Amanda C. Spivak

Professor
Department of Marine Sciences
Franklin College of Arts and Sciences
University of Georgia

p. 762.499.6228
e. aspivak@uga.edu
orcid: 0000-0001-6743-0783

DEGREES

2008: Ph.D., Marine Science. College of William & Mary, Williamsburg, VA.
2001: A.B., Biology, Environmental Science concentration, with honors. Minor in English. Magna Cum Laude. Bryn Mawr College, Bryn Mawr, PA.

ACADEMIC POSITIONS

Professor. University of Georgia, Department of Marine Sciences, Franklin College of Arts and Sciences, Athens, GA. *2025 - Present*.
Associate Professor. University of Georgia, Department of Marine Sciences, Franklin College of Arts and Sciences, Athens, GA. *2019 – 2025*.
Associate Scientist. Woods Hole Oceanographic Institution, Department of Marine Chemistry and Geochemistry, Woods Hole, MA. *2015 – 2018.*
Assistant Scientist. Woods Hole Oceanographic Institution, Department of Marine Chemistry and Geochemistry, Woods Hole, MA. *2011 – 2015.*
Postdoctoral Fellow. U.S. Environmental Protection Agency, Gulf Ecology Division, Ecosystem Assessment Branch, Gulf Breeze, FL. *2010 – 2011.*
Postdoctoral Fellow. Miami University, Zoology Department, Oxford, OH. Advisor: Michael J. Vanni. *2008 – 2009.*
Graduate Assistant. College of William & Mary, Virginia Institute of Marine Science, Physical Sciences Department, Gloucester Point, VA. *2002 – 2008.*

RECOGNITION AND OUTSTANDING ACHIEVEMENTS

US EPA Scientific and Technological Achievement Award Honorable Mention, 2013
ASLO Early Career Travel Award, 2013
Invited Participant, ECO-DĀS VIII, 2008
U.S. Environmental Protection Agency STAR Fellow, 2005 – 2008
VIMS Matthew Fontaine Maury Student Fellowship Award, 2007
Virginia Institute of Marine Science Student Research Grant, 2005-2006
Virginia Institute of Marine Science Graduate Fellowship Award, 2002-2005

EDUCATION

Courses taught at UGA (since 2019; number of students in parentheses)

Classroom Instruction:

MARS 3450: Marine Biology. 3 credits. SP25 (45).
MARS 8010: Biological Oceanographic Processes. 3 credits. FA24 (15), FA23 (16), FA22 (14), FA21 (13); FA20 (11), FA19 (9).
MARS 8130: Seminar in Hydrobiology. 1 credit. SP 25 (12), FA24 (17), SP21 (13), FA20 (17).
MARS 8160: Marine Ecology. 3 credits. SP22 (8), SP20 (3).

Undergraduate Research (variable credits):

MARS 4960R: Faculty-mentored undergraduate research I. SP25(1), FA24 (2).
BIOL 4960R: Faculty-mentored undergraduate research I. SP22 (2), FA21 (2).
CHEM 4600: Independent Research. SP20, FA19. (1).
ECOL 4960R: Faculty-mentored undergraduate research I. FA23, SU22, SP21, SP20.

ECOL 4970R: Faculty-mentored undergraduate research II. FA23 (1).
ECOL 4990R: Undergraduate Research Thesis. SP24 (1). FA22 (1).
GEOG 3990: Internship in Geography. SP24 (1).

Graduate Directed Research (variable credits):
MARS 7000: Masters Research. SP23 (1). FA22 (2), SP22 (4), FA21 (3), SP21 (2), FA20 (2).
MARS 7300: Masters Thesis. SP23 (1), FA22 (2).
MARS 8900: Research Techniques in Marine Science. SU25 (3). SP25 (3). FA24 (3). SU24 (1). SP24 (1). FA23 (1), SU23 (1), SP23 (2), FA22 (3), SP22 (4), FA21 (3), SP21 (2), FA20 (2), SP20 (1).
MARS 9000: Doctoral Research. SU25 (4). SP25 (4). FA24 (4). SU 24 (2) SP24 (2). FA23 (2). SU23 (1), SP23 (1). FA22 (1).

Courses taught at the Massachusetts Institute of Technology (MIT) – Woods Hole Oceanographic Institution (WHOI) Joint Program (2011-2018; number of students in parentheses)

Classroom Instruction:
MIT 12.743: Geochemistry: Marine Sediments. SP17 (5), SP15(3), SP13(7) 18 units (3 credits).
MIT 7.433: Topics in Biological Oceanography: Food Webs - Structure, Dynamics, and Ecosystem Function. FA16 (5). 6 units (1 credit).
MIT 12.759. Marine Chemistry Seminar: Landmark Papers in Chemical Oceanography SP12(11), SP14(8). 6 units (1 credit).

Undergraduate Research:
WH.490. Semester at WHOI directed research. FA15(1), FA17(1) 6 credits.

Graduate Directed Research:
MIT 12.722: Doctoral Research, Pre-Thesis Proposal. Fall 2017 – Fall 2018. 18-36 units (3-6 credits per semester). 100%.

Recognitions and Outstanding Achievements by Students
UGA Office of Postdoctoral Affairs Travel Award. S-M Chen. 2025
Knauss Fellowship. G. Giordano. 2024
Knauss Fellowship. S. Luk. 2022
Coastal & Estuarine Research Federation Graduate Student Poster Award. G. Giordano. 2021
Coastal & Estuarine Research Federation Rising Tides Award. T. Manns. 2021
UGA Center for Undergraduate Research Opportunities Research Assistantships to C. Bowser, B. Pevey. 2023. S. Reddy, S. Kanaparti, S. Dong. 2021. W.R. Farrell. 2020
WHOI Ocean Ventures Fund award to Ph.D. student S. Luk. 2019. $5,980
Coastal & Estuarine Research Federation Student travel award to S. Luk. 2019. $300
Coastal & Estuarine Research Federation Undergraduate poster award. R. Schenck. 2017

PUBLICATIONS

The following notation and symbols are used:

underlined: corresponding or presenting author	
italics: graduate student	*: postdoc
±: undergraduate student	^: technician

BOOKS/THESES AUTHORED

Spivak, A.C. 2008. Bottom-up and Top-down Controls on Sedimentary Ecosystem Functioning in a Seagrass Habitat. Ph.D. Thesis, College of William and Mary, Virginia Institute of Marine Science, Virginia. Advisors: Drs. E.A. Canuel and J.E. Duffy

Spivak, A.C. 2001. Lopsided symbioses in *Scleractinian* corals. Undergraduate Thesis. Bryn Mawr College, Pennsylvania.

JOURNAL ARTICLES (PEER REVIEWED)

34. Reddy, S.[±], W. R. Farrell[±], F. Wu, S. Pennings, J. Sanderman, M. Eagle, C. Craft, **A.C. Spivak**. Decomposing the Tea Bag Index and finding slower organic matter loss rates at higher elevations and deeper soil horizons in a minerogenic salt marsh. *Biogeosciences*. 22(2): 435–453 10.5194/bg-22-435-2025

33. Koontz, E., J.R. Holmquist, S.M. Parker, A. Stearns, B.J. Roberts, C.M. Young, L. Windham-Myers, P. Oikawa, J.P. Megonigal, G. L. Noyce, E. Buskey, R.K. Derby, R. P. Dunn, M.C. Ferner, J. L. Krask, C. Marconi, K. Savage, J. Shahan, **A.C. Spivak**, K. St. Laurent, J. Argueta, S. Baird, K.M. Beheshti, L. C. Crane, K.A. Cressman, J.A. Crooks, S. Fernald, J.A. Garwood, J.S. Goldstein, T. Grothues, A. Habeck, S. Lerberg, S. B. Lucas, P. Marcum, C. Peter, S. Phipps, K.B. Raposa, A.S. Rovai, S. Schooler, R. R. Twilley, M.C. Tyrrell, K.A. Uyeda, S. Wulfing, J. Aman, A. Giacchetti, S. Cross-Johnson. Controls on spatial variation in porewater methane concentrations across U.S. tidal wetlands. *Global Change Biology*. 957: 177290. 10.1016/j.scitotenv.2024.177290

32. Mariotti, G., G. Ceccherini, C. Alexander, **A.C. Spivak**. 2024. Centennial changes of salt marsh area in Coastal Georgia (USA) related to large-scale sediment dynamics by river, waves, and tides. *Estuaries and Coasts* 47: 1498-1516

31. Hill, K., and **A.C. Spivak** (2024). Blue Carbon and Wetlands Compensatory Mitigation: Fitting a Climate-Sized Peg into a Watershed-Sized Hole, *Sea Grant Law and Policy Journal* 13(1):67-97.

30. Holmquist, J.R., D.H. Klinges, M. Lonneman, J. Wolfe, B. Boyd, M. Eagle, J. Sanderman, K. Todd-Brown, E.F. Belshe, S. Chapman, R. Corstanje, C. Janousek, J.T Morris, G. Noe, A. Rovai, **A.C. Spivak**, M. Vashen, L. Windham-Myers, K. Kroeger, J. P. Megonigal (2024). The Coastal Carbon Library and Atlas: Open source soil data and tools supporting blue carbon research and policy, *Global Change Biology* 30(1): e17098.

29. Bowen, J.L., **A.C. Spivak**, A.E. Bernhard, R.W. Fulweiler, A.E. Giblin (2023). Salt marsh nitrogen cycling: Where land meets sea, *Trends in Microbiology* 10.1016/j.tim.2023.09.010. *Invited Review*

28. **Spivak, A.C**., A. Pinsonneault*, C. Hintz, J. Brandes, J. P. Megonigal (2023). Ephemeral microbial responses to pulses of bioavailable carbon in oxic and anoxic salt marsh soils, *Soil Biology and Biochemistry* 185: 109157.

27. *Luk, S.Y.*, K.M. Gosselin^, J. Sanderman, G. Mariotti, M. Eagle, **A.C. Spivak**. 2023. Peat decomposition and erosion contribute to pond deepening in a temperate salt marsh, *Journal of Geophysical Research: Biogeosciences* 128 (2): e2022JG007063.

26. Eagle, M. J., K. D. Kroeger, **A. C. Spivak**, F. Wang, J. Tang, O. I. Abdul-Aziz, K. S. Ishtiaq, J. O'Keefe Suttles, and A. G. Mann. 2022. Soil carbon consequences of historic hydrologic impairment and recent restoration in coastal wetlands, *Science of the Total Environment*, 848: 157682.

25. Wu, F., S.C. Pennings, C. Ortals, J. Ruiz, W.R. Farrell[±], S. McNichol^, C. Angelini, **A.C. Spivak**, M. Alber, C. Tong. 2022. Disturbance is complicated: Headward-eroding saltmarsh creeks produce multiple responses and recovery trajectories. *Limnology and Oceanography* 67: S86-S100.

24. Gosselin, K.M., R.K. Nelson, **A.C. Spivak**, S.P. Sylva, B.A.S. Van Mooy, C. Aeppli, C. Sharpless, G.W. O'Neil, E.C. Arrington, C.M. Reddy, D.L. Valentine. 2021. Production of Two Highly Abundant 2-Methyl-Branched Fatty Acids by Blooms of the Globally Significant Marine Cyanobacteria *Trichodesmium erythraeum*, *ACS Omega* 6 (35): 22803-22810.

23. *Luk, S.Y.*, K. Todd-Brown, M.E. Gonneea, A.P. McNichol, J. Sanderman, K. Gosselin^, and **A.C. Spivak**. 2021. Soil organic carbon development and decay in natural and disturbed salt marsh environments, *Geophysical Research Letters* 48 (2): e2020GL090287.

22. Wang, F., M. Gonneea, K. Kroeger, **A.C. Spivak**, and J. Tang. 2021. Plant biomass and rates of carbon dioxide uptake are enhanced by successful restoration of tidal connectivity in salt marshes, *Science of the Total Environment* 750: 141566.

21. **Spivak, A.C**., A. Denmark±, K.M. Gosselin^, and S.P. Sylva^. 2020. Pond biogeochemistry does not scale with dimensions or landscape features in a temperate salt marsh, *Journal of Geophysical Research – Biogeosciences* 125 (10): e2020JG005664.

20. Mariotti, G., **A.C. Spivak**, *S.Y. Luk*, G. Ceccherini, M. Tyrrell, and M.E. Gonneea. 2020. Modeling the spatial dynamics of marsh ponds in New England salt marshes, *Geomorphology* 365: 107262.

19. Howard, E.M., **A.C. Spivak**, J.S. Karolewski, K.M. Gosselin^, Z.O. Sandwith, C.C. Manning, and R.H.R. Stanley. 2020. Dissolved oxygen and triple oxygen isotope measurements provide different insights into gross oxygen production in a shallow salt marsh pond, *Estuaries and Coasts* 43 (8): 1908-1922

18. Osland, M., L. Feher, **A.C. Spivak**, J. Nestlerode, A. Almario, N. Cormier, A. From, K. Krauss, M. Russell, F. Alvarez, D. Dantin, J. Harvey, C. Stagg. 2020. Rapid peat development beneath created, maturing mangrove forests: Ecosystem changes across a 25-year chronosequence. *Ecological Applications* 30 (4): e02085

17. Bulseco, A.N., J.H. Vineis, A.E. Murphy, **A.C. Spivak**, A.E. Giblin, J. Tucker, and J.L. Bowen, 2020. Metagenomics coupled with biogeochemical rates measurements provide evidence that nitrate addition stimulates respiration in salt marsh sediments, *Limnology and Oceanography*. 65: S321-S339.

16. **Spivak, A.C.**, J. Sanderman, J.L. Bowen, E.A. Canuel, C.S. Hopkinson. 2019. Global- change controls on soil-carbon accumulation and loss in coastal vegetated ecosystems, *Nature Geoscience* 12(9): 685-692. *Highlighted by Nature Geoscience in a "Focus on Soil Organic Carbon" collection. www.nature.com/collections/iedgfhcebe*

15. Nelson, J.A., D.S. Johnson, L.A. Deegan, **A.C. Spivak**, and N.R. Sommer. 2019. Feedbacks between nutrient enrichment and geomorphology alter bottom-up control on food webs, *Ecosystems.* 22: 229-242.

14. **Spivak, A.C.**, K. Gosselin^, and S.P. Sylva^. 2018. Shallow ponds are biogeochemically distinct habitats in salt marsh ecosystems, *Limnology and Oceanography* 63: 1622-1642.

13. **Spivak, A.C.,** K. Gosselin^, E. Howard, G. Mariotti, I. Forbrich, R. Stanley, and S.P. Sylva^. 2017. Shallow ponds are heterogeneous habitats within salt marsh ecosystems, *Journal of Geophysical Research – Biogeosciences* 122: 1371-1384.

12. Krauss, K.K., N. Cormier, M.J. Osland, M.L. Kirwan, C.L. Stagg, J.A. Nestlerode, M.J. Russell, A.S. From, **A.C. Spivak**, D.D. Dantin, J.E. Harvey, and A.E. Almario. 2017. Created mangrove wetlands store belowground carbon and surface elevation change enables them to adjust to sea-level rise, *Scientific Reports* 7(1030): 1-11. *Highlighted in USGS Earth Science Matters Newsletter. Volume 7, Fall 2017*

11. **Spivak, A.C**. and J. Ossolinski^. 2016. Limited effects of nutrient enrichment bacterial carbon sources in salt marsh tidal creek sediments, *Marine Ecology Progress Series* 544: 107-130.

10. **Spivak, A.C.** and J. Reeve±. 2015. Rapid cycling of recently fixed carbon in a *Spartina alterniflora* system: A stable isotope tracer experiment, *Biogeochemistry* 125: 97-114.

9. **Spivak, A.C.** 2015. Benthic biogeochemical responses to changing estuary trophic state and nutrient availability: A paired field and mesocosm experiment approach, *Limnology and Oceanography* 60(1): 3-21.
8. Schmitz, O.J., P.R. Raymond, J.A. Estes, W.A. Kurz, G.W. Holtgrieve, M.E. Ritchie, D.E. Schindler, **A.C. Spivak**, R.W. Wilson, M.A. Bradford, V. Christansen, L. Deegan, V. Smetacek, M.J. Vanni, and C.C. Wilmers. 2014. Animating the carbon cycle, *Ecosystems* 17(2): 344-359
7. Osland, M.J., **A.C. Spivak**, J.A. Nestlerode, J.M. Lessman, A.E. Almario, P.T. Heitmuller, M.J. Russell, K.W. Krauss, F. Alvarez, D.D. Dantin, J.E. Harvey, A.S. From, N. Cormier, and C.L. Stagg. 2012. Ecosystem development after mangrove wetland creation: Plant - soil change across a 20-year chronosequence, *Ecosystems* 15(5): 848-866.
6. **Spivak, A.C**., M.J. Vanni, and E. Mette. 2011. Moving on up: Can results from simple aquatic mesocosm experiments be applied across broad spatial scales?, *Freshwater Biology* 56(2): 279-291. *One of the most highly ranked articles in ecology by Faculty of 1000, 2011*
5. **Spivak, A.C**., E.A. Canuel, J.E. Duffy, and J.P. Richardson. 2009. Nutrient enrichment and food web composition affect ecosystem metabolism in an experimental seagrass habitat, *PLoS ONE* 4(10): e7473.
4. **Spivak, A.C**., E.A. Canuel, J.E. Duffy, J.G. Douglass, and J.P. Richardson. 2009. Epifaunal community composition and nutrient levels alter sediment organic matter composition in a seagrass bed: A field experiment, *Marine Ecology Progress Series* 376: 55-67.
3. **Spivak, A.C.**, E.A. Canuel, J.E. Duffy, and J.P. Richardson. 2007. Top-down and bottom-up controls on sediment organic matter composition in an experimental seagrass system, *Limnology and Oceanography* 52: 2595-2607.
2. Douglass, J.G., J.E. Duffy, **A.C. Spivak**, and J.P. Richardson. 2007. Nutrient versus consumer control of community structure in a Chesapeake Bay eelgrass habitat, *Marine Ecology Progress Series* 348: 71-83.
1. Canuel, E.A., **A.C. Spivak**, E.J. Waterson, and J.E. Duffy. 2007. Biodiversity and food web structure influence short-term accumulation of sediment organic matter in an experimental seagrass system, *Limnology & Oceanography* 52:590-602

SYMPOSIUM PROCEEDINGS (PEER-REVIEWED):

2. Fox, S., Y. Olsen, and **A.C. Spivak**. 2010. Effects of bottom-up and top-down controls and climate change on estuarine macrophyte communities and the ecosystem services they provide, p. 129-145. In P.F. Kemp [ed.], Eco-DĀS VIII Symposium Proceedings. ASLO.
1. Griffen, B.D., D. Spooner, **A.C. Spivak**, A.M. Kramer, A.E. Santoro, N.E. Kelly. 2010. Moving species redundancy toward a more predictive framework, p. 30-46. In P.F. Kemp [ed.], Eco-DĀS VIII Symposium Proceedings. ASLO.

WORKS SUBMITTED BUT NOT YET ACCEPTED (PEER-REVIEWED):

1. Holmquist JR, EF Belshe, B Boyd, LN Brown, S Chapman, R Corstanje, M Eagle, C Janousek, M Jung, D Klinges, M Lonneman, JT Morris, G Noe, A Rovai, J Sanderman, **A Spivak**, K Todd-Brown, M Vahsen, L Windham-Myers, JP Megonigal. Probabilistic forecasting of coastal wetland soil carbon response to sea-level rise. Submitted to *Ecological Monographs*.
2. Langley, JA, SK Chapman, TL Maxwell, P Rivera, L Wang, MF Adame, C Asanopolous, JF Blanco, JL Breithaupt, SWJ Canty, L Chambers, J Cornwell, C Craft, IC Feller, Dan Friese, G Guntenspergen, J Holmquist, SF Jones, JLJ Jupin, BP Kelleher, Grey, J Kelleway, ML Kirwan, KW Krauss, CE Lovelock, A McLellan, JP Megonigal, JT Morris, SC Neubauer, M Pastore, K Rogers, AS Rovai, AC Ruiz-Fernandez, N Saintilan, JA Sanchez-Cabeza, LT Simpson, C

Smeaton, **AC Spivak**, H Steinmuller, NB Weston. Blue nitrogen burial follows the fate of tidal wetlands. Submitted to *JGR-Earth's Future*.

3. Pierce, M.J., T. Lynn, J. Grissett, S. Ziegler, S. Williams, S. Reddy, S. Dong, C. Bowser, M. Alber, S.C. Pennings, D.R. Mishra, A.C. Spivak, J.E. Byers. Scaling the spatial and temporal effects of wrack disturbance across a salt marsh landscape. Submitted to Marine Ecology Progress Series.

4. White, M., D. Burkepile, A. Stier, A. Chen, A. Stajner, A.C. Spivak, B. Strickland, M. Castorani, D. Capone, G. Cawley, J. Allgeier, J. Nelson, J. Caselle, J. Rehage, J. Peters, K. Emery, L. Enright, L. Kui, N. Lemoine, N. Lyon, R. Hopcroft, S. Grier, W. R. James. Species richness and synchrony regulate the temporal stability of consumer-mediated nutrient dynamics in marine ecosystems.

CREATIVE CONTRIBUTIONS OTHER THAN FORMAL PUBLICATIONS

Musical composition: Sonification of GCE-LTER Data. Collaboration with Dr. Peter V. Z. Lane (UGA). Part of the "Waves of Wonder" installation at the Ships of the Sea Maritime Museum (6-9/2024, GA). Concert premiere at the GA Tech Symphony Orchestra (Fall 2024). 2023-2024.

"Global change affects soil carbon storage in blue carbon ecosystems". 9/2019. Nature Ecology and Evolution blog. natureecoevocommunity.nature.com/posts/53239-global-change-affects-soil-carbon-storage-in-blue-carbon-ecosystems

"Marshes, Mosquitoes, and Sea Level Rise: How did mosquito-control methods affect coastal marshes?" 10/2018. Oceanus. http://www.whoi.edu/oceanus/feature/managing-marshes-mosquitoes-sea-level-rise

"A Changing Oceanscape: Carbon and Marine Ecosystems". 11/2017. Film from the Ocean Carbon and Biogeochemistry Program and featured at the 2017 AGU Fall Meeting. https://www.us-ocb.org/new-ocb-short-film/

"Study will explore salt marsh management". 10/2017. Falmouth Enterprise Newspaper

RESEARCH GRANTS

22. National Science Foundation. Cross Directorate. (2025-2031). LTER: Georgia Coastal Ecosystems – V. M. Alber, S. Pennings, A.C. Spivak. Total $7,542,000.

21. Simons Foundation. (2024-2028). The short and the long of it: Understanding how oscillatory flow and redox affect the rapid carbon transformations that contribute to long-term preservation in marsh soils. A.C. Spivak (sole PI) Total $1,164,155.
One of 7 awards comprising the $8.4 M collaboration "Ecosystem on the Edge: How Coastal Marsh Plants and Microbes Thrive in an Oscillating Environment". Z. Cardon, J. Bowen, I. Forbrich, A. Giblin, C. Harvey, M. Keiluweit, and A.C. Spivak

20. Department of Energy, Advanced Light Source General User Proposals, Laurence Berkeley Lab. (2025) Characterizing redox effects on mechanisms destabilizing soil carbon in contrasting salt marshes. A.C. Spivak, J. Pett-Ridge, and P. Nico. Multiple shifts on STXM beams 5.3.2.2, 11.0.2

19. National Oceanic and Atmospheric Administration, Georgia Sea Grant (2024-2026). Leveraging sediment properties to enhance blue carbon storage in beneficial use restoration projects. A.C. Spivak (sole PI) Total $149,998

18. National Oceanic and Atmospheric Administration, Georgia Division of Natural Resources Coastal Incentive Grant (2023-2025). Marsh Migration and Blue Carbon: Scientific and Legal Research to Inform Coastal Management. K. Hill and A.C. Spivak. Total $159,607

17. National Science Foundation. (2023) Coastal Connections Post-Baccalaureate Program. Supplement to Georgia Coastal Ecosystems LTER. Total $48,854

16. Department of Energy, Joint Genome Institute, Community Science Program (2021) Microbial controls on carbon cycling and storage resulting from saltwater intrusion in tidal fresh, brackish, and saline marshes. J. Bowen and A.C. Spivak. Sequencing of 92 microbial genomics samples

15. National Science Foundation, Division of Environmental Biology (2021-2024) MCA: Characterizing Rhizosphere Decomposition with Novel Techniques in Contrasting Salt Marshes. A.C. Spivak (sole PI) $370,330

14. Department of the Army, US Coastal Research Program (2020-2023) Hydrological management of a tidally restricted coastal wetland: Characterizing biogeochemical responses over multiple time scales. A.C. Spivak (sole PI) $340,962.

13. National Oceanic and Atmospheric Administration, Georgia Division of Natural Resources Coastal Incentive Grant (2020-2022) Are Georgia's salt marshes keeping up with sea level? Characterizing accretion rates and improving model predictions. A.C. Spivak (sole PI). Total $159,996

12. National Oceanic and Atmospheric Administration, Georgia Sea Grant (2020-2022) Tidal channel network dynamics and salt marsh ecosystem functioning along the Georgia Coast. A.C. Spivak (lead PI), G. Mariotti. Total $150,000.

11. Office of Naval Research (2018-2020) "Junior Researcher" STEM Program. Aecern, LLC (education company leading the project). ($74,889 sub-award to Spivak).

10. National Oceanic and Atmospheric Administration, Woods Hole Sea Grant (2018-2020) Pond Management and Carbon Storage in Salt Marshes. A.C. Spivak (lead PI) and G. Mariotti. Total $174,771.

9. National Oceanic and Atmospheric Administration, National Estuarine Research Reserve System Science Collaborative (2017-2020) Evaluating the Impact of Hydrologic Alterations on Salt Marsh Sustainability in a Changing Climate. A.C. Spivak (lead PI), G. Mariotti, T.M. Rogers, M. Gonneea, M. Tyrell, S. Adamowicz, G. Sakolsky, K. Kroeger, and Z. Wang. Total $500,000.

8. Woods Hole Oceanographic Institution, Andrew W. Mellon Foundation Award for Innovative Research (2016-2018) Quantifying the Impact of Ponding on Carbon Storage in Salt Marshes A.C. Spivak (sole PI). Total $58,866

7. Woods Hole Oceanographic Institution, Ocean Life Initiative (2016-2018) Will Ocean Acidification affect Food Chain Efficiency in Natural Communities? A.C. Spivak (lead PI) and Z.A. Wang. Total $74,966

6. National Oceanic and Atmospheric Administration, Massachusetts Institute of Technology Sea Grant (2015-2017) Evaluating Salt Marsh Ecosystem Restoration: Quantifying Soil Carbon Accumulation and Greenhouse Gas Emissions Across an 11-y Chronosequence. A.C. Spivak (lead PI), M. Gonneea, and K. Kroeger. Total $150,000.

5. Woods Hole Oceanographic Institution, Coastal Ocean Initiative (2015-2017) An Experimental Test of Nutrient Reduction on Carbon Cycling in Eutrophic Sediment A.C. Spivak (sole PI). Total $74,933

4. Woods Hole Oceanographic Institution, Mellon Joint Initiatives Award (2015-2017) Impacts of Anadromous Herring on Lake Metabolism and Sediment Biogeochemistry: A Natural Experiment Afforded by Dam Removal A.C. Spivak (lead PI) & J. Llopiz. Total $97,543

3. National Science Foundation, OCE Biological Oceanography (2012-2015) Eutrophication Effects on Sediment Metabolism and Benthic Algal-bacterial Coupling: An Application of Novel Techniques in a LTER Estuary. R.H. Stanley (lead PI) and A.C. Spivak. Total $786,298

2. Woods Hole Oceanographic Institution, Coastal Ocean Initiative (2012-2014) Linking Carbon, Nitrogen, and Sulfur dynamics in a *Spartina alterniflora* Saltmarsh: Characterizing the Sources of Organic Matter Decomposed by Sediment Microbes A.C. Spivak (sole PI). Total $46,700

1. Woods Hole Oceanographic Institution, Arctic Research Initiative (2011-2013) Bioavailability of ancient terrestrial organic carbon in the Mackenzie River System. A.C. Spivak (lead PI) and M. Coolen. Total $67,461

SUPERVISION OF STUDENTS, POSTDOCTORAL ASSOCIATE, AND TECHNICIANS

POSTDOCTORAL RESEARCH ASSOCIATE AT UGA (SINCE 2019):

S. Chen. Marine Sciences Department. Advisor. 2024 – present.
A. Pinsonneault. Marine Sciences Department. Advisor. 2019–2021

GRADUATE ADVISOR AND COMMITTEE MEMBER AT UGA (SINCE 2019):

N. Zhang. Ph.D. Marine Sciences Department. Advisor. 2024 – present.
B. Guo. Ph.D. Marine Sciences Department. Advisor. 2022 – present
J. Simon. Ph.D. Marine Sciences Department. Co-advisor. 2023 – present
G. Giordano. M.S. Marine Sciences Department. Advisor. 2020 – 2023.
T. Manns. M.S. Marine Sciences Department. Advisor. 2020 – 2022.
W. Phelps. M.S. Civil and Environmental Engineering. Advisor. 2020-2022.

H. Leavitt. Ph.D. Marine Sciences Department. Committee member. 2024 – present
C. Nivison. Ph.D. Odum School of Ecology. Committee member. 2023 – present
P. Okrah. Ph.D. Marine Sciences Department. Committee member. 2023– present
G. Azarius Utsumi. Ph.D. Marine Sciences Department. Committee member. 2021 – present
A. Julien. Ph.D. Geography Department. Committee member. 2021 – present
C. Narron. Ph.D. Geography Department. Committee member. 2019–present
R. Martineac. Ph.D. Marine Sciences Department. Committee member. 2019 – 2023

J. Beeck. MS. Marine Sciences Department. Committee member. 2024–present
A. Thomas. M.S. Marine Sciences Department. Committee member. 2024–present
A. Baker. M.S. Marine Sciences Department. Committee member. 2024– present
L. Carroll. M.S. Warnell School. Committee member. 2019 – 2023

GRADUATE ADVISOR AND COMMITTEE MEMBER AT MIT-WHOI JOINT PROGRAM (2011-2018):

S. Luk. Ph.D. Marine Chemistry & Geochemistry. Advisor. 2016 – 2021
E. Howard. Ph.D. Marine Chemistry & Geochemistry. Committee member. 2014-2016.

EXTERNAL GRADUATE COMMITTEE MEMBER:

J. L'Heureux. Ph.D. Northeastern University. 2021 – 2024.

POST-BACCALAUREATE RESEARCH MENTOR:

D. Doomstorm. 2023-2024.

UNDERGRADUATE RESEARCH SUPERVISOR AT UGA (SINCE 2019):

C. Bowser. Thesis. CURO project. 5/2022 – 5/2024. Ecology major
S. G. Reddy. Thesis. CURO project. 8/2020 – 12/2022. Ecology and Biology majors.
K. Griffin. Non-thesis. CURO project. 8/2024 – 5/2025. Ocean Sciences major
B. Pevey. Non-thesis. CURO project. 8/2023-12/2023. Ocean Sciences major
S. Dong. Non-thesis. CURO project. 8/2021 – 5/2023. Biology major
S. Kanaparti. Non-thesis. CURO project. 8/2021 – 5/2022. Biology major
W. R. Farrell. Non-thesis. CURO project. 5/2019 – 7/2020. Ecology and Marketing major

M. Hutchinson. Non-thesis. 5/2025- present. Ecology major.
A. Grove. Non-thesis. 5/2025-8/2025. Intern from University of Delaware
N. Wiggins. Non-thesis. 1/2025-5/2025. Ecology major
O. Francois. Non-thesis. 8/2024 - 12/2024. Geology major
N. Kute. Non-thesis. 1/2024 - 5/2024. Ecology major
S. Noble-Kuchera. Non-thesis. 5/2023-8/2023. Intern from Georgia Tech
R. Kabira. Non-thesis. 5/2022 – 8/2022. Pharmacy major
A. Daniel. Non-thesis. 1/2022 – 5/2022. Biology major
Z. Alexander. Non-thesis 8/2021 – 12/2021. Ecology major
R. Lofgren. Non-thesis. 5/2021 – 8/2022. Ecology major
S. Speir. GCE Summer Intern. 5/2021 – 8/2021. Ecology major.
H. S. Mai. Non-thesis. 8/2019 – 5/2020. Chemistry major.

UNDERGRADUATE RESEARCH SUPERVISOR AT WHOI (2011-2018):

M. Francesconi. Non-thesis. Summer 2018. University of Notre Dame.
K. Rainville. Non-thesis. Fall 2017. Mount Holyoke College.
G. Yoo, Summer 2017. Boston University.
S. McNichol. Non-thesis. Winter 2016, Summer 2017. Oberlin College.
C. Mayorga. Non-thesis. Summer 2018. University of Texas A & M.
R. Schenck. Non-thesis. Summer 2017. Amherst College.
S. Jayne. Non-thesis. Spring 2016. Northeastern University.
E. Neel. Summer 2016. Wellesley College.
A. Denmark. Non-thesis. Summer 2016. MIT.
M. Capooci. Thesis. Summer 2015. University of Scranton.
L. Davidson. Non-thesis. Fall 2015. Barnard College.
S. Johnson. Summer 2015. St. John's University.
K. Gosselin. Non-thesis. Summer-Fall 2014. The New College.
C. Hoffman. Non-thesis. Summer 2014. Oberlin College.
J. Reeve. Non-thesis. Summer 2013. Haverford College.
M. Diaz. Summer 2013. University of Rochester.
R. Pineda. Summer 2012. Western Washington University.

TECHNICIANS:

J. Riekenberg. UGA. 2024 – present
S. Dong. UGA. 2021- 2025.
S. Gibson. UGA. 2022 - 2023.
S. McNichol. UGA. 2019 – 2021.
K. Gosselin. WHOI. 2013-2018
J. Ossolinski. WHOI. 2013-2014 (not continuous)
S. Sylva. WHOI. 2011-2018 (not continuous)

PRESENTATIONS

INVITED SEMINARS:

Spivak, A.C. 2024. Clear as mud: Molecular insights to landscape patterns of soil carbon in coastal wetlands. Department of Marine Sciences Seminar. University of Georgia.

Spivak, A.C. 2022. Will it stay or will it go?: Controls on carbon preservation or loss from salt marsh soils. University of Hamburg. (virtual; invited by graduate students).

Spivak, A.C. 2022 and 2023. Hydrological Management of a Tidally Restricted Coastal Wetland: Characterizing Biogeochemical Responses Over Multiple Time Scales. US Coastal Research Project Program Updates. (virtual)

Spivak, A.C. 2022. Exploring controls on soil organic carbon preservation in temperate salt marshes. University of Massachusetts Amherst. Guest Lecture Series. Geosciences Department. (virtual)

Spivak, A.C. 2020. Characterizing the composition and reactivity of refractory salt marsh soil organic carbon. University of Florida, Howard T. Odum Center for Wetlands (virtual)

Gonneea, M., K. Kroeger, J. Tang, F. Wang, A.C. Spivak. 2020. Wetland elevation trajectories in salt marshes with natural, impounded, and restored tidal hydrology: A Cape Cod case study. USGS Coastal Change Hazards Seminar.

Spivak, A.C. 2019. Shallow ponds impact salt marsh biogeochemistry and carbon storage. Department of Biology & Biochemistry, University of Houston, TX

Luk, S., K.M. Gosselin^, M. Gonneea, A. McNichol, J. Sanderman. G. Mariotti, A.C. Spivak. 2019. Marshes, Mosquitos, and Sea Level Rise. Waquoit Bay National Estuarine Research Reserve. "Science at the Reserve" series.

Spivak, A.C. K. Gosselin, I. Forbrich, G. Mariotti, M. Gonneea, S. Sylva. 2018. Shallow ponds impact salt marsh biogeochemistry and carbon storage. Dauphin Island Sea Lab Seminar, Dauphin Island, AL.

Spivak, A.C. 2018. Disturbance impacts on coastal ecosystem ecology and metabolism. Department of Marine Sciences Seminar, University of Georgia, GA.

Spivak, A.C., K. Gosselin, M. Gonneea, S. Sylva. 2017. Integrating heterogeneity: Shallow ponds are biogeochemically distinct habitats that reduce carbon storage in salt marsh ecosystems. Biology Department Seminar, Boston University, Boston, MA.

Spivak, A.C. 2017. Career paths in marine science. The College of William & Mary, Williamsburg, VA.

Spivak, A.C. 2017. The role of ponding in marsh biogeochemistry and carbon storage. Biology Department Seminar, Virginia Institute of Marine Science, Gloucester Point, VA.

Spivak, A.C. 2017. The role of ponding in marsh biogeochemistry and carbon storage. Marine Chemistry & Geochemistry Department Seminar, WHOI, Woods Hole, MA

Spivak, A.C. 2016. Biogeochemical Dynamics in Temperate Salt Marsh Ponds. Northeastern University, Nahant Marine Science Center. Nahant, MA. Department Seminar.

Spivak, A.C. 2016. Biogeochemical processes in three ponds in the PIE-LTER marshes. MBL Ecosystems Seminar. Woods Hole, MA. Department Seminar.

Spivak, A.C. 2014. Sediment organic matter responds rapidly to habitat quality: Implications for shallow ecosystem recovery from eutrophication. Dauphin Island Sea Lab Seminar. Dauphin Island, AL.

Spivak, A.C., M.J. Vanni, and L. Knoll. 2012. Can detritivorous fish alter carbon dynamics in eutrophic reservoirs? WHOI Biology Department Seminar. Woods Hole, MA.

Spivak, A.C. and M.J. Osland. 2011. Development of sediment organic matter in restored mangrove habitats: Insight from a 20-y chronosequence. Marine Biological Laboratory. Woods Hole, MA.

Spivak, A.C. 2010. Food web diversity alters sediment biogeochemistry in a seagrass habitat. WHOI Marine Chemistry and Geochemistry Department Seminar. Woods Hole, MA.

Spivak, A.C. 2009. Resource levels and food web composition affect seagrass ecosystem functioning. US EPA Gulf Ecology Division. Gulf Breeze, FL. Oral Presentation.

INVITED CONFERENCE PRESENTATIONS:

Cardon, Z., S. Thomas, J. Oller, J. Bowen, I. Forbrich, A. Giblin, C. Harvey, M. Keiluweit, T. O'Meara, A.C. Spivak, B. Sulman. 2024. Swoosh and Ooze: Tidal and Plant Drivers of Sediment Oxygenation in a Brackish Coastal Marsh. AGU, Washington, DC.

Spivak, A.C. 2024. Clear as mud: Molecular insights to landscape patterns of soil carbon in coastal wetlands. Keynote. Goldschmidt Meeting. Chicago, IL.

Spivak, A.C. 2024. Collaborative research at GCE-LTER. Critical Knowledge Gaps for Coastal Systems: Research Priorities for the US South Atlantic and Gulf of Mexico Workshop. DOE Environmental System Science. Gaithersburg, MD.

Spivak, A.C., *T. Manns*, M. Eagle, G. Mariotti. 2023. Tidal channel migration effects on salt marsh soil carbon. GA Sea Grant State of the Coast Symposium. Tybee Island, GA.

Spivak, A.C., *G. Giordano, T. Manns*, M. Alber, M. Eagle. 2022. Are Georgia's salt marshes keeping up with sea level?: Characterizing accretion rates and carbon sources. Georgia Coastal Resources Conference. Richmond Hill, GA

Spivak, A.C., 2022. Will it stay or will it go?: Controls on carbon preservation or loss from salt marsh soils. Plenary. Ocean Carbon Biogeochemistry Meeting. Woods Hole, MA.

Spivak, A.C., A. Pinsonneault*, C. Hintz, P. Megonigal. 2021. Interactive controls of redox conditions and rhizodeposition on biotic and abiotic processes in mineral salt marsh soils. Fall AGU Meeting. (virtual)

Spivak, A.C., *S.Y. Luk,* A. Pinsonneault*. 2021. Losing ground: Towards understanding SOC preservation in coastal salt marshes. ASLO Summer Meeting. (virtual)

Spivak, A.C., A. Pinsonneault*, *G. Giordano*, M. Eagle, C. Hintz. 2021. Salt Marsh Sustainability and Functioning in a Changing GA Seascape. GA Climate Conference. (virtual)

Spivak, A.C., G. Mariotti, M. Eagle. 2021. Tidal channel network dynamics and salt marsh ecosystem functioning along the Georgia Coast. Georgia Sea Grant Symposium. (virtual)

Spivak, A.C., *S.Y. Luk*, G. Mariotti, and M. Gonneea. 2021. Hydrologic management strategies and soil carbon storage in a northeast salt marsh. 13th International Symposium on Biogeochemistry of Wetlands. (virtual)

Luk, S.Y., K. Gosselin^, M. Gonneea, A. McNichol, J. Sanderman, A.C. Spivak. 2020. Pond management and carbon storage in salt marshes. Woods Hole Sea Grant Research Symposium. Woods Hole, MA.

Spivak, A.C., I. Forbrich, G. Mariotti, E. Howard, M. Gonneea, S. Sylva. 2017 Shallow ponds and marsh carbon metabolism. OCB Summer Workshop, Woods Hole, MA.

Spivak, A.C. 2014. Seasonal and nutrient enrichment effects on carbon exchange between benthic microalgae and bacteria in salt marsh tidal creeks. Annual TIDE Experiment Meeting. Marine Biological Laboratory, Woods Hole, MA.

Spivak, A.C. and R. Stanley. 2013. Exploring nutrient enrichment effects on benthic production and algal-bacterial coupling. Plum Island Ecosystems LTER Annual Meeting. Marine Biological Laboratory. Woods Hole, MA.

Spivak, A.C., M.J. Vanni, and L. Knoll. 2012. Can detritivorous fish alter carbon dynamics in eutrophic reservoirs? Yale Climate and Energy Initiative Annual Conference: Managing Species for Regulating the Carbon Cycle. New Haven, CT.

Spivak, A.C. 2008. Bottom-up and top-down controls on sedimentary ecosystem functioning. Eco-DĀS VIII Symposium. Honolulu, HI.

Spivak, A.C., E.A. Canuel, J.E. Duffy, and E.J. Waterson. 2004. Trophic structure, biodiversity, and carbon cycling: Evidence of cascading effects in an experimental eelgrass system. Joint Oceans Research Conference between ASLO and TOS. Honolulu, HI.

CONTRIBUTED CONFERENCE PRESENTATIONS (SINCE 2019)

Guo, B., J. Pett-Ridge, A.C. Spivak. 2025. Redox conditions and root exudate composition affect soil carbon cycling in mineral and organic salt marshes. ASLO Meeting. Charlotte, NC

Chen, S.-M., Eagle, M., Ledford, T., Mortazavi, B., Falvey Gibson, S., Thomas, A., Nelson, J., Dong, S., Lofgren, R., and Spivak, A.C. 2025. Ecological and biogeochemical impacts of tidal impoundment on coastal salt marshes: establishing baselines for assessing post-restoration ecosystem responses. ASLO Meeting. Charlotte, NC

Holmquist, JR, E. Belshe, B. Boyd, L. Brown, S. Chapman, R. Corstanje, M. Eagle, C. Janousek, D. Klinges, M. Lonneman, J. Morris, G. Noe, A. Rovai, J. Sanderman, A.C. Spivak, K. Todd-Brown, M. Vahsen, L. Windham-Myers, J.P. Megonigal. 2024. Probabilistic forecasting of coastal wetland soil carbon response to sea-level rise. AGU Meeting. Washington, DC.

Spivak, A.C., M. Eagle, T. Ledford, B. Mortazavi, J. Nelson. 2023. Establishing ecological and biogeochemical baselines to evaluate tidal impoundment impacts and post-restoration ecosystem trajectories. CERF Meeting, OR.

Spivak, A.C., *B. Guo*, J. Pett-Ridge. 2023. Redox conditions and root exudate composition affect soil carbon cycling in mineral and organic salt marshes. Goldschmidt. Lyon, France

Koontz, E., J. Holmquist, S. Parker, A. Stearns, B. Roberts, C. Young, L.Windham-Myers, P. Oikawa, E. Buskey, R.K. Derby, R. Dunn, M.C. Ferner, J. Krask, C. Marconi, K. Savage, J. Shahan, A. Spivak, K. St. Laurent, J. Argueta, S. Baird, K. Beheshti, L. Crane, K. Cressman, J. Crooks, N. Dix, S. Fernald, J.A. Garwood, J. Goldstein, T. Grothues, A. Habeck, S. Lerberg, S.B. Lucas, P. Marcum, C. Peter, S. Phipps, K.B. Raposa, A. Rovai, S. Schooler, R. Twilley, M. Tyrrell, K. Uyeda, S. Wulfing, J. Aman, A. Giacchetti, S. Johnson, P. Megonigal, and G. Noyce. 2022. Controls on spatial variation in porewater methane concentration across U.S. tidal wetlands. AGU, IL.

Luk, S.Y., M.E. Gonneea, G. Mariotti, A.C. Spivak. 2020. Assessing the impacts of hydrological alterations due to anthropogenic ditching on salt marsh ecosystem services and sustainability. AGU.

Gonneea, M. K. Kroeger, A.C. Spivak, J. Tang. 2020. Carbon dynamics in impounded and restored wetlands: Links to hydrology and elevation. Geological Society of America.

Spivak, A.C. 2020. Marsh Carbon Budgets. GCE-LTER Meeting. Athens, GA.

Luk, S.Y., K. M. Gosselin^, A. McNichol, J. Sanderman, A.C. Spivak. 2019 Assessing the role of organic matter reactivity in limiting salt marsh pond deepening. CERF Meeting, AL.

Brown, L., S. Chapman, B. Boyd, C. Janousek, J. Sanderman, G. Noe, A.C. Spivak, E. Fard, J. Morris, J. Holmquist, P. Megonigal, G. MacDonald. 2019. Improving blue carbon estimates: Best practices for quantifying uncertainty in loss-on-ignition. CERF Meeting, AL.

Kroeger, K., M. Gonneea, Z. A. Wang, N. Ganju, J. Pohlman, O. A. Aziz, J. Tang, A.C. Spivak, S. Moseman-Valtierra. 2019. Salt Marsh Net Ecosystem Carbon Balance: Comprehensive Measurements of the Lateral Flux. CERF Meeting, AL.

Spivak, A.C., S. McNichol^, S. Wankel, R.W. Fulweiler. 2019. Benthic microalgae help retain detrital marsh grass carbon and nitrogen in estuarine sediments. CERF Meeting, AL.

Spivak A.C., M. Gonneea, K. Kroeger. 2019. Tidal Connectivity and Coastal Wetland Biogeochemistry. Goldschmidt Conference. Barcelona, Spain.

Spivak, A.C. 2019. Putting the horse before the cart: Understanding marsh biogeochemistry for sustainable management in a changing world. OceanVisions. Georgia Tech, GA.

POSTER PRESENTATIONS (SINCE 2019)

Guo, B., J. Pett-Ridge, A.C. Spivak. 2023. Effects of root exudates on decomposition under oxic and anoxic conditions in contrasting marshes. CERF Meeting. Portland, OR.

Doomstorm, D. A.C. Spivak. 2023. Bioturbation effects of *Minuca pugmax* on wetland soil biogeochemistry along the US East coast. CERF Meeting. Portland, OR.

Reddy, S.[±], F. Wu, S. Pennings. W.R. Ferrell[±], A.C. Spivak. 2022. Position in the Tidal Frame Strongly Influences Decomposition in Salt Marshes. LTER All Scientists Meeting. CA.

Manns, T., M. Eagle, G. Mariotti, A.C. Spivak. 2021. Impacts of Tidal Channel Migration on Salt Marsh Functioning. CERF Meeting. Virtual

Giordano, G., M. Eagle, A.C. Spivak. 2021. Ecological and biogeochemical responses to SLR in Satilla River Marshes. CERF Meeting. Virtual. *Graduate student poster award*

McNichol, S.M.^, *S.Y. Luk*, M.E. Gonneea, G. Mariotti, A.C. Spivak. 2020. Distance from tidal creek is an important factor affecting the ecology and biogeochemistry of ditched and natural salt marshes. AGU Meeting. Virtual.

Farrell, W.R.[±], A.C. Spivak, S.C. Pennings, F. Swift, J. Ruiz, S.M. McNichol^. 2020. Nutrient use efficiency of Georgia salt marsh flora along a salinity gradient. CURO Symposium.

Mai, S.H.[±], *S.Y. Luk*, A.C. Spivak. 2020. Comparison of soil and plant characteristics in the salt marsh and recovered ponds. CURO Symposium.

Luk, S.Y., K.M. Gosselin^, J. Sanderman, A.C. Spivak. 2020. Changes in soil organic matter composition and reactivity associated with the disturbance of salt marsh pond expansion. Ocean Sciences Meeting. San Diego, CA.

Mayorga, C.[±], M. Gonneea, A.C. Spivak. 2019. The effect of ditching on carbon storage in salt marshes. ASLO Aquatic Sciences Meeting. Puerto Rico.

PUBLIC SERVICE

International Programs

Print portfolio "Tidalectics". Scientific contribution to an art portfolio. Puertografico Conference Puerto Rico. (4/2020).

Local Community Services and Relations

UGA Young Dawgs. Athens Clarke County High School research mentor. 2020.
STEM Junior Researcher program. Field-based experience for 89 high school students. 2018-2020.
New Bedford Symphony Orchestra's Learning in Concert program. 4600 students. 2017-2018.
WHOI's Ocean Science Journalism Fellows program. 2012, 2017.
Panelist: Marine Biological Laboratory's Semester in Environmental Science "Workshop on the role of off-campus study and research programs in undergraduate science education". 2014.
Falmouth Middle School and High Schools, student tours of seawater facilities and research. 2013.
Chapin School, grade school student tours of seawater facilities and research. 2013.
Student presentation judge: Marine Biological Laboratory Semester in Environmental Science. December 2011, Woods Hole, MA.
Talawanda Grade School Science Days. 2009
VIMS Marine Science Day. 2007.
Smithsonian Environmental Research Center Open House. 2002.

Governmental and Non-governmental Agencies

Blue Carbon Basics Workshop 2024. Described blue carbon concepts to GA Attorney General's Office, GA Sea Grant, GA Conservancy, and multiple GA DNR divisions, among others.
Workshops for resource managers from federal (US NPS, US FWS) and state (MA DER, Mosquito Control Project, Waquoit Bay NERR) agencies on managing marsh hydrology. 2018 – 2020.

MEDIA COVERAGE

ClimateWire Interview "Research casts skepticism on 'blue carbon' climate efforts". 7/2022.
Interviewed for Yale Climate Connections "Ditch-digging reduces the ability of marshes to protect coastal communities from flooding". 11/2021. yaleclimateconnections.org/2021/11/depression-era-program-left-some-new-england-communities-more-vulnerable-to-sea-level-rise/
Interviewed for "Studying ecosystems, one coast at a time". 6/2020. research.uga.edu/news/amanda-spivak-studying-ecosystems-one-coast-at-a-time/
Quoted in "Scientists assess storage value in blue carbon ecosystems". 10/2019. Phys.org. phys.org/news/2019-10-scientists-storage-blue-carbon-ecosystems.html

PROFESSIONAL SERVICE

SERVICE TO PROFESSIONAL SOCIETIES, ORGANIZATIONS, OR GOVERNMENT AGENCIES

Executive Board of the LTER Science Council. Appointed 2024-2027
Florida Coastal Ecosystems – Long-Term Ecological Research Project. Internal Executive Committee, External Advisor 2022 – present
Georgia Coastal Ecosystems – Long-Term Ecological Research project. Executive Committee, Disturbance Committee, PredEx Committee, Flux Tower Committee. 2019 – present
NERRS Science Collaborative Webinar. "Marsh Sustainability and Hydrology" End-user webinar on decision support tools for marsh hydrological management. 2019.
Herring River Restoration Project (National Park Service, MA). Supported decision making. 2020
CERF's Career Development and Education Committee 2018 – 2019

WORKSHOP PARTICIPANT

NSF-LTER Science Council Meeting. Fairbanks, AK. 6/2024
Simons C-Marsh Workshop. Rowley, MA. 3/2024 and 5/2025
DOE ESS "Critical Knowledge Gaps for Coastal Systems: Research Priorities for the U.S. South Atlantic and Gulf of Mexico." Invited panelist and participant. Fredericksburg, MD 3/2024
NSF- LTER Consumer Nutrient Dynamics Synthesis Working Group member. Multiple workshops, virtual and in person at NCEAS, Santa Barbara CA. 2023-2024
NSF-LTER All Scientists Meeting. Pacific Grove, CA. 9/2022
NSF-LTER Science Council. MI 5/2023. AK 6/2024.
International Blue Carbon Initiative Science Working Group (Invited) '19 (DK) '20 (Virtual)
NSF Coastal Carbon Research Coordination Network Soil Carbon Working Group (Invited). Decomposition sub-group lead. 2018 – 2020. Edgewater, MD.
National Estuarine Research Reserve System Science Collaborative Workshop. (Invited). 2017. Providence, RI.
Earth Science Women's Network workshop on leadership and management skills. 2013. Providence, RI.

CO-ORGANIZED SESSIONS AT SCIENTIFIC CONFERENCES

CERF Meeting 2023, OR. "Coastal wetland restoration and management: consequences for biogeochemical processes and fluxes."
Goldschmidt 2023, Lyon, France. "Microbial carbon cycling from the continents to the oceans: Molecular mechanisms to global impacts on the biosphere."
CERF Meeting 2021. "Belowground ecosystem function: advances in measuring the unseen world."
CERF Meeting 2019, AL. "Microbes to maps: Data-model integration for coastal wetland blue C"
CERF Meeting 2019, AL. "Isotopes, lipids, & DNA: Trophic \biomarkers in coastal ecology".
ASLO Summer Meeting 2018, Victoria, BC. "Biogeochemical Transformations Across Terrestrial - Aquatic Interfaces"
CERF Meeting 2017, RI. "Coastal vegetated habitats as carbon sinks-sources in a changing world"
Joint Aquatic Sciences Meeting 2014, OR. "Functioning of salt marsh and mangrove wetland ecosystems across ecological and spatial scales".

SOCIETY MEMBERSHIPS

Coastal and Estuarine Research Federation (CERF)
American Geophysical Union (AGU)
European Geophysical Union (EGU)
Association for the Sciences of Limnology and Oceanography (ASLO)

ASSOCIATE EDITOR

Journal of Geophysical Research – Earth Surface. 2020-present. (renewed for 2nd term)

AD-HOC MANUSCRIPT REVIEWER FOR PEER-REVIEWED JOURNALS (SINCE 2019)

Biogeosciences
Estuaries and Coasts
Frontiers in Environmental Science
Global Biogeochemical Cycles
Geochimica et Cosmochimica Acta
Hydrobiologia: the international journal on limnology and marine sciences
Journal of Geophysical Research: Biogeosciences
Journal of Geophysical Research: Earth Surface
Limnology and Oceanography
Nature Reviews Earth & Environment
Nature Climate Change
Nature Communications
Scientific Reports

GRANT REVIEW PANELIST

NSF Biological Oceanography
Department of Energy
NSF Division of Environmental Biology
NSF LTER Mid-Term Site Review
NSF LTER Synthesis
NSF EPSCoR programs
NSF SEES-Ocean Acidification
NSF Chemical Oceanography

AD-HOC GRANT REVIEWER

United Kingdom Research and Innovation Natural Environmental Research Council
DOE Earth & Environmental Systems Sciences Division
DOE Basic Energy Sciences
NSF Biological Oceanography program
NSF Division of Environmental Biology
NSF Atmospheric Sciences
MS-AL Sea Grant Consortium

EXTERNAL EVALUATOR OF PROMOTION / TENURE DOSSIERS AND PHD DISSERTATION REFEREE

Boston University, Boston, MA (2 promotion / tenure)
University of Minnesota, Duluth, MA (promotion / tenure)
Edith Cowan University, Perth, Australia (thesis / dissertation)
Woods Hole Oceanographic Institution, Woods Hole, MA (promotion)

SERVICE ON DEPARTMENTAL, COLLEGE, UNIVERSITY, OR INSTITUTION COMMITTEES

UGA Odum School of Ecology, Ecosystem Ecology Faculty Search Committee. 2025.
UGA Office of Postdoctoral Affairs, Postdoctoral Scholar Travel Awards. 2025
UGA Graduate School, Excellence in Research Graduate Student Awards. 2024
UGA Dept. of Marine Sci. Physical Oceanography Faculty Search Committee. 2023.

UGA Marine Institute Research Scientist Faculty Search Committee. 2022
UGA Dept. of Anthropology Environmental Artificial Intelligence Faculty Search Committee. 2021.
UGA Dept. of Marine Sci. Marine Conservation Biology Faculty Search Committee. 2020.
UGA Dept. of Marine Sci. Diversity, Equity, and Inclusion Committee. 2020 – 2022.
UGA Dept. of Marine Sci. Graduate Affairs Committee. 2019 – present.
UGA Dept. of Marine Sci. Marine Conservation Biologist Search Committee. 2019 – 2020.
UGA Dept. of Marine Sci. Strategic Planning Committee. 2019 – 2021.
UGA Marine Institute Faculty. 2019 – present.
WHOI Search Committee for Vice President of Academic Programs and Dean. 2016 – 2017.
WHOI Search Committee for Marine Chemistry and Geochemistry Department Chair. 2017.
WHOI Scientific Staff Executive Committee. 2015 – 2017.
WHOI Coastal Ocean Institute Advisory Committee. 2015 – 2016.
WHOI Marine Chemistry and Geochemistry Department Seminar Series Organizer. 2015 – 2016.
WHOI Seawater Users Committee. 2011 – 2018.
WHOI Women's Committee. 2011 – 2013.

SERVICE TO STUDENT GROUPS AND ORGANIZATIONS

Georgia Sea Grant Annual Student Onboarding. Research panelist. *Invited* 2023.
UGA Ocean Initiative marine science round table. *Invited* 2023, 2025.