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Education

2011 **Ph.D.** (**Biological Oceanography**) Massachusetts Institute of Technology-Woods Hole Oceanographic Institution Joint Program in Oceanography: Applied Ocean Science and Engineering

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

2014 – present	Faculty Lecturer : Ocean Sciences Department, University of California, Santa Cruz, Santa Cruz, CA USA
2014 - present	Postdoctoral Scholar : Keck Sciences Department, Claremont-McKenna College, Claremont, CA USA Supervisor: Dr. Branwen Williams
2013 - present	Postdoctoral Scholar : Ocean Sciences Department, University of California, Santa Cruz, Santa Cruz, CA USA Supervisors: Dr. Mathew McCarthy and Dr. Thomas Guilderson
2011 - 2012	Postdoctoral Fellow : Red Sea Research Center, King Abdullah University of Science and Technology, Thuwal, Kingdom of Saudi Arabia and Biology Department, Woods Hole Oceanographic Institution, Woods Hole, MA, USA Supervisors: Dr. Michael Berumen (KAUST) and Dr. Simon Thorrold (WHOI)

Publications

16. **McMahon KW**, Elsdon T, Thorrold SR, McCarthy M (in press). Trophic discrimination of nitrogen stable isotopes in amino acids varies with diet quality in a marine fish. *Limnology and Oceanography*



- 15. **McMahon KW**, Polito M, Abel S, McCarthy MD, Thorrold SR (in press) Carbon and nitrogen isotope fractionation of amino acids in an avian marine predator, the Gentoo penguin (*Pygoscelis papua*). *Ecology and Evolution*
- 14. Schiff JT, Batista F, Sherwood OA, Guilderson TP, Hill TM, Ravelo AC, **McMahon KW**, McCarthy MD (2014) Compound specific amino acid δ^{13} C patterns in a deep-sea proteinaceous coral: implications for reconstructing detailed δ^{13} C records of exported primary production. *Marine Chemistry* 166: 82-91
- 13. **McMahon KW**, 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. **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^{13} 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, **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, McMahon KW, and Aurioles D (2009) 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. J. West, G. J. Bowen, T. E. Dawson, K. P. Tu). pp. 299-318, *Springer*, New York
- 5. Skomal GB, Zeeman SI, Chisholm JH, Summers EL, Walsh HJ, **McMahon KW**, Thorrold SR. (2009) Mesopelagic trans-equatorial migrations by basking sharks in the western Atlantic Ocean. *Current Biology* **19**:1019-1022



- 4. Carroll M, Johnson B, Henkes G, **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
- 3. Ambrose WG, Carroll ML, Greenacre M, Thorrold SR, **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
- 2. **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)
- 1. **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, submitted and near completion,

- a. **McMahon KW**, Reynolds M, Johnson BJ, Ambrose WG, Clough LM (in review) Terrestrial organic matter fuels Arctic coastal lagoon food webs. *PLOS One*
- b. **McMahon KW**, Thorrold SR, Houghton LA, Berumen ML (in review) Tracing carbon flow through food webs in tropical seascapes: a compound-specific carbon isotope approach. *Oecologia*
- c. **McMahon KW**, Guilderson TP, Sherwood OA, Larsen T, McCarthy MD (submitted) Millennial-scale plankton regime shifts in the subtropical North Pacific Ocean. Intended *Science*

Research Grants and Fellowships

- 2012 King Abdullah University of Science and Technology Postdoctoral Fellowship research grant (\$25,000)
- 2008 International Society for Reef Studies/Ocean Conservancy Coral Reef Research Fellowship (\$14,546)
- 2008 Ocean Life Institute Student Research Grant (\$2,340)
- 2008 Isoscapes Conference Travel Grant (\$400)
- 2006-9 National Science Foundation Graduate Research Fellowship (\$121,500)
- 2005-6 Ocean Life Fellowship (\$28,446)
- 2005 Howard Hughes Travel Grant (\$500)
- 2004-5 Howard Hughes Summer Fellowship (\$3,000)
- 2004 Bates College Student Research Grant (\$3,000)
- 2004 Howard Hughes Student-Faculty Research Grant (\$12,000)
- 2004 Howard Hughes Travel Grant (\$500)
- 2003 Bates College Student Research Grant (\$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 33rd 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)
- 2001 Arthur Crafts Award

Teaching Experience

- 2015 **Guest Lecturer**, Claremont-McKenna College, EA 52: Environmental Science, Policy and Politics, introductory undergraduates (45 students)
- 2014 **Instructor**, UC-Santa Cruz, OCEA-01: The Oceans, introductory undergraduates (200 students), Overall teaching evaluation 4.6 out of 5 (62% response rate)
- 2014 **Co-Instructor**, University of Utah, Isotopes in Spatial Ecology and Biogeochemistry (SPATIAL Short Course), graduate students (30 students)
- **Guest Lecturer**, UC-Merced, ES291: Environmental Systems Seminar, graduate students (45 students)
- 2013 **Guest Lecturer**, UC-Santa Cruz, OCEA-290J: Topics in Marine Organic Geochemistry, multiple lectures for graduate students (15 students)
- 2012 **Guest Lecturer**, Bates College, Bio313: Marine Ecology, advanced undergraduates (15 students)
- 2012 **Guest Lecturer**, Bates College, Geo340: Stable Isotope Geochemistry, advanced undergraduates (12 students)
- 2012 **Guest Lecturer**, King Abdullah University of Science and Technology, MarSE 221: Marine Life, graduate students (20 students)
- 2010 Guest Lecturer, Sea Education Association, advanced undergraduates (25 students)
- 2010 **Teaching Assistant**, MIT/WHOI Joint Program: 7.43: Biological Oceanography, graduate students (15 students)
- 2010 **Guest Lecturer**, Connecticut College: Biology/Botany 294: Seminar Series, advanced undergraduates (25 students)
- 2009 **Co-Instructor**, Woods Hole Oceanographic Institution: Developed and co-taught three week course "Human Impacts on the Marine Environment," advanced undergraduates (5 students)
- 2008 **Guest Lecturer**, Mullen-Hall Elementary School: Multiple lessons on ocean science, Elementary School
- 2008 **Guest Lecturer**, Brown University: BIOL1880: Comparative Biology of Vertebrates, advanced undergraduates
- 2007 **Guest Lecturer**, Codman Academy: Marine Biology Course, high school students (20 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

- 2014 **Undergraduate mentor**: Kevin Miles (West Valley College), Community College Research Internship for Scientific Engagement CC-RISE
- ASLO mentor: Elizabeth Hetherington (UC-San Diego) and Amanda McCutcheon (U. of Guam), Ocean Sciences Meeting, Honolulu, HI 2014
- 2013 Graduate student mentor: Emily Brault, John Schiff, UC-Santa Cruz
- 2013 Undergraduate mentor: Melissa Hanson, UC-Santa Cruz
- 2013 **High school mentor**: Anastasia Leopold, High School Summer Intern program, UC-Santa Cruz
- 2012 **Undergraduate mentor**: Elizabeth Sonshine, Bates College Career Discovery in Practice
- 2011 Thesis committee member: Carolynn Harris, Undergraduate honors thesis, Bates College
- 2010-11 **High school mentor**: MacKenzie Tasha, Falmouth High School Volunteer in Public Schools (VIPS)
- 2008-11 **MIT-WHOI Graduate Student mentor**: Li Ling Hamady, Santiago Herrera, Katherine Pitz, Maya Yamato

Conference Presentations

- **McMahon KW**, McCarthy MD, Guilderson TP. Oral Presentation: "Decadal to century scale changes in North Pacific Ocean phytoplankton communities assessed by δ^{13} C compound-specific stable isotope analysis of deep-sea corals." Ocean Sciences Meeting, February 2014, Honolulu, HI, USA (Session 153 F organizer and chair)
- **McMahon KW**, Berumen ML, Thorrold SR. Oral Presentation: "Unraveling carbon flow pathways on coral reefs with compound specific stable isotope analysis." 8th Annual Isotope Ecology Conference, August 2012, Brest, France
- **McMahon KW**, Berumen ML, Thorrold SR. Oral Presentation: "Seascape connectivity in a Red Sea coral reef ecosystem." 12th International Coral Reef Symposium, July 2012, Cairns, Australia
- **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



- **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
- **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
- **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
- **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." 4th International Otolith Symposium, August 2009, Monterey, CA, USA (Best Student Paper Award)
- **McMahon KW**, Fogel ML, Elsdon TS, Thorrold SR. Oral Presentation: "Carbon isotope fractionation of amino acids of a marine fish." 33rd Annual Larval Fish Conference, July 2009, Portland, OR, USA (Sally Richardson Best Student Paper Award)
- **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." 6th Annual Isotope Ecology Conference, August 2008, Honolulu, HI, USA
- **McMahon KW**, Thorrold SR. Poster Presentation "Ocean ecogeochemistry applied to connectivity analyses in marine populations." Isoscapes Conference, April 2008, Santa Barbara, CA, USA
- **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." 34th Annual Benthic Ecology Meeting. April 2005, Williamsburg, VA, USA
- **McMahon KW**. Oral Presentation: "The Impacts of a changing food supply on Arctic benthos." Mount David Research Symposium, March 2005, Lewiston, ME, USA
- **McMahon KW**, Johnson BJ, Ambrose WG Jr. Poster Presentation: "Contributions of local food items to the diet of *Fundulus heteroclitus*: analysis of δ^{13} C/ δ^{15} N and gut contents." 33^{rd} Annual Benthic Ecology Meeting. March 2004, Mobile, AL, USA
- **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 Papers (# indicates student presentation)
- #Miles KW, Glynn DS, **McMahon KW**, McCarthy MD, Guilderson TP. "Investigating past ocean ecosystem variability with δ^{13} C and δ^{15} 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
- #Glynn D, McCarthy MD, **McMahon KW**, Guilderson T. "Millennial scale oscillations in bulk δ^{15} N and δ^{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
- 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^{15} N and δ^{13} C records from proteinaceous deep-sea corals. American Geophysical Union Fall Meeting, December 2014, San Francisco, CA, USA
- 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
- 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
- #Leopold A, Brault E, **McMahon KW**. "Variation in bulk δ^{13} C and δ^{15} N values of ancient Antarctic seal bones." American Geophysical Union Fall Meeting, December 2013, San Francisco, CA, USA
- Thorrold SR, **McMahon KW**, Berumen ML. "Revisiting the source of carbon fueling fisheries on coral reefs." 12th International Coral Reef Symposium, July 2012, Cairns, Australia
- 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
- DesRosiers N, Noble, M, **McMahon KW**, Berumen ML. "Distribution patterns and ecology of *Amphiprion bicinctus* in the central Red Sea, Saudi Arabia." 2nd Asia-Pacific Coral Reef Symposium, June 2010, Phuket, Thailand
- Ambrose WG, Carroll ML, Clough LM, Greenacre M, **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.
- Skomal GB, Zeeman SI, Chisholm JH, Summers EL, Walsh HJ, **McMahon KW**, Thorrold SR. "Mesopelagic trans-equatorial migrations by basking sharks in the western Atlantic Ocean" 25th Annual American Elasmobranch Society Meeting, July 2009, Portland, OR, USA
- Carroll ML, Johnson BJ, Henkes GA, **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
- Graham B, Fry B, Popp B, Koch P, Newsome S, **McMahon KW**. "Using isoscapes to trace the movements and foraging behavior of predators in oceanic ecosystems." 6th Annual Isotope Ecology Conference, August 2008, Honolulu, HI, USA
- 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, **McMahon KW**, Carroll ML. "Shifts in the δ¹³C 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
- 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
- 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." 1st International Sclerochronology Conference, July 2007, St. Petersburg, FL, USA
- 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
- Carroll ML, Ambrose WG, Greenacre M, Clough LM, **McMahon KW**, Stinson L, 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, **McMahon KW**, Carroll ML. "Shifts in the δ¹³C 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
- Johnson BJ, Ambrose WG Jr., Henkes GA, **McMahon KW**, Carroll ML. "Shifts in the δ^{13} 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
- Johnson BJ, Ambrose WG, **McMahon KW**, Carroll ML. "Shifts in the δ^{13} 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, **McMahon KW**. "Climate change on Svalbard: Evidence from modern and fossil bivalves." Arctic Frontiers Meeting. January 2007, Tromsö, Norway
- Clough LM, Ambrose WG, Betournay S, Carroll ML, Lopez GR, Meltzer K, Sun M-Y, **McMahon KW**, Richardson M. "The digestibility of ice algae and phytoplankton: Impacts on arctic benthic macrofauna." Ocean Sciences Meeting. February 2006, Honolulu, HI, USA
- Carroll ML, Ambrose WG, Greenacre M, **McMahon KW**, Thorrold SR. "Patterns of variation in bivalve frowth 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, **McMahon KW**, Thorrold SR. ""Patterns of variation in bivalve frowth in a Norwegian High-Arctic Fjord: Evidence for local- and large-scale forcing." 34th Annual Benthic Ecology Meeting. April 2005, Williamsburg, VA, USA
- Carroll ML, Clough LM, Sun M-Y, Lopez GR, Ambrose WG, **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 Talks and Seminars

- Keck Science Department Seminar, February 2015, Claremont McKenna College, Claremont, CA, USA
- Center for Accelerated Mass Spectrometry Seminar, July 2014, Lawrence Livermore National Laboratory, Livermore, CA, USA





- Chesapeake Biological Laboratory Seminar, July 2014, University of Maryland, Solomons, MD, USA
- Marine Biology Seminar, April 2014, Scripps Institution of Oceanography, La Jolla, CA, USA
- Environmental Earth System Science Seminar, March 2014, Stanford University, Palo Alto, CA, USA
- Environmental Systems Seminar, January 2014, University of California-Merced, Merced, CA USA
- Environmental Earth System Science Seminar, December 2013, Stanford University, Palo Alto, CA, USA
- Southwest Fisheries Science Center Seminar, November 2013, NOAA Fisheries Service, Santa Cruz, CA, USA
- iDive SCUBA-Hack, August 2013, Marine Science and iOS developer workshop, San Francisco, CA, USA
- Ocean Science Department Seminar, May 2013, University of California-Santa Cruz, Santa Cruz, CA, USA
- Red Sea Research Center Department Seminar, December 2012, King Abdullah University of Science and Technology, Thuwal, Kingdom of Saudi Arabia
- Biology Department Seminar, Oct 2012, Bates College, Lewiston, ME, USA
- Workshop II: Sampling animal tissues for stable isotope analysis, August 2012, 8th Annual Isotope Ecology Conference, Brest, France. Workshop co-organizer and presenter.
- ARC Centre of Excellence Coral Reef Studies Seminar, June 2011, James Cook University, Townsville, Australia
- Sea Education Association, June 2010, Woods Hole, MA, USA
- Biology Department Seminar, February 2010, Connecticut College, New London, CT, USA
- Biology Department Seminar, November 2009, Woods Hole Oceanographic Institution, Woods Hole, MA
- Ocean Science Journalism Fellows Lecture, September 2009, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
- Biology Department Seminar, February 2009, Bates College, Lewiston, ME, USA





- Trustee and Corporation Member Lecture, October 2008, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
- Ocean Science Journalism Fellows Lecture, September 2008, Woods Hole Oceanographic Institution, Woods Hole, MA, USA
- School of Marine and Atmospheric Sciences Lecture, April 2005, Stony Brook University, Stony Brook, NY, USA
- Ecology and Evolutionary Biology Department Lecture, October 2004, Cornell University, Ithaca, NY, USA

Synergistic Activities

- 2014 Project Leader, Community College Research Internship for Scientific Engagement CC-RISE, University of California Santa Cruz (Santa Cruz, CA, June August 2014)
- 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).
- 2014 Project member, Phoenix Islands Protected Area Expedition Science 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 conjuction with iOS developers
- 2013 Project Leader, High School Summer Student Internship Program, University of California Santa Cruz (Santa Cruz, CA, June December 2013).
- 2012 Co-Organizer, Workshop II: Sampling animal tissues for stable isotope analysis, 8th 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).
- 2010-2011 Member, Falmouth High School Volunteer in Public Schools (VIPS) (Falmouth, MA).

Manuscript reviewer for: Amino Acids, Aquaculture Research, Coral Reefs, Deep Sea Research, Environmental Science and Technology, Ecology, Ecosphere, Estuaries, Journal of Animal Ecology, Journal of Experimental Marine Biology and Ecology, Journal of Sea Research, Limnology and Oceanography, Marine Biology, Marine Ecology Progress Series, Methods in Ecology and Evolution, PLOS One, Progress in Oceanography, Rapid Communications in Mass Spectrometry





Grant reviewer for: National Geographic Society, National Science Foundation, Sea Grant

Dive certifications: 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, Phi Beta Kappa Society, Sigma Xi Scientific Research Society, WHOI Postdoctoral Association

Current as of February 2014

Letters of Reference

Dr. Mathew McCarthy Associate Professor Ocean Sciences Department University of California Santa Cruz, CA 95060 Ph: (831) 459-4718 mccarthy@pmc.ucsc.edu

Dr. Marilyn Fogel Senior Professor School of Natural Sciences University of California Merced, CA 95343 Ph: 209-205-6743 mfogel@ucmerced.edu

Dr. Simon Thorrold Senior Scientist Biology Department, MS # 50 Woods Hole Oceanographic Institution Bates College Woods Hole, MA 02543 Ph: (508) 289-3366 sthorrold@whoi.edu

Dr. William Ambrose Jr. Senior Professor **Biology Department** Lewiston, MS 04240 Ph: (207) 786-6114 wambrose@bates.edu