

Sophie J. McCoy, Ph.D.

University of North Carolina at Chapel Hill
Department of Biology
Wilson 334, CB3280
Chapel Hill, NC 27599
e-mail: sophie.mccoy@unc.edu; website: marecology.com

Professional Appointments

Department of Biology University of North Carolina at Chapel Hill	Assistant Professor <i>2022 - present</i>
Phycological Society of America	Norma J. Lang Early Career Fellow <i>2019 - 2022</i>
Department of Biological Science Florida State University	Assistant Professor <i>2016 - 2021</i>
Marine Ecology and Biodiversity Group Plymouth Marine Laboratory	Marie Curie Fellow <i>2014 - 2016</i>

Education

Ph.D. Ecology & Evolution The University of Chicago, Chicago, IL	2014
Sc.B. Chemistry (Honors) Brown University, Providence, RI	2008

Awards, Honors, & Fellowships

Voices for Science Fellowship, Science Policy Track American Geophysical Union	2020 - 2021
Norma J. Lang Early Career Fellowship Phycological Society of America	2019 - 2022
First Year Assistant Professor Award Florida State University	2017
Postdoctoral and Early Career Researcher Exchange Fellowship Marine Alliance for Science and Technology, Scotland	2016
Marie Curie International Incoming Fellowship (IIF) EU FP7 Programme	2014 - 2016
Best Dissertation in the Biological Sciences University of Chicago	2014

Departmental Award, Ecology and Evolution University of Chicago	2014
Bold Award Phycological Society of America	2013
Outstanding Student Paper Award, Ocean Sciences Section American Geophysical Union Meeting	2011
Graduate Research Fellowship (GRFP) National Science Foundation	2010 - 2014
National Defense Science & Engineering Graduate Fellowship (NDSEG) US Department of Defense	2010 - 2013
Planetary Biology Internship (PBI) Award National Aeronautics and Space Administration	2009
Karen T. Romer Undergraduate Research Assistantship Brown University	2007

Publications

ORCID ID 0000-0003-1324-1578

(**lab members**, graduate student author, *undergraduate student author*)

31. **Manning, JC** and **SJ McCoy** (2022). Coprophagy in Caribbean parrotfishes. Accepted, *Ecology*.
30. Page, HN, K Bahr, T Cyronak, E Jewett, M Johnson and **SJ McCoy** (2022). Responses of benthic calcifying algae to ocean acidification differ between laboratory and field settings. *ICES Journal of Marine Science*, fsab232. doi:10.1093/icesjms/fsab232
29. *Miranda, K, B Weigel* and **SJ McCoy**, and CA Pfister (2021). The ecosystem consequences of alternate primary producers. *Ecology*, 102(9): e03455. doi: 10.1002/ecy.3455
28. **Kolzenburg, R**, F D'Amore, **SJ McCoy**, and F Ragazzola (2021). Physiological adaptations in marginal populations of *Corallina officinalis* to future climatic changes. *Environmental and Experimental Botany*, 188: 104522. doi: 10.1016/j.envexpbot.2021.104522
27. **Cissell, EC**, SA Kranz, and **SJ McCoy** (2021). Rhodolith holobionts are not sources of fixed nitrogen in a northeastern Gulf of Mexico patch reef. *Bulletin of Marine Science*, 97(1). doi: 10.5343/bms.2020.0041
26. **Cissell, EC**, and **SJ McCoy** (2021). Shotgun metagenomic sequencing reveals the full taxonomic, trophic, and functional diversity of a coral reef benthic cyanobacterial mat from Bonaire, Caribbean Netherlands. *Science of the Total Environment*, 755: 142719. doi: 10.1016/j.scitotenv.2020.142719
25. Twist, BA, CE Cornwall, **SJ McCoy**, PW Gabrielson, PT Martone and WA Nelson (2020). The need to employ reliable and reproducible species identifications in coralline algal research. *Marine Ecology Progress Series*, 654: 225-231. doi: 10.3354/meps13506
24. **McCoy, SJ**, SA Krueger-Hadfield and N Mieszkowska (2020). Evolutionary phycology: Toward a macroalgal species conceptual framework. *Journal of Phycology*, 56(6): 1404-1413. doi: 10.1111/jpy.13059

23. Lester, SE, A Rassweiler, **SJ McCoy**, M Donovan, A Dubel, M Miller, S Miller, B Ruttenberg, J Samhour and ME Hay (2020). Caribbean reefs of the Anthropocene: variance in ecosystem services and bright spots at coral depauperate reefs. *Global Change Biology*, 26(9): 4785-99. doi: 10.1111/gcb.15253
22. Cullen, CM, A Kawalpreet, S Beyhan, CE Cho, S Woloszynek, M Convertino, **SJ McCoy**, Y Zhang, M Anderson, D Alvarez-Ponce, E Smirnova, L Karstens, PC Dorrestein, H Li, AS Gupta, K Cheung, J Powers, Z Zhao and G Rosen (2020). Emerging priorities for microbiome research. *Frontiers in Microbiology*, 11: 72. doi: 10.3389/fmicb.2020.00136
21. **McCoy, SJ**, A Santillán-Sarmiento, MT Brown, S Widdicombe and GA Wheeler (2020). Photosynthetic responses of turf-forming red macroalgae to high-CO₂ conditions. 56(1): 85-96. *Journal of Phycology*. doi: 10.1111/jpy.12922
20. **McCoy, SJ**, and S Widdicombe (2019). Thermal tolerance is independent of environmental history in an intertidal seaweed. *Ecology and Evolution*, 9(23): 13402-13412. doi: 10.1002/ece3.5796
19. Cissell, EC, JC Manning and **SJ McCoy** (2019). Consumption of proliferating cyanobacterial mats on Caribbean reefs. *Scientific Reports* 9: 12693. doi: 10.1038/s41598-019-49126-9
18. Ravaglioli, C, F Bulleri, S Ruhl, **SJ McCoy**, H Findlay, S Widdicombe and AM Queirós (2019). Ocean acidification and hypoxia alter organic carbon fluxes in marine soft sediments. *Global Change Biology*, 25(12): 4165-4178. doi: 10.1111/gcb.14806
17. Kolzenburg, R, KR Nicastro, **SJ McCoy**, A Ford, GI Zardi and F Ragazzola (2019). Understanding the margin squeeze: Differentiation in fitness-related traits between central and trailing edge populations of *Corallina officinalis*. *Ecology and Evolution*: 1-15. doi: 10.1002/ece3.5162
16. Queirós, AM, N Stephens, S Widdicombe, K Tait, **SJ McCoy**, J Ingels, S Ruhl, R Airs, A Beesley, G Carnovale, P Cazenave, S Dashfield, E Hua, M Jones, P Lindeque, CL McNeill, J Nunes, H Parry, C Pascoe, A Rees, C Widdicombe, T Smyth, A Atkinson, D Krause-Jensen and PJ Somerfield (2019). Connected macroalgal-sediment systems: blue carbon and foodwebs in the deep coastal ocean. *Ecological Monographs*: 89(3): e01366. doi: 10.1002/ecm.1366
 - F1000 Recommended Article
15. Yuan, X, **SJ McCoy**, Y Du, S Widdicombe and JM Hall-Spencer (2018). Physiological and behavioral plasticity of the sea cucumber *Holothuria forskali* (Echinodermata, Holothuroidea) to acidified seawater. *Frontiers Physiology*, 9: 1339. doi: 10.3389/fphys.2018.01339
14. **McCoy, SJ**, and NA Kamenos (2018). Coralline algal skeletal mineralogy affects grazer impacts. *Global Change Biology*, 24(10): 4775-4783. doi: 10.1111/gcb.14370
13. **McCoy, SJ**, NA Kamenos, P Chung, JT Wootton and CA Pfister (2018). Altered crystal mineralogy in the California mussel on decadal and centennial scales in a changing ocean. *Global Change Biology*, 24(6): 2554-2562. doi: 10.1111/gcb.14013
12. Pfister, CA, K Roy, JT Wootton, **SJ McCoy**, RT Paine, TS Suchanek and ES Sanford (2016). Historical baselines and the future of shell calcification for a foundation species in a changing ocean, *Proceedings of the Royal Society, B*, 283: 20160392. doi 10.1098/rspb.2016.0392
11. **McCoy, SJ**, CA Pfister, G Olack and AS Colman (2016). Diurnal and tidal patterns of carbon uptake and calcification in geniculate intertidal coralline algae, *Marine Ecology*, 37(3): 553-564. doi 10.1111/maec.12295
10. **McCoy, SJ**, S Allesina and CA Pfister (2016). Ocean acidification affects competition for space: projections of community structure using cellular automata, *Proceedings of the Royal Society, B*, 283: 20152561. doi 10.1098/rspb.2015.2561

9. Nunes, J, **SJ McCoy**, HS Findlay, F Hopkins, V Kitidis, AM Queirós, L Rayner and S Widdicombe (2016). Two intertidal, non-calcifying macroalgae (*Palmaria palmata* and *Saccharina latissima*) show complex and variable responses to short-term CO₂ acidification, *ICES Journal of Marine Science*, 73(3): 887-896. doi 10.1093/icesjms/fsv081
8. **McCoy, SJ**, and NA Kamenos (2015). Coralline algae (Rhodophyta) in a changing world: integrating ecological, physiological, and geochemical responses to global change, *Journal of Phycology*, 51:6-24.
7. **McCoy, SJ**, and F Ragazzola (2014). Skeletal trade-offs in coralline algae in response to ocean acidification, *Nature Climate Change*, 4: 719-723.
 - *Highlighted article in Nature Climate Change: News and Views*
6. **McCoy, SJ**, and CA Pfister (2014). Historical comparisons reveal altered competitive interactions in a guild of crustose coralline algae, *Ecology Letters*, 17: 475-483.
5. **McCoy, SJ** (2013). Morphology of the crustose coralline alga *Pseudolithophyllum muricatum* (Rhodophyta, Corallinaceae) responds to 30 years of ocean acidification in the northeast Pacific, *Journal of Phycology*, 49(5): 830-837.
4. Garrard, SL, R Hunter, A Frommel, AC Lane, JC Phillips, R Cooper, R Dineshram, U Cardini, **SJ McCoy**, M Arnberg, BG Rodrigues Alves, S Annane, MR de Orte, A Kumar, G Aguirre-Martínez, RH Maneja, MD Basallote Sánchez, F Ape, A Torstensson and MM Bjoerk (2013). Ocean acidification: the next generation - a postgraduate perspective on research priorities, *Marine Biology*, 160: 1789-1805.
3. Pfister, CA, **SJ McCoy**, JT Wootton, PA Martin, AS Colman and D Archer (2011). Rapid environmental change over the past decade revealed by isotopic analysis of the California mussel in the northeast Pacific, *PLoS One*, 6(10): e25766.
2. **McCoy, SJ**, LF Robinson, CA Pfister, JT Wootton and N Shimizu (2011). Exploring B/Ca as a pH-proxy in bivalves: relationships between *Mytilus californianus* B/Ca and environmental data from the northeast Pacific, *Biogeosciences*, 8: 2567-2579.
1. Russell, JM, **SJ McCoy**, D Verschuren, I Bessems and Y Huang (2009). Human impacts, climate change, and aquatic ecosystem response during the past 2000 yr at Lake Wandakara, Uganda, *Quaternary Research*, 72(3): 315-324.

Manuscripts Submitted

32. **Cissell, EC** and **SJ McCoy**. Marine cyanobacteria in the Anthropocene: Are top-down paradigms robust to climate change? In review, *Climate Change Ecology*.
33. **MacVicar, A**, **SJ Stoppelmann**, **TJ Broomes** and **SJ McCoy**. Gulf of Mexico rhodoliths are robust to sunscreen pollution. In review, *Marine Pollution Bulletin*.

Educational Research Manuscripts

- Lamb, T, AE Beatty, EP Driessen, R Youngblood, A Esco, S Cotner, C Creech, AG Drake, S Fagbodun, J Harshman, K Hobbs, AK Lane, E Larson, **SJ McCoy**, R Robnett, S Thompson, and CJ Ballen. Equity and inclusion underlie instructor assessment choices amid COVID-19 pandemic. In prep for *CBE - Life Sciences Education*.
- Robnett, R, CJ Ballen, S Fagbodun, AK Lane, **SJ McCoy**, L Robinson, E Weems, and S Cotner. Are synchronous chats a silver lining of emergency remote instruction? Text-based chatting is disproportionately favored by women in an introductory biology course. In review, *PLoS One*.

Reports

AMAP (2013) AMAP Assessment 2013: Arctic Ocean Acidification. Arctic Monitoring and Assessment Programme (AMAP), Oslo, Norway. viii + 99 pp.

Research Support

Pending

NSF Integrative Organismal Systems Pending
PI: McCoy \$368,754
Cryptic species and Functional Diversity in Algae: An Ecophysiological Niche Axis

Funded

FL License Plate Fund, Protect Our Reefs 07/21 - 06/22
PI: McCoy \$29,845
Top-down Controls of Benthic Cyanobacterial Mats

HHMI Inclusive Excellence (IE3) 02/21 - 01/22
PIs: Underwood, K. Burgess, Dixon, McCoy, McNutt & Winn \$30,000
Toward a Seamless and Inclusive Transition to FSU for Transfer Students in STEM

Tatelbaum Ocean Research Fund 09/20 - 08/23
PI: McCoy \$300,000
Links between Biology, Environmental Conditions and Water Chemistry

FACE Foundation, Thomas Jefferson Fund 09/20 - 09/22
PIs: McCoy & Le Gall \$10,000
Exploring Ecophysiological Divergence Among Cryptic Macroalgae

Phycological Society of America, Norma J. Lang Early Career Fellowship 09/19 - 08/23
PI: McCoy \$10,000
Determining Community-Level Interactions of Cryptic Macroalgae

NSF Research Coordination Network: Undergraduate Biology Education (UBE) 09/19 - 08/21
PI: S Cotner (McCoy as Senior Personnel) \$496,090
EDU-STEM: Equity and Diversity in Undergraduate STEM

Florida State University, Committee on Faculty Research Support Award 03/19 - 10/19
PI: McCoy \$14,000
Comparison of Pre- and Post-Industrial Marine Environments in the Gulf of Mexico

EU FP7 Marie Curie International Incoming Fellowship (IIF) 04/14 - 08/16
04/14 - 08/16 €221,606.40
REAFCC - Response of Ecosystem Assembly and Function to Climate Change: A multidisciplinary approach to understand community response to climate change in coastal rocky ecosystems

NSF Doctoral Dissertation Improvement Grant, DEB-1110412 05/11 - 05/13
PIs: Pfister & McCoy \$14,968
Effects of Ocean Acidification on the Physiology and Species Interactions of Crustose Coralline Red Algae

Achievement Rewards for College Scientists (ARCS) Foundation

PI: McCoy

Effects of Ocean Acidification on Coralline Algal Ecology

10/11 - 10/13

\$20,000

Teaching

Certificate in University Teaching, The University of Chicago Center for Teaching & Learning, 2013

Courses Developed and Taught, Florida State University

Experimental Biology Laboratory: Environmental and Ecological Physiology (Bio 3042L)

Fall 2016, 2017, Summer 2019, Spring 2020 Undergraduate course.

Ecophysiology (Bio 4933/5933)

Spring 2018, Fall 2019 Advanced undergraduate lecture course co-listed for graduate enrollment.

Courses Developed, The University of Chicago

Topics in Aquatic Ecology: Macroalgal Phototrophs (EceV 42700) with C. Stepien, C. Pfister

Fall 2012 Graduate directed reading group.

Approaches to Teaching in the Darwinian Sciences (Evol 49401) with N. Block, M. LaBarbera, Fall 2011

Advanced graduate course on teaching pedagogy - *developed with the University of Chicago Center for Teaching and Learning and faculty in the Dept. Ecology & Evolution and the Committee on Evolutionary Biology.*

Guest Lectures

Biogenic Calcites, University of California, Davis and Bodega Marine Lab, D. Gold, 2020

Marine Biology Honors Seminar, Florida State University, J. Wulff, 2016, 2018, 2019, 2020

Seminar in Biological Frontiers, Florida State University, T. Terebelski, 2017, 2019

Marine Ecology, Plymouth University, M. Brown, Autumn 2015

Teaching Assistant Training, University of Chicago, V. Prince, Fall 2013

Tropical Ecology: Biodiversity and Human Impacts, U. Chicago. E. Larsen, Winter 2013

Marine Ecology, University of Chicago, J.T. Wootton, Winter 2011

Graduate Teaching Assistant, The University of Chicago, 2009-2014

Population Ecology (Evol 42800) C. Pfister

Natural History of North American Deserts - Field School (Bios 13112) E. Larsen

Biodiversity (Bios 20198) M. LaBarbera

Tropical Ecology: Biodiversity and Human Impacts (Bios 13126) E. Larsen

Natural History of North American Deserts (Bios 13111) E. Larsen

Environmental Ecology (Bios 13107) T. Price

Approaches to Teaching in the Darwinian Sciences (Evol 49401) M. LaBarbera

Marine Ecology (Bios 23289) T. Wootton

Ecology and Evolution (Bios 20185) J. Coyne, G. Dwyer

Undergraduate Teaching Assistant, Brown University, 2006-2008

Introductory Chemistry (Chem 10) J. Lusk, S. Russo-Rodriguez

Equilibrium, Rate, and Structure (Chem 33) J. Doll, C. Rose-Petruck, R. Stratt

Advising and Mentorship

Mentorship Trainings

University of North Carolina at Chapel Hill, *TEAM ADVANCE*, in progress

Florida State University, 'Entering Mentoring' Workshop for Biology Faculty, 2021

Doctoral Students Advised

Florida State University (6)

Emily Fuqua ('26; co-advised with Sandra Brooke until Fall 2021)
Randi Bowman ('25; co-advised with Sandra Brooke until Fall 2021)
Ethan Cissell ('22)
Joshua Manning ('22)
Abigail Engleman ('20; co-advised with Sandra Brooke)

Doctoral Students Mentored as a Dissertation Committee Member

Florida State University (9)

Penelope Ales ('25; Advisors: Nora Underwood & Brian Inouye)
Aaron Ridall ('25; Advisor: Jeroen Ingels)
Christian Fender ('25; Advisor: Mike Stukel, EOAS)
Rachael Best ('24; Advisor: Don Levitan)
Gabrielle Fisher ('23; Advisor: Kay Jones)
Benjamin Puer ('23 ; Advisor: Joe Travis)
Juan Reza ('23; Advisor: Hank Bass)
Alexandra Hooks ('22 ; Advisor: Scott Burgess)
Brendan Scherer ('21; Advisor: Austin Mast)
Margaret Vogel ('20; Advisors: Tom Miller & Olivia Mason)

External Doctoral Dissertation Committee Member/Examiner (3)

Anna Kluibenschedl, University of Otago ('20; Advisor: Chris Cornwall & Chris Hepburn)
David Bélanger, Memorial University of Newfoundland ('20; Advisor: Patrick Gagnon)
Regina Kolzenburg, University of Portsmouth ('19; Advisor: Federica Ragazzola)

Visiting Doctoral Student Mentored

Plymouth Marine Laboratory (2)

Chiara Ravaglioli (University of Pisa, Italy)
Visnu da Cunha Sarmento (Universidade Federal de Pernambuco, Brazil)

Masters Students Advised

Florida State University (2)

Sean McCollum ('23; co-advised with Joel Trexler)
Brandon Witmer ('22 - advised until fall 2021)

Plymouth Marine Laboratory (2)

Elizabeth Elliot, M.Sc. Environmental Consultancy Programme, Plymouth University ('15; co-advised with Murray Brown)
Kirsten Seal, M.Sc. Applied Marine Science Programme, Plymouth University ('15; co-advised with Murray Brown)

Masters Students Mentored as a Dissertation Committee Member

Florida State University (4)

Dani Davis ('23; Advisor: Tom Miller)
Anthony Sogluizzo ('21; Advisor: Sandra Brooke)
Katherine Kaiser ('18; Advisor: Janie Wulff)

Undergraduate Researchers Advised (* laboratory research, ° field research)

Florida State University (12)

Lena Kury* ('23)
Alie MacVicar* ('22; Lehigh University)
Joseph Portillo* ('20)
Joh'Nyra Bryant* ('20)
Shelby Graziani* ('20)
Maxwell Gray* ('22)
Jessica Henson* ('22)
Braedon Koechle* ('21)
Alexis Rosa* ('22)
Isabelle Basden° ('19)
Briana Clark° ('21; Texas A&M)
Michelle Dziewit° ('21; Texas A&M)

*FSU Directed Independent Study,
Biological Science, Advisor (5)*

Maria De Jesus* ('21)
Troy Broomes* ('19)
Sara Stoppelmann* ('19)
Max Pearl* ('21)
Penelope Ales*° ('17)

*FSU Directed Independent Study,
Environmental Science, Advisor (4)*

TyLeah Tebbenkamp* ('20)
Samina Fuller* ('21)
Abigail Baker* ('21)
Rebecca Morrow° ('17)

*FSU Honors in the Major, Committee
Member (6)*

Chandler Wright (Marine Biology '21; Levitan)
Kristie Dick (Marine Biology '20; Morton)
Jane Wadhams (Geology '20; Owens)
Valencia Beckwith (Biology '19; Fuentes)
Isabelle Basden (Marine Biology '19; Wulff)
Yuliya Danyuk (Environmental Science '17; Kranz)

Plymouth Marine Laboratory (1)

Faye Dixon*° (Lancaster University '16)

The University of Chicago (7)

Lyda Harris° ('14)
Samuel Betcher° ('12)
Michaelyn Kanichy° (Stanford '14)
Peter Zaykoski° ('11)
Rachel Belangers* ('11)
Brendan Colson*° ('10)
Allison Barner* ('09)

High School Researchers Advised

*Florida State University, Young
Scholars Program (6)*

Mary Brady* (North Nicholas High School '19)
Caitlin Chen* (Oviedo High School '19)
Tran Le* (Apopka High School '19)
Racquelle Moxey* (Apopka High School '19)
Natalie Bailey* (Oviedo High School '18)
Carson Cole* (Space Coast High School '18)

Professional Service

Phycological Society of America

Norma J. Lang Fellowship Committee	2021 - present
Equity, Diversity, and Inclusion Committee	2020 - 2021
Student Grants Committee, Chair	2019 - present
Student Grants Committee	2016 - present

NOAA Gulf of Mexico Coastal Acidification Network (G-CAN)

Policy Working Group	2020 - 2021
Steering Committee	2016 - 2021

Florida State University

Executive Committee, Department of Biological Science	2020 - 2021
Executive Committee, Biological Science Imaging Resource Center (BSIR)	2020 - 2021
Committee on Faculty Research Support, Grant Reviewer, FSU Council on Research and Creativity	2019 - 2021
IDEA Grant Committee, FSU Center for Undergraduate Research and Academic Engagement	2019 - 2021
Margaret Menzel Award Committee, Department of Biological Science	2018 - 2021
NSF GRFP Workshop for Graduate Students, Co-organizer and presenter (with 3 faculty)	2017 - 2021
Mote Committee, Department of Biological Science	2016 - 2021
Research Faculty Search Committee, FSU Coastal and Marine Laboratory	2017, 2018
Coastal and Marine Conservation Student Research Award Committee, FSU Coastal and Marine Laboratory	2016 - 2018
Faculty Advisor to Seminole Scuba Club student group	2017 - 2018
Elections Committee, Department of Biological Science	2016 - 2017

Ongoing Service to Previous Institutions

The University of Chicago, Lawrence A. Kimpton Fellows Program, Alumni Mentor	2022 - present
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Phillips Academy Alumni Climate Group, co-founding member 2020 - present
 Phillips Academy Alumni Interviewer 2020 - present
 Brown University Alumni Interviewer 2009 - present

Grant Review

Panelist, NSF Postdoctoral Research Fellowships in Biology (PRFB) 2022
 Panelist, NSF Integrative Organismal Systems 2020
 Panelist, NSF Graduate Research Fellowship Program (GRFP) 2019, 2020
 Panelist National Defense Science and Engineering Graduate (NDSEG) Fellowship, American Society for Engineering Education 2015 - 2017, 2019

Reviewer: NSF (Biological Oceanography, Graduate Research Fellowship Program), American Philosophical Society (Lewis and Clark Fund), ASEE NDSEG Fellowship (Biosciences), MIT Sea Grant, NOAA Domestic Coral Reef Conservation Grant Program, NOAA Ocean Acidification Program, Florida Aquaculture License Plate Fund, the National Geographic Society, and the Phycological Society of America.

Service to Academic Journals

Special Issue Editor: *Algae in the Anthropocene, Climate Change Ecology* (Elsevier) 2020-2021
 External Report Reviewer, *Arctic Monitoring and Assessment Programme (AMAP) Assessment on Ocean Acidification in the Arctic* 2018

Reviewer: *Acta Botanica Brasiliica, African Journal of Environmental Science and Technology, The Biological Bulletin, Continental Shelf Research, Coral Reefs, Ecology, Ecology Letters, Frontiers in Marine Science, Geology, Global Change Biology, ICES Journal of Marine Science, Journal of Experimental Marine Biology and Ecology, Journal of Ecology, Journal of Phycology, Marine and Freshwater Research, Marine Biology, Marine Ecology Progress Series, Marine Environmental Research, Nature Climate Change, Nature Ecology and Evolution, Palaeogeography, Palaeoclimatology, Palaeoecology (Palaeo3), PeerJ, PLoS One, Proceedings of the Royal Society, B, Royal Society of Chemistry Advances, Royal Society Open Science, Science, and Scientific Reports.*

Educational Outreach (Youth & Community)

Skype a Scientist, Asheville Science Museum, Ask a Scientist at Tallahassee's First Fridays, Oasis Center for Women and Girls, Bio for the Win Science Blog, Chicago's Shedd Aquarium, ARCS Foundation, the American Geophysical Union Climate Science Q&A Service, Nuffield Foundation Research Placements, UTC Plymouth Women in STEM, Chicago Museum of Science and Industry (Science Works: Cool Jobs, Hot Careers 2013), University of Chicago GeoUnion Undergraduate Club, Spark Chicago Career Mentor, Chicago's Shedd Aquarium (Shedd Explorers Summer Camp), Chicago Public Schools Perspectives Charter School, and the Boys' and Girls' Club of Greater Lawrence.

Meeting Organization

Session Organizer: 'Lang Symposium: Evolutionary ecology of cryptic species,' Joint Aquatic Sciences Meeting, Grand Rapids, MI 2022
 Faculty Steering Committee: Southern Biogeochemistry Symposium at FSU 2018

Talks and Seminars

Invited Research Seminars

- 2022 Department of Biological Sciences, University of California, San Diego, CA (planned)
- 2021 Illinois Institute of Technology, Chicago, IL (virtual)
Department of Biological Science, Florida State University, Tallahassee, FL (virtual)
Department of Biology, University of North Carolina, Chapel Hill, NC (virtual)
Bigelow Marine Laboratory, East Boothbay, ME (virtual)
Department of Evolution and Ecology, University of California, Davis, CA (virtual)
- 2020 Department of Earth and Planetary Sciences, University of California, Davis, CA (virtual)
NOAA/GCOOS Gulf of Mexico Coastal Acidification Network (GCAN) Webinar
- 2019 Biology Department Seminar, University of North Florida, Jacksonville, FL
- 2017 Biological Sciences Postdoctoral Association, Florida State University, Tallahassee, FL
Tri-Beta Biological Honor Society, Florida State University, Tallahassee, FL
- 2016 Coastal & Marine Laboratory, Florida State University, St. Teresa, FL
Department of Zoology, Oxford University, Oxford, England
Marine Alliance for Science & Technology Scotland, Webinar
Scottish Association for Marine Science, Oban, Scotland
- 2015 School of Marine Science & Engineering, Plymouth University, Plymouth, England
GEOMAR Helmholtz Centre for Ocean Research, Kiel, Germany
School of Geographical and Earth Sciences, Univ. Glasgow, Glasgow, Scotland
Department of Biological Science, Florida State University, Tallahassee, FL
- 2014 Department of Integrative Biology, The University of Texas at Austin, Austin, TX
Plymouth Marine Laboratory, Plymouth, England
School of Biology, Georgia Institute of Technology, Atlanta, GA
Climate Change Forum, The Field Museum, Chicago, IL
Department of Ecology & Evolutionary Biology, University of Michigan, Ann Arbor, MI
- 2013 John G. Shedd Aquarium, Chicago, IL
- 2009 PaleoLunch Series, Woods Hole Oceanographic Institution, Woods Hole, MA

Conference Presentations (First Author only, # denotes Invited Speaker)

- 2022 # Ecological Society of America Annual Meeting, Montreal, Canada (planned)
Phycological Society of America Annual Meeting, Grand Rapids, MI - *Invited Plenary* (planned)
- 2020 Ocean Sciences Meeting, San Diego, CA
- 2019 Phycological Society of America Annual Meeting, Hollywood Beach, FL
- 2018 Southeastern Phycological Colloquy, Jacksonville, FL

- # American Fisheries Society Annual Meeting, Special Symposium: 'Bad Acid: Past and future risk of acidification to aquatic ecosystems that support fisheries and aquaculture,' Atlantic City, NJ
- VI International Rhodolith Workshop, Roscoff, France
- 2016 # Gordon Research Conference, Classifying Biotic Responses to a Rapidly Changing Ocean: From Genes to Ecosystems, Waterville Valley, NH
- # Western Society of Naturalists, Monterey, CA
- The IXth International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms, Cambridge, England
- 2015 Aquatic Biodiversity and Ecosystems, Liverpool, England
- Aquatic Sciences Meeting, Granada, Spain
- 2014 Ecological Society of America 99th Annual Meeting, Sacramento, CA
- # Early Career Scientist Symposium, University of Michigan, Ann Arbor, MI
- Ocean Sciences Meeting, Honolulu, HI
- 2013 International Phycological Congress / Phycological Society of America, Orlando, FL
 - *Harold C. Bold Award for Best Student Presentation*
- 2012 Third Symposium on the Ocean in a High-CO₂ World, Monterey, CA
- Ecological Society of America 97th Annual Meeting, Portland, OR
- 2011 Fall Meeting of the American Geophysical Union, San Francisco, CA
 - *Outstanding Student Paper Award, Ocean Sciences Section*
- Workshop on Acidification in Aquatic Environments, Tromsø, Norway
- 2010 Ocean Sciences Meeting, Portland, OR
- 2009 Fall Meeting of the American Geophysical Union, San Francisco, CA

Public & Outreach Talks

- 2022 Blue Runs Deep, Industry Session: Climate Change, Phillips Academy, Andover, MA (virtual)
- 2021 Climate Cafe, Earth Day Speaker, Phillips Academy, Andover, MA (virtual)
- 2020 Asheville Museum of Science, Asheville, NC (virtual)
- South Florida Divers, Inc. (SFDI), Ft. Lauderdale, FL (virtual)
- Alumni Climate Cafe, Phillips Academy, Andover, MA (virtual)
- 2019 Thomasville University Science Cafe, Thomasville, GA
- 2018 Climate: Science and Society, Florida State University, Tallahassee, FL
 - <https://youtu.be/SdmGij6WLgU>
 - Our Ocean Economy: Algae, Florida State Capitol, Tallahassee, FL (02/12/18)
- 2013 Chicago Council on Science and Technology (C²ST), Chicago, IL