

## Eric W. Montie

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### EDUCATIONAL BACKGROUND

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<b>MIT/WHOI</b>	PhD, Biological Oceanography	2006
<b>Clemson University</b>	MS, Environmental Toxicology	1999
<b>Harvard University</b>	Post-baccalaureate studies (Biochemistry)	1994
<b>Univ. Rhode Island</b>	BS, Zoology	1993

### APPOINTMENTS AND PROFESSIONAL EXPERIENCES

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<b>USC Beaufort</b>	Full Professor, Biology	2025 - Present
<b>USC Beaufort</b>	Advisor for Grad Students, MS Comp. Science	2022 - Present
<b>College of Charleston</b>	Adjunct Faculty, Graduate Program Marine Biology	2016 – Present
<b>USC Beaufort</b>	Associate Professor, Biology	2016 – 2025
<b>USC Beaufort</b>	Assistant Professor, Biology	2011 – 2016
<b>Univ. South Florida</b>	Research Associate (Neuro-imaging, bioacoustics)	2008 – 2010
<b>Univ. South Florida</b>	Postdoctoral Fellow (Marine Bioacoustics)	2007 – 2008
<b>WHOI</b>	Postdoctoral Investigator (Marine Chemistry)	2006 – 2007
<b>NOAA/NOS</b>	Research Biologist (Marine Mammals)	1999 – 2000

### DISTINGUISHED AWARDS

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- 2021 Governor's Award for Excellence in Scientific Research at a PUI
- 2013 Breakthrough Rising Star, USC Columbia (15 selected of 2000 faculty)
- 2003 EPA STAR Fellowship

### RESEARCH INTERESTS

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- Bioacoustics
- Marine soundscapes
- Neuroimaging of marine mammals
- Hearing of fish and marine mammals
- Impacts of stressors on marine organisms and ecosystems (i.e., chemical pollution, noise pollution, dredging, climate change)

## **PUBLICATIONS (UNDERLINED AUTHORS WERE USCB UNDERGRADUATES)**

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Total Manuscripts = 35 (25 while at USCB)

Feature Articles = 7

Number of Different Journals = 19

USCB Undergraduate Coauthors = 13 (includes multiple publications by same author)

1. Wall, C.C, McKenna M., Hatch, L.T., Van Parijs, S.M., Bochenek, R., Dugan, P., Parcerisas, C., Ryan, J., Anderson, C.D., Becker, K., Berchok, C., Biddle, M., Boebel, O., Canino, A., Canonico, G., Cline, D., Davis, G.E., Frasier, K., Gedamke, J., Haver, S.M., Khazmutdinova, K., Kinneking, N., Kumar, A., Marian, A., Miksis-Olds, J., **Montie, E.W.**, Ponirakis, D., Rice, A.N., Rowell, T.J., Rueda, C., Shumchenia, E., Shyka, T., Staaterman, E., Thomisch, K. (2025). Big data, sound science, lasting impact: a framework for passive acoustic monitoring. (Submitted to *Big Earth Data*).
2. Flem, S., Berns, G., Iglis, B., Niederhut, D., **Montie, E.W.**, Deacon, T., Miller, K.L., Tyack, P., Cook, P.F. (2025). Lateralized cerebellar connectivity differentiates auditory pathways in echolocating and non-echolocating whales. *PLoS ONE* 20(6): e0323617.
3. Ji, Y., Marian, A.D., **Montie, E.W.** (2024). Deep-Learning-Based detection of recreational vessels in an estuarine soundscape in the May River, South Carolina, USA. *PLoS ONE* 19(7), e0302497.
4. Tribble, C., Monczak, A., Transue, L., Marian, A., Fair, P., Balmer, B., Ballenger, J., Baker, H., Weinpress-Galipeau, M., Robertson, A., Strand, A., **Montie, E.W.** (2023). Enhancing interpretation of cetacean acoustic monitoring: investigating factors that influence vocalization patterns of Atlantic bottlenose dolphins in an urbanized estuary, Charleston Harbor, South Carolina, USA. *Aquatic Mammals*, 49(6), 519-549.
5. Transue, L., Monczak, A., Tribble, C., Marian, A., Fair, P., Ballenger, J., Balmer, B., **Montie, E.W.** (2023). The biological and anthropogenic soundscape of an urbanized port – the Charleston Harbor estuary, South Carolina, USA. *PLoS ONE* 18(4), e0283848. **(PRESS RELEASE)**
6. Monczak, A., McKinney, B., Soueidan, J., Marian, A., Seder, A., May, E., Morgenstern, T., Roumillat, W., **Montie, E.W.** (2022). Sciaenid courtship sounds correlate with juvenile appearance and abundance in the May River, South Carolina, USA. *Marine Ecology Progress Series*, 693, 1-17. **(FEATURE ARTICLE)**.
7. Song, Z., Salas, A.K., **Montie, E.W.**, Laferriere, A., Zhang, Y., Mooney, T.A. (2021). Sound pressure and particle motion components of the snaps produced by two snapping shrimp species (*Alpheus heterochaelis* and *Alpheus angulosus*). *The Journal of the Acoustical Society of America* 150, 3288-3301
8. Soueidan, J., Warren, A., Pearson, M., **Montie, E.W.** (2021). A changing estuary: understanding historical patterns in salinity and fecal coliform levels in the May River, SC. *Marine Pollution Bulletin* 168, 112384
9. Marian, A.D., Monczak, A., Balmer, B.C., Hart, L.B., Soueidan, J., **Montie, E.W.** (2021). Long-term passive acoustics to assess spatial and temporal vocalization patterns of Atlantic common bottlenose dolphins (*Tursiops truncatus*) in the May River estuary, South Carolina. *Marine Mammal Science* 37, 1060-1084.

10. Monczak, A., McKinney, B., Mueller, C., **Montie, E.W.** (2020). What's all that racket! Soundscapes, phenology, and biodiversity in estuaries. *PLoS ONE* 15(9), e0236874.
11. Mueller, C., Monczak, A., Soueidan, J., McKinney, B., Smott, S., Mills, T., Ji, Y., **Montie, E.W.** (2020). Sound characterization and fine-scale spatial mapping of an estuarine soundscape in the southeastern USA. *Marine Ecology Progress Series* 645, 1-23. **(FEATURE ARTICLE)**.
12. Monczak, A., Mueller, C., Miller, M.E., Ji, Y., Borgianini, S.A., **Montie, E.W.** (2019) Sound patterns of snapping shrimp, fish, and dolphins in an estuarine soundscape of the southeastern USA. *Marine Ecology Progress Series* 609, 49-68.
13. Monczak, A., Ji, Y., Soueidan, J., **Montie, E.W.** (2019). Automatic detection, classification, and quantification of sciaenid fish calls in an estuarine soundscape in the Southeast United States. *PLoS ONE* 14(1), e0209914.
14. Smott, S., Monczak, A., Miller, M., **Montie, E.W.** (2018). Boat noise in an estuarine soundscape – a potential risk on the acoustic communication and reproduction of soniferous fish in the May River, South Carolina. *Marine Pollution Bulletin* 133, 246-260.
15. Monczak, A., Berry, A., Kehrer, C., **Montie, E.W.** (2017). Long-term acoustic monitoring of fish calling provides baseline estimates of reproductive timelines in the May River estuary, southeastern USA. *Marine Ecology Progress Series* 581, 1-19. **(FEATURE ARTICLE)**.
16. **Montie, E.W.**, Hoover, M., Kehrer, C., Yost, J., Brenkert, K., O'Donnell, T., Denson, M.R. (2017). Acoustic monitoring indicates a positive relationship between calling frequency and spawning in captive spotted seatrout (*Cynoscion nebulosus*). *PeerJ* 5:e2944; DOI 10.7717/peerj.2944.
17. **Montie, E.W.**, Kehrer, C., Yost, J., Brenkert, K., O'Donnell, T., Denson, M.R. (2016). Long-term monitoring of captive red drum (*Sciaenops ocellatus*) reveals that calling incidence and structure correlate with egg deposition. *Journal of Fish Biology* 88, 1776-1795.
18. Colon-Perez, L.M., Spindler, C., Goicochea, S., Triplett, W., Parekh, M., **Montie, E.**, Carney, P., Price, C., Mareci, T. (2015). Dimensionless, scale invariant, edge weight metric for the study of complex structural networks. *PLOS ONE*. 10(7): e0131493. doi:10.1371/journal.pone.0131493.
19. **Montie, E.W.**, Vega, S., & Powell, M. (2015). Seasonal and spatial patterns of fish sound production in the May River, South Carolina. *Transactions of the American Fisheries Society* 144, 705-716.
20. Powell, M.H., Nguyen, H.V., Gilbert, M., Parekh, M., Colon-Perez, L.M., Mareci, T.H., **Montie, E.W.** (2012). Magnetic resonance imaging and volumetric analysis: novel tools to study thyroid hormone disruption and its effects on white matter development. *Neurotoxicology* 33, 1322-1329.
21. **Montie, E.W.**, Wheeler, E., Pussini, N., Battey, T.W.K., Van Bonn, W., Gulland, F. (2012). Magnetic resonance imaging reveals that brain atrophy is more severe in older California sea lions with domoic acid toxicosis. *Harmful Algae* 20, 19-29.
22. Fair, P.A., **Montie, E.**, Balthis, L., Reif, J.S., Bossart, G.D. (2011). Influences of biological variables and geographic location on circulating concentrations of thyroid hormones in wild bottlenose dolphins (*Tursiops truncatus*). *General and Comparative Endocrinology* 174, 184-194.
23. Van Bonn, W., **Montie, E.**, Dennison, S., Pussini, N., Cook, P., Greig, D., Barakos, J., Colegrove, K., Gulland, F. (2011). Evidence of injury caused by gas bubbles in a live marine mammal: barotraumas in a California sea lion *Zalophus californianus*. *Diseases of Aquatic Organisms* 96, 89-96.

24. Moore, M.J., Hammar, T., Arruda, J., Cramer, S., Dennison, S., **Montie, E.**, Fahlman, A. (2011). Hyperbaric computed tomographic measurement of lung compression in seals and dolphins. *The Journal of Experimental Biology* 214, 2390-2397.
25. **Montie, E.W.**, Manire, C.A., Mann, D.A. (2011). Live CT imaging of sound reception anatomy and hearing measurements in the pygmy killer whale (*Feresa attenuata*). *The Journal of Experimental Biology* 214, 945-955. **(INSIDE JEB)**.
26. Mann, D., Hill-Cook, M., Manire, C., Greenhow, D., **Montie, E.**, et al. (2010). Hearing loss in stranded odontocete dolphins and whales. *PLoS ONE* 5(11): e13824. doi:10.1371/journal.pone.0013824.
27. **Montie, E.W.**, Wheeler, E., Pussini, N., Battey, T.W.K., Barakos, J., Dennison, S., Colegrove, K., Gulland, F., (2010). Magnetic resonance imaging quality and volumes of brain structures from live and postmortem imaging of California sea lions with clinical signs of domoic acid toxicosis. *Diseases of Aquatic Organisms* 91, 243-256.
28. **Montie, E.W.**, Letcher, R.J., Reddy, C.M., Moore, M.J., Rubinstein, B., Hahn, M.E., (2010). Brominated flame retardants and organochlorine contaminants in winter flounder, harp and hooded seals, and North Atlantic right whales from the Northwest Atlantic Ocean. *Marine Pollution Bulletin* 60, 1160-1169.
29. **Montie, E.W.**, Pussini, N., Schneider, G.E., Battey, T.W.K., Dennison, S., Barakos, J., Gulland, F., (2009). Neuroanatomy and volumes of brain structures of a live California sea lion (*Zalophus californianus*) from magnetic resonance images. *The Anatomical Record* 292, 1523-1547. **(FRONT COVER OF JOURNAL)**.
30. Wilson, M., **Montie, E.W.**, Mann, K.A., Mann, D.A., (2009). Ultrasound detection in the Gulf menhaden requires gas-filled bullae and an intact lateral line. *The Journal of Experimental Biology* 212, 3422-3427.
31. **Montie, E.W.**, Reddy, C.M., Gebbink, W.A., Touhey, K.E., Hahn, M.E., Letcher, R.J., (2009). Organohalogen contaminants and metabolites in cerebrospinal fluid and cerebellum gray matter in short-beaked common dolphins and Atlantic white-sided dolphins from the western North Atlantic. *Environmental Pollution* 157, 2345-2358.
32. **Montie, E.W.**, Garvin, S.R., Fair, P.A., Bossart, G.D., Mitchum, G.B., McFee, W.E., Speakman, T., Starczak, V.R., Hahn, M.E., (2008). Blubber morphology in wild bottlenose dolphins (*Tursiops truncatus*) from the southeastern United States: influence of geographic location, age class, and reproductive state. *Journal of Morphology* 269, 496-511.
33. **Montie, E.W.**, Fair, P.A., Bossart, G.D., Mitchum, G.B., Houde, M., Muir, D.C.G., Letcher, R.J., McFee, W.E., Starczak, V.R., Stegeman, J.J., Hahn, M.E., (2008). Cytochrome P4501A1 expression, polychlorinated biphenyls and hydroxylated metabolites, and blubber dynamics of bottlenose dolphins (*Tursiops truncatus*) from the Southeast United States. *Aquatic Toxicology* 86, 397-412.
34. **Montie, E.W.**, Schneider, G.E., Ketten, D.R., Marino, L., Touhey, K.E., Hahn, M.E., (2008). Volumetric neuroimaging of the brain of the Atlantic white-sided dolphin (*Lagenorhynchus acutus*) from in situ magnetic resonance images. *The Anatomical Record* 291, 263-282.
35. **Montie, E.W.**, Schneider, G.E., Ketten, D.R., Marino, L., Touhey, K.E., Hahn, M.E., (2007). Neuroanatomy of the subadult and fetal brain of the Atlantic white-sided dolphin (*Lagenorhynchus acutus*) from in situ magnetic resonance images. *The Anatomical Record* 290, 1459-1479. **(FRONT COVER OF JOURNAL)**.

## **PRESENTATIONS WHILE AT USCB**

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Total Presentations at Scientific Meetings = 17

Talks and Seminars = 63

### **Invited Presentations at Professional Meetings**

1. *Using Magnetic Resonance Imaging to Investigate the Neurological Effects of Chemical Pollutants and Marine Neurotoxins in Model Organisms and Marine Mammals*. Invited Speaker; Florida Marine Mammal Health Conference, Mote Marine Laboratory, Sarasota, FL; April, 2012.

### **Contributed Presentations**

2. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS) – Over Ten Years of Listening to Estuaries in South Carolina!* Invited Speaker; Skidaway Institute of Oceanography, University of Georgia; June 26, 2024.
3. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS)*. Invited Speaker; Southeast Coastal Ocean Observing Regional Association (SECOORA) Annual Meeting; Charleston, SC; May 7-8<sup>th</sup>, 2024.
4. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS)*. Invited Speaker; Southeast Coastal Ocean Observing Regional Association (SECOORA) Annual Meeting; Jacksonville University, Jacksonville, FL; May 10<sup>th</sup>, 2023.
5. *Spatial and Temporal Analyses of Atlantic Common Bottlenose Dolphin (*Tursiops truncatus*) vocalizations and distribution patterns in Charleston Harbor, South Carolina*. Student Poster Presentation (Caroline Tribble et al.). 24<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Palm Beach, Florida; August 2022.
6. *Assessing Management Boundaries of the Common Bottlenose Dolphin (*Tursiops truncatus*) via collaborative photo-identification*. 24<sup>th</sup> Biennial Conference on the Biology of Marine Mammals. Palm Beach, Florida; August 2022.
7. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS)*. Invited Speaker; Southeast Coastal Ocean Observing Regional Association (SECOORA) Annual Meeting; Georgia Aquarium, Atlanta, GA; June 2022.
8. Seongsoo Kim, Yiming Ji, Jongyeop Kim, and Eric Montie presented “*Dolphin Whistles Visualization Framework: My SQL Query Approach*”, at the 20<sup>th</sup> IEEE/ACIS International Conference on Software Engineering Research. Las Vegas, USA, May 25-27, 2022.
9. *The Estuarine Soundscape of the May – a Deep Tidal River in South Carolina*. Oral Presentation. Joint Meeting of Benthic Ecology and Southeastern Estuarine Research Society; April 2017.
10. *The Estuarine Soundscape of Chechessee Creek and an Adjacent Saltwater Impoundment*. Student Poster Presentation. Joint Meeting of Benthic Ecology and Southeastern Estuarine Research Society; April 2017.
11. *Acoustic Monitoring of Bottlenose Dolphins in the May River*. Student Oral Presentation; Southeastern and Mid-Atlantic Marine Mammal Symposium; April 2016.
12. *MRI and Volumetric Neuroimaging of Stranded Cetaceans along the Eastern United States*. Student Poster Presentation. Southeastern and Mid-Atlantic Marine Mammal Symposium; April 2016.

13. *The Risk of Boat Noise on the Acoustic Communication of Fish in the May River, South Carolina*. Student Poster Presentation; Southeastern Estuarine Research Society; April 2016.
14. *Long-term Acoustic Monitoring of the May River Soundscape – Baseline Information on the Patterns of Fish Spawning*; Student Poster Presentation; Southeastern Estuarine Research Society; April 2016.
15. *Acoustic Monitoring of Spawning in Captive and Wild Sciaenids*. Oral Presentation; Southeastern Estuarine Research Society; April 2016.
16. *Using Passive Acoustics to Better Understand Reproduction of Spotted Seatrout and Red Drum*. Selected speaker American Fisheries Society; January 2013.
17. *Live CT Imaging of Sound Reception Anatomy and Hearing Measurements in the Pygmy Killer Whale*. Oral Presentation; 19<sup>th</sup> Biennial Conference on the Biology of Marine Mammals, Tampa, FL; November 30, 2011.

### **Talks and Seminars**

1. Eric Montie presented, “Ten Years of Listening to Estuaries and Tracking Bottlenose Dolphins in the Lowcountry”, on February 21, 2025 at the Port Royal Sound Foundation.
2. Eric Montie presented, “Estuarine Soundscapes and the Lowcountry Dolphin Conservation Program”, on January 23, 2023 at the Port Royal Sound Foundation Research Symposium.
3. Alyssa Marian and Eric Montie presented, “The Lowcountry Dolphin Conservation Program”, on February 11, 2023 at Montage Palmetto Bluff.
4. Eric Montie presented, “Stick Your Head Underwater and Listen ... Estuaries are Loud!” on September 22, 2023 as part of the USCB Department Seminar series.
5. Eric Montie presented, “Estuarine Soundscapes and the Lowcountry Dolphin Conservation Program”, on October 18, 2023 at Oldfield Club in Bluffton, South Carolina.
6. Eric Montie presented, “Estuarine Soundscapes and the Lowcountry Dolphin Conservation Program”, on November 14, 2023 at the Colleton River Plantation in Bluffton, South Carolina.
7. Eric Montie presented “Estuarine Soundscape Observatory Network in the Southeast (ESONS)”, at the State of the Sound Symposium hosted by the Port Royal Sound Foundation. February 11<sup>th</sup>, 2022.
8. Eric Montie presented “Historical Analysis of Salinity and Fecal Coliform in the Estuaries of Beaufort County, South Carolina”, at the State of the Sound Symposium hosted by the Port Royal Sound Foundation. February 11<sup>th</sup>, 2022.
9. Eric Montie and Alyssa Marian presented “The Lowcountry Dolphin Conservation Program”, at the State of the Sound Symposium hosted by the Port Royal Sound Foundation. February 11<sup>th</sup>, 2022.
10. “Tracking courtship behavior of estuarine fishes with passive acoustic recorders to estimate reproductive potential and comparisons to young-of-the year abundance”. American Fisheries Society; February 2021.
11. “What’s All that Racket! Estuarine Soundscapes in South Carolina”. Port Royal Sound Research Task Force; February 2021.
12. “USCB Lowcountry Dolphin Conservation” by Alyssa Marian and Eric Montie. Port Royal Sound Foundation; April 2021.

13. "What's All that Racket! Estuarine Soundscapes in South Carolina". National Estuarine Research Reserve Symposium; August 2021.
14. "Estuarine Soundscapes and the Lowcountry Dolphin Conservation Program". Spring Island Nature Series; October 2021.
15. "Historical Analysis of Salinity and Fecal Coliform Levels in the May River Estuary, South Carolina". Beaufort County Stormwater Utility; November 2021.
16. "Estuarine Soundscape Observatory Network and the Lowcountry Dolphin Conservation Program". Graduate Program in Marine Biology, College of Charleston; November 2021.
17. "Estuarine Soundscapes and the Lowcountry Dolphin Conservation Program". Colleton River Nature Series; November 2021.
18. "Our Local Dolphins", hosted by Oldfield Outfitters; December 2020.
19. "What's All that Racket! Estuarine Soundscapes in South Carolina" as a Webinar, hosted by the Southeast Coastal Ocean Observing Regional Association (SECOORA).  
<https://secoora.org/webinar-whats-all-that-racket-estuarine-soundscapes-in-south-carolina/>; November 2020.
20. "Diversity and Abundance of Fish Species Occupying Tidal Pools and Creeks in the May River Estuary, South Carolina", hosted by the Port Royal Sound Research Task Force.  
<https://www.portroyalsoundfoundation.org/>; November 2020.
21. "Tracking courtship behavior of estuarine fishes with passive acoustic recorders to estimate reproductive potential and comparisons to young-of-the-year abundance" highlighted by Atlantic State Marine Fisheries Commission; October 2020.
22. "Our Local Dolphins", hosted by Palmetto Bluff Conservancy; September 2020.
23. "Our Local Dolphins", hosted by Lowcountry Master Naturalist Program; May 2020.
24. "What's All That Racket! Soundscapes, Phenology, and Biodiversity in Estuaries", hosted by USCB Department of Natural Sciences; February 2020.
25. "Understanding Noise Pollution and Seismic Air Guns and Their Impacts on Marine Life", hosted by USCB Department of Natural Sciences; January 2020.
26. *Historical Analysis of Water Quality and Climate Change Endpoints and Monitoring of Natural Resources in the May River*. Invited Speaker. Town of Bluffton City Council, December 2019.
27. *Bottlenose Dolphins in the May River*. Alyssa Marian Graduate Student. USCB Seminary Series. November 2019.
28. *Historical Analysis of Water Quality and Climate Change Endpoints and Monitoring of Natural Resources in the May River*. Invited Speaker. May River Watershed Action Plan Advisory Committee, October 2019.
29. *Monitoring the Health of the May River Estuary Using Soundscape Ecology and Traditional Biodiversity Surveys*. Invited Speaker. Palmetto Bluff Conservancy, May 2019.
30. *Listening to Snapping Shrimp, Fish, and Dolphins – New Ways to Understand the Health of Our Estuaries*. Invited Speaker. Palmetto Bluff Conservancy, July 2018.
31. *Understanding Noise Pollution and Seismic Air Guns and Their Impacts on Marine Life*. Invited Speaker. Invited Speaker. Port Royal Sound Foundation, April 2018.
32. *Listening to Snapping Shrimp, Fish, and Dolphins – New Ways to Understand the Health of Our Estuaries*. Invited Speaker. Spring Island, March 2018.
33. *Conservation of Bottlenose Dolphins in the Lowcountry*. Invited Speaker. Callawassie Ecology Program, March 2018.

34. *Historical Analysis of Water Quality and Climate Change Endpoints and Monitoring of Natural Resources in the May River*. Invited Speaker. May River Watershed Action Plan Advisory Committee (WAPAC), February 2018.
35. *Longterm Acoustic Monitoring of Fish Courtship Sounds to Detect Changes in Reproductive Timelines Associated with Climate Change*. Invited speaker, Fort Johnson Seminar Series, November 2017.
36. *Behavior, Communication, and Conservation of Bottlenose Dolphins in the Lowcountry*. Invited speaker, Colleton River Nature Series. November 2017
37. *Longterm and Precise Monitoring of Water Quality, Fish Reproduction, and Bottlenose Dolphin Abundance in the May River, SC*. Invited speaker, Lowcountry Stormwater Partners, November 2017.
38. *Longterm and Precise Monitoring of Water Quality, Fish Reproduction, and Bottlenose Dolphin Abundance in the May River, SC*. Invited speaker, May River Watershed Action Plan Implementation Advisory Committee, October 2017.
39. *Snaps, Grunts, and Whistles! How the Underwater Sounds of the Lowcountry May Help Us Understand the Impacts of Climate Change*. Invited speaker, USCB-Indivisible Environmental Symposium, October 2017.
40. *Brain, Behavior, and Acoustic Communication of Our Local Bottlenose Dolphins*. Invited speaker, Port Royal Sound Foundation, October 2017.
41. *"The May River" – the Longest Current Study of an Estuarine Soundscape*. Invited speaker, Palmetto Bluff Conservancy, July 2017.
42. *When the Lowcountry Waters Sing – Using Sound to Understand the Reproduction of Recreational Fisheries*. Invited speaker, Bay Street Outfitters; November 2016.
43. *The May River Soundscape – Acoustic Ecology of Prey and Predators*. Invited speaker, Palmetto Bluff Conservancy; May 2016.
44. *When the May River Sings – Courtship Sounds and Fish Spawning in the Lowcountry*. Invited speaker, USCB Brown Bag Seminar Series; April 2016.
45. *When the May River Sings – Courtship Sounds and Fish Spawning in the Lowcountry*. Invited speaker, USCB Department of Natural Sciences Seminar Series; April 2016.
46. *When the Rivers around Spring Island Sing – An Introduction to the World of Underwater Sound*. Invited speaker, Spring Island; February 2016.
47. *The Underwater Soundscape of the Lowcountry – It's a Noisy World!* Invited speaker Callawassie Island; October 2015.
48. *Underwater Acoustic Monitoring Program: Using Sound to Understand the Health of Our Tidal Creeks, Rivers, Estuaries, and Oceans*. Invited speaker Port Royal Sound Maritime Center; February 2015.
49. *Using Passive Acoustics to Better Understand Reproduction of Fish in the May River*. Invited speaker Palmetto Bluff Conservancy; June 2014.
50. *Using Passive Acoustics to Better Understand Reproduction of Spotted Seatrout and Red Drum*. Invited speaker Hilton Head Island Sportfishing Club; May 2014.
51. *Using Passive Acoustics to Better Understand Reproduction of Spotted Seatrout and Red Drum*. Invited speaker SCDNR; January 2014.
52. *Acoustic Ecology and Conservation of Bottlenose Dolphins and Their Prey in the Port Royal Sound Embayment*; Colleton River Plantation; November 2013.



53. *Using Passive Acoustics to Understand Reproduction of Soniferous Fish*. Invited speaker; South Carolina Yacht Club; Hilton Head Island, SC; June 2013.
54. *Acoustic Ecology and Conservation of Fish and Bottlenose Dolphins of the Low Country*; Port Royal Sound Foundation Appreciation Dinner; May 2013.
55. *Using Passive Acoustics to Understand Reproduction of Soniferous Fish*. Invited speaker; USC Marine Science; Columbia, SC; April 2013.
56. *Using Passive Acoustics to Understand Reproduction of Soniferous Fish*. Invited speaker; USCB Seminar Series; Bluffton, SC; April 2013.
57. *Acoustic Ecology and Conservation of Fish and Bottlenose Dolphins in the May River*; Palmetto Bluff Conservancy; April 2013.
58. *Hearing Measurements in Bottlenose Dolphins from the Indian River Lagoon – a Model to Examine the Prevalence and Causes of Hearing Loss in Wild Cetaceans*. Invited Speaker; Georgia Aquarium, Atlanta, GA; March 23, 2012.
59. *Investigations of Hearing Variability in Toothed Whales*. Invited Speaker; Savannah State University, Savannah, GA; October 17, 2012.
60. *Acoustic Ecology and Conservation of Fish and Bottlenose Dolphins of the Low Country*. Invited Speaker; Spring Island Institute, Beaufort, SC; October 29, 2012.
61. *Acoustic Ecology of Dolphins – Communication, Hearing, and Pollutants*. Invited Speaker; Dolphin Project, Savannah, GA; October 15, 2011.
62. *Hearing in Toothed Whales*. Invited Speaker; MUSC, Charleston, SC; June 1, 2011.
63. *Using MRI to Investigate the Effects of Pollutants and Marine Neurotoxins on Brain Morphology in Rats and Marine Mammals*. Invited speaker; Fort Johnson Marine Science Seminar Series; Charleston, SC; February 25, 2011.

## RESEARCH GRANTS AT USCB

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Total Grants Submitted = 87

Pending = 1

Current Grants = 8

Total Grants Awarded = 44

Percent Success = 51%

Eight Current Grants = **\$1,122,205**

Total Funding Received While at USCB = **~\$2,192,010**

### Pending Grants

1. NOAA IOOS/SECOORA/Bipartisan Infrastructure Law (BIL) Funding. (2025-2027): **(\$70,000)**. “Infrastructure Needs for the Estuarine Soundscape Observatory Network in the Southeast (ESONS)”. PI – Eric Montie. (This grant will be awarded, waiting on agreement).

### Current Grants Awarded

2. USC ASPIRE AI. (7/1/2025 – 9/30/26): **(\$29,342)**. “Applying Artificial Intelligence (AI) to The Estuarine Soundscape Observatory Network in the Southeast (ESONS) to Quantify Biological Sounds and Vessel Noise”. PI – Eric Montie (USCB), CoPIs – Davide Fusi (USCB), John Thrasher (USCB), Xiaomei Zhang (USCB), Collaborators - Ahmed ElSaid (UNCW), Yiming Ji (Kennesaw State University).

3. South Carolina Aquarium. (6/1/2025 – 5/31/2027): **(\$40,000)**. “Analyzing Historical Datasets to Understand the Impacts of Dredging and Commercial Vessel Noise on Bottlenose Dolphins (*Tursiops erebennus*) and Their Prey in Charleston Harbor, South Carolina”. PI – Patricia Fair (MUSC), CO-PIs – Eric Montie (USCB). (Program officer indicated this grant will be awarded).
4. NOAA IOOS/SECOORA/NOAA Inflation Reduction Act (2024 – 2029). **(\$495,000)**. “Inflation Reduction Act: Sharing Passive Acoustic Monitoring Data from the Estuarine Soundscape Observatory Network in the Southeast (ESONS) with the IOOS Association”. PI – Eric Montie.
5. Maritime Administration (MARAD) / U.S. Department of Transportation / UNCW. (2022 - 2025). (Subaward to Montie **\$206,861; \$216,521 change**). “Testing a Novel Strategy to Measure Underwater Radiated Noise of Vessels in Shallow Coastal Oceans”. PI – Lynn Leonard (UNCW), CO-PIs – Eric Montie (USCB), Xuemei Chen (UNCW), Mark Lammers (UNCW), James Winebrake (UNCW), Collaborator – John Gebbie (Metron, Inc.).
6. NOAA IOOS/SECOORA (2021 – 2026). (Total subaward to Montie **\$420,000; change \$240,370**). “Estuarine Soundscape Observatory Network in the Southeast”. PI – Eric Montie (USCB). Collaborator – Joseph Ballenger (SCDNR).
7. Pritchard’s Island Research Initiative (2023-2026). **(\$70,972)**. “Listening To and Remotely Sensing Marine Life Surrounding Pritchard’s Island, SC”. PI – Eric Montie.
8. Port Royal Sound Foundation (2025): **(\$15,000)**. “Bottlenose Dolphin Monitoring in the Port Royal Sound Area (PRSA)”. PI – Eric Montie.
9. Pritchard’s Island Research Initiative (2025): **(\$15,000)**. “Expanding Bottlenose Dolphin Monitoring to the Tidal Creeks and Inlets of Pritchards Island”. PI – Eric Montie.

#### **Completed Grants/Contracts Awarded**

10. Port Royal Sound Foundation (PRSF) (2023-2024). **(\$15,087)**. “Bottlenose Dolphin Monitoring in the Port Royal Sound Area (PRSA) – Year 2”. PI – Eric Montie.
11. USC RISE (May – Dec 2024). **(\$6,000)**. “Mapping Spawning Aggregations of Sciaenid Species in the May River Estuary Using Passive Acoustics, Molecular Taxonomy, and Quantitative PCR”. PI – Edward D’Antonio, CoPI – Eric W. Montie.
12. Port Royal Sound Foundation (PRSF) (2022 – 2023). **(\$37,500)**. Bottlenose Dolphin Monitoring in the Port Royal Sound Area – Establishing a Flagship Program for the Port Royal Sound Foundation”. PI – Eric Montie.
13. Spring Island Trust. 2020. **(\$50,000)**. “Investigating Historical Trends of Salinity and Fecal Coliform Levels in Beaufort County from SCDHEC Datasets”. PI – Eric Montie (USCB).
14. Spring Island Trust. 2019. **(\$45,000)**. Establish a Dolphin Monitoring and River Health Assessment Program for Chechessee Creek and Colleton River.
15. NOAA-NERRS Science Collaborative. 2020. (\$148,013; Subaward to Montie **\$20,212**). “Listen In: Acoustic Monitoring of Estuarine Communities Facing Ecosystem Change”. PI – Christopher Biggs (University of Texas at Austin); Coinvestigators – Kevin Boswell (Florida International University), Eric Montie (USCB), Matt Kimball (USC Baruch), Robert Dunn (USC Baruch), etc.
16. NOAA IOOS/NOPP/MBON. 2020. (\$101,464; Subaward to Montie **\$74,726**). “Demonstrating an Estuarine Soundscape Observatory Network in the Southeast: Understanding baseline

- rhythms of biological sounds and correlations to traditional biodiversity measurements". PI – Gabrielle Canonico (NOAA/NOS/US IOOS); Project Partners: Eric Montie (Science Lead, USCB), Jennifer Dorton (SECOORA), Joseph Ballenger (SCDNR), Erik Smith and Robert Dunn (USC Baruch), Dwayne Porter (NOAA NERRS).
17. NOAA - Southeast Coastal Ocean Observing Regional Association (SECOORA). 2019. **(\$29,943)**. Integrating Biological Sound and Noise Measurements into Regional Coastal Ocean Observing Systems (RCOOS) in Estuaries of South Carolina. (Lead PI – Eric Montie).
  18. Town of Bluffton / Beaufort County. 2018. **(\$30,000)**. Historical Analysis of Water Quality and Climate Change Endpoints and Monitoring of Natural Resources in the May River – A Pilot Study for Other Watersheds in Beaufort County. (PI: Eric Montie).
  19. Community Foundation of the Lowcountry. 2018. **(\$68,592)**. Infrastructure for USCB Marine Sensory and Neurobiology Lab to Monitor the Impacts of Water Quality and Climate Change on Our Local Natural Resources. (PI: Eric Montie).
  20. USC ASPIRE III. **(\$48,635)**. 2018. Building USCB Infrastructure for Marine Soundscape and Noise Pollution Research and Other Coastal Ecology and Conservation Programs. (PI: Eric Montie; CoPI: Stephen Borgianini).
  21. USC ASPIRE II. **(\$100,000)**. 2017. Building a USC interdisciplinary team to study the impacts of anthropogenic noise on the behavior of marine organisms. (PI: Eric Montie; CoPI: Yiming Ji; CoPI: Matt Kimball).
  22. SCEPSCoR / IDeA. **(\$10,000)**. 2017. Recording estuarine soundscapes to investigate phenological shifts and changes in fish reproduction associated with climate variability. (PI: Eric Montie).
  23. South Carolina Aquarium. **(\$265,883)**. December 2016. Assessing Disturbance from the Charleston Harbor Deepening Project on Bottlenose Dolphins. (Project Coordinator: Patricia Fair; USCB-PI: Eric Montie).
  24. USC RISE. **(\$6,000)**. December 2016. Understanding the Temporal Rhythms of an Estuarine Soundscape. (PI: Eric Montie).
  25. USCB Sea Islands Institute. **(\$5,000)**. 2016. Locating Spawning Aggregations and Critical Nursery Habitat of Red Drum in Calibogue and Port Royal Sound Estuarine Systems. (PI: Eric Montie).
  26. Harbor Branch Oceanographic Institute at Florida Atlantic University, 2016. **(\$25,803)**. Using Magnetic Resonance Imaging to Investigate Brain Lesions and Morphological Abnormalities Associated with Pathogens, Environmental Chemicals, and Harmful Algal Bloom Toxins in Florida Stranded Cetaceans. (PI: Eric Montie, CoPI: Adam Schaefer (HBOI-FAU)).
  27. The LowCountry Institute, 2016. **(\$20,000)**. Using Passive Acoustics, Plankton Tows, and Fyke Net Sampling to Investigate Fish Spawning Aggregations in Spring Island Mesocosms and Chechessee Creek. (PI: Eric Montie).
  28. USCB Sea Islands Institute, 2016. **(\$5,000)**. Establishing a relationship between seasonal patterns of fish sound production and seasonal patterns of juvenile fish abundance in the May River, SC. PI = Eric Montie.
  29. USC Magellan Minigrant, 2015. **(\$1,000)**. 2015 Fyke net sampling in the May River. PI = Eric Montie, CoPI = Bradshaw McKinney.
  30. Palmetto Bluff Conservancy, February 2015. **(\$17,500)**. 2015-2017 Acoustic monitoring program of the May River. (PI: Eric Montie).

31. Advanced Support Program for Innovative Research Excellence-I (ASPIRE-I), January 2015. **(\$14,994)**. REVISED PROPOSAL - Using long term acoustic recorders to understand daily and seasonal patterns of spawning in Sciaenids: baseline information necessary to understand the impacts of climate change. (PI: Eric Montie).
32. Research Initiative for Summer Engagement (RISE), January 2015. **(\$5,972)**. Developing zebrafish as a biomedical model to understand the neuro-developmental effects of thyroid hormone disrupting chemicals. (PI: Eric Montie).
33. Harbor Branch Oceanographic Institute at Florida Atlantic University, February 2015. **(\$7,482)**. Invoice for auditory analysis – factors that may play a role in hearing loss of bottlenose dolphins. (PI: Eric Montie; CoPI: Adam Schaefer, HBOI-FAU).
34. Palmetto Bluff Conservancy, February 2015. **(\$9,683)**. 2015 Underwater acoustic monitoring program in the May River. (PI: Eric Montie).
35. Beaufort County Stormwater Utility, July 2014. **(\$4,100)**. Beaufort county volume sensitive waters study. (PI: Eric Montie; Partner: SCDNR).
36. Port Royal Sound Foundation, June 2014. **(\$26,000)**. Underwater sound exhibit at the Port Royal Sound Maritime Center (PI: Eric Montie).
37. Palmetto Bluff Conservancy, 2014. **(\$9,683)**. Underwater acoustic monitoring program in the May River: using sound to understand the daily and seasonal patterns of fish spawning. PI: Eric Montie.
38. National Estuarine Research Reserve System Science Collaborative, NOAA, April 2013. **(\$42,910)**. Collaborative research to prioritize the runoff volume sensitivities of tidal headwaters. (PI: John Leffler, SCDNR; Subcontract to USCB: Eric Montie).
39. Palmetto Bluff Conservancy, April 2013. **(\$5,000)**. Passive acoustics and visual surveys to monitor the health of fish and bottlenose dolphin populations in the May River. (PI: Eric Montie).
40. RISE Internal Program, February 2013. **(\$4,966)**. Using zebrafish (*Danio rerio*) and goldfish (*Carassius auratus*) as model organisms to determine the role that thyroid hormones play in hearing development and hair cell regeneration. (PI: Eric Montie).
41. Magellan Scholarship, February 2013. **(\$2,500)**. Correlation of sound production and egg production in captive spotted seatrout (*Cynoscion nebulosus*) and red drum (*Sciaenops ocellatus*). (PIs: Steven Vega and Eric Montie).
42. USCB Sea Islands Institute, November 2012. **(\$5,000)**. Spatial patterns of fish sound production in the May River, South Carolina. (PI: Eric Montie).
43. Beaufort County, July 2012. **(\$8,192)**. Beaufort county salinity study. (PI: Eric Montie; Partner: John Leffler, SCDNR).
44. Advanced Support Program for Innovative Research Excellence-I (ASPIRE-I), January 2012. **(\$14,793)**. Using passive acoustics to correlate sound production and egg release in captive populations of soniferous fishes: a model to study spawning behavior in the wild. (PI: Eric Montie; Co-PI: Mike R. Denson, SCDNR).
45. Georgia Aquarium, December 2010. **(\$26,649)**. An ecosystem-based approach to conducting standardized health surveillance and hearing measurements in wild Atlantic Bottlenose Dolphins (*Tursiops truncatus*) inhabiting the Indian River Lagoon, Florida. (PI: Eric Montie).

#### **Grants/Contracts Not Funded**

46. USCB Think Big. 2021. Tracking Short-Term Variability and Long-Term Change in Marine Biodiversity in South Carolina Estuaries Using Novel Technology: Water Quality Sensors, eDNA, and Soundscape Observatories. PI – Eric Montie (USCB); CoPIs – Mercer Brugler (USCB), Daniel Pettay (USCB), Ron Erdei (USCB).
47. NOAA-MBON. 2021. (\$103,307). “A Pilot Project – Understanding the Biscayne Bay Soundscape and Correlations with Biodiversity from Video Surveys and Acoustic Telemetry”. PI – Neil Hammerschlag (University of Miami); CoPI – Eric Montie (USCB).
48. NOAA-NERRS Science Collaborative. 2021. (\$399,999). “Listen In: Acoustic Monitoring of Estuarine Communities in Response to Disturbance, Restoration, and Long-term Change”. PI – Christopher Biggs (University of Texas at Austin); CoPIs – Jessica McIntosh (Rookery Bay NERR/Florida International University), Eric Montie (USCB), Kevin Boswell (Florida International University), Matthew Kimball (USC Baruch), Robert Dunn (USC Baruch, NI-WB NERR).
49. ASPIRE II. 2021. (\$100,000). “Tracking Short-term Variability and Long-term Change: Expanding Soundscape Ecology to the North Inlet-Winyah Bay National Estuarine Research Reserve (NI-WB NERR)”. PI – Eric Montie (USCB); CoPIs – Matt Kimball (USC Baruch), Robert Dunn (USC Baruch, NI-WB NERR).
50. NSF 20-592. 2021. (Award to Montie \$566,556). “Collaborative Research: III: Medium: Estuarine Soundscape Observatory Network of the Southeast (ESONS) - Computing Intensive Sound Datasets to Enhance Ocean Informatics”. PI – Yiming Ji (Georgia Southern); CoPI – Eric Montie (USCB), Collaborator – Ron Erdei (USCB).
51. NSF 18-513. 2021. (\$386,954; Subaward to Montie \$0). “MRI: Acquisition of a Slocum Glider”. PI – Erin L. Meyer-Gutbrod (USC Columbia); CoPIs – James Pinckney (USC), Ioannis Rekleitis (USC), Annie Bourbonnais (USC), Joshua Stone (USC); Collaborator – Eric Montie (USCB).
52. NSF 21-523. 2020 (Award to Montie \$533,234). “Collaborative Research: HDR DSC: Marine Biodiversity Observation and Research Network – Intensive Datasets to Monitor Changing Environmental Conditions in Southeast Estuaries”. PI – Yiming Ji (Georgia Southern), CoPI – Eric Montie (USCB).
53. Office of Naval Research – SERDP preproposal. 2018. (\$2,000,000 with indirect costs). Interactions of stressors in bottlenose dolphins: a natural experiment using a large-scale harbor dredging project. (Lead PI - Patricia Fair; Coinvestigators – David Lusseau, University of Aberdeen; Eric Montie, USCB; Nick Kellar, NOAA Fisheries; Dorian Houser, National Marine Mammal Foundation; Greg Bossart, Georgia Aquarium. **Invited to submit full proposal but not funded because of complications**
54. Office of Naval Research – NOPP. 2018. (\$1,046,070 with indirect costs). Estuary to Coastal Ocean Biodiversity Observatory Network in the Southeast (ECOBONS). (Lead PI Eric Montie; CoPI Yiming Ji, USCB; CoPI Matthew Kimball, USCB; CoPI Dawn Glasgow, SCDNR; CoPI Marcel Reichert, SCDNR; CoPI Joseph Ballenger, SCDNR; CoPI Debra Hernandez, SECOORA). **Received Excellent Reviews**
55. NSF EPSCoR Research Infrastructure Improvement Program: Track-2 Focused EPSCoR Collaborations – Harnessing the Data Revolution. 2018. (\$1,500,000 with indirect costs). Harnessing Soundscape Data to Determine the Resiliency of Estuaries, Coastal, and Oceanic Ecosystems in the Face of Environmental Change and Human Use. (PI: Eric Montie; Co-PI:

- Jennifer Miksis-Olds, UNH; CoPI: Yiming Ji, USCB; CoPI: Matthew Kimball, USC Baruch, Collaborator: Marcel Reichert, SCDNR).
56. NOAA-Saltonstall-Kennedy Competition. 2018. (\$293,996 with indirect costs). Long-term Monitoring of Soundscapes and Fish Abundance to Assess the Consequence of Climate Variability on Spawning and Year Class Size of Sciaenids. (PI: Eric Montie; Co-PI: Joseph Ballenger-SCDNR).
  57. Joint Industry Program. (\$248,501 with indirect costs). 2018. Captive Experiments and Field Studies to Understand the Impacts of Vessel Activity and Air Gun Noise on the Behavior, Sound Production, and Spawning of Fish. (PI: Eric Montie; Co-PI: Matt Kimball-USC; CoPI: Mike Denson-SCDNR; CoPI: Patricia Fair-MUSC; Collaborator: Erin Levesque-SCDNR).
  58. NOAA Prescott Proposal (\$49,700). 2017. Neurological impacts of domoic acid and mercury exposure on *Kogia* spp and bottlenose dolphins along the east coast of the United States. (PI: Adam Schaefer; CoPI: Eric Montie).
  59. Coastal Conservation Association. (\$25,000). November 2016. Locating Spawning Aggregations and Critical Nursery Habitat of Red Drum in Calibogue and Port Royal Sound Estuarine Systems. (PI: Eric Montie).
  60. NSF. June 2016. CREST Center for Estuarine Response to Gradual Change and Stochastic Events. (PI: Carol Pride – SSU; Collaborator – Eric Montie).
  61. NOAA. (\$1,227,501). April 2016. Using Magnetic Resonance Imaging to Investigate the Impacts of PCBs and Hypothyroidism on Brain Development in Stranded Bottlenose Dolphins from the Turtle/Brunswick River Estuary. (PI: Eric Montie; Co-PI: Brian Balmer – NOAA).
  62. NOAA. (\$1,262,067). April 2016. Passive Acoustic Monitoring of Bottlenose Dolphins in the Turtle/Brunswick River Estuary. (PI: Eric Montie; Co-PI: Brain Balmer – NOAA).
  63. Palmetto Bluff Conservancy, July 2015. (\$105,492). 2015 Research Fellowship Program in Biology and Acoustic Behavior: Acoustic Ecology of American Alligators in Palmetto Bluff (PI: Eric Montie).
  64. National Science Foundation. (\$769,087), August 2015. IOS RUI Proposal: The effects of water temperature fluctuations on sound production and spawning of soniferous fish – insights on the impacts of climate change. (PI: Eric Montie; CoPI: Yi Yiming).
  65. Office of Naval Research. (\$599,092), July 2015. Assessing changes in health after exposure to disturbances in the wild – the acoustic effects of dredging on a dolphin population. (PI: Patricia Fair, NOAA; CoPI: David Lusseau, University of Aberdeen; CoPI: Eric Montie; CoPI: Nick Kellar, NOAA; CoPI: David Janz, University of Saskatchewan)
  66. National Institute of Deafness and Communication Disorders, NIH R15 Research AREA grant, June 2015. (\$407,059). Understanding the role of thyroid hormones in zebrafish hearing development. (PI: Eric Montie).
  67. South Carolina Sea Grant Proposal, June 2015. (\$170,743). Relating fish spawning aggregations and egg production in the wild using novel acoustic and molecular tools. (PI: Eric Montie; CoPIs: Steve Arnott and Dianne Greenfield, SCDNR).
  68. South Carolina Sea Grant Concept Letter, April 2015. (\$160,000). Projecting the impacts of climate variability and change on the reproduction of spotted seatrout and red drum. (PI: Eric Montie; CoPI: Steve Arnott, SCDNR).

69. South Carolina Sea Grant Concept Letter, April 2015. (\$159,956). Understanding the impacts of dredging and shipping noise on spawning aggregations of Sciaenids in Charleston Harbor, South Carolina. (PI: Eric Montie; CoPI: Steve Arnott, SCDNR).
70. USCB Sea Islands Institute, November 2014. (\$5,000). Using long-term acoustic recorders to determine the daily and seasonal patterns of spotted seatrout spawning in the May River, South Carolina. (PI: Eric Montie).
71. Office of Naval Research, May 2014. (\$632,401). Evaluating consequences of chronic intermittent noise on the communication, foraging, and distribution of smaller odontocetes. (PI: Eric Montie; CoPI: Aran Mooney, WHOI).
72. Advanced Support Program for Innovative Research Excellence-I (ASPIRE-I), January 2014. (\$14,641). Using long term acoustic recorders to understand daily and seasonal patterns of spawning in Sciaenids: baseline information necessary to understand the impacts of climate change. (PI: Eric Montie).
73. NSF Preproposal 1425874 to IOS Behavioral Systems Cluster. (\$400,000). January 2014. IOS Preliminary Proposal RUI: The Effects of Water Temperature Fluctuations on Sound Production and Spawning of Soniferous Fish - Insights on the Impacts of Climate Change. (PI: Eric Montie; CoPI: Mike Denson, Yiming Ji). **SELECTED FOR FULL PROPOSAL.**
74. USCB Sea Islands Institute, November 2013. (\$5,000). Using long-term acoustic recorders to determine daily and seasonal patterns of fish sound production in the May River, South Carolina. (PI: Eric Montie).
75. Florida Protect Wild Dolphins, October 2013. (\$17,737). An investigation of the variation of hearing sensitivity in a bottlenose dolphin population inhabiting the Indian River Lagoon, Florida. (PI: Eric Montie; CoPIs: Stephen McCulloch, Gregory Bossart, Aran Mooney). **WITHDRAWN.**
76. Port Royal Sound Foundation, May 2013. (\$77,220). Passive acoustics and visual surveys to monitor the health of fish and bottlenose dolphin populations in tidal creeks of the Port Royal Sound ecosystem. (PI: Eric Montie).
77. South Carolina Sea Grant Pre-proposal, April 2013. (\$131,886). Spotted seatrout as a model organism to use passive acoustic technology as a means to identify and characterize spawning aggregations and habitat of soniferous fish. (PI: Eric Montie; Co-PI: Michael R. Denson, SCDNR; Collaborator: Chris March, Spring Island; Collaborator: Karl Brenkert, SCDNR).
78. Office of Naval Research Code 32 Pre-proposal, April 2013. (\$451,071). Hearing and sound production variability in wild bottlenose dolphin populations. (PI: Eric Montie; Co-Investigators: Aran Mooney, WHOI; Gregory Bossart, Georgia Aquarium; Stephen McCulloch, Harbor Branch Oceanographic Institute).
79. American Thyroid Association Pre-proposal, January 2013. (\$50,000). Using zebrafish (*Danio rerio*) as a model organism to determine the effects of thyroid hormone disruption on hearing development. (PI: Eric Montie).
80. NSF 13-506 IOS Behavioral Systems Cluster Pre-proposal, January 2013. (\$350,000). IOS Preliminary proposal RUI: Using long-term acoustic recorders to understand the effects of water temperature on sound production and spawning of soniferous fish. (PI: Eric Montie; Senior Personnel: Michael R. Denson, SCDNR).

81. Magellan Scholarship, October 2012. (\$2,500). Correlation of sound production and egg production in captive spotted seatrout (*Cynoscion nebulosus*) and red drum (*Sciaenops ocellatus*). (PI: Steven Vega and Eric Montie).
82. Office of Naval Research BAA number 12-001, September 2012. (\$43,941). An investigation of the variation of hearing sensitivity in wild bottlenose dolphin populations: a model for pelagic cetaceans. (PI: Eric Montie; Co-investigators: Gregory D. Bossart, Georgia Aquarium; Pat Fair, NOAA; Stephen D. McCulloch, Harbor Branch Oceanographic Institution).
83. Carolinas Integrated Sciences & Assessments (CISA), July 2012. (\$19,967). Using long-term acoustic recorders to understand the effects of climate variability on sound production and spawning of soniferous fish. (PI: Eric Montie; CoPI: Mike R. Denson, SCDNR).
84. Florida Protect Wild Dolphins, May 2012. (\$10,926). 2012 Hearing measurements in wild Atlantic bottlenose dolphins (*Tursiops truncatus*) inhabiting the Indian River Lagoon, Florida. (PI: Eric Montie). **AWARDED BUT NOT ACCEPTED.**
85. USCB Sea Islands Institute, November 2011. (\$4,969). Monitoring spawning behavior of red drum and spotted sea trout using passive acoustics in the May River and Calibogue Sound. (PI: Eric Montie).
86. South Carolina Sea Grant Pre-proposal, April 2011. (\$111,000). Monitoring spawning behavior of Sciaenids and environmental variables using passive acoustics – a citizen science action program. (PI: Eric Montie; CoPI: Joe Staton).
87. Joint Industry Program, February 2011. (\$9,660). Development of active sonar to detect marine mammals for seismic mitigation: from theoretical modeling to sea testing of probability of detection. (PI: Michael Moore at WHOI; Partner: Eric Montie).

## TEACHING EFFECTIVENESS

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### Courses Taught at USCB

- BIOL B102 Biological Principles II
- BIOL B234 Human Physiology
- BIOL B295 Directed Studies in Biology
- BIOL B395 Advance Directed Studies in Biology
- BIOL B399 Independent Study
- BIOL B435 Neurobiology
- BIOL B435L Neurobiology Lab
- BIOL B436 Ichthyology
- BIOL B438 Marine Mammal Biology
- BIOL B438 Marine Mammal Biology Lab
- BIOL B460 General Physiology
- BIOL B460L General Physiology Lab
- BIOL B499 Topics in Biology – Bioacoustics
- BIOL B499 Topics in Biology – Marine Mammal Biology

### Courses Developed or Restructured at USCB



- BIOL B435 Neurobiology – Restructured the lectures and added personal research experiences where relevant. The course does not focus solely on human neurobiology but often incorporates other organisms like fish and marine mammals.
- BIOL B435L Neurobiology Lab – Restructured the lab which now focuses on brain dissections, analysis of MRI data, analyzing neurophysiology data, molecular expression of neurotransmitter receptors, vision and hearing experiments, molecular expression during brain development, and neurological disease. Understanding how to read and write scientific papers, as well as analyze and present data, are major focuses.
- BIOL B436 Ichthyology – This is the first time that Fish Biology was offered at USCB. I developed the curriculum and lab exercises for this course. The course focuses on the i) incredible diversity of fishes around the world with focus on local species; ii) the anatomy of fishes with an emphasis on sensory structures; iii) their reproduction and development, and the ecology of fishes focusing on interactions with their physical environment, interactions with other members of the population, and interactions with other species of the same community.
- BIOL B460 General Physiology – Restructured the lectures and added personal research experiences where relevant. This course highlights the physiological adaptations of organisms to their environment with an emphasis on marine animals.
- BIOL B460L General Physiology Lab - Restructured the lab, which focuses on reading scientific literature, analyzing physiological data, and scientific writing.
- BIOL B499 Topics in Biology – Bioacoustics - In fall 2020, I designed an online topic course on the bioacoustics of aquatic organisms. Lectures and presentations focused on sound production and reception of (i) marine invertebrates such as snapping shrimp, mantis shrimp, and spiny lobsters; (ii) fish in the families Sciaenidae, Serranidae, Batrachoididae, Gobiidae, and Gadidae; (iii) amphibians such as frogs and toads; (iv) alligators and crocodiles; and (v) marine mammals such as pinnipeds, manatees, baleen whales, and toothed whales. Lecture materials were presented in organized lecture modules.
- BIOL B499 Topics in Biology – Marine Mammal Biology - In spring 2021, I designed an online topic course in Marine Mammal Biology, which was approved as BIOL B38 Marine Mammal Biology and BIOL B438L Marine Mammal Biology Lab. Lecture materials were presented in organized lecture modules in Blackboard, following the guidelines provided by Lori Vargo to enhance the online teaching environment.

### **Mentoring of Undergraduate and Graduate Students**

I provide USCB undergraduates with research opportunities through enrollment in BIOL B295, B395, and B399 courses. In addition, I serve as a primary advisor for graduate students enrolled in the MS Computational Science Program at USCB and the Graduate Program in Marine Biology at the College of Charleston. Our goal is to provide students with critical thinking skills through our soundscape, fish, and marine mammal research. These students learn to work with “big data” and software packages such as Adobe Audition, Microsoft Excel, Powerpoint, Python, R, and MATLAB to investigate long-term changes in biological sounds, noise pollution, and climate. Students learn valuable field skills including small boat operations and vessel safety, deployment/retrieval of environmental sensors and passive acoustic recorders, water quality monitoring, seining, and marine mammal survey techniques. These research

experiences propel students to move forward with job opportunities and successful admissions into graduate, dental, medical, and veterinary schools.

Total USCB Undergraduate Students Mentored = 55

Total USCB Graduate Students in Computational Science Mentored = 2

Total USCB Student Scholarly Exhibits = 38

Total USCB Undergraduate Coauthors = 13

Total Undergraduate Students Mentored from Other Universities = 12

Total Graduate Students Mentored from Other Universities = 6

#### **Current USCB Students That We Mentor in Research.**

<b>Name</b>	<b>Year</b>	<b>Project and Mentoring Strategy</b>
55. Sarah Bourne (USCB, Marine Biology)	2025 -	Sarah joined our lab in fall 2025 and is reviewing sound files associated with ESONS. Sarah also helps with deployment/retrieval of recorders associated with ESONS and with dolphin population surveys.
54. Cole Culbertson (USCB, Marine Biology)	2025 -	Cole joined our lab in fall 2025 and is helping to deploy/retrieve recorders associated with ESONS.
53. Bella Genco (USCB, Biomedical Sciences)	2025 -	Bella joined our lab in fall 2025 and is reviewing sound files associated with ESONS. Bella is interested in Neuroscience and is very interested in how organisms use sound/language to communicate.
52. Taylor Keyman (USCB, Marine Biology)	2025 -	Taylor joined our lab in fall 2025 and is reviewing sound files associated with ESONS.
51. Aidan Potter (USCB, Coastal Ecology & Conservation)	2025 -	Aidan joined our lab in fall 2025 and is reviewing sound files associated with ESONS.
50. Laney Umsted (USCB, Marine Biology)	2025 -	Laney joined our lab in fall 2025 and is focusing on bottlenose dolphin monitoring studies. Laney partakes in dolphin surveys, enters data into Microsoft Excel, performs photo-ID analysis using <i>Darwin</i> software, maintains our long-term dolphin database, and creates posts on our Facebook page ( <a href="https://www.facebook.com/MarineNeuroLabAtUSCB/">https://www.facebook.com/MarineNeuroLabAtUSCB/</a> ).
49. Hayden Greenwalt (USCB, Honors Program in Marine Biology)	2024 -	Hayden joined our lab in spring 2024 and started reviewing sound files associated with ESONS. Using these data, Hayden and colleagues presented a poster at 2024 USCB SRSD and 2024 <i>Discover USC</i> entitled, "The Estuarine Soundscape Observatory Network in the Southeast (ESONS) – Ten Years of Listening to Estuaries in South Carolina". In summers 2024 and 2025, Hayden and colleagues worked as paid interns in our lab on a Pritchards Island project, "Does Biological Sound and Intensity Vary among Different Marine

		Microhabitats around Pritchards Island?" Hayden is now working on transforming their soundscape poster into a manuscript.
48. Mary Tindall (USCB, Marine Biology)	2024 -	Mary joined our lab in spring 2024 and started reviewing sound files associated with ESONS. Using these data, Mary and colleagues presented a poster at 2024 USCB SRSD and 2024 Discover USC entitled, "The Estuarine Soundscape Observatory Network in the Southeast (ESONS) – Ten Years of Listening to Estuaries in South Carolina". In summers 2024 and 2025, Mary and colleagues worked as paid interns in our lab on a project, "Does Biological Sound and Intensity Vary among Different Marine Microhabitats around Pritchards Island?" Mary is now working on a manuscript on the Pritchard's spatial soundscape data.
47. Jessica Miller (USCB, Marine Biology; now USCB, MS Computational Science)	2023 -	Jessica joined our lab in fall 2023 and started reviewing sound files associated with ESONS. Using these data, Jessica and colleagues presented a poster at 2024 USCB SRSD and 2024 Discover USC entitled, "Bottlenose Dolphins Talk More in the Winter – Seasonal Changes in Vocalization Patterns Across Estuaries in South Carolina". Jessica is now working with other USCB undergraduates to transform this poster into a manuscript. Jessica also partook in bottlenose dolphin surveys funded by PRSF. In summers 2024 and 2025, Jessica worked as a paid intern in our lab. Jessica transitioned to a graduate student in the USCB MS Computational Science program, where I am serving as her major advisor. We're excited to have Jessica continue with research in our lab.

#### Past USCB students that I have mentored in research.

Name	Year	Title or Topic
46. Patrick Jones (USCB, MS Graduate Student in Computational Science)	2022 - 2025	I served as the major adviser for Patrick Jones in the USCB Computational Science Master's Program, Thesis Option. In Spring 2025, Patrick successfully defended his thesis, "Measuring Underwater Radiated Noise of Vessels and Understanding the Soundscape at a Shallow Coastal Ocean Site in the Cape Fear Shipping Channel, North Carolina, USA". This work was funded through a subaward provided by UNCW with the Department of Transportation (DOT) / Maritime Administration (MARAD) as the prime. Patrick received a stipend from this grant his entire time at USCB. Through the MS Computational Science Program, Patrick gained valuable programming experience in MATLAB, Python, and R. I am now assisting Patrick with manuscript preparations, job applications, and/or PhD programs.
45. Garrett Willford (USCB, Honors Program in Marine Biology)	2023 - 2025	Garrett joined our lab in fall 2023 and began reviewing sound files and helping with the deployment and retrieval of passive acoustic recorders associated with ESONS. Using these data, Garrett presented a poster at 2024 USCB SRSD and 2024 Discover USC entitled, "Temporal Synchrony in Courtship Behavior of Sound-Producing Fish Across Estuaries in South Carolina". Garrett received first prize for this poster at 2024 Discover USC. Garrett is now working to transform this poster into a manuscript. In addition, I helped Garrett acquire an internship at the SCDNR Waddell Mariculture Center in summer 2024; Garrett worked half time as a paid intern in our lab and half time for SCDNR. Garrett is now in the Graduate Program in Marine Biology at the College of Charleston, where I may serve on his committee or primary advisor.

44. Bella DuBois (USCB, Marine Biology)	2023 - 2025	Bella joined our lab in fall 2023 and focused on bottlenose dolphin monitoring funded by PRSF. Bella partook in dolphin surveys, entered data into Microsoft Excel, performed photo-ID analysis using <i>Darwin</i> software, maintained our long-term dolphin database, and created posts on our Facebook page ( <a href="https://www.facebook.com/MarineNeuroLabAtUSCB/">https://www.facebook.com/MarineNeuroLabAtUSCB/</a> ). Bella presented a poster at 2024 USCB SRSD and 2024 Discover USC entitled, "Bottlenose Dolphin Surveys in the Port Royal Sound Area (PRSA), South Carolina Indicate the Existence of Resident and Migratory Populations". Bella completed an internship at Mote Marine Lab in summer 2025.
43. Lily Blake (USCB, Honors Program in Marine Biology)	2023 - 2025	Lily joined our lab in fall 2023 and reviewed sound files associated with ESONS. Using these data, Lily and colleagues worked as a team and presented a poster at 2024 USCB SRSD and 2024 Discover USC entitled, "Bottlenose Dolphins Talk More in the Winter – Seasonal Changes in Vocalization Patterns Across Estuaries in South Carolina". Lily also partook in bottlenose dolphin surveys funded by PRSF. Over the summer 2024, Lily worked as a paid intern in our lab. In summer 2025, Lily was an intern at the Alaska Sealife Center. Lily is now working with other USCB undergraduates to transform their poster into a manuscript. Lily is interested in applying to veterinary or vet tech school in fall 2025.
42. Warren McClellan (USCB, Coastal Ecology and Conservation)	2024 - 2025	Warren joined our lab in spring 2024 and started reviewing sound files associated with ESONS. Using these data, Warren and colleague presented a poster at 2024 USCB SRSD and 2024 Discover USC entitled, "Listening to Vessel Noise – Have Recreational Boats Increased in the May River Over the Last 10 Years". Warren received first prize for this poster at 2024 USCB SRSD. Over the summer, Warren worked as a paid intern in our lab on a project associated with the USCB Pritchards Island Program "Does Biological Sound and Intensity Vary among Different Marine Microhabitats around Pritchards Island?" Warren expressed an interest in graduate school, so we are devising a plan for him to move forward.
41. Michael Martello (USCB, Biology)	2024	Michael joined our lab in spring 2024. Using ESONS data, Michael assisted Warren in preparing and presenting a poster at 2024 USCB SRSD and 2024 Discover USC entitled, "Listening to Vessel Noise – Have Recreational Boats Increased in the May River Over the Last 10 Years". This Team received first prize for this poster at 2024 USCB SRSD. Michael applied to Dental School, so this research experience will help him attain this career goal.
40. Anneau Cappelmann (USCB)	2021 - 2023	Anneau assisted with deployment and retrieval of passive acoustic recorders associated with ESONS, bottlenose dolphin surveys, and data entry. Anneau worked on a project to characterize sounds produced by pigfish ( <i>Orthopristis chrysoptera</i> ) and spot ( <i>Leiostomus xanthurus</i> ) acquired in captive tanks at the SCDNR Waddell Mariculture Center. Anneau earned first prize for this poster at 2023 USCB Research and Scholarship Day.
39. Ian Deery (USCB)	2021 - 2022	Ian assisted with deployment and retrieval of passive acoustic recorders associated with ESONS, bottlenose dolphin surveys, and data entry.
38. Thomas Morgenstern (USCB)	2016 - 2021	When Thomas (aka Jake) was a student at USCB, he assisted with seining, bottlenose dolphin surveys, deployment/retrieval of passive acoustic recorders, and reviewing acoustic files. In 2018, Jake landed a job as a fishery biologist at the Waddell Mariculture Center, SCDNR because of his valuable

		research experience that we provided in fisheries. Jake was a coauthor on a manuscript published in <i>Marine Ecology Progress Series</i> .
37. Bradshaw McKinney (USCB)	2015-2021	Bradshaw worked on a project entitled, "Establishing a Relationship between Seasonal Patterns of Fish Sound Production and Young-of-the-Year Abundance in the May River and Chechessee Creek, SC". He presented this work as a poster at USCB Research and Scholarship Day and Discover USC. After graduating, he served as the field manager in our research lab for approximately 3 years and assisted with deployment and retrieval of passive acoustic recorders, seining, and bottlenose dolphin surveys. Bradshaw was a coauthor on three publications in our lab including the following journals, <i>Marine Ecology Progress Series</i> and <i>PLOS ONE</i> . Bradshaw now works at the Savannah River Site.
36. Taylor Morton (USCB)	2021	Taylor worked in our lab on fish, soundscape, and bottlenose dolphin research.
35. Evan Bowman (USCB)	2021	Evan worked in our lab on fish, soundscape, and bottlenose dolphin research. Evan successfully landed a job at the Waddell Mariculture Center, SCDNR.
34. Karena Cunningham (USCB)	2020	Karena worked in our lab on fish, soundscape, and bottlenose dolphin research.
33. Stephanie Keller (USCB)	2020	Stephanie worked in our lab on fish, soundscape, and bottlenose dolphin research. Stephanie helped Alyssa Marian with specific tasks involved in Alyssa's thesis research.
32. Alex Pinckney (USCB)	2019	Alex worked in our lab on fish, soundscape, and bottlenose dolphin research. This experience allowed Alex to land a job at SCDHEC.
31. Shane Carey (USCB)	2019	Shane worked in our lab on fish, soundscape, and bottlenose dolphin research then joined Dr. Ed D'Antonio's lab, which was more suited for Shane's medical research interest.
30. Corey Chase (USCB)	2019	Corey worked in our lab on fish, soundscape, and bottlenose dolphin research.
29. Michelle Mixson (USCB)	2019-2020	Michelle worked in our lab on fish, soundscape, and bottlenose dolphin research.
28. Allison Davis (USCB)	2018-2019	Allison worked in our lab on soundscape ecology projects and bottlenose dolphin research.
27. Miane Jackson (USCB)	2018-2019	Miane worked in our lab on soundscape ecology projects and bottlenose dolphin research.
26. Ashlee Seder (USCB)	2016-2018	Ashlee reviewed acoustic files, helped with seining, and assisted with dolphin surveys. She was a coauthor on one manuscript published in <i>Marine Ecology Progress Series</i> .
25. Joshua Himes (USCB)	2017	Josh worked in our lab on fish, soundscape, and bottlenose dolphin research. He was a coauthor on a poster for USCB Research and Scholarship Day entitled, "Monitoring the Impacts of Climate Change in the Lowcountry of South Carolina – Sea Level Rise, Water Temperature, and Shifts in the Timing of Fish Reproduction".

24. Shaneel Bivek (USCB)	2017	Shaneel worked in our lab on fish, soundscape, and bottlenose dolphin research. He was a coauthor on a poster for USCB Research and Scholarship Day entitled, "Acoustic Propagation of Fish Calls in May River, SC".
23. Debra Albanese (USCB)	2017	Debra worked in our lab on fish, soundscape, and bottlenose dolphin research.
22. Caleb Shedd (USCB)	2017	Assisted with seining, dolphin surveys, passive acoustic recorder deployment/retrieval, and reviewing acoustic files.
21. Austin Roller (USCB)	2017	Austin worked in our lab on fish, soundscape, and bottlenose dolphin research. He was a coauthor on a poster for USCB Research and Scholarship Day entitled, "Acoustic Propagation of Fish Calls in May River, SC".
20. Genesis Gonzalez (USCB)	2016	Genesis worked on a BIOL 399 Independent Study project entitled, "MRI and Volumetric Neuroimaging of Stranded Cetaceans along the Eastern United States" and presented this work at the Southeastern and Mid-Atlantic Marine Mammal Symposium in April 2016.
19. Jeremy Mildish (USCB)	2016	Jeremy worked on a BIOL 399 Independent Study project entitled, "MRI and Volumetric Neuroimaging of Stranded Cetaceans along the Eastern United States" and presented this work at the Southeastern and Mid-Atlantic Marine Mammal Symposium in April 2016.
18. Brenna Herron (USCB)	2015	Brenna worked on a project to investigate the expression of thyroid hormone receptors in hair cells of zebrafish.
17. Chris Kehrer (USCB)	2013-2015	Chris worked on two projects - correlating sound production and egg production in captive red drum and spotted seatrout, which were accepted to the <i>Journal of Fish Biology</i> and <i>Peer J</i> , respectively (see publication list). Chris also was a coauthor of a paper published in <i>Marine Ecology Progress Series</i> . Chris now works at the Port Royal Sound Foundation.
16. Kwesi Lincoln (USCB)	2015	Kwesi volunteered in our lab and worked on a project investigating the expression of thyroid hormone receptors in hair cells of zebrafish. He helped to generate data for a NIH R15 grant.
15. Matt Hoover (USCB)	2012-2014	Matt was a USCB student that worked on a project to correlate sound production and egg production in captive spotted seatrout. This led to a poster presented at USCB Research and Scholarship Day. Matt was a coauthor on a manuscript, which was accepted to the <i>Journal of Fish Biology</i> (see publication list).
14. Ashley Freeman (USCB)	2013-2014	Ashley worked on a project to investigate the effects of triclosan on hearing development.
13. Michael Schaffer (USCB)	2013	Michael worked on a project to determine if thyroid hormones are important in the development of hearing in fish.
12. Sarah Thompson (USCB)	2013	Sarah worked on a project to investigate the effects of triclosan on hearing development.
11. Travis Kinard (USCB)	2012-2013	Travis was a USCB student that worked on a project to correlate sound production and egg production in captive spotted seatrout.
10. Rebecca Rawson (USCB)	2012-2013	Rebecca was a USCB student that worked on a project that investigated dolphin abundance and distribution in the May River. This led to a poster presented at USCB Research and Scholarship Day, which won first place.

9. Steven Vega (USCB)	2011-2013	Steven worked on a project that investigated the seasonal and spatial patterns of fish sound production in the May River, South Carolina. This led to a poster presented at USCB Research and Scholarship Day, which won second place. This led to a manuscript published in <i>The Transactions of American Fisheries Society</i> (see publication list).
8. Mike Powell (USCB)	2011-2013	Mike worked on a project entitled "Magnetic resonance imaging and volumetric analysis: novel tools to study thyroid hormone disruption and its effects on white matter development". This led to a poster presented at Research and Scholarship Day. It also led to a first-author publication in the peer-reviewed journal, <i>Neurotoxicology</i> (see publication list).
7. Hao Nguyen (USCB)	2011	Hao worked on a project that used MRI to investigate the effects of thyroid hormone disruption on white matter development. He was a coauthor on a paper accepted to <i>Neurotoxicology</i> (see publication list).
6. Ilton Cubero (USCB)	2011	Ilton was a former USCB student that worked on a project using MRI to investigate the effects of thyroid hormone disruption on white matter development. Ilton graduated from Dartmouth Medical School and is now a cardiovascular fellow at John Hopkins University.
5. Kathleen Armstrong (USCB)	2011	Kathleen was a former USCB student that worked on a project using MRI to investigate the effects of thyroid hormone disruption on white matter development.
4. Jessica Perulli (USCB)	2011	Jessica was a former USCB student that worked on a project using MRI to investigate the effects of thyroid hormone disruption on white matter development.
3. Andrea Parra (USCB)	2011	Andrea worked on a project that examined the distribution of bottlenose dolphins in the May River. Andrea graduated from University of South Carolina School of Medicine.
2. Blake Carroll (USCB)	2011	Blake was a former USCB student that worked on a project using MRI to investigate the effects of thyroid hormone disruption on white matter development.
1. Justin LaFrance (USCB)	2011	Justin was a former USCB student that worked on a project using MRI to investigate the effects of thyroid hormone disruption on white matter development. Justin graduated Edward Via College of Osteopathic Medicine, Carolina Campus.

**Students and interns from other universities that I have mentored (18 total).**

18. Philip Souza (University of Texas at Austin)	2021 -	I serve as an external advisor for Philip's PhD Thesis, "Examining the biodiversity and functioning of a dynamic estuary through bioacoustics and cryptobenthic fish communities".
17. Alyssa Marian (College of Charleston, then USCB Lab Manager)	2017 - 2020	I served as Alyssa's primary adviser, while she obtained her Master's Degree in the Graduate Program in Marine Biology at the College of Charleston. Alyssa successfully defended her thesis in May 2020. Alyssa's research focused on a project entitled, "Long-term passive acoustics to assess spatial and temporal vocalization patterns of Atlantic common bottlenose dolphins ( <i>Tursiops truncatus</i> ) in the May River estuary, South Carolina". Alyssa published this work in <i>Marine Mammal Science</i> (see publication list). Alyssa is now our lab manager. Alyssa assists with the guidance of undergraduate and graduate students, runs the day-to-day operations of the lab, and manages

		research projects including “The Estuarine Soundscape Observatory Network in the Southeast (ESONS)” funded by NOAA IOOS / SECOORA and our bottlenose dolphin survey program funded by the Port Royal Sound Foundation, Montage Resorts, and the Coastal Discovery Museum. Alyssa is wonderful with undergraduates!
16. Caroline Tribble (College of Charleston)	2019 - 2022	I served as Caroline’s primary adviser in the College of Charleston Graduate Program in Marine Biology. Caroline successfully defended her thesis proposal entitled, “Assessing the influence of anthropogenic noise on Atlantic common bottlenose dolphin ( <i>Tursiops truncatus</i> ) vocalizations using long-term passive acoustic monitoring in Charleston Harbor, South Carolina”. Caroline published this work in <i>Aquatic Mammals</i> . Caroline now works at the University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory as a dolphin specialist on a wind-energy project.
15. Lindsey Transue (College of Charleston)	2019 - 2022	I served as Lindsey’s primary adviser in the College of Charleston Graduate Program in Marine Biology. Lindsey successfully defended her thesis in May 2022. Lindsey’s research focused on a project entitled, “The Influence of Vessel Noise and Dredging Operations on the Biological Soundscape in Charleston Harbor, South Carolina, USA – an Urbanized Port”. Lindsey published her thesis work in <i>PLOS ONE</i> as a Feature Article. Lindsey now works at NOAA’s Northeast Fisheries Science Center, Woods Hole, MA for the Northeast Passive Acoustic Research Group.
14. Jamileh Soueidan (USCB, then College of Charleston)	2017- 2021	Jamileh joined our research lab in 2017 as an intern from USC Columbia. Jamileh worked on multiple fish, bottlenose dolphin, and water quality projects (see publication list). In 2018, Jamileh was accepted into the MS Environmental and Sustainability Studies Program at the College of Charleston. Jamileh successfully defended her thesis in May 2021. Jamileh’s research focused on a project entitled, “Historical Analysis of Salinity and Fecal Coliform in the Estuaries of Beaufort County, South Carolina”. Jamileh published the first chapter of her thesis, “A changing estuary: Understanding historical patterns in salinity and fecal coliform levels in the May River, SC”, in <i>Marine Pollution Bulletin</i> (see publication list). Jamileh now works for the Chesapeake Research Consortium as an environmental scientist and advocate.
13. Agnieszka Monczak (University of Aberdeen)	2015 - 2020	Agnieszka was a bioacoustics intern from Poland with a Master’s Degree in Oceanography. Aga worked on multiple fish and dolphin bioacoustic projects (see publication list). Aga was the lab manager from 2015 – 2020. Aga finished her doctoral degree in bioacoustics at the University of Aberdeen, Scotland.
12. Claire Mueller (Intern)	2016 -2020	Claire worked in our lab on fish, soundscape, and bottlenose dolphin research. We worked on publication entitled, “Sound characterization and fine-scale spatial mapping of an estuarine soundscape in the southeastern USA”, which was a Feature Article in <i>Marine Ecology Progress Series</i> (see publication list).
11. Eva May (Duke University)	2017	Eva was an intern from Duke University that worked on a project entitled, “Potential impacts of anthropogenic noise on estuarine fish sound production, behavior, and spawning”. Eva is now a PhD student at University of Washington.
10. Somers Smott (Miami University)	2016-2017	Somers worked in our lab on fish, soundscape, and bottlenose dolphin research. We worked on a publication entitled, “Boat noise in an estuarine soundscape – A potential risk on the acoustic communication and



		reproduction of soniferous fish in the May River, South Carolina”, which was published in <i>Marine Pollution Bulletin</i> .
9. Michaela Miller (Stony Brook University)	2015-2016	Michaela was a graduate from Stony Brook University, NY. She worked in our lab on multiple fish, soundscape, and bottlenose dolphin projects (see publication list).
8. Mackenna Neuroth (St. Johns University)	2015-2016	Mackenna was a graduate from St. John’s University. She worked in our lab on multiple fish, soundscape, and bottlenose dolphin projects.
7. Hannah Nylander (University of Minnesota, Duluth)	2015-2016	Hannah was a graduate from University of Minnesota, Duluth. She worked in our lab on multiple fish, soundscape, and bottlenose dolphin projects.
6. Andrea Berry (USC Columbia)	2014-2015	Andrea worked on our stormwater runoff project. She also worked on a project to determine the daily and seasonal patterns of sound production of soniferous fish in the May River, SC (see publication list). Andrea works with the stormwater department in Bluffton, SC.
5. Alishia Zyer (Technician)	2013-2015	Alishia was the lab technician during this time. Her primary responsibility was to work on a project that was using zebrafish as a biomedical model to investigate the effects of thyroid hormone disruption on hearing development. We used the preliminary data and submitted an R15 grant to NIH.
4. Jenna MacKinnon (Dalhousie University)	2015	Jenna was an intern from Dalhousie University, Canada. She worked on fish and dolphin bioacoustic projects.
3. Zach Novince (Northeastern University)	2014	Zach volunteered in the lab working on a project to investigate the expression of thyroid hormone receptors in hair cells of zebrafish. Zach Novince graduated from Northeastern University with his Master’s Degree in Bioinformatics.
2. Kelsey Moran (Kalamazoo College)	2013	Kelsey performed her senior thesis research in my lab during the summer of 2013, “Using zebrafish as a model organism to investigate the effects of triclosan on hearing development”.
1. Rebecca Hazelkorn (Savannah State University)	2011-2012	I served as a committee member for Rebecca’s Master’s Thesis: “Activity budgets and aggression of common bottlenose dolphins ( <i>Tursiops truncatus</i> ) as they relate to begging behavior in Savannah, Georgia”. Rebecca is now working at Mote Marine Laboratory.

### **Scholarly Exhibits of USCB Mentored Students**

1. *Long-Term Passive Acoustics and Visual Surveys of Tamanend’s Bottlenose Dolphins as Evidence for Bottom-Up Ecology in Estuaries*. Lily Blake, Jessica Miller, Alyssa Marian, Isabella DuBois, Joseph Ballenger, Eric Montie. 2025 Discover USC.
2. *Long-Term Passive Acoustics and Visual Surveys of Tamanend’s Bottlenose Dolphins as Evidence for Bottom-Up Ecology in Estuaries*. Lily Blake, Jessica Miller, Alyssa Marian, Isabella DuBois, Joseph Ballenger, Eric Montie. 2025 USCB Research & Scholarship Day.

3. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS): Does Climate Variability and Noise Pollution Affect Fish Chorus in Estuaries of South Carolina?* Garrett Willford, Warren McClellan, Alyssa Marian, Lily Blake, Jessica Miller, Hayden Greenwalt, Mary Tindall, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2025 Discover USC.
4. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS): Does Climate Variability and Noise Pollution Affect Fish Chorus in Estuaries of South Carolina?* Garrett Willford, Warren McClellan, Alyssa Marian, Lily Blake, Jessica Miller, Hayden Greenwalt, Mary Tindall, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2025 USCB Research & Scholarship Day.
5. *Hurricanes and Salinity Drops in the May River, South Carolina – Possible Impacts on Fish and Dolphin Acoustics.* Bella DuBois, Alyssa Marian, Patrick Jones, Jessica Miller, Lily Blake, Garrett Willford, Hayden Greenwalt, Warren McClellan, Mary Tindall, and Eric W. Montie. 2025 USCB Research & Scholarship Day.
6. *Bottlenose Dolphins Talk More in the Winter – Seasonal Changes in Vocalization Patterns across Estuaries in South Carolina.* Lily Blake, Jessica Miller, Alyssa Marian, Katherine Doyle, Garrett Willford, Warren McClellan, Hayden Greenwalt, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2024 Discover USC.
7. *Bottlenose Dolphins Talk More in the Winter – Seasonal Changes in Vocalization Patterns across Estuaries in South Carolina.* Lily Blake, Jessica Miller, Alyssa Marian, Katherine Doyle, Garrett Willford, Warren McClellan, Hayden Greenwalt, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2024 USCB Research & Scholarship Day.
8. *Listening to Vessel Noise – Have Recreational Boats Increased in the May River Estuary Over the Last 10 Years?* Warren McClellan, Michael Martello, Alyssa Marian, Katherine Doyle, Lily Blake, Garrett Willford, Jessica Miller, Hayden Greenwalt, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2024 Discover USC.
9. *Listening to Vessel Noise – Have Recreational Boats Increased in the May River Estuary Over the Last 10 Years?* Warren McClellan, Michael Martello, Alyssa Marian, Katherine Doyle, Lily Blake, Garrett Willford, Jessica Miller, Hayden Greenwalt, Joseph Ballenger, Brock Renkas, Eric W. Montie. 1<sup>st</sup> place for issue-based research at 2024 USCB Research & Scholarship Day.
10. *Temporal Synchrony in Courtship Behavior of Sound-Producing Fish Across Estuaries in South Carolina.* Garrett Willford, Alyssa Marian, Katherine Doyle, Lily Blake, Jessica Miller, Warren McClellan, Hayden Greenwalt, Joseph Ballenger, Brock Renkas, Eric W. Montie. 1<sup>st</sup> place poster at 2024 Discover USC.
11. *Temporal Synchrony in Courtship Behavior of Sound-Producing Fish Across Estuaries in South Carolina.* Garrett Willford, Alyssa Marian, Katherine Doyle, Lily Blake, Jessica Miller, Warren McClellan, Hayden Greenwalt, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2024 USCB Research & Scholarship Day.
12. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS) – Ten Years of Listening to Estuaries in South Carolina!* Hayden Greenwalt, Mary Tindall, Alyssa Marian, Katherine Doyle, Lily Blake, Garrett Willford, Jessica Miller, Warren McClellan, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2024 Discover USC.
13. *The Estuarine Soundscape Observatory Network in the Southeast (ESONS) – Ten Years of Listening to Estuaries in South Carolina!* Hayden Greenwalt, Mary Tindall, Alyssa Marian, Katherine

- Doyle, Lily Blake, Garrett Willford, Jessica Miller, Warren McClellan, Joseph Ballenger, Brock Renkas, Eric W. Montie. 2024 USCB Research & Scholarship Day.
14. *Bottlenose Dolphin Surveys in the Port Royal Sound Area (PRSA), South Carolina Indicate the Existence of Resident and Migratory Populations.* Bella DuBois, Alyssa Marian, Patrick Jones, Katherine Doyle, and Eric W. Montie. 2024 USCB Research & Scholarship Day.
  15. *Bottlenose Dolphin Surveys in the Port Royal Sound Area (PRSA), South Carolina Indicate the Existence of Resident and Migratory Populations.* Bella DuBois, Alyssa Marian, Patrick Jones, Katherine Doyle, and Eric W. Montie. 2024 Discover USC.
  16. *Characterization of Sounds Produced by Pigfish (*Orthopristis chrysoptera*) and Spot (*Leiostomus xanthurus*) Acquired in Captive Tanks at the SCDNR Waddell Mariculture Center.* Anneau Cappelmann, Alyssa Marian, Jason Broach, Evan Bowman, Thomas Morgenstern, Erin Levesque, Eric W. Montie. 2023 USCB Research and Scholarship Day, 1<sup>st</sup> Place.
  17. *Carrying Capacity of Common Bottlenose Dolphins (*Tursiops truncatus*) in May River Estuary, South Carolina, USA.* Patrick Jones, Alyssa Marian, Xiaomei Zhang, and Eric W. Montie. 2023 USCB Research and Scholarship Day.
  18. *Using Soundscape Ecology to Investigate How Climate Variability Influences Chorusing Timelines, Juvenile Abundance, and Growth of Silver Perch (*Bairdiella chrysoura*).* Alex Pinckney et al. 2019. Poster Presentation. USCB Research and Scholarship Day; April 2019.
  19. *Fine-scale Spatial Mapping of Biological Sounds in the May River Estuary.* Ashlee Seder et al., Poster Presentation. USCB Research and Scholarship Day; April 2018. First Place.
  20. *Fine-scale Spatial Mapping of Biological Sounds in the May River Estuary.* Ashlee Seder et al., Poster Presentation. SC EPSCoR REU conference; April 2018.
  21. *Listening to Estuarine Soundscapes to Investigate Shifts in Fish Reproduction Associated with Climate Variability.* Bradshaw McKinney et al., Poster Presentation. SC EPSCoR REU conference; April 2018.
  22. *Fish Diversity, Abundance, and Growth Patterns in Tidal Pools and Creeks of the May River, SC.* Jake Morgenstern et al., Poster Presentation. USCB Research and Scholarship Day; April 2018.
  23. *Acoustic Propagation of Fish Calls in the May River, South Carolina.* Shaneel Bivek et al., Poster Presentation. USCB Research and Scholarship Day; April 2017.
  24. *Monitoring the Impacts of Climate Change in the Lowcountry of South Carolina – Sea Level Rise, Water Temperature, and Shifts in the Timing of Fish Reproduction.* Joshua Himes et al., Poster Presentation. USCB Research and Scholarship Day; April 2017.
  25. *Establishing a Relationship between Seasonal Patterns of Fish Sound Production and Young-of-the-Year Abundance in the May River and Chechessee Creek, South Carolina.* Bradshaw McKinney et al., Poster Presentation. USCB Research and Scholarship Day; April 2017.
  26. *Modeling of Spotted Seatrout (*Cynoscion nebulosus*) Reproductive Output and Impacts of Stormwater Runoff in the May River, SC.* Bradshaw McKinney et al., Poster Presentation. USCB Research and Scholarship Day; April 2016.
  27. *MRI and Volumetric Neuroimaging of Stranded Cetaceans along the Eastern United States.* Jeremy Mildish et al., Poster Presentation. USCB Research and Scholarship Day; April 2016.
  28. *More and Longer Mating Calls in Male Red Drum (*Sciaenops ocellatus*) Leads to More Egg Production.* Chris Kehrre. Poster Presentation; Research and Scholarship Day at USCB; April 2014.

29. *Spatial distribution of fish sound production in the May River, Bluffton, South Carolina.* Steven Vega. Poster Presentation; Research and Scholarship Day at USCB; April 2013.
30. *Visual health index of bottlenose dolphins (*Tursiops truncatus*) inhabiting the May River and Calibogue Sound, South Carolina.* Rebecca Rawson. Poster Presentation; Research and Scholarship Day at USCB; April 2013.
31. *Correlation of sound production and egg release in captive spotted seatrout.* Chris Kehrer. Poster Presentation; Research and Scholarship Day at USCB; April 2013.
32. *Magnetic resonance imaging and volumetric analysis: novel tools to study thyroid hormone disruption and its effects on white matter development.* Mike Powell. Poster Presentation; Research and Scholarship Day at USCB; April 2012.
33. *High-throughput spectral analysis of fish sounds using MATLAB programming.* Matt Hoover. Poster Presentation; Research and Scholarship Day at USCB; April 2012.
34. *Sound production of fish in the May River from August to October 2011.* Steven Vega. Poster Presentation; Research and Scholarship Day at USCB; April 2012.
35. *Sightings and photo identification of bottlenose dolphins (*Tursiops truncatus*) in the May River, South Carolina.* Andrea Parra. Poster Presentation; Research and Scholarship Day at USCB; April 2012.
36. *Using Magnetic Resonance Imaging to Determine the Effects of Thyroid Hormone Disruption on Brain Development.* Mike Powell. Poster presentation; SE Regional Idea Meeting; New Orleans, Louisiana; April 18, 2011.
37. *Using Magnetic Resonance Imaging to Determine the Effects of Thyroid Hormone Disruption on Brain Development.* Mike Powell. Poster presentation; USCB Student Research and Scholarship Day<sup>12<sup>th</sup></sup>; Bluffton, SC; April 18, 2011.
38. *Using Magnetic Resonance Imaging to Determine the Effects of Thyroid Hormone Disruption on Brain Development.* Mike Powell. Poster presentation; 12<sup>th</sup> Annual Frontiers in Neuroscience Research Day; Seabrook, SC; April 15, 2011.

## SERVICE

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### Greater Community

Dates	Duties	Recompense
Nov 2019 –	Bottlenose dolphin outreach program with Montage Resorts in Palmetto Bluff.	\$6000/year to USCB
October 2018 –	USCB Adopt-A-Dolphin Program with the Coastal Discovery Museum, <a href="https://www.coastaldiscovery.org/adopt-a-dolphin-program/">https://www.coastaldiscovery.org/adopt-a-dolphin-program/</a> . This site is an excellent outreach program that brings visibility to our university and educates the public on the possibilities that future students could have if they attend USCB. The Coastal Discovery Museum Facebook page has 12,000 followers.	~ \$2000/year to USCB
August 2015 –	We manage the USCB Lowcountry Dolphin Conservation & the Marine Sensory and Neurobiology Lab Facebook page, <a href="https://www.facebook.com/MarineNeuroLabAtUSCB/">https://www.facebook.com/MarineNeuroLabAtUSCB/</a> . This page is another excellent outreach to the community, where we post photos	None

	and videos of our monthly bottlenose dolphin surveys and ESONS related research. Our site has 887 followers as of September 12 <sup>th</sup> , 2025.	
March 2025	I attended and participated in the Port Royal Sound Foundation Monitoring and Research Symposiums.	None
March 2024	I attended and participated in the Port Royal Sound Foundation Monitoring and Research Symposium.	None
January 2024	"USCB Engages in Innovative Dolphin Research in Local Waters", The Bluffton Sun. See <a href="https://issuu.com/theblufftonsun/docs/bcs-011724a01">https://issuu.com/theblufftonsun/docs/bcs-011724a01</a> eedition.	None
Sept 2020 – 2021	Port Royal Sound Research Task Force. I attended weekly meetings organized by Dr. Chris Marsh to facilitate collaborative research in the Port Royal Sound Watershed.	None
March 2017 – January 2020	Served on the May River Watershed Action Plan Advisory Committee (WAPAC), which is a City Council appointed position. I attended a meeting once a month and assisted in ensuring that the May River remains a healthy ecosystem.	None
June 2015 – June 2018	<i>Spartina Charters</i> and USCB Dolphin Research Excursion Program. Every Wednesday and two Saturdays per month USCB interns educated citizens aboard <i>Spartina Charters</i> from March to December each year.	None
October 2016	Port Royal Sound Foundation celebration and dinner.	None
July 2015	Southeastern Bat Diversity Network volunteer.	None
February 2015	Meeting with Marcel Reichert at SCDNR to discuss and help with recording seismic air gun sounds offshore.	None
February 2015	Beaufort County Watershed Advisory Committee Workshop.	None
October 2014	Our lab created an underwater sound exhibit at the Port Royal Sound Maritime Center.	None
August 2014	<i>Bluffton Breeze</i> , "Listening to the May".	None
July 2014	<i>Hilton Head Monthly</i> , "USCB Making Inroads Towards Sustainability".	None
April 2014	Participation in Earth Day Celebration in Bluffton, SC.	None
January 2012 – 2014	Member of the Port Royal Sound Maritime Center Exhibits Committee.	None
March 2014	<i>Hilton Head Monthly</i> , "Meet USCB's Fish Whisperer".	None
January 2014	<i>Hilton Head Monthly</i> , "In the Spotlight".	None
September 2013	Beaufort County Watershed Advisory Committee Workshop.	None
August 2013	Coastal Discovery Museum meeting to enhance collaboration of coastal research with USCB.	None
May 2013	Provided information about our coastal research at Port Royal Sound Foundation Appreciation Dinner.	None
April 2013	Attended Breakthrough Star Dinner at USC Columbia to accept award.	None

April 2013	Had students in my lab present their research at the May River Cleanup at the Bluffton Oyster Factory.	None
April 2013	"Dr. Eric Montie, 2013 USCB Breakthrough Star" article in the <i>Beaufort Tribune</i> .	None
March 2013	"USCB professor named 'Breakthrough Star' for his coastal research" in <i>The Island Packet</i> .	None
December 2012	USCB students aid NOAA in necropsies of stranded dolphins and whales in <i>The Island Packet</i> .	None
May – August, 2012	Educational outreach on the <i>Vagabond</i> during summer 2012.	None
April 2012	Had students in my lab present their research at the May River Cleanup at the Bluffton Oyster Factory.	None
April 2012	"USCB students study May River Ecology" in <i>The Island Packet</i> .	None
November 2011	The <i>Vagabond</i> – research platform and educational outreach.	None
November 2011	Nature boat cruise to educate citizens on local marine animals that produce sound.	Yes
September 2011	Nature boat cruise to educate citizens on local marine animals that produce sound.	Yes
July 2011	Worked with reporters for an article in <i>The Island Packet</i> entitled, "Researcher Studying the Sounds of Area's Waters".	None
March 2011	Cobia Fishermen of Beaufort County Meeting.	None

### Professional Community

Dates	Duties	Recompense
October 2023 -	Participate in "NOAA's National Center for Environmental Information Passive Acoustic Archive Workshops" (~ four per year) that bring together partners and stakeholders from government (NOAA Fisheries Science Centers and Office of Science and Technology, NOAA National Marine Sanctuaries, NOAA IOOS, NOAA Pacific Marine Environmental Laboratory, National Park Service, US Navy Living Marine Resources, BOEM, NOAA NCEI), academia (UNH, San Diego State University, USCB), industry (Google), and the international community (Alfred Wegener Institute).	None
October 2023 -	Participate in quarterly SoundCoop workshops hosted by NOAA IOOS, BOEM, ONR, US Navy Living Marine Resources, and many institutions to enhance the understanding of biological, geophysical, and anthropogenic sounds in marine ecosystems.	None
March 2021 -	Lead participant in the Biosound working group. Helped develop the Marine Biodiversity Observation Network (MBON) Biosound website ( <a href="https://marinebon.org/biosound/">https://marinebon.org/biosound/</a> ) and contributed to the Biosound Exploratory Project ( <a href="https://ocean-science-analytics.github.io/biosound-exploratory-project/overview.html">https://ocean-science-analytics.github.io/biosound-exploratory-project/overview.html</a> ). We generally have 4-6 meetings per year.	None

Nov 2018 -	Adjunct Faculty, Master of Science in Environmental Studies Program, College of Charleston. Serving as an adjunct in this program helps guide USCB students interested in attending graduate school in environmental studies.	None
August 2016 -	Adjunct Faculty, Graduate Program in Marine Biology, College of Charleston. Serving as an adjunct in this program helps guide USCB students interested in attending graduate school in marine biology.	None
February 2023	Participated in “Acoustic Anthropogenic-Biological Indicators Workshop”, Florida Fish and Wildlife Conservation Commission, MBON, SECOORA, St. Petersburg, FL.	None
June 2023	Contributed sounds of marine life from our Estuarine Soundscape Observatory Network in the Southeast or ESONS ( <a href="https://secoora.org/observations-systems/marine-life/">https://secoora.org/observations-systems/marine-life/</a> ) to World Oceans Passive Acoustic Monitoring Day ( <a href="https://www.wo-pam.com/">https://www.wo-pam.com/</a> ).	None
August 2023	Reviewed the Regional Wildlife Science Collaborative for Offshore Wind (RWSC) Science Plan, “Introduction to an Integrated Science Plan for Wildlife, Habitat, and Offshore Wind Energy in U.S. Atlantic Waters” for NOAA IOOS/SECOORA.	None
December 2023	Reviewed the proposal, “Characterizing Spatial Overlap Between Protected and Invasive Species in the Hudson River” by Aaron Rice (PI, Cornell University) submitted to the New York State Water Resources Institute.	None
August 2022	Reviewed the manuscript, “Passive acoustic monitoring of coastal dolphins ( <i>Sousa plumbea</i> and <i>Tursiops aduncus</i> ) in Plettenberg Bay, South Africa: temporal occurrence patterns and behavior” for the <i>African Journal of Marine Science</i> .	None
March 2022	Reviewed the manuscript, “Anthropogenic noise impacts on spawning and ecology of Atlantic fisheries: implications for managers and long-term fishery productivity” for ASFMC.	None
June 2015 - 2020	USCB Bioacoustics Internship Program.	None
September 2019	Reviewed paper for PLOS ONE.	None
April 2014 - 2016	Slocum Lunz Fellowship Board.	None
February 2014	Review of manuscript for the <i>Journal of Neuroendocrinology</i> , “Diffusion tensor tractography in hypothyroidism and its correlation with memory function”.	None
April 2013	Review of manuscript for the journal <i>Thyroid</i> entitled, “Hippocampal volume is decreased in adults with hypothyroidism”.	None
November 2012	Reviewer for manuscript submitted to the <i>Anatomical Record</i> .	None



June – August 2011	Scientific committee topic chair: Communication and Sensory Biology for Society of Marine Mammalogy 2011 meeting.	None
February 2011	Science Shot: 'Keep It Down!' Says the Pygmy Killer Whale.	None

#### University

Dates	Duties	Recompense
August 2024 -	Department of Natural Sciences representative for Faculty Senate.	None
August 2024 -	Faculty Welfare Committee.	None
October 2023 - May 2024	In October 2023, I became the faculty advisor for the Environmental Sustainability and Conservation Club at USCB. We have outlined multiple sustainability projects on campus, which are organized in Blackboard for easy transition to the next advisor.	None
May 2024	I attended a Pritchards Island boat cruise to discuss our research with donors.	None
April 2024	I attended a Community Foundation of the Lowcountry site visit for Kathryn Madden's and Dr. Bruce Marlowe's proposal to enhance the greenhouse for the Department of Education.	None
March 2024	I attended the Marine Science Mural Celebration. In addition, I provided multiple suggestions in the design of the mural.	None
February 2023	Served on USCB search committee for the Director of Sponsored Programs that successfully hired Dave Hall.	None
April 2023	Bottlenose dolphin monitoring video for <i>Inside Carolina</i> .	None
December 2023	Reviewed USCB Community Foundation of the Lowcountry (CFL) proposals for submission to CFL.	None
January 2021 – 2022	Strategic Plan Implementation Subgroup - Sustainability: Employ programs and services that address the unique features, needs, and opportunities of each campus.	None
January 2019 - 2020	Strategic Plan Implementation Subgroup - Experiential Learning: Offer experiential learning so every graduate will have at least one internship, research, service learning, or applied learning experience to enhance career preparation.	None
September 2016 - 2018	Faculty Grievance Committee.	None
September 2013 - 2018	Faculty Development Committee.	None
November 2018	Reviewer for Magellan Grants.	None
April 2016	Brown Bag Seminar.	None
January 2016	Review of RISE proposals.	None
September 2015	Attended <i>May River Review</i> .	None
April 2015	Judge for Research and Scholarship Day.	None
February 2014	Attended 50th Anniversary of the Desegregation of the University of South Carolina Beaufort celebration.	None
April 2014	Helped Kasia Pawelek with ASPIRE1 grant.	None



April 2014	Worked with QEP to make BIOL 460 a writing and reading Intensive class to enhance critical thinking throughout USCB.	None
October 2013	Helped USCB with advertising brochures.	None
March 2013	Thank you note from Lynn McGee for media coverage and working with reporters for Breakthrough Rising Star Award.	None
March 2013	Reviewer for ASPIRE 1 internal grant.	None
February 2013	Attended Sustainability meeting to promote interaction with community.	None
February 2013	Sponsored Dr. Lou Guillette at USCB. He gave a talk entitled, "Impact of manmade chemicals on wildlife and possible correlations to disease in humans".	None
February 2012	OLLI Course "Acoustic Ecology of Dolphins – Communication, Hearing, & Pollution".	None
July 2011	Participated and provided a display of acoustic ecology equipment at USCB's booth at Be Green Packaging.	None

#### Department

Dates	Duties	Recompense
January 2025 -	Developing a MS Program in Computational Biology.	None
January 2019 –	Help service trucks and boats for the Marine Biology and Coastal Ecology & Conservation Programs.	None
April 2024	Organized and attended USCB CPR and First Aid training for research lab.	None
February 2024	Helped with Spring 2024 Open House & attended women's basketball game.	None
October 2023	Helped with USCB Bluffton Open House.	None
September 2023	Gave seminar for Department of Natural Sciences Seminar Series, BIOL B290.	
August 2023	Attended boat cruise to introduce USCB Biology students into the Department.	None
September - December 2022	Created a safety protocol for the use of research vessels that other faculty members can use.	None
February/March 2021	Led discussion of Master's Program in Biology with Department faculty and Dr. Skipper.	None
May 2020	Met with all candidates for new Marine Biology position that hired Dr. Mercer Brugler.	None
October-November 2019	Reports for two infrastructure grants, which purchased two trucks and two boats for the Department.	None
January - May 2019	Search Committee for Marine Biology Professor that hired Dr. Daniel Pettay.	None
April 2018	Awarded two infrastructure grants, which purchased two trucks and two boats for the Department.	None
October 2017	Assisted Department of Natural Sciences develop a Chemistry Minor.	None

October 2017	Indivisible presentation.	None
November 2016	Tried to create a "Protect Our Salt Marsh" Specialty License Plate.	None
August 2016	Tutoring for biology courses.	None
April 2016	Gave seminar for Department of Natural Sciences Seminar Series, BIOL B290.	None
January 2016	Biology Search Committee for Prokaryote Cell Biology Position that hired Dr. Kim Ritchie.	None
February 2015	Gave seminar for Department of Natural Sciences Seminar Series, BIOL B290.	None
June 2014	Biology student orientation.	None
June 2013	Biology student orientation.	None
April 2013	Gave seminar for Department of Natural Sciences Seminar Series, BIOL B290.	None
Sept 2012 – April 2013	Biology Search Committee for Structural Biology Position that Hired Dr. Edward D'Antonio.	None
November 2011	Helped in construction of the Coastal Ecology and Conservation concentration at USCB.	None
October 2011	Meeting with Mike Denson at SCDNR to facilitate marine research with USCB.	None