54. <sup>#</sup>Michelson CI, Polito MJ, Wunder MB, Emslie SD, McCarthy MD, Patterson WP, McMahon KW. "Late Holocene climate change directed shifts in Southern Ocean biogeochemical cycling and predator trophic dynamics." 11<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, May 2021, Virtual
- 53. \*Ramirez MD, <sup>#</sup>Besser AC, Newsome SD, McMahon KW. "Meta-analysis of primary producer amino acid δ<sup>15</sup>N values and their influence on trophic position estimation." 11<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, May 2021, Virtual
- 52. <sup>#</sup>Reyes-Delgado A, <sup>#</sup>Santos N, <sup>#</sup>Langan JA, <sup>#</sup>Heinichen M, **McMahon KW** "Cod morphometric analysis reveals physical differences among sub-populations in the Georges Bank fisheries stock, Northwest Atlantic." Southern New England Chapter of the American Fisheries Society's Winter Meeting, January 2021, Virtual (won Best Student Presentation Award)
- 51. #Reyes-Delgado A, #Santos N, #Langan JA, #Heinichen M, McMahon KW "Cod morphometric analysis reveals physical differences among sub-populations in the Georges Bank fisheries stock, Northwest Atlantic." American Geophysical Union Fall Meeting, December 2020, Virtual, (won Outstanding Student Presentation Award)
- 50. Ambrose WG Jr, Johnson JC, Clough LM, Whiting A, Griffith D, Johnson BJ, McMahon KW. "Utilizing Scientific Ecological Knowledge (SEK) and Traditional Ecological Knowledge (TEK) to delineate the coastal food web of Kotzebue Sound, Alaska." 10<sup>th</sup> International Congress of Arctic Social Sciences, June, 2020, Virtual.
- 49. <sup>#</sup>Tietbohl MD, Larsen T, **McMahon KW**, Houghton LA, Sinclair-Taylor T, Thorrold SR, Berumen ML. "Insights into the nutritional ecology of herbivorous reef fishes using



compound-specific isotope analysis." 14<sup>th</sup> International Coral Reef Symposium, July 2020, Bremen, Germany

- 48. <sup>#</sup>Santos N, <sup>#</sup>Mayer C, <sup>#</sup>Langan J, **McMahon KW**. "Competition between Atlantic cod and black sea bass due to warming southern New England waters." Ocean Sciences Meeting, February 2020, San Diego, CA, USA
- 47. <sup>#</sup>Stahl A, Rynearson T, **McMahon KW**. "Characterizing isotopic fingerprints of eukaryotic microalgae to study sources and cycling of organic matter through food webs." Ocean Sciences Meeting, February 2020, San Diego, CA, USA
- 46. <sup>#</sup>Nowakowski C, Stamieszkin K, Record N, McMahon KW. "Time series analysis of Calanus finmarchicus and Centropages typicus abundance with respect to the converging time frequencies in multiple climate mechanisms in the Gulf of Maine." Ocean Sciences Meeting, February 2020, San Diego, CA, USA
- 45. <sup>#</sup>Michelson CI, **McMahon KW**, Patterson WP, Emslie SD, Polito MJ. "Penguins as ecosystem proxies? Identifying millennial-scale shifts in carbon sources and phytoplankton regimes in the Antarctic marine ecosystem." Ocean Sciences Meeting, February 2020, San Diego, CA, USA
- 44. Sherwood O, Renee Fougere C, Tibert BS, McMahon KW. "Amino acid δ<sup>13</sup>C records from deep-sea corals of the NW Atlantic: Reconstructing plankton community composition in a rapidly changing ocean." Ocean Sciences Meeting, February 2020, San Diego, CA, USA
- 43. Polito, M.J., <sup>#</sup>Michelson, C., **McMahon, K.W.** "Advances in the use of biogeochemical markers to track the diets and movement of Antarctic marine predators." Society for Integrative and Comparative Biology. January, 2020, Austin, TX
- 42. <sup>#</sup>Santos N, <sup>#</sup>Mayer C, <sup>#</sup>Langan J, **McMahon KW**. "Competition between Atlantic cod and black sea bass due to warming southern New England waters." Southern New England Chapter of the American Fisheries Society's Winter Meeting, January 2020, Boston, MA, USA
- 41. Sherwood OA, Chen S, Fougere C, Tibert BS, **McMahon KW**. "Compound-specific carbon isotopes of essential amino acids in deep-sea corals of the NW Atlantic record changes in plankton community composition over the last century." Goldschmidt Conference, August 2019, Barcelona, Spain
- 40. Guilderson T, McMahon KW, Sherwood O, McCarthy MD, <sup>#</sup>Glynn D, Williams BW, Roark B, Dunbar R, Shen Y. "A window opens from the mesopelagic: A proteinaceous deep-sea coral's view of biogeochemistry and ecosystem change above." Deep-Sea Biology Symposium, September 2018, Monterey, CA, USA
- 39. <sup>#</sup>Tietbhol MD, Larsen T, McMahon KW, Houghton LA, Sinclair-Taylor T, Thorrold SR, Berumen ML. "Insights from compound-specific isotope analysis into the nutritional ecology of herbivorous reef fishes." 11<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2018, Vina del Mar, Chile
- 38. #Michelson CI, McMahon KW, Patterson WP, Emslie SD, McCarthy MD, Polito MJ. "Deciphering millennial-scale Antarctic ecosystem change using amino acid stable isotope analysis of modern and ancient penguin eggshell. 11<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, July 2018, Vina del Mar, Chile



- 37. <sup>#</sup>Michelson CI, McMahon KW, Emslie SD, Patterson WP, McCarthy MD, Polito MJ. "Penguin proxies: Deciphering millennial-scale Antarctic ecosystem change using amino acid stable isotope analysis." American Geophysical Union Fall Meeting, December 2017, New Orleans, LA, USA
- 36. Thorrold SR, <sup>#</sup>Braun CD, Houghton LA, McMahon KW, Berumen ML. "Assessing functional diversity and food web architecture on central Pacific coral reefs with a compound-specific stable carbon approach." IndoPacific Fish Conference, October 2017, Tahiti.
- 35. #Glynn DS, Guilderson TP, McMahon KW, McCarthy MD. "Dramatic nutrient and phytoplankton community shifts in the NPSG during recovery from Younger Dryas Cold Period and Little Ice Age." 2017 Aquatic Sciences Meeting, February 2017, Honolulu, HI USA
- 34. <sup>#</sup>Preciado C, <sup>#</sup>Michelson CI, McCarthy MD, **McMahon KW**. "Calibrating compound-specific stable nitrogen isotope analysis in avian eggs as bioarchives for paleoreconstruction." American Geophysical Union Fall Meeting, December 2016, San Francisco, CA, USA
- 33. Thorrold SR, McMahon KW, Houghton LA, Sandin SA, Berumen ML. "Tracing carbon flow through coral reef food webs using a compound-specific stable isotope approach." 13<sup>th</sup> International Coral Reef Symposium, June 2016, Honolulu, HI USA
- 32. #Tietbohl MD, Thorrold SR, McMahon KW, Berumen ML, Choat JH, Houghton LA. "Assessing functional diversity of reef fish herbivores (and detritivores?) using a compoundspecific stable isotope approach. 13<sup>th</sup> International Coral Reef Symposium, June 2016, Honolulu, HI USA
- 31. McCarthy MD, McMahon KW, Gier E, <sup>#</sup>Batista F. "Compound specific amino acids as paleoproxies: Archives, potential, and emerging challenges. 10<sup>th</sup> International Conference on Applications of Stable Isotope Techniques to Ecological Studies, April 2016, Tokyo, Japan
- 30. Thorrold SR, McMahon KW, <sup>#</sup>Braun CD, Berumen ML, Houghton LA. "Tracing Carbon Flow Through Food Webs on Isolated Coral Reefs in the Central Pacific Ocean Using a Compound-Specific Stable Isotope Approach" Ocean Sciences Meeting, February 2016, New Orleans, LA, USA
- 29. <sup>#</sup>Glynn D, McCarthy MD, McMahon KW, Guilderson TP. "High resolution record of NPSG primary production δ<sup>15</sup>N and δ<sup>13</sup>C from deep sea corals suggest major shifts in nutrient and phytoplankton composition over the last 5000 years." Ocean Sciences Meeting, February 2016, New Orleans, LA, USA
- 28. <sup>#</sup>Wright Z, <sup>#</sup>Glynn D, McMahon KW, McCarthy MD. "A high-resolution, paleo-record of export production from a unique HNLC zone on the California Margin using deep-sea coral stable isotope values." American Geophysical Union Fall Meeting, December 2015, San Francisco, CA, USA
- 27. <sup>#</sup>Miles KW, <sup>#</sup>Glynn DS, **\*McMahon KW**, McCarthy MD, Guilderson TP. "Investigating past ocean ecosystem variability with δ<sup>13</sup>C and δ<sup>15</sup>N records in long lived deep-sea proteinaceous corals from the Central Equatorial Pacific. American Geophysical Union Fall Meeting, December 2014, San Francisco, CA, USA
- 26. <sup>#</sup>Glynn D, McCarthy MD, **\*McMahon KW**, Guilderson TP. "Millennial scale oscillations in bulk  $\delta^{15}$ N and  $\delta^{13}$ C over the Mid- to Late Holocene seen in proteinaceous corals from the



North Pacific Subtropical Gyre. American Geophysical Union Fall Meeting, December 2014, San Francisco, CA, USA

- 25. Sherwood O, \*McMahon KW, Guilderson TP, McCarthy MD. "Late Holocene plankton domain shifts in the North Pacific Subtropical Gyre revealed by amino acid specific δ<sup>15</sup>N and δ<sup>13</sup>C records from proteinaceous deep-sea corals. American Geophysical Union Fall Meeting, December 2014, San Francisco, CA, USA
- 24. \*Soreide J, Iken K, Bluhm B, Gradinger R, Renaud PE, Tamelander T, Tremblay JE, Hop H, Carroll ML, Ambrose WG Jr., \*McMahon KW, Wooler M, Dunton K. "Stable isotope baselines in marine food webs: A pan-Arctic review." Ocean Sciences Meeting, February 2014, Honolulu, HI, USA
- 23. \*Soreide J, Iken K, Bluhm B, Gradinger R, Renaud PE, Tamelander T, Tremblay JE, Hop H, Carroll ML, Ambrose WG Jr., \*McMahon KW, Wooler M, Dunton K. "Stable isotope baselines in marine food webs: A pan-Arctic review." Arctic Marine Science Symposium, January 2014, Anchorage, AK, USA
- 22. <sup>#</sup>Leopold A, <sup>#</sup>Brault E, \*McMahon KW. "Variation in bulk δ<sup>13</sup>C and δ<sup>15</sup>N values of ancient Antarctic seal bones." American Geophysical Union Fall Meeting, December 2013, San Francisco, CA, USA
- 21. Thorrold SR, **\*McMahon KW**, Berumen ML. "Revisiting the source of carbon fueling fisheries on coral reefs." 12<sup>th</sup> International Coral Reef Symposium, July 2012, Cairns, Australia
- 20. Thorrold SR, **\*McMahon KW**, Berumen ML. "Revisiting the source of carbon fueling fisheries on coral reefs." Ocean Sciences Meeting, February 2012, Salt Lake City, UT, USA
- 19. <sup>#</sup>DesRosiers N, Noble, M, **\*McMahon KW**, Berumen ML. "Distribution patterns and ecology of *Amphiprion bicinctus* in the central Red Sea, Saudi Arabia." 2<sup>nd</sup> Asia-Pacific Coral Reef Symposium, June 2010, Phuket, Thailand
- 18. Ambrose WG, Carroll ML, Clough LM, Greenacre M, <sup>#</sup>McMahon KW, Henkes G, Edgerly J "Bivalve (*Serripes groenlandicus*) and gastropod (*Neptunea heros*) growth in coastal northwest Alaska reflects Arctic climate regime shifts and local environmental factors." International Polar Year Open Science Conference, June 2010, Olso, Norway.
- 17. Skomal GB, Zeeman SI, Chisholm JH, Summers EL, Walsh HJ, <sup>#</sup>McMahon KW, Thorrold SR. "Mesopelagic trans-equatorial migrations by basking sharks in the western Atlantic Ocean" 25<sup>th</sup> Annual American Elasmobranch Society Meeting, July 2009, Portland, OR, USA
- 16. Carroll ML, Johnson BJ, <sup>#</sup>Henkes GA, <sup>#</sup>McMahon KW, Voronkov A, Ambrose WG Jr., Denisenko SG. "Environmental regulation of bivalve growth in the southern Barents Sea: A combined ecological and geochemical approach." EGU General Assembly Conference, April 2009, Vienna, Austria
- 15. Graham B, Fry B, Popp B, Koch P, Newsome S, <sup>#</sup>McMahon KW. "Using isoscapes to trace the movements and foraging behavior of predators in oceanic ecosystems." 6<sup>th</sup> Annual Isotope Ecology Conference, August 2008, Honolulu, HI, USA
- 14. Carroll ML, Denisenko SG, Voronkov A, Ambrose WG, Henkes G, #McMahon KW.
   "Arctic bivalves as indicators of environmental variation from intra-annual to centennial timescales." Ocean Sciences Meeting, ASLO, March 2008, Orlando, FL, USA
- Johnson BJ, Ambrose WG, Henkes G, <sup>#</sup>McMahon KW, Carroll ML. "Shifts in the δ<sup>13</sup>C of Serripes groenlandicus shell organic matter: A proxy for intra- and interannual changes



in primary production in the Arctic?" National American Chemical Society (ACS) Meeting, August 2007, Boston, MA, USA

- 12. #Henkes GA, Ambrose WG Jr., Johnson BL, Carroll ML, #McMahon KW, Denisenko SG, Thorrold SR. "Tracing environmental variation over the past 130 years in the Barents Sea: Mineral ratio (Mg/Ca, Sr/Ca, Ba/Ca, and Mn/Ca) evidence in shells of the circumpolar greenland cockle, *Serripes groenlandicus*." American Geophysical Union Fall Meeting, December 2007, San Francisco, CA, USA
- 11. #Henkes GA, Johnson BJ, Ambrose WG, #McMahon KW, Carroll ML, Hop H "Examining environmental conditions in a Norwegian High Arctic Fjord: Evidence from Serripes groenlandicus (Bivalvia) growth rates and shell organic carbon isotope composition." 1<sup>st</sup> International Sclerochronology Conference, July 2007, St. Petersburg, FL, USA
- 10. Carroll ML, Ambrose WG, Greenacre M, Clough L, "McMahon KW, Thorrold SR, "Henkes GA, "Stinson L, "Edgerly J. "Arctic bivalves as proxies of local and large-scale climatic variations: Analysis of pan-Arctic growth patterns." 1st International Sclerochronology Conference, July 2007, St. Petersburg, FL, USA
- 9. Carroll ML, Ambrose WG, Greenacre M, Clough LM, <sup>#</sup>McMahon KW, <sup>#</sup>Stinson L, <sup>#</sup>Edgerly J, Thorrold S. "Arctic bivalves as proxies of local and large-scale climatic variations: Analysis of pan-Arctic growth patterns." Ecosystems Dynamics in the Norwegian Sea and Barents Sea. March 2007, Tromsø Norway
- Johnson BJ, Ambrose WG, <sup>#</sup>McMahon KW, Carroll ML. "Shifts in the δ<sup>13</sup>C of *Serripes groenlandicus* shell organic matter: A proxy for intra- and interannual changes in primary production in the Arctic?" New England Geological Society American Annual Meeting. March 2007, Durham, NH, USA
- 7. Johnson BJ, Ambrose WG Jr., <sup>#</sup>Henkes GA, <sup>#</sup>McMahon KW, Carroll ML. "Shifts in the δ<sup>13</sup>C of *Serripes groenlandicus* shell organic matter: A proxy for intra- and interannual changes in primary production in the Arctic?" American Chemical Society, 2007, Washington, D.C., USA
- 6. Johnson BJ, Ambrose WG, <sup>#</sup>McMahon KW, Carroll ML. "Shifts in the δ<sup>13</sup>C of Serripes groenlandicus shell organic matter: A proxy for intra- and interannual changes in primary production in the Arctic?" Arctic Frontiers Meeting, January 2007, Tromsö, Norway
- Ambrose WG, Carroll ML, Nolan K, Retelle M, Greenacre M, <sup>#</sup>McMahon KW. "Climate change on Svalbard: Evidence from modern and fossil bivalves." Arctic Frontiers Meeting. January 2007, Tromsö, Norway
- 4. Clough LM, Ambrose WG, Betournay S, Carroll ML, Lopez GR, Meltzer K, Sun M-Y, <sup>#</sup>McMahon KW, Richardson M. "The digestibility of ice algae and phytoplankton: Impacts on arctic benthic macrofauna." Ocean Sciences Meeting. February 2006, Honolulu, HI, USA
- 3. Carroll ML, Ambrose WG, Greenacre M, <sup>#</sup>McMahon KW, Thorrold SR. "Patterns of variation in bivalve growth in a Norwegian High-Arctic Fjord: Evidence for local- and large-scale forcing." American Society of Limnology and Oceanography (ASLO) Summer Meeting. June 2005, Santiago de Compostela, Spain
- Ambrose WG, Carroll ML, Greenacre M, <sup>#</sup>McMahon KW, Thorrold SR. "'Patterns of variation in bivalve growth in a Norwegian High-Arctic Fjord: Evidence for local- and large-scale forcing." 34<sup>th</sup> Annual Benthic Ecology Meeting. April 2005, Williamsburg, VA, USA



 Carroll ML, Clough LM, Sun M-Y, Lopez GR, Ambrose WG, <sup>#</sup>McMahon KW. "Response of Arctic benthic communities to variable food supplies associated with climatic change: Ice algae vs. phytoplankton." Gordon Research Conference on Polar Marine Sciences. March 2005, Ventura, CA, USA

### Invited Seminars and Guest Lectures

- 74. Invited Seminar: Biology Department, Jan 2024, University of Victoria, Victoria BC Canada
- 73. Invited Seminar: Department of Ecology and Evolutionary Biology, Jan 2023, University of Michigan, Ann Arbor MI, USA
- 72. Invited Seminar and Panelist: United States Agency for International Development: Center for Adaptive and Innovative Statecraft IUUF Applied Research Series, August 2022, Virtual
- 71. Invited Seminar: TechCamp Kochi: US Department of State, International Diplomacy Program, May 2022, Kochi, India
- 70. Guest Lecture: ES423/623: Marine Biogeochemistry, Feb 2022, Boston University, Boston, MA, USA
- 69. Invited Seminar: Ocean Sciences Department, May 2021, University of California Santa Cruz, CA, USA
- 68. Guest Lecture: ES423/623: Marine Biogeochemistry, Apr 2021, Boston University, Boston, MA, USA
- 67. Invited Seminar: Donner Foundation Climate Seminar, April 2021, Newport, RI, USA
- 66. Invited Seminar: Aquidneck Land Trust Climate Series, April 2021, Portsmouth High School, Newport, RI, USA
- 65. Invited Seminar: Aquidneck Land Trust Climate Series, April 2021, Rogers High School, Newport, RI, USA
- 64. Invited Seminar: Department of Marine Sciences, Oct 2020, University of Connecticut, Avery Point, CT, USA
- 63. Invited Seminar: Aquidneck Land Trust Climate Series, May 2020, Portsmouth High School, Newport, RI, USA
- 62. Invited Seminar: Aquidneck Land Trust Climate Series, May 2020, Rogers High School, Newport, RI, USA
- 61. Guest Lecture: OCG521 Chemical Oceanography (11 graduate students), February 2020, University of Rhode Island, Narragansett, RI, USA
- 60. Invited Seminar: Quark Enterprises Antarctica Research Cruise, 3 seminars, January 2020, M/V Ocean Endeavor, Western Antarctic Peninsula
- 59. Marine Biology Friday Afternoon Special Sessions, September 2019, University of Rhode Island, South Kingston, RI, USA
- 58. Invited Seminar: Physical Sciences Department Colloquium, April 2019, Rhode Island College, Providence, RI, USA
- 57. Invited Seminar: Biology Department Seminar, April 2019, Boston University, Boston, MA, USA
- 56. Invited Seminar: Quark Enterprises Antarctica Research Cruise, 3 seminars, Feb Mar, 2019, M/V Ocean Endeavor, Falklands (Malvinas), South Georgia, Western Antarctic Peninsula
- 55. Invited Seminar: Biology Department, January 2019, Bates College, Lewiston, ME, USA



- 54. Invited Seminar: Biology Department, November 2018, James Madison University, Harrisonburg, VA, USA
- 53. Invited Seminar: Synergist I: *Deepstaria enigmatica*, October 2018, AS220 Main Stage, Providence, RI, USA
- 52. Invited Seminar: Dean's Advisory Council Meeting, September 2018, University of Rhode Island, South Kingston, RI, USA
- 51. Guest Lecture: OCG561 Biological Oceanography (21 graduate students), October 2018, University of Rhode Island, Narragansett, RI, USA
- 50. Invited Seminar: Institute of Environmental Science and Evolution, July 2018, Universidad Austral de Chile, Valdivia, Chile
- 49. Invited Seminar: Biological and Environmental Sciences Colloquium, March 2018, University of Rhode Island, South Kingston, RI, USA
- 48. Invited Seminar: Biology Department, March 2018, University of Tampa, Tampa, FL, USA
- 47. Invited Seminar: Phoenix Islands Protected Area UNESCO World Heritage Site Annual Meeting, February 2018, Portland, OR, USA
- 46. Invited Seminar: Graduate School of Oceanography, April 2017, University of Rhode Island, Narragansett, RI, USA
- 45. Invited Seminar: Life and Environmental Sciences, April 2017, University of California-Merced, Merced, CA, USA
- 44. Invited Seminar: Zoology Department, January 2017, University of British Columbia, Vancouver, Canada
- 43. Invited Seminar: Ocean Science Department, January 2017, University of California-Santa Cruz, Santa Cruz, CA, USA
- 42. Invited Seminar: Quark Enterprises Antarctica Research Cruise, 3 seminars, December, 2016, M/V Ocean Endeavor, Western Antarctic Peninsula
- 41. Guest Lecturer: OCEA-01 The Oceans (150 undergraduate students), November 2016, University of California-Santa Cruz, Santa Cruz, CA, USA
- 40. Invited Seminar: Phoenix Islands Protected Area UNESCO World Heritage Site Annual Meeting, June 2016, Honolulu, HI, USA
- 39. Invited Seminar: International Symposium on Stable Isotopes in Marine Environments, May 2016, Hanyang University, Seoul, South Korea
- 38. Invited Seminar: Australian Rivers Institute, April 2016, Griffith University, Brisbane, Australia
- 37. Invited Seminar: College of Coast and Environment Department, April 2016, Louisiana State University, Baton Rouge, LA, USA
- 36. Invited Seminar: Workshop I and II: Stable isotope analysis in Marine Mammal Ecology, December 2015, 21<sup>st</sup> Biennial Conference on Marine Mammals, San Francisco, CA. Two-day workshop presenter
- 35. Invited Seminar: Marine and Environmental Biology, November 2015, University of Southern California, Los Angeles, CA, USA
- 34. Invited Seminar: Ocean Science Department, October 2015, University of California-Santa Cruz, Santa Cruz, CA, USA
- 33. Guest Lecturer: BIO301 Ecology and Biology of Coral Reefs (25 undergraduate students), April 2015, Wake Forest University, Winston-Salem, NC, USA



- 32. Guest Lecturer: EART-299 Isotopic Methods in Environmental Science (12 undergraduate students) March 2015, University of California-Santa Cruz, Santa Cruz, CA, USA
- 31. Invited Seminar: Keck Science Department, February 2015, Claremont McKenna College, Claremont, CA, USA
- 30Guest Lecture: EA52 Environmental Science, Policy, and Politics (45 undergradautes), February 2015, Claremont McKenna College, Claremont, CA, USA
- 29. Invited Seminar: Center for Accelerated Mass Spectrometry, July 2014, Lawrence Livermore National Laboratory, Livermore, CA, USA
- 28. Invited Seminar: Chesapeake Biological Laboratory, July 2014, University of Maryland, Solomons, MD, USA
- 27. Invited Seminar: Scripps Institution of Oceanography, April 2014, University of California-San Diego, La Jolla, CA, USA
- 26. Invited Seminar: Environmental Earth System Science Department, March 2014, Stanford University, Palo Alto, CA, USA
- 25. Invited Seminar: Environmental Earth System Science Department, January 2014, University of California-Merced, Merced, CA USA
- 24. Invited Seminar: Environmental Earth System Science Seminar, December 2013, Stanford University, Palo Alto, CA, USA
- 23. Invited Seminar: Southwest Fisheries Science Center, November 2013, NOAA Fisheries Service, Santa Cruz, CA, USA
- 22. Invited Seminar: iDive SCUBA-Hack, August 2013, Marine Science and iOS developer workshop, San Francisco, CA, USA
- 21. Invited Seminar: Ocean Science Department, May 2013, University of California-Santa Cruz, Santa Cruz, CA, USA
- 20 .Guest Lecturer: ES291 Environmental Systems Seminar (45 undergraduate students), April 2013, University of California-Merced, Merced, CA, USA
- 19. Guest Lecturer: OCEA-290J Topics in Marine Organic Geochemistry (15 undergraduate students) April 2013, University of California-Santa Cruz, Santa Cruz, CA, USA
- 18. Invited Seminar: Red Sea Research Center Department, December 2012, King Abdullah University of Science and Technology, Thuwal, Kingdom of Saudi Arabia
- 17. Guest Lecture: MarSE221 Marine Life (20 graduate students), November 2012, King Abdullah University of Science and Technology, Thuwal, Kingdom of Saudi Arabia
- 16. Invited Seminar: Biology Department, October 2012, Bates College, Lewiston, ME, USA
- 15. Guest Lecturer: Bio313 Marine Ecology (15 undergradaute students), October 2012, Bates College, Lewiston, ME USA
- Guest Lecturer: Geo340 Stable Isotope Geochemistry (12 undergraduate students), October 2012, Bates College, Lewiston, ME USA
- Invited Seminar: Workshop II: Sampling animal tissues for stable isotope analysis, August 2012, 8<sup>th</sup> Annual Isotope Ecology Conference, Brest, France. Workshop co-organizer and presenter.
- 12. Invited Seminar: ARC Centre of Excellence Coral Reef Studies, June 2011, James Cook University, Townsville, Australia
- 11. Invited Seminar: Sea Education Association, June 2010, Woods Hole, MA, USA
- 10. Invited Seminar: Biology Department, February 2010, Connecticut College, New London, CT, USA



- 9. Invited Seminar: Biology Department, November 2009, Woods Hole Oceanographic Institution, Woods Hole, MA
- 8. Invited Seminar: Ocean Science Journalism Fellows Lecture, September 2009, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
- 7. Invited Seminar: Biology Department, February 2009, Bates College, Lewiston, ME, USA
- 6. Invited Seminar: Trustee and Corporation Member Lecture, October 2008, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
- 5. Guest Lecture: BIOL1880 Comparative Biology of Vertebrates (38 undergraduate students), October 2008, Brown University, Providence, RI, USA
- 4. Invited Seminar: Ocean Science Journalism Fellows Lecture, September 2008, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
- 3. Guest Lecture: Marine Biology (20 high school students), May 2007, Codman Academy, Dorchester, MA, USA
- 2. Invited Seminar: School of Marine and Atmospheric Sciences Lecture, April 2005, Stony Brook University, Stony Brook, NY, USA
- 1. Invited Seminar: Ecology and Evolutionary Biology Department Lecture, October 2004, Cornell University, Ithaca, NY, USA

### Justice, Equity, Diversity, and Inclusion Initiatives

2023-present	URI JEDI Committee member
2023	Inclusive Teaching Pedagogy and Decolonizing Curriculum Workshop Lead
2022	URI JEDI Series: Decolonizing Our Oceanography Curriculum Workshop Lead
2022-present	URI Diversity and Inclusion Badge Program: Developed and lead a recurring
	workshop on building a diverse mentor network for the URI Microcredential in
	JEDI
2022	TechCamp – Kochi: US Department of State, International Diplomacy Program,
	May 2022, Kochi, India: Workshop on coproduction of knowledge with Indigenous
	communities for sustainable fisheries management
2022	URGE Pod participant: URI-GSO
2022	Panelist: ST14 Mental Health and Self Care in Ocean Sciences, Ocean Sciences
	Meeting, Virtual
2021-2022	Search Committee Chair: URI-GSO Assistant Dean of Justice, Equity, Diversity,
	and Inclusion (successful)
2021	URI Welcome and Community Connection – Mentor Networking Breakout
	session lead
2021	Entering Mentoring and Inclusive Mentoring Training – Center for the Improvement
	of Mentored Experiences in Research and National Research Mentoring Network
2020-2022	Committee Member: American Geophysical Union Inclusive Graduate Education
	Network - Bridges Program URI GSO & CELS
2019-present	Summer Undergraduate Research Fellowship in Oceanography (SURFO) Mentor.
	NSF REU program at URI-GSO
2018-present	Society for Women in Marine Sciences (SWMS): Graduate Student Mentor;
	Society for Women in Marine Sciences (SWMS) Symposium. Session Moderator:



Narragansett, RI Mar 2018; Woods Hole, MA Sept 2018; Narragansett, RI Dec 2020 2014-present ASLO Graduate Student Mentor

 2014-present ASEO Graduate Student Wenton
 2014-2017 Project Leader, Community College Research Internship for Scientific Engagement CC-RISE, University of California, Santa Cruz
 2013 Project Leader, High School Summer Student Internship Program, University of California – Santa Cruz (Santa Cruz, CA, June – December 2013).

#### Synergistic Activities

2024	URI-GSO Promotion and Tenure Committee Member
2024	NSF Panel Member – Division of Biological Infrastructure
2024	Ocean Sciences Meeting. Session co-organizer and co-chair: Leveraging
	historical archives to reconstruct ecological processes across temporal and spatial scales, Feb 2024
2023	Chief Scientist: Gulf of Maine Cruise aboard R/V Endeavor (EN700): April 18-26, 2023
2022	Science Exploration Camp Presenter – Inner Space Center, for RI Middle School and High School students
2022	Scientist Volunteer: "The Scientist is in" GSO and the Roger Williams Park Zoo Program for Earth Day
2022	Metcalf 24 <sup>th</sup> Annual Science Immersion Workshop for Journalists: Science coach
2022	Ocean Sciences Meeting. Session organizer and co-chair: Compound-specific
	isotopes in marine ecology and biogeochemistry: analysis and applications, March 2022
2022-2023	Chair: Campus Community Committee
2021	2021 UCAR Annual Members Meeting - Participation
2021	Scientist Volunteer: "The Scientist is in" GSO and the Roger Williams Park Zoo
	Program for World Ocean's Day
2021	Metcalf 23 <sup>rd</sup> Annual Science Immersion Workshop for Journalists: Science coach
2021	RI C-AIM Vis-a-thon Program, science collaboration with RISD
2020-2023	Student Admission and Review Committee – Biology Representative since 2020, Chair since 2021 (URI-GSO)
2020	Chief Scientist: Antarctica Research Cruise aboard M/V Ocean Endeavor Quark Enterprises (END010720): Jan 6-18, Western Antarctic Peninsula)
2020	NOAA Panel member – Climate Program office
2020	NSF Panel Member – Office of Polar Programs
2019	Chief Scientist: Antarctica Research Cruise aboard M/V Ocean Endeavor Quark
	Enterprises (END021819): Feb 16 – Mar 13, Falklands (Malvinas), South Georgia, Western Antarctic Peninsula.
2019	Search Committee Member: Tenure track faculty position in Ecosystem Modeling (successful)
2018-2020	Committee Member: Environmental Sustainability Committee, Transportation subcommittee



2018-2021	Committee Member: URI-GSO Self-Study Committee, Communication and Public Outreach subcommittee
2018-present	Skype-a-Scientist Educator: K-12 education and outreach
2018	Ocean Sciences Meeting. Session organizer and chair, student presentation judge: Integrative approaches and emerging techniques to study the sources and cycling of organic matter through isotope ecology and geochemistry, Portland, OR, Feb 2018
2017-present	IsoBank – Environmental Isotope Chemistry Subgroup Committee member
2017	ASLO Aquatic Sciences Meeting. Session co-organizer and co-chair: Tracing ecological dynamics and biogeochemical cycles via compound-specific isotope analysis (CSIA) of organic compounds, Honolulu, HI February 2017
2016	Chief Scientist: Antarctica Research Cruise aboard M/V Ocean Endeavor Quark Enterprises (END120316): Dec 1 – Dec 14, Western Antarctic Peninsula
2016	12 <sup>th</sup> International Coral Reef Symposium. Session co-organizer and co-chair:
	Movement Ecology on Coral Reefs, (Honolulu, HI, June 2016).
2015	NSF Panel Member – Office of Polar Programs
2014-present	Scholarship Committee Chair, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course)
2014	Organizer and chair, Section F Session 153: Using Compound-Specific Stable
	Isotope Analysis to Advance Population and Community Ecology, Ocean Sciences Meeting (Honolulu, HI, Feb 2014)
2013	Marine Science advisor, iDive SCUBA-Hack to develop apps for the new Apple iPad underwater housing unit (iDive) in conjunction with iOS developers
2012-2020	Science Advisory Project Member, Phoenix Islands Protected Area – UNESCO
	World Heritage Site
2012	Co-Organizer, Workshop II: Sampling animal tissues for stable isotope analysis,
	8 <sup>th</sup> Annual Isotope Ecology Conference (Brest, France, August 2012).
2012	Project Leader, Bates College Career Discovery in Practice, Woods Hole
	Oceanographic Institution (Woods Hole, MA, January 2012).

Manuscript reviewer for: Amino Acids, Aquaculture Research, Aquatic Ecology, Archaeometry, Canadian Journal of Zoology, Coral Reefs, Current Biology, Deep Sea Research, Ecological Monographs, Ecology, Ecology and Evolution, Ecology Letters, Ecosphere, Environmental Microbiology, Environmental Science and Technology, Estuaries, Frontiers in Marine Science, Functional Ecology, Geochimica et Cosmochimica Acta, Global Change Biology, Hydrobiologia, ICES Journal of Marine Science, Journal of Animal Ecology, Journal of Experimental Marine Biology and Ecology, Journal of Fish Biology, Journal of Sea Research, Limnology and Oceanography, Limnology and Oceanography Letters, Marine Biology, Marine Biology Research, Marine Chemistry, Marine Ecology, Marine Ecology Progress Series, Marine Environmental Research, Marine Mammal Science, Methods in Ecology and Evolution, Nature, Oecologia, Oikos, Philosophical Transactions of Royal Society B, PLOS One, Polar Biology, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society B, Progress in Oceanography, Rapid Communications in Mass Spectrometry, Scientific Reports



**Grant reviewer for:** Canada Foundation of Innovation, Marsden Fund, National Geographic Society, National Science Foundation (DEB: LTER; EAR: GG, SGP; GEO: OCE – BIO, OCE-CHEM, CAMEO; OPP: ANS, AON); Natural Environment Research Council; Sea Grant; UK Department of Environment, Food, and Rural Affairs; The Rolex Awards for Enterprise; The Royal Society: Newton International Fellowship

*Dive certifications:* AAUS Scientific Diver, NAUI Advanced Open Water, NAUI Rescue Diver, NAUI Nitrox, NAUI Drysuit, IANTD Closed-Circuit rebreather

*Society membership:* American Association for Underwater Scientists, American Fisheries Society, Association for the Sciences of Limnology and Oceanography, Divers Alert Network, Ecological Society of America, Society for Women in Marine Sciences, National Research Mentoring Network

Current as of May 2024