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EDUCATION:

- 2006 Ph.D. Biological Oceanography (Dr. LA Levin, Advisor); Scripps Institution of Oceanography; University of California, San Diego
1999 B.A. Biology with Highest Honors, and History (also met Chemistry minor requirements); University of North Carolina at Chapel Hill

PROFESSIONAL EXPERIENCE:

- 2021- Professor, Institute of Marine Sciences and Department of Earth, Marine, and Environmental Sciences, University of North Carolina at Chapel Hill, Morehead City, NC
2016-2021 Associate Professor, Institute of Marine Sciences and Department of Marine Sciences, University of North Carolina at Chapel Hill, Morehead City, NC
2009-2016 Assistant Professor, Institute of Marine Sciences and Department of Marine Sciences, University of North Carolina at Chapel Hill, Morehead City, NC
2008-2009 Research Senior Marine Scientist I, Dauphin Island Sea Lab, Dauphin Island, AL
2006-2008 Post-Doctoral Researcher, Marine Sciences Consortium (Dr. KL Heck, Jr; Dr. SP Powers), Dauphin Island Sea Lab, Dauphin Island, AL
2000, 2006 Graduate Research Assistant, Biological Oceanography (Dr. LA Levin), Scripps Institution of Oceanography, UCSD, La Jolla, CA

HONORS:

- 2023 Marine and Coastal Fisheries, Top Downloaded Article – 2021 (Co-author)
2016 Elise B. Newell Visiting Scholar, Florida Sea Grant and University of South Florida
2015-2017 National Academy of Sciences' Gulf Research Program Early Career Research Fellow (\$76,000)
2014 Marine and Coastal Fisheries Best Paper of 2013 (Co-author)
2011 University of North Carolina Junior Faculty Development Award (\$5,000)
2010 University of North Carolina Research Council Development Award (\$5,000)
2006 EW Fager Student Award, Scripps Institution of Oceanography (at time of award, 1 of 11 recipients since 1976)
2006 Texas Institute of Oceanography Postdoctoral Fellowship (Declined)

- 2001-2005 National Science Foundation Graduate Research Fellowship (approximately \$115,000)
- 2001 National Defense Science and Engineering Graduate Fellowship (Declined)
- 1999 RE Coker Award for Excellence in Undergraduate Research in Ecology: “Site-specific test of source-sink dynamics of a bay scallop population”
- 1998 Phi Beta Kappa
- 1995-1999 James M Johnston Scholar; University of North Carolina at Chapel Hill

PEER-REVIEWED PUBLICATIONS (Mentored: #graduate student; *undergraduate/technician; \$postdoctoral researcher):

Articles and Submissions

102. Gross, CP, JE Duffy, KA Hovel, MR Kardish, PL Reynolds, C Boström, KE Boyer, M Cusson, J Eklöf, AH Engelen, BK Eriksson, **FJ Fodrie**, JN Griffin, CM Hereu, M Hori, AR Hughes, MV Ivanov, P Jorgensen, C Kruschel, K-S Lee, J Lefcheck, P-O Moksnes, M Nakaoka, MI O'Connor, NE O'Connor, JL Olsen, RJ Orth, BJ Peterson, H Reiss, F Rossi, J Ruesink, EE Sotka, J Thormar, F Tomas, R Unsworth, EP Voigt, MA Whalen, and JJ Stachowicz (*submitted*) Plant genetic diversity drives a latitudinal cline in the structure and taxonomic turnover of associated animal communities. *Ecology Letters*
101. Yarnall[#], AH, LA Yeager, C Lopazanski^{*}, AK Poray^{*}, J Morley^{\$}, A Hurlbert, and **FJ Fodrie** (*revision requested*) Habitat area more consistently affects seagrass faunal communities than fragmentation *per se*. *Ecological Monographs*
100. Naisbett-Jones, LC, EG Tsai, **FJ Fodrie**, CMF Lohmann, and KJ Lohmann (*resubmitted*) A geomagnetic map and compass in a bottom-dwelling flatfish. *Current Biology*
99. Poray, AK, JW Morley^{\$}, LEJ Alexander, and **FJ Fodrie** (*revision requested*) Positive interactions between bivalves and seagrass may facilitate an ecosystem-based approach to habitat conservation. *Estuaries and Coasts*
98. Kroll[#], IR, and **FJ Fodrie** (*revision requested*) Carry-over effects from nursery habitats may influence reproductive life history of a coastal marine fish. *Estuaries and Coasts*
97. Kenworthy[#], MD, JH Grabowski, RK Gittman, DA Keller[#], FS Scharf, L Hollensead, TK Scheffel, and **FJ Fodrie** (*revision requested*) Restoration goals, spatial scale, and species identity influence how cultch shell enhancement and artificial reefs provide habitat subsidies for estuarine fishes. *Restoration Ecology*
96. Trackenberg, ST, CJ Baillie, **FJ Fodrie**, S Bartusek, EH Wellman, and RK Gittman (*in press*) Are nursery habitat frameworks still taking baby steps in their application to U.S. fisheries management? *BioScience*

95. Plumlee[#], JD, C Branham^{*}, S Ryburn, and **FJ Fodrie** (2023) Trophic partitioning among seasonally resident predators in a temperate estuary. *Marine Ecology Progress Series* **721**: 119-133.
94. Oken, KL, KW Able, K de Mutsert, **FJ Fodrie**, PC López-Duarte, CW Martin, MJ McCann, P Neubauer, JA Olin, MJ Polito, BJ Roberts, and OP Jensen (2023) Fishery closures, more than predator release, increased resilience of nearshore fishes and invertebrates to the Deepwater Horizon oil spill. *Estuaries and Coasts* **46**:1907-1922.
93. Yu, L, M Khachatryan, M Matschiner, A Healey, D Bauer, B Cameron, M Cusson, JE Duffy, **FJ Fodrie**, D Gill, J Grimwood, M Hori, K Hovel, AR Hughes, J Jenkins, K Keymanesh, C Kruschel, S Mamadi, P-O Moksnes, M Nakaoka, C Pennacchio, K Reiss, F Rossi, JL Ruesink, S Schultz, S Talbot, R Unsworth, D Ward, T Dagan, J Schmutz, JJ Stachowicz, Van de Peer, JL Olsen, TBH Reusch (2023) Ocean currents drive the worldwide colonization of eelgrass (*Zostera marina*), the most widespread marine plant. *Nature Plants* **9**: 1207-1220.
92. Naisbett-Jones, LC, C Branham, S Biraff, S Paliotti, AR McMains, **FJ Fodrie**, JW Morley, JA Buckel, and KJ Lohmann (2023) A method for long-term retention of pop-up satellite archival tags (PSATs) on small migratory fishes. *Journal of Fish Biology* **102**: 1029-1039.
91. Bost, MC, CD Deaton, AB Rodriguez, BA McKee, **FJ Fodrie**, and CB Miller (2023) Anthropogenic impacts on tidal creek sedimentation since 1900. *PLoS One* **18**: e0280490.
90. Clance^{*}, LR, SL Ziegler[#], and **FJ Fodrie** (2023) Contaminants disrupt aquatic food webs via decreased consumer efficiency. *Science of the Total Environment* **859**: 160245.
89. Zhang^{\$}, YS, RK Gittman, SH Swinea^{*}, G Roskar, JA Jarvis, JM Kenworthy, **FJ Fodrie** (2022) Tropical cyclone impacts on seagrass-associated fishes in a temperate-subtropical estuary. *PLoS One* **17**: e0273556.
88. Duffy, JE, JJ Stachowicz, PL Reynolds, EE Sotka, KA Hovel, C Bostrom, KE Boyer, M Cusson, J Eklof, AH Engelen, BK Eriksson, **FJ Fodrie**, JN Griffin, CM Hereu, M Hori, AR Hughes, MV Ivanov, M Jahnke, P Jorgensen, C Kruschel, K-S Lee, JS Lefcheck, P-O Moksnes, M Nakaoka, MI O'Connor, NE O'Connor, RJ Orth, BJ Peterson, H Reiss, K Reiss, JP Richardson, F Rossi, JL Ruesink, ST Schultz, J Thormar, F Tomas, R Unsworth, E Voigt, MA Whalen, SL Ziegler, JL Olsen (2022) A Pleistocene legacy structures variation in modern seagrass ecosystems. *Proceedings of the National Academy of Sciences* **119**: e2121425119.
87. Plumlee[#], JD, G Roskar^{*}, JK Craig, and **FJ Fodrie** (2022) Assessing the catchability of predators in the presence of prey using experimental gillnets in a temperate estuary. *Fisheries Research* **253**: 106383.
86. Tice-Lewis[#], M, YS Zhang^{*, \$}, SG Redding^{*}, NL Lindquist, AB Rodriguez, C Fieseler, QA Walker^{*}, **FJ Fodrie** (2022) Coastal squeeze on temperate reefs: long-term shifts in salinity, water quality, and oyster-associated communities. *Ecological Applications* **32**: e2609

85. Grabowski, JH, CJ Baillie, A Baukus, **FJ Fodrie**, RK Gittman, AR Hughes, DL Kimbro, HS Lenihan, SP Powers, K Sullivan, and R Wagaman (2022) Fish and invertebrate use of restored vs. natural oyster reefs in a shallow temperate latitude estuary. *Ecosphere* **13**: e4035.
84. Gross, CP, JE Duffy, KA Hovel, MR Kardish, PL Reynolds, C Boström, KE Boyer, M Cusson, J Eklöf, AH Engelen, BK Eriksson, **FJ Fodrie**, JN Griffin, CM Hereu, M Hori, AR Hughes, MV Ivanov, P Jorgensen, C Kruschel, K-S Lee, J Lefcheck, P-O Moksnes, M Nakaoka, MI O'Connor, NE O'Connor, JL Olsen, RJ Orth, BJ Peterson, H Reiss, F Rossi, J Ruesink, EE Sotka, J Thormar, F Tomas, R Unsworth, EP Voigt, MA Whalen, and JJ Stachowicz (2022) The biogeography of community assembly: latitude and predation pressure drive geographic variation in community trait distribution in a guild of marine epifaunal crustaceans. *Proceedings of the Royal Society B, Biological Sciences* **289**: 20211762
83. Yarnall[#], AH, JE Byers, LA Yeager, and **FJ Fodrie** (2022) Comparing fragmentation and edge effects on seagrass communities: a meta-analysis. *Ecology* **103**: e3603.
82. Plumlee[#], JD, MD Kenworthy[#], RK Gittman, DA Keller[#], EE Garnet, L Vaca-Pita, LA Carr, **FJ Fodrie** (2022) Remarkable euryhalinity of a marine fish *Lutjanus novemfasciatus* in mangrove nurseries. *Ecology* **103**: e03582.
81. Van Hoeck, RV, AB Paxton, DR Bohnentiehl, JC Taylor, **FJ Fodrie**, and CH Peterson (2021) Passive acoustic monitoring complements traditional methods for assessing habitat enhancement outcomes. *Ecosphere* **12**: e03840.
80. Swinea^{*}, SH, and **FJ Fodrie** (2021) Gulf fisheries supported resilience in the decade following unparalleled oiling. *Ecosphere* **12**: e03801.
79. Gittman, RK, SB Scyphers, CJ Baillie, A Brodmerkel, JH Grabowski, M Livernois, A Poray, CS Smith, and **FJ Fodrie** (2021) Reversing a tyranny of cascading shoreline-protection decisions driving coastal habitat loss. *Conservation Science and Practice* **3**: e490.
78. Keppeler, FW, JA Olin, P Lopez-Duarte, MJ Polito, L Hooper-Bùi, SS Taylor, NN Rabalais, **FJ Fodrie**, BJ Roberts, RE Turner, CW Martin, and OP Jensen (2021) Body size, trophic position, and the coupling of different energy pathways across a saltmarsh landscape. *Limnology and Oceanography Letters* **6**: 360-368.
77. Ziegler[#], SL, LR Clance^{*}, AR McMains^{*}, MD Miller^{*}, and **FJ Fodrie** (2021) Influence of marsh island size on nekton communities: intermediate optima rather than SLOSS. *Marine Ecology Progress Series* **672**: 45-56.
76. Wiesenburg, DA, RL Shipp, C Wilson, **FJ Fodrie**, SP Powers, J Latrigue, KM Darnell, MM Baustian, C Ngo, JF Valentine, and K Wowk (2021) Prospects for Gulf of Mexico Environmental Recovery and Restoration. *Oceanography* **34**: 164-173.

75. Li, W, X-M Liu, K Wang, **FJ Fodrie**, and T Yoshimura (2021) The K isotopic composition of modern marine biogenic carbonates. *Geochimica et Cosmochimica Acta* **304**: 364-380.
74. Benavides[#], MT, **FJ Fodrie**, SR Fegley, and G Bargione (2021) Size changes within a southeast United States coastal shark assemblage: 1975-2018. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* **13**: 228–239.
73. Hovel, KA, JE Duffy, JJ Stachowicz, P Reynolds, C Bostrom, K Boyer, M Cusson, **FJ Fodrie**, CM Hereu, M Hori, P Jorgensen, C Kruschel, K-S Lee, NE O'Connor, M Nakaoka, FT Nash, F Rossi, and J Ruesink (2021) Joint effects of patch edges and habitat degradation on faunal predation risk in a widespread marine foundation species. *Ecology* **102**: e03316.
72. Lefcheck, JS, B Pfirmann, **FJ Fodrie**, JH Grabowski, AR Hughes, and AR Smyth (2021) Consumption rates on oyster reefs vs. shellfish leases: a seasonal and latitudinal comparison. *Journal of Experimental Marine Biology and Ecology* **536**: 1-8.
71. Ziegler[#], SL, MD Miller^{*}, CS Smith, and **FJ Fodrie** (2021) Abiotic cycles mediate the strength of cross-boundary consumption within coastal food webs. *Estuaries and Coasts* **44**: 1147-1156.
70. Whalen, MA, RDB Whippo, PH York, E Aiello, T Alcoverro, C Bertolini, L Benedetti-Cecchi, M Bresch, F Bulleri, PE Carnell, S Cimon, RM Connolly, M Cusson, MS Diskin, E D'Souza, AAV Flores, **FJ Fodrie**, AWE Galloway, LC Gaskins, OJ Graham, TC Hanley, CJ Henderson, CM Hereu, M Hessing-Lewis, KA Hovel, BB Hughes, AR Hughes, KM Hultgren, H Jänes, DS Janiak, LN Johnston, P Jorgensen, BP Kelaher, C Kruschel, BS Lanham, K-S Lee, JS Lefcheck, E Lozano-Álvarez, PI Macreadie, ZL Monteith, NE O'Connor, AD Olds, JK O'Leary, CJ Patrick, O Pino, AGB Poore, MA Rasheed, WW Raymond, K Reiss, OK Rhoades, MT Robinson, PG Ross, F Rossi, TA Schlacher, J Seemann, BR Silliman, DL Smee, JJ Stachowicz, M Thiel, RKF Unsworth, BI van Tussenbroek, A Vergés, ME Yeager, BK Yednock, SL Ziegler, and JE Duffy (2020) Predator communities mediate the effect of climate on predation intensity in shallow marine environments. *Proceedings of the National Academy of Sciences* **117**: 28160-28166.
69. Van Hoeck[#], RV, AB Paxton, DR Bohnenstiehl, JC Taylor, **FJ Fodrie**, DP Nowacek, CM Voss, and CH Peterson (2020) Soundscapes of natural and artificial temperate reefs: similar temporal patterns but distinct spectral content. *Marine Ecology Progress Series* **649**: 35-51.
68. Plumlee[#], JD, LA Yeager, and **FJ Fodrie** (2020) Role of saltmarsh production in subsidizing adjacent seagrass food webs: implications for landscape-scale restoration. *Food Webs* e00158.
67. **Fodrie, FJ**, KL Heck Jr, CFT Andrus, and SP Powers (2020) Determinants of the nursery role of seagrass meadows in the sub-tropical Gulf of Mexico: inshore-offshore connectivity for snapper and grouper. *Marine Ecology Progress Series* **647**: 135-147.
66. Yarnall[#], AH, and **FJ Fodrie** (2020) Predation patterns across states of landscape fragmentation can shift with seasonal transitions. *Oecologia* **193**: 403-413.

65. Hoey, JA, **FJ Fodrie**, Q Walker*, E Hilton, TG Kellison, T Targett, JC Taylor, KW Able, and ML Pinsky (2020) Using multiple natural tags provides evidence for extensive larval dispersal across space and through time in summer flounder. *Molecular Ecology* **29**: 1421-1435.
64. Korzik, M, H Austin, B Cooper, C Jasperse, G Tan, E Richards, E Spencer, B Steinwand, **FJ Fodrie**, and J Bruno (2020) Marketplace shrimp mislabeling in North Carolina. *PLoS One* **15**: e0229512.
63. Benavides#, MT, **FJ Fodrie**, and DW Johnston (2019) Shark detection probability from aerial drone surveys within a temperate estuary. *Journal of Unmanned Vehicle Systems* **8**: 44-56.
62. Ziegler#, SL, KW Able, and **FJ Fodrie** (2019) Dietary shifts across biogeographic scales alter spatial subsidy dynamics. *Ecosphere* **10**: e02980.
61. Yeager, LA, JK Geyer*, and **FJ Fodrie** (2019) Trait sensitivities to seagrass fragmentation across spatial scales shape benthic community structure. *Journal of Animal Ecology* **88**: 1743-1754.
60. Keller#, DA, RK Gittman, MC Brodeur#, MD Kenworthy#, JT Ridge#, LA Yeager\$, AB Rodriguez, and **FJ Fodrie** (2019) Salt marsh shoreline geomorphology influences the development of restored oyster reefs and use by associated fauna. *Restoration Ecology* **27**: 1429-1441.
59. Jensen, OP, CW Martin, KL Oken, **FJ Fodrie**, PC López-Duarte, KW Able, and BJ Roberts (2019) Simultaneous estimation of dispersal and survival of the gulf killifish (*Fundulus grandis*) from a batch-tagging experiment. *Marine Ecology Progress Series* **624**: 183-194.
58. Lipcius, RN, DB Eggleston, **FJ Fodrie**, J van der Meer, KA Rose, RP Vasconcelos, and KE van de Wolfshaar (2019) Modeling quantitative value of coastal habitats for exploited populations. *Frontiers in Marine Science* **6**: 1-22.
57. Livernois, MC, **FJ Fodrie**, KL Heck Jr, and SP Powers (2019) Emergent multiple predator effects and habitat complexity shape estuarine trophic dynamics. *Journal of Experimental Marine Biology and Ecology* **511**: 120-128.
56. Kenworthy#, MD, JH Grabowski, CA Layman, GD Sherwood, SP Powers, CH Peterson, RK Gittman, DA Keller#, and **FJ Fodrie** (2018) Movement ecology of a higher-order predator reveals limited landscape-scale connectivity within a temperate estuary. *Canadian Journal of Fisheries and Aquatic Sciences* **75**: 1990-1998.
55. Ziegler#, SL, **FJ Fodrie**, CJ Baillie*, and JH Grabowski (2018) Effects of landscape setting on oyster reef structure and function persist more than a decade post restoration. *Restoration Ecology* **26**: 933-942.

54. Gittman, RK, **FJ Fodrie**, CJ Baillie^{*}, MC Brodeur[#], CA Currin, DA Keller[#], MD Kenworthy[#], JP Morton^{*}, JT Ridge[#], and YS Zhang^{*} (2018) Living on the edge: increasing patch size enhances resilience of restored salt marsh to inundation stress. *Estuaries and Coasts* **41**: 884-895.
53. Kroll[#], IR, AK Poray, BJ Puckett, DB Eggleston, and **FJ Fodrie** (2018) Quantifying estuarine-scale invertebrate larval dispersal and connectivity: methodological and ecological insights. *Limnology and Oceanography* **63**: 1979-1991.
52. Mahoney^{*}, R, MD Kenworthy[#], JK Geyer^{*}, KA Hovel, and **FJ Fodrie** (2018) Distribution and relative predation risk of nekton reveal complex edge effects within temperate seagrass habitat. *Journal of Experimental Marine Biology and Ecology* **503**: 52-59.
51. Reynolds, PL, JJ Stachowicz, K Hovel, C Boström, K Boyer, M Cusson, JS Eklof, FG Engel, AH Engelen, BK Eriksson, **FJ Fodrie**, JN Griffin, C Hereu, M Hori, T Hanley, M Ivanov, P Jorgensen, C Kr13uschel, K-S Lee, K McGlathery, PO Moksnes, M Nakaoka, MI O'Connor, N O'Connor, RJ Orth, F Rossi, J Ruesink, E Sotka, F Tomas, RKF Unsworth, MA Whalen, and JE Duffy (2018) Biogeography of predation pressure in eelgrass across the Northern Hemisphere. *Ecology* **99**: 29-35.
50. Keller[#] DA, RK Gittman, R Bouchillon^{*}, and **FJ Fodrie** (2017) Life stage and species identity determine whether habitat subsidies enhance or simply redistribute consumer biomass. *Journal of Animal Ecology* **86**: 1394-1403.
49. Ridge[#], JT, AB Rodriguez, and **FJ Fodrie** (2017) Evidence of exceptional shellfish reef resilience to rapid fluctuations in sea level. *Ecology and Evolution* **7**: 10409-10420.
48. **Fodrie, FJ**, AB Rodriguez, RK Gittman, JH Grabowski, NL Lindquist, CH Peterson, MF Piehler, and JT Ridge[#] (2017) Oyster reefs as carbon sources and sinks. *Proceedings of the Royal Society B, Biological Sciences* **284**: 20170891.
47. Livernois^{*}, MC, JH Grabowski, AK Poray, TC Gouhier, AR Hughes, KF O'Brien, LA Yeager^{\$}, and **FJ Fodrie** (2017) Effects of habitat fragmentation on *Zostera marina* seed distribution. *Aquatic Botany* **142**: 1-9.
46. Ridge[#], JT, AB Rodriguez, and **FJ Fodrie** (2017) Saltmarsh and fringing oyster reef transgression in a shallow temperate estuary: implications for restoration, conservation and blue carbon. *Estuaries and Coasts* **40**: 1013–1027.
45. Smith, CS, RK Gittman, IP Neylan, SB Scyphers, J Morton, **FJ Fodrie**, JH Grabowski, and CH Peterson (2017) Hurricane damage along natural and hardened estuarine shorelines: using homeowner experiences to promote nature-based coastal protection. *Marine Policy* **81**: 350-358.

44. McCann, MJ, KW Able, RR Christian, **FJ Fodrie**, OP Jensen, J Johnson PC López-Duarte, CW Martin, JA Olin, MJ Polito, BJ Roberts, and SL Ziegler[#] (2017) Key taxa in food web responses to stressors: The *Deepwater Horizon* Oil Spill. *Frontiers in Ecology and the Environment* **15**: 142-149.
43. López-Duarte, PC, **FJ Fodrie**, OP Jensen, A Whitehead, F Galvez, B Dubansky, and KW Able (2016) Is exposure to Macondo oil reflected in the otolith chemistry of marsh-resident fish? *PLoS One* **11**: e0162699.
42. Yeager^{\$}, LA, DA Keller[#], TR Burns^{*}, A Pool, and **FJ Fodrie** (2016) Threshold effects of habitat fragmentation on fish diversity at landscapes scales. *Ecology* **97**: 2157–2166.
41. Gittman, RK, CH Peterson, CA Currin, **FJ Fodrie**, MF Piehler, and JF Bruno (2016) Living shorelines can enhance the nursery role of threatened coastal habitats. *Ecological Applications* **26**: 249-263.
40. Kroll[#], IR, AK Poray, BJ Puckett, DB Eggleston, and **FJ Fodrie** (2016) Environmental effects on elemental uptake in the shells of the Eastern oyster, *Crassostrea virginica*: implications for the use of geochemical tagging to assess connectivity. *Marine Ecology Progress Series* **543**: 173–186.
39. Walles, B, **FJ Fodrie**, S Nieuwhof, PMJ Herman, and T Ysebaert (2016) Guidelines for evaluating performance of oyster habitat restoration should include tidal emersion: reply to Baggett et al. *Restoration Ecology* **24**: 4-7.
38. Ridge[#], JT, AB Rodriguez, **FJ Fodrie**, NL Lindquist, MC Brodeur[#], SE Coleman[#], JH Grabowski, and EJ Theuerkauf (2015) Maximizing oyster-reef growth supports green infrastructure with accelerating sea-level rise. *Scientific Reports* **5**: 14785.
37. Theuerkauf, EJ, JD Stephens, JT Ridge[#], **FJ Fodrie**, and AB Rodriguez (2015) Carbon export from fringing saltmarsh shoreline erosion overwhelms burial across a critical width threshold. *Estuarine, Coastal and Shelf Science* **164**: 367-378.
36. Gittman, RK, **FJ Fodrie**, AM Popowich, DA Keller[#], JF Bruno, CA Currin, CH Peterson, and MF Piehler (2015) Engineering away our natural defenses: an analysis of shoreline hardening in the United States. *Frontiers in Ecology and the Environment* **13**: 301–307.
*Research featured in *Science* (special section on Oceans and Climate): Popkin, G. (2015) Breaking the waves. *Science* **350**: 756-759.
35. Able, KW, PC López-Duarte, **FJ Fodrie**, OP Jensen, CW Martin, BJ Roberts, J Valenti, K O'Connor, and SC Halbert (2015) Fish assemblage structure in Louisiana salt marshes: effects of the Macondo Oil Spill. *Estuaries and Coasts* **38**: 1385-1398.
34. Baillie^{*}, CJ, JM Fear, and **FJ Fodrie** (2015) Ecotone effects on seagrass and saltmarsh habitat-use by juvenile fishes in a temperate estuary. *Estuaries and Coasts* **38**: 1414-1430.

33. **Fodrie, FJ**, LA Yeager[§], JH Grabowski, CA Layman, GD Sherwood, and MD Kenworthy (2015) Measuring individuality in habitat use across complex landscapes: approaches, constraints, and implications for assessing resource specialization. *Oecologia* **178**: 75-87.
32. Brodeur[#], MC, MF Piehler, and **FJ Fodrie** (2015) Consumers mitigate effects of heat stress and nutrient enrichment on eelgrass (*Zostera marina* L.) communities at its southern range limit. *Marine Ecology Progress Series* **525**: 53-64.
31. Heck Jr, KL, **FJ Fodrie**, SL Madsen, CJ Baillie^{*}, and DA Byron (2015) Seagrass consumption by native and a tropically associated fish species: potential impacts of the tropicalization of the northern Gulf of Mexico. *Marine Ecology Progress Series* **520**: 165–173.
30. **Fodrie, FJ**, KW Able, F Galvez, KL Heck Jr, OP Jensen, PC López-Duarte, CW Martin, RE Turner, and A Whitehead (2014) Integrating organismal and population responses of estuarine fishes in *Macondo* spill research. *BioScience* **64**: 778-788.
29. **Fodrie, FJ**, AB Rodriguez, CJ Baillie^{*}, MC Brodeur[#], SE Coleman[#], RK Gittman, DA Keller[#], MD Kenworthy, AK Poray, JT Ridge[#], EJ Theuerkauf, and NL Lindquist (2014) Classic paradigms in a novel environment: inserting food-web and productivity lessons from rocky shores and saltmarshes in to biogenic reef restoration. *Journal of Applied Ecology* **51**: 1314-1325.
28. Rodriguez, AB, **FJ Fodrie**, JT Ridge[#], NL Lindquist, EJ Theuerkauf, SE Coleman[#], JH Grabowski, MC Brodeur[#], RK Gittman, DA Keller[#], and MD Kenworthy (2014) Oyster reefs can outpace sea-level rise. *Nature Climate Change* **4**: 493-497.
27. Gericke, RL, KL Heck Jr, and **FJ Fodrie** (2014) Interactions between northern-shifting tropical species and native species in the northern Gulf of Mexico. *Estuaries and Coasts* **37**: 952-961.
26. Scyphers, SB, **FJ Fodrie**, FJ Hernandez, SP Powers, and RL Shipp (2013) Venting and reef fish survival: perceptions and participation rates among recreational anglers in the northern Gulf of Mexico. *North American Journal of Fisheries Management* **33**: 1071–1078.
25. Powers, SP, **FJ Fodrie**, SB Scyphers, JM Drymon, RL Shipp, and GW Stunz (2013) Gulf-wide decreases in the size of large coastal sharks documented by generations of fishermen. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* **5**: 93-102.
*Awarded Marine and Coastal Fisheries Best Paper of 2013
24. **Fodrie, FJ**, and SZ Herzka (2013) A comparison of otolith geochemistry and stable isotope markers to track fish movement: describing estuarine ingress by larval and post-larval hablibut. *Estuaries and Coasts* **36**: 906-917.
23. Carson, HC, PC López-Duarte, GS Cook, **FJ Fodrie**, BJ Becker, C DiBacco, and LA Levin (2013) Temporal, spatial, and interspecific variation in geochemical tags within fish otoliths, bivalve larval shells, and crustacean larvae. *Marine Ecology Progress Series* **473**: 133-148.

22. López-Duarte, PC, HS Carson, GS Cook, **FJ Fodrie**, BJ Becker, C DiBacco, and LA Levin (2012) What controls connectivity? An empirical, multi-species approach. *Integrative and Comparative Biology* **52**: 511-524.
21. **Fodrie, FJ**, BJ Toscano*, MC Brodeur*, and SP Powers (2012) Friend or foe: conflicting demands and conditional risk taking by opportunistic scavengers. *Journal of Experimental Marine Biology and Ecology* **422-423**: 114-121.
20. Craig, MT, **FJ Fodrie**, LG Allen, RJ Toonen, and LA Chartier (2011) Discordant phylogeographic and biogeographic breaks in California halibut. *Bulletin of the California Academy of Sciences* **110**: 141-151.
19. **Fodrie, FJ**, and KL Heck Jr (2011) Response of coastal fishes to the Gulf of Mexico oil disaster. *PLoS One* **6**: e21609. *Article featured at sciencenews.org
18. **Fodrie, FJ**, BJ Becker, LA Levin, K Gruenthal, and PA McMillan (2011) Connectivity clues from short-term variability in settlement and geochemical tags of mytilid mussels. *Journal of Sea Research* **65**: 141-150. *Cited by Faculty of 1000 as in the top 2% of Biology papers
17. Toscano*, BJ, **FJ Fodrie**, SL Madsen*, and SP Powers (2010) Multiple prey effects: agonistic behaviors between prey species enhances overall predation by their shared predator. *Journal of Experimental Marine Biology and Ecology* **385**: 59-65.
16. Martin, CW, **FJ Fodrie**, KL Heck Jr, and J Mattila (2010) Differential habitat use and antipredator response of juvenile roach (*Rutilus rutilus*) to olfactory and visual cues from multiple predators. *Oecologia* **162**: 893-902.
15. **Fodrie, FJ**, KL Heck Jr, SP Powers, WM Graham, and KL Robinson# (2010) Climate-related, decadal-scale assemblage changes of seagrass-associated fishes in the northern Gulf of Mexico. *Global Change Biology* **16**: 48-59.
14. **Fodrie, FJ**, LA Levin, and AE Rathburn (2009) High densities and depth-associated changes of epibenthic megafaunal along the Aleutian Margin from 2000-4200 m. *Journal of the Marine Biological Association of the United Kingdom* **89**: 1517-1527.
13. Dick, GJ, SM Webb, BG Clement, **FJ Fodrie**, JR Bargar, and BM Tebo (2009) Enzymatic microbial Mn (II) oxidation and Mn biooxide production in the Guaymas Basin deep-sea hydrothermal plume. *Geochimica et Cosmochimica Acta* **73**: 6517-6530.
12. **Fodrie, FJ**, LA Levin, and AJ Lucas (2009) Use of population fitness to evaluate the nursery function of juvenile habitats. *Marine Ecology Progress Series* **385**: 39-49.
11. Herzka, SZ, R Griffiths, **FJ Fodrie**, and ID McCarthy (2009) Size-specific distribution and movement patterns of juvenile flatfish in a Pacific estuary derived through length-frequency and mark-recapture data. *Ciencias Marinas* **35**: 41-57.

10. Rathburn, AE, LA Levin, M Tryon, JM Gieskes, JB Martin, ME Pérez, **FJ Fodrie**, C Neira, GJ Fryer, G Mendoza, PA McMillan, J Kluesner, J Adamic, and W Ziebis (2009) Geological and biological heterogeneity of the Aleutian margin (2000-4800 m). *Progress in Oceanography* **80**: 22-50.
9. **Fodrie, FJ**, MD Kenworthy, and SP Powers (2008) Unintended facilitation between marine consumers generates enhanced mortality for their shared prey. *Ecology* **89**: 3268-3274.
8. **Fodrie, FJ**, and LA Levin (2008) Linking juvenile habitat utilization to population dynamics of the California halibut. *Limnology and Oceanography* **53**: 799-812.
7. **Fodrie, FJ**, and SH Herzka (2008) Tracking juvenile fish movement and nursery contribution within arid coastal embayments via otolith microchemistry. *Marine Ecology Progress Series* **361**: 253-265.
6. Becker, BJ, LA Levin, **FJ Fodrie**, and PA McMillan (2007) Complex larval connectivity patterns among marine invertebrate populations. *Proceedings of the National Academy of Sciences, USA* **104**: 3267-3272. *Cited by Faculty of 1000 as in the top 2% of Biology papers
5. **Fodrie, FJ**, SZ Herzka, AJ Lucas, and V Francisco (2007) Intraspecific density regulates positioning and feeding mode selection of the sand dollar *Dendraster excentricus*. *Journal of Experimental Marine Biology and Ecology* **340**: 169-183.
4. **Fodrie, FJ**, and G Mendoza (2006) Availability, usage and expected contribution of potential nursery habitats for the California halibut. *Estuarine, Coastal and Shelf Science* **68**: 149-164.
3. Becker, BJ, **FJ Fodrie**, PA McMillan, and LA Levin (2005) Spatial and temporal variability in trace elemental fingerprints of mytilid mussel shells: a precursor to invertebrate larval tracking. *Limnology and Oceanography* **50**: 48-61.
2. Craig, MT, **FJ Fodrie**, and PA Hastings (2004) The nearshore fish assemblage of the Scripps Coastal Reserve, San Diego, California. *Coastal Management* **32**: 341-351.
1. Peterson, CH, **FJ Fodrie**, HC Summerson, and SP Powers (2001) Site-specific and density-dependent extinction of prey by schooling rays: generation of a population sink in top-quality habitat for bay scallops. *Oecologia* **129**: 349-356.

Book Chapters

1. Able, KW and **FJ Fodrie** (2015) Distribution and dynamics of habitat use by juvenile and adult flatfishes. Pgs. 242-282. In: Gibson, RN, RDM Nash, AJ Geffen, and HW Van der Veer (eds.), *Flatfishes: Biology and Exploitation, Second Edition*. Fish and Aquatic Resources Series. Blackwell Publishing, Oxford, United Kingdom.

Completed Draft Manuscripts Being Prepared for Journal Submission

Plumlee[#], JD, and **FJ Fodrie** (*in prep*) Trophic niche width and individual specialization among marine predators in a temperate estuary. *Target: Oecologia*

Reustle^{\$}, JW, M Tice-Lewis[#], YS Zhang^{\$}, SG Redding^{*}, CM Fieseler, QA Walker^{*}, and **FJ Fodrie** (*in prep*) Oyster-reef community composition shifts markedly across emersion and salinity gradients in temperate estuaries. *Target: Marine Ecology Progress Series*

Benavides[#], MT, MD Kenworthy[#], JE Byers, and **FJ Fodrie** (*in prep*) Seasonal residency and movement patterns of bonnethead sharks (*Sphyrna tiburo*) in two subtropical estuaries and adjacent coastal waters of the South Atlantic Bight. *Target: Estuaries and Coasts*

Knorek[#], ZR, NL Lindquist, and **FJ Fodrie** (*in prep*) Salinity mediated bioerosion affects decadal-scale trajectories of biogenic-reef restoration across an oyster sanctuary network. *Target: Ecological Applications*

Knorek[#], ZR, NL Lindquist, and **FJ Fodrie** (*in prep*) Density-dependent processes, not limited recruitment, drive shellfish population dynamics in a restored subtidal sanctuary network. *Target: Oecologia*

Ziegler, SL, JS Lesser, AR McMains, PC Lopez-Duarte, JA Olin, MJ Polito, and **FJ Fodrie** (*in prep*) Geographic variation in cross-habitat energy flows to mobile consumers. *Target: PLoS*

Yarnall[#], AH, and **FJ Fodrie** (*in prep*) Habitat heterogeneity influences on bay scallop predation survival and cohort density: two field experiments in artificial seagrass. *Target: Oecologia*

Van Hoeck[#], RV, DR Bohnenstiehl, and **FJ Fodrie** (*in prep*) Eavesdropping on estuaries: is soundscape spatial variation explained by habitat and biodiversity metrics? *Target: Estuaries and Coasts*

Baker, H, JD Kenworthy, E Clancy, BJ Puckett, **FJ Fodrie**, and JA Jarvis (*in prep*) The response of *Zostera marina* and its seed bank to two tropical cyclones in North Carolina. *Target: Estuaries and Coasts*

Hensel, E, CJ Patrick, JA Hogan, LK Reynolds, ER White, YS Zhang, and **FJ Fodrie** (*in prep*) The role of biodiversity and disturbance intensity on nearshore fish community responses to hurricanes. *Target: Ecosphere*

Lefcheck, JS, RJ Orth, **FJ Fodrie**, D Gong, M Faulkner, KM Laumann, and CJ Patrick (*in prep*) Tropicalization of mid-western Atlantic coastal bays by pinfish (*Lagodon rhomboides*): a combined ecological and oceanographic perspective. *Target: Estuaries and Coasts*

GRANTS:

Awarded

\$150,000	Lead PI: North Carolina Sea Grant (2024-2026) “Employing proven restoration approaches to recover and expand essential seagrass habitat in NC” (Effort: 4.2% yr ⁻¹)
\$187,013	Lead PI: NCDMF Commercial Fishing Resource Fund (2023-2024) “A Comparison of Commercial and Recreational Marine Fisheries Management and Allocation Approaches in North Carolina: Dynamics Related to Efforts to Rebuild Depleted Stocks” (Effort: 5.6% yr ⁻¹)
\$657,490	Lead PI (only UNC dollars listed): North Carolina Collaboratory (Awarded: 2022-2025) “Review of ecological and management status of North Carolina coastal fisheries and habitats” (Effort: 16.6% yr ⁻¹)
\$299,834	Co-PI: United States Coastal Research Program (2022-2024) “Investigating oyster-reef morphodynamics to optimize nature-based infrastructure.” (Effort: 8.3% yr ⁻¹)
\$119,983	Lead PI: North Carolina Sea Grant (2022-2024) “Assessing long-term water temperature patterns in North Carolina estuaries: a key for gauging and predicting ecosystem health in an era of global change” (Effort: 4.15% yr ⁻¹)
\$24,978	Lead PI: North Carolina Sea Grant (2021-2022) “Using adaptive management to guide the next phase of the New River Estuary Oyster Highway” (No funded effort)
\$20,000	Lead PI: North Carolina Policy Collaboratory (2021) “Gauging the conservation and socioeconomic outcomes of net regulations in North Carolina” (Effort: 4.15% yr ⁻¹)
\$100,000	Lead PI: North Carolina Policy Collaboratory (2020) “Fisheries approaches for North Carolina, a national-review perspective” (Effort: 8.3% yr ⁻¹)
\$25,000	Lead PI: North Carolina Sea Grant (2020-2021) “Determining the ecological impacts of shellfish relay in North Carolina” (No funded effort)
\$59,305	Co-PI: North Carolina Sea Grant (2020) “Water quality barriers to oyster recovery and restoration: Impacts of raphidophyte harmful algal bloom species on oyster recruitment to the New River Estuary” (Effort: 4.15% yr ⁻¹)
\$9,950	Lead PI: North Carolina Sea Grant (2020) “Stable isotopes as a tool to elucidate trophic and habitat partitioning of a diverse marine predatory community” (No funded effort)
\$145,722	Lead PI: NCDMF Coastal Recreational Fishing License (2020-2021) “Evaluating and optimizing restoration targets and multi-substrate monitoring methods for North Carolina’s Oyster Sanctuary Program” (Effort: 8.3% yr ⁻¹)

\$16,609	UNC Lead PI: NCDMF Coastal Recreational Fishing License (2020-2021) “Evaluating the current productivity and suitability of North Carolina's designated estuarine nursery areas” (Effort: 4.15% yr ⁻¹)
\$120,000	Co-PI: North Carolina Sea Grant (2018-2020) “Impacts of culture technique and location in the estuary on the nutrient removal potential of oyster aquaculture” (No funded effort)
\$330,395	UNC Lead PI: NSF – MSA (2019-2022) “Collaborative Proposal: MSA: Environmental and anthropogenic drivers of decadal-scale changes in estuarine fish alpha and beta diversity from local to biogeographic scales” (Effort: 8.3% yr ⁻¹)
\$82,512	Lead PI (only UNC dollars listed): NSF – BIO OCE (2016-2019) “RAPID: Collaborative Research: Mechanisms of seagrass community injury and resilience post Hurricane Florence: implications for increasingly stormy coasts” (Effort: 4.15% yr ⁻¹)
\$100,000	Lead PI: Duke Energy Water Resources Fund (2019-2020) “New River Estuary Oyster Highway” (No funded effort)
\$63,750	Lead PI: North Carolina Policy Collaboratory (2019-2020) “New River Estuary Oyster Highway” (No funded effort)
\$16,365	Lead PI: North Carolina Policy Collaboratory (2018-2019) “Habitat function of North Carolina leases” (No funded effort)
\$75,000	Lead PI: North Carolina Policy Collaboratory (2017-2018) “Shellfish Mariculture Strategic Plan” (Effort: 8.3% yr ⁻¹)
\$70,000	Lead PI: North Carolina Wildlife Habitat Foundation (2018) “New River Estuary Oyster Highway” (No funded effort)
\$78,285	UNC Lead PI (only UNC dollars listed): Gulf of Mexico Research Initiative – RFP VI (2018-2019) “Coastal Waters Consortium III” (Effort: 4.15% yr ⁻¹)
\$119,681	Lead PI: North Carolina Sea Grant (2018-2020) “Habitat value of oyster leases within estuarine landscapes for finfish and crustaceans” (No funded effort)
\$50,000	Lead PI: North Carolina Policy Collaboratory (2017-2018) “Will expanding oyster mariculture help to recover ecosystem services of estuarine landscapes?” (Effort: 4.15% yr ⁻¹)

\$195,331	Lead PI: NCDMF Coastal Recreational Fishing License (2017-2019) “Effects of isolated marsh islands and fringing mainland marshes on secondary production and food web dynamics in tidal estuaries” (Effort: 4.15% yr ⁻¹)
\$451,039	Lead PI (only UNC dollars listed): NSF – BIO OCE (2016-2019) “Collaborative Research: Habitat fragmentation effects on fish diversity at landscape scales: experimental tests of multiple mechanisms” (Effort: 8.3% yr ⁻¹)
\$100,000	Lead PI: Coastal Conservation Association Building Conservation Trust (2016) “Fishery production from restored oyster reefs” (No funded effort)
\$290,053	Lead PI: NCDMF Coastal Recreational Fishing License (2016-2019) “Investigating rates of sedimentation in tidal creeks and resulting impacts on fishery production in primary and secondary nurseries” (Effort: 8.3% yr ⁻¹)
\$149,999	Lead PI: North Carolina Sea Grant (2016-2018) “Effects of oyster grow-out cages on the condition and ecosystem-services of seagrass communities” (Effort: 4.15% yr ⁻¹)
\$43,525	Lead PI: North Carolina Aquariums Conservation Program (2015-2016) “Seasonal residency patterns, landscape-scale habitat use, and movement ecology of bonnethead sharks, <i>Sphyrna tiburo</i> , in North Carolina estuaries” (No funded effort)
\$321,565	Co-PI: NCDMF Coastal Recreational Fishing License (2015-2018) “Enhancing the quality of fish habitat and quantity of oysters by refining reef-restoration techniques” (Effort: 8.3% yr ⁻¹)
\$128,126	UNC Lead PI (only UNC dollars listed): Gulf of Mexico Research Initiative – RFP IV (2015-2017) “Coastal Waters Consortium II” (Effort: 8.3% yr ⁻¹)
\$4,960	Lead PI: North Carolina Sea Grant (2014) “Can stable isotope analyses be used to elucidate trophic flows between interconnected saltmarsh and seagrass ecosystems?” (No funded effort)
\$5,000	Lead PI: North Carolina Sea Grant (2014) “Linking nursery habitat to the adult stock dynamics of black sea bass (<i>Centropristis striata</i>)” (No funded effort)
\$149,983	UNC Lead PI (only UNC dollars listed): Mid-Atlantic Sea Grant (2014-2016) “Understanding the impacts of climate change on the distribution, population connectivity, and fisheries for summer flounder (<i>Paralichthys dentatus</i>) in the Mid-Atlantic” (Effort: 8.3% yr ⁻¹)
\$217,366	Lead PI: NCDMF Coastal Recreational Fishing License (2013-2015) “Effects of landscape setting on the function of North Carolina seagrass meadows as essential fish habitat” (Effort: 8.3% yr ⁻¹)

\$225,963	Lead PI: NCDMF Coastal Recreational Fishing License (2013-2015) “Investigating salinity fluxes on natural and restored shell bottom habitat to better predict disturbance effects driven by climate change” (Effort: 8.3% yr ⁻¹)
\$63,101	Lead PI: NCDMF Coastal Recreational Fishing License (2013-2015) “Incorporating stakeholder knowledge of the status and value of coastal habitats into education, outreach and conservation initiatives” (No funded effort)
\$49,927	Co-PI: UNC-CH, ESD Climate Action Program (2013-2014) “Offsetting UNC’s carbon emissions by saltmarsh restoration at the Institute of Marine Sciences” (No funded effort)
\$74,988	Lead PI: Albemarle-Pamlico National Estuary Program (2013) “Using positive interactions between bivalves and seagrass to improve water quality and restore essential fish habitat in coastal North Carolina” (Effort: 8.3% for one yr)
\$74,959	Lead PI: NC-DENR; NC-NERRS (2012) “Sustainable estuarine shoreline stabilization” (Effort: No funded effort)
\$510,000	UNC Lead PI (only UNC dollars listed): NSF – BIO OCE (2012-2015) “Collaborative Research: Interacting effects of local demography and larval connectivity on estuarine metapopulation dynamics” (Effort: 8.3% yr ⁻¹)
\$211,484	Lead PI: NCDMF Coastal Recreational Fishing License (2012-2014) “Acoustic tagging of adult red drum and sheepshead to evaluate restored habitat function, resident versus migratory life histories, and post-capture mortality” (Effort: 8.3% yr ⁻¹)
\$149,944	Co-PI: North Carolina Sea Grant (2012-2014) “Quantifying oyster reef accretion rates and structural evolution for improving estimates of carbon sequestration and restoration success” (Effort: 8.3% yr ⁻¹)
\$45,361	Co-PI: Albemarle-Pamlico National Estuary Program (2012) “Enhancing oyster reef ecosystems and their beneficial services in coastal tidal creeks” (No funded effort)
\$479,314	Co-PI (part of large consortium research team; LUMCON as lead Institution; only fisheries dollars listed): Gulf of Mexico Research Initiative – GRI II (2011-2015) “Response of marsh fishes to petroleum pollution” (Effort: 8.3% yr ⁻¹)
\$51,251	Lead PI: NCSG Fisheries Resource Grants (2011-2013) “Turning negatives to positives: employing derelict crab pots as substrate for restored intertidal oyster reefs” (Effort: 8.3% for one yr)

- \$24,168 Lead PI: Albemarle-Pamlico National Estuary Program (2011) “Recycling fishing gear to enhance shellfish productivity and improve local water quality” (No funded effort)
- \$67,364 Co-PI: Albemarle-Pamlico National Estuary Program (2010-2011) “Evaluating restoration success for newly constructed oyster reefs spanning a critical intertidal elevation” (Effort: 4.2% for one yr)
- \$193,975 Lead PI: NCDMF Coastal Recreational Fishing License (2010-2012) “Quantifying the nursery role of SAV and wetland landscapes for recreationally important fishes in high-salinity environments of North Carolina.” (Effort: 8.3% yr⁻¹)
- \$39,364 Lead PI: NCSG Blue Crab – Shellfish Research (2010-2011) “Restoration revisited: assessing the long-term primary and secondary production value of decade-old, man-made oyster reefs” (Effort: 4.2% for one yr)
- \$30,000 Lead PI: Southeast Aquatic Resources Partnership - NOAA (2009-2011) “Using positive interactions between bivalves and seagrasses to restore essential fish habitat” (No funded effort)
- \$175,891 Co-PI (proposal author): Northern Gulf Institute (2009-2012) “Climate-related ichthyofaunal shifts in the northern Gulf of Mexico: Implications for estuarine ecology and nearshore fishery production” (Effort: 8.3% yr⁻¹)
- \$221,230 Co-PI (proposal author): NOAA Marine Fisheries Initiative (2008-2011) “Nursery origins of adult gag grouper, gray snapper, and lane snapper in the northern Gulf of Mexico: Onshore-offshore connectivity of reef fishes and contribution of seagrass meadows to fishery production” (Effort: 8.3% yr⁻¹)
- \$382,044 Co-PI (proposal coauthor): National Marine Fishery Service (2006-2009) “Estimating the relative importance of northern Gulf nursery habitats to adult fish populations: studies of gray snapper (*Lutjanus griseus*) and gag grouper (*Mycteroperca microlepis*)” (Effort: 100% yr⁻¹)
- \$9,999 Proposal author/administrator: California Sea Grant Rapid Response (2005-2006) “Development of LA-ICP-MS methods to chart movements of fish” (No funded effort)
- \$70,000 Proposal author/administrator: California Department of Boating and Waterways (2004-2006) “Assessing the ecological value of southern California marinas as nursery habitat” (No funded effort)
- \$11,500 Proposal author/administrator: UCMEXUS Dissertation Research Grant (2003-2004) “Tracking movements of juvenile fish via elemental fingerprinting and stable isotope analyses” (No funded effort)

\$10,000 Proposal author/administrator: California Coastal Environmental Quality Initiative (2002) “Evaluating the relative importance of coastal habitat types as productive nursery grounds for the California halibut” (No funded effort)

\$10,000 Proposal author/administrator: California Coastal Environmental Quality Initiative (2001) “Retroactive tracking of nursery habitat use by California halibut” (No funded effort)

Pending

PRESENTATIONS (as leading presenter only):

National/International Presentations

- 2023 “Ecological lessons from 50 years of shark research near Cape Lookout, NC” (Oral, Invited). North Carolina State University (CMAST), Morehead City, NC.
- 2022 “Response of coastal fishes to basin-scale oiling” (Oral, Invited). Austral Spring School, Federal University of Ceará, Brazil
- 2022 “Multiple drivers of change in estuarine fish communities” (Oral, Invited). University of South Carolina, Columbia, SC.
- 2022 “Effects of basin-scale press and pulse disturbance on Gulf of Mexico fisheries” (Oral, Invited) Florida International University, Miami, FL.
- 2022 “Science you can eat: the role of landscape- and basin-scale drivers in estuarine fisheries ecology” (Oral, Invited) University of North Carolina at Chapel Hill, Virtual.
- 2021 “Effects of basin-scale press and pulse disturbance on Gulf of Mexico fisheries” (Oral, Invited) University of North Carolina at Pembroke, Virtual.
- 2021 “Natural history, restoration ecology, and climate response of oyster reefs.” (Oral, Invited) Truett University, Virtual.
- 2019 “Coastal squeeze on oysters: shifting estuarine salinity, water quality, and reef communities” (Oral) Coastal and Estuarine Research Federation Biannual Meeting, Mobile, AL.
- 2018 “Assessing summer flounder larval population connectivity via geochemical tagging” (Oral, Invited) American Fisheries Society Annual Meeting, Atlantic City, NJ.
- 2018 “The nursery roles of estuarine and open coast habitats for black sea bass” (Oral, Invited) American Fisheries Society Annual Meeting, Atlantic City, NJ.

- 2018 “Effects of the Deepwater Horizon oil spill on marsh-associated fishes: the interdisciplinary research portfolio of Ken Able et al.” (Oral, Invited) American Fisheries Society Annual Meeting, Atlantic City, NJ.
- 2018 “Natural history, restoration ecology, and climate response of North Carolina oyster reefs.” (Oral, Invited) East Carolina University, Greenville, NC.
- 2017 “Has warming, oiling, and fishing fundamentally altered coastal ecosystems in the northern Gulf of Mexico?” (Oral, Invited) Gulf Coast Research Laboratory, Ocean Springs, MS.
- 2017 “Effects of basin-scale press and pulse disturbance in the Gulf of Mexico?” (Oral, Invited) Dauphin Island Sea Lab, Dauphin Island, AL.
- 2017 “Effects of basin-scale press and pulse disturbance in the Gulf of Mexico?” (Oral, Invited) University of North Carolina at Chapel Hill, Chapel Hill, NC.
- 2017 “Effects of basin-scale press and pulse disturbance in the Gulf of Mexico?” (Oral, Invited) University of South Florida, St. Petersburg, FL.
- 2017 “The nursery role of seagrass meadows for snapper and grouper in the northern GOM” (Poster) Gulf of Mexico Oil Spill and Ecosystem Sciences Conference.
- 2016 “Has warming, oiling, and fishing fundamentally altered coastal ecosystems in the northern Gulf of Mexico?” (Oral, Invited) Virginia Institute of Marine Sciences, Gloucester Point, VA.
- 2016 “How did the oil spill affect Gulf fisheries” (Oral, Invited) Gulf of Mexico Fisheries Management Council, Austin, TX.
- 2016 “The nursery role of seagrass meadows for snapper and grouper in the northern GOM” (Oral) Benthic Ecology Meetings, Portland, Maine.
- 2016 “Reconciling Organismal Versus Population Responses of Estuarine Fishes to the Macondo Oil Spill – a 5-Year Update” (Oral) Gulf of Mexico Oil Spill and Ecosystem Science Conference, Tampa, FL.
- 2015 “Has warming, oil pollution, and fishing dramatically altered coastal ecosystems in the northern Gulf of Mexico?” (Oral, Invited) Stony Brook University, Stony Brook, NY.
- 2015 “Landscape context effects the ecosystem-service delivery of temperate biogenic reefs” (Oral) Ecological Society of America Centennial Meeting, Baltimore, MD.
- 2015 “Fish + oil + heat: a recipe for ecosystem shifts in the Gulf of Mexico?” (Oral, Invited) Duke University Marine Lab, Beaufort, NC.

- 2015 “Are there ‘big ones’ left in the Gulf of Mexico: an 80-year, multi-species record of trophy fish sizes” (Oral) Benthic Ecology Meetings, Quebec City, Canada.
- 2015 “Landscape effects on the fishery productivity and ecosystem service delivery of a temperate estuary” (Oral, Invited) Dauphin Island Sea Lab, Dauphin Island, AL.
- 2014 “Response of temperate biogenic habitats to regional climate change” (Oral, Invited) Rutgers University Marine Field Station, Tuckerton, NJ.
- 2014 “Landscape context affects the evolution and ecosystem-service delivery of restored oyster reefs” (Oral) Restore America’s Estuaries, Washington, DC.
- 2014 “Linking habitat availability and structure to coastal fishery production” (Oral) Galápagos Science Center, Puerto Baquerizo Moreno, Galápagos.
- 2014 “Landscape effects on the evolution and ecosystem-service delivery of restored estuarine habitats” (Oral, Invited) Harte Research Institute for Gulf of Mexico Studies Texas A&M University, Corpus Christi, TX.
- 2014 “Landscape context and fragmentation *per se* regulate diversity and assemblage structure of fishes in *Zostera marina* meadows” (Oral, Invited) Zostera Experimental Network, Smithsonian Institution, Washington, DC.
- 2014 “Fishery production across estuarine seascapes: habitat availability, setting, and fragmentation regulate fish behaviors and assemblage structure” (Oral, Invited) University of North Carolina at Chapel Hill, Biology Department, Chapel Hill, NC.
- 2013 “The pearl of the oyster is the carbon: coastal shellfish reefs as sources and sinks on a blue carbon scale” (Oral) Coastal and Estuarine Research Federation Biannual Meeting, San Diego, CA.
- 2013 “Classic paradigms in a novel environment: inserting food-web and productivity lessons from rocky shores and saltmarshes in to biogenic reef restoration.” (Oral) Benthic Ecology Meetings, Savannah, GA.
- 2013 “Basin-scale to landscape-scale movement and habitat-use of estuarine fishes: can we really identify ‘essential fish habitat’” (Oral, Invited) University of North Carolina at Wilmington, Wilmington, NC.
- 2013 “Natural history, ecosystem services and climate response of intertidal shellfish reefs” (Oral, Invited) Northeastern University, Nahant, MA.
- 2012 “Quantifying the nursery role of biogenic habitats within complex estuarine landscapes” (Oral, Invited) North Carolina Coastal Recreational Fishing License Symposium, New Bern, NC.

- 2012 “Shellfish reefs as carbon sources and sinks” (Oral) Benthic Ecology Meetings, Norfolk, VA.
- 2012 “Natural history, landscape ecology and blue carbon services of intertidal oyster reefs” (Oral, Invited) Florida International University, Miami, FL.
- 2011 “Natural history, distribution maintenance, and restored ecosystem services of intertidal shellfish reefs” (Oral, Invited) University of North Carolina Curriculum for the Environment and Ecology, Chapel Hill, NC.
- 2011 “Response of coastal fishes to the Gulf of Mexico oil disaster” (Oral) Benthic Ecology Meetings, Mobile, AL.
- 2011 “Intertidal oyster reef restoration in North Carolina” (Oral, Invited) Albemarle-Pamlico National Estuary Program Science and Technology Advisory Committee, Washington, NC.
- 2010 “Landscape setting and substrate depth determine outcomes of intertidal oyster reef restoration: trends, insights and new directions from a decade-old restoration study” (Oral) International Conference on Shellfish Restoration, Charleston, SC.
- 2009 “Complex food-web interactions in marine communities: implications for fisheries and coastal ecosystem management” (Oral, Invited) Institute of the Environment, Morehead City, NC.
- 2009 “Are there “big ones” left in the Gulf of Mexico: evidence from fishery dependent catch data and inter-generational perceptions among fishers?” (Oral, Invited) Center for Marine Sciences and Technology, Morehead City, NC.
- 2009 “Can post-settlement immigration expand a bottleneck in the life history of an estuarine-dependent finfish?” (Poster) 4th International Otolith Symposium, Monterey, CA.
- 2009 “Basin-wide decrease in large sharks documented by a unique eight-decade dataset from the Gulf of Mexico” (Poster) Joint Meeting of Ichthyologists and Herpetologists, Portland, OR.
- 2009 “Persistence or extirpation of the largest fishes in the Gulf of Mexico during the 20th century” (Oral, Invited) Scripps Institution of Oceanography, San Diego, CA.
- 2009 “Climate- and harvest-related shifts in fish communities of the northern Gulf of Mexico” (Oral, Invited) Gulf Coast Research Laboratory, Ocean Springs, MS.
- 2009 “Basin-wide decrease in large sharks documented by a unique eight-decade data set from the Gulf of Mexico” (Oral) Benthic Ecology Meeting, Corpus Cristi, TX.

- 2008 “Can stone crabs provide a biological control against oyster drills and increase oyster survivorship?” (Oral) 11th International Conference on Shellfish Restoration, Charleston, SC.
- 2008 “Decadal-scale assemblage changes of seagrass-associated fishes in the northern Gulf of Mexico: are they climate related?” (Oral) Bays and Bayous Symposium, Biloxi, MS.
- 2008 “The role of juvenile habitats in determining migration corridors and population dynamics of the California halibut” (Oral, Invited) Rutgers University, New Brunswick, NJ.
- 2008 “Community structure, recruitment potential and climate-related faunal shifts of fishes in northern Gulf of Mexico seagrass meadows” (Oral) Benthic Ecology Meeting, Providence, RI.
- 2008 “Connectivity of estuarine and coastal populations of fish and bivalves” (Oral, Invited) Institute of Marine Sciences, Morehead City, NC.
- 2008 “Nursery origins of adult snapper from the northern Gulf of Mexico: onshore-offshore connectivity of reef fishes and contribution of seagrass meadows to fishery production” (Poster) ASLO, Orlando, FL.
- 2007 “Multiple metrics of habitat connectivity and value: nursery utilization and population dynamics of California halibut” (Oral, Invited) Estuarine Research Federation, Providence, RI.
- 2007 “Demographic consequences of nursery habitat selection by California halibut” (Oral) Benthic Ecology Meeting, Atlanta, GA.
- 2006 “Three ‘seas’ of nursery habitat utilization: contribution, concentration and connectivity” (Oral, Invited) Dauphin Island Sea Lab, AL.
- 2006 “A generalist nursery habitat strategy by California halibut connects coastal seascapes” (Poster) ASLO, Honolulu, HI.
- 2005 “Availability, suitability and contribution of potential nursery habitats for the California halibut” (Oral) CAERS, Santa Barbara, CA.
- 2004 “Trace element fingerprinting to infer larval trajectories: implications and benefits of high- frequency field collections” (Oral) International Larval Biology Conference, Hong Kong, China.
- 2001 “Assessing larval dispersal using trace elemental concentrations in mytilid larval shells” (Poster) ASLO, Victoria, BC, Canada.

2000 “Metapopulation dynamics in the bay scallop: mechanisms creating population sinks where least expected” (Oral) Benthic Ecology Meeting, Wilmington, NC.

General Public Lectures and Presentations (including K-12 groups)

- 2022-2023 Presenter, “NC Fishes”, Core Sound Museum Earth Day, Harkers Island, NC.
- 2022 Speaker, “Ecological lessons from 50 years of shark research near Cape Lookout, North Carolina”, Lunchtime Discovery Series, North Carolina Museum of Natural Sciences, Raleigh, NC.
- 2021 Speaker, “Coastal fisheries management: a state-by-state synthesis of fisheries resource allocation, habitat management, and administrative frameworks”, Marine and Estuary Foundation, Wilmington, Burlington, and Figure Eight Island, NC.
- 2019-2023 Speaker, “The role of habitat in sustaining North Carolina fisheries”, Introduction to Fisheries Science for Fishermen, North Carolina Sea Grant, Morehead City, NC.
- 2019 Speaker, “Oyster reef ecology”, UNC-CH Alumni Meeting, Morehead City, NC.
- 2016 Speaker, “Resilience and the North Carolina Coast”, Blue Heron Bowl, Morehead City, NC.
- 2016 Speaker, “Fisheries research in the Galapagos”, UNC-CH Institute of Marine Sciences Brown Bag Series, Morehead City, NC.
- 2015 Speaker, “Ecology you can eat! NC’s estuarine fishes”, Sound Series Science Café, North Carolina Natural Sciences Museum, Raleigh, NC.
- 2015 Speaker, “The ecological value of NC estuaries”, Carteret County Rotary Club, Morehead City, NC.
- 2012 Speaker, “Oyster reefs in a changing climate”, North Carolina Natural History Museum, Raleigh, NC.
- 2012 Speaker, “Ecology of intertidal oyster reefs”, EARTH Satellite Workshop, NC Aquarium, Pine Knoll Shores, NC.
- 2012 Speaker/host, “Climate change science summit”, ANDRILL.ORG, Morehead City, NC.
- 2011 Speaker, “Future of oysters in North Carolina”, Eastern North Carolina Science Café, Atlantic Beach, NC.

- 2011 Presenter, “Positive interactions in NC seagrass meadows: hard clam-eelgrass facilitation nursery habitat utilization by finfishes”, North Carolina Seagrass Workgroup, Washington, NC.
- 2011 Speaker, “Marine Sciences at UNC”, Carolina Student Transfer Excellence Program, Morehead City, NC.
- 2011 Speaker/host, Craven County Academically Gifted Program, Institute of Marine Sciences, Morehead City, NC.
- 2011 Speaker/host, College Success Foundation, Institute of Marine Sciences, Morehead City, NC.
- 2008 Public Outreach Brochure: “History of the Alabama Deep-Sea Fishing Rodeo and Associated Scientific Research” Handed out at the 76th ADSFR, Dauphin Island, AL.
- 2008 Presenter: “Scientific merit of the Alabama Deep-Sea Fishing Rodeo demonstrated by long-term ecological trends” Mobile Jaycees, Mobile, AL.
- 2006 Presenter: “How Can Fish Have Fingerprints?” Expanding Your Horizons Conference to Foster Interest of Young Women for Science. University of South Alabama. Mobile, AL.
- 2006 Presenter: “Keys to Identifying the Fish of the Cabrillo National Monument.” Given to park rangers to aid in the enforcement of CNM regulations. San Diego, CA.
- 2003, 2005 Presenter: “Population Connectivity in Coastal Ecosystems of San Diego County.” E.W. Scripps Associates Science Series. La Jolla, CA.

TEACHING AND MENTORING:

Masters Advisor

Michelle Brodeur, 2009-2014 (UNC-CH); “Consumers mitigate effects of heat stress and nutrient enrichment on eelgrass (*Zostera marina* L.) communities at its southern range limit”; Transitioned to: Communications Director, North Carolina Coastal Reserve / National Estuarine Research Reserve

Sara Coleman, 2011-2014 (UNC-CH); “Effects of boring sponge on oyster soft tissue, shell integrity, and predator-related mortality”; Transitioned to: staff researcher with The Nature Conservancy, Rhode Island

Emma Garnet, 2013-2014 (Univ. Kiel; Thesis supervisor; co-advised with L Vinueza, USFQ); “Evaluating mangroves as essential nursery grounds for snapper (Lutjanidae) and grunts

(Haemulidae) on southern Isabela, Galápagos Islands”; Transitioned to: Cambridge University Ph.D. student

Maxwell Tice-Lewis, 2016-2018 (UNC-CH); “Natural and anthropogenic drivers of oyster reef community dynamics”; Transitioned to: Oregon First Nations Oyster Biologist

Owen Mulvey-Mcferron, 2017-2020 (UNC-CH); “Effects of landscape-scale oyster-reef restoration on nekton communities in a temperate estuary”; Transitioned to: North Carolina Division of Marine Fisheries Biologist

Jonathan Lucas, 2018-2021 (UNC-CH); “Relative importance of substrate availability, recruitment, and post-settlement processes in determining oyster restoration trajectories across an estuarine salinity gradient”; Transitioned to: Research technician/lab manager, North Carolina State University

Eliza Schlein, 2018-2019 (NEU; thesis director); “Oyster recruitment along the New River Estuary Oyster Highway restoration project”; Transitioned to: WRA, Inc. Biologist

Rebekah Flick, 2022- (UNC-CH); Effectiveness of the Coastal Area Management Act in conserving biogenic habitats; anticipated graduation TBD

Madeline Payne, 2022- (UNC-CH); Efficacy of the Fisheries Reform Act in sustainable fisheries management; anticipated graduation TBD

Kamy Bates, 2023- (UNC-CH); Reproductive dynamics of eelgrass; anticipated graduate TBD

Ph.D. Advisor

Michelle Brodeur, 2014-2016 (UNC-CH); “Interspecific competition and predation control oyster reef distribution in euhaline estuaries”; Transitioned to: Communications Director, North Carolina Coastal Reserve / National Estuarine Research Reserve

Ian Kroll, 2012-2017 (UNC-CH); “Assessing estuarine-scale population connectivity and dynamics for the management of commercial marine fisheries”; Transitioned to: Knauss Marine Policy Fellow, United States Fish and Wildlife Service

Justin Ridge, 2012-2017 (UNC-CH; co-advised with AB Rodriguez); “Landscape connectivity influences growth and accretion in temperate biogenic reefs and adjacent saltmarshes”; Transitioned to: Post-doctoral researcher at Duke University

Danielle Keller, 2013-2018 (UNC-CH); “How the structure and spatial components of habitat affect estuarine communities”; Transitioned to: United States Army Corps of Engineers Biologist/Project Manager

Matthew Kenworthy, 2015-2019 (UNC-CH); “Movement ecology of large estuarine fishes”; Transitioned to: Post-doctoral researcher at Savannah State University

Shelby Ziegler, 2015-2020 (UNC-CH); “Spatial subsidies and habitat connectivity in temperate coastal ecosystems”; Transitioned to: Post-doctoral researcher at Moss Landing Marine Lab

Martin Benavides, 2015-2020 (UNC-CH); “Variability in coastal shark populations across multiple spatiotemporal scales”; Transitioned to: Post-doctoral researcher with the Smithsonian Institution

Amy Yarnall, 2016-2021 (UNC-CH); “Community structure and dynamics in estuarine seagrass systems across habitat configurations, environmental gradients, and spatial scales”; Transitioned to: Post-doctoral researcher with ORISE program

Jeffrey Plumlee, 2018-2022 (UNC-CH); “Trophic ecology of estuarine landscapes connected by large mobile predators”; Transitioned to: Post-doctoral researcher at Dauphin Island Sea Lab

Zofia Knorek, 2018- (UNC-CH); “Unraveling the recovery trajectories of restored oyster habitat in mid-Atlantic estuaries”; anticipated graduation: 2022

Rebecca Gaesser, 2018-2022 (UNC-CH); “Marine ecosystems through the lens of soundscape ecology: how biological processes, landscape structure, and anthropogenic activity affect spatiotemporal soundscape patterns”; Transitioned to: Knauss Marine Policy Fellow, National Oceanic and Atmospheric Administration

Nicholas Funnell, 2020- (UNC-CH); “Effects of oyster relay on donor biogenic reef communities”; anticipated graduation TBD

Alexis Longmire, 2021- (UNC-CH); “Nursery dynamics within intertidal back-barrier habitats for juvenile horseshoe crabs”; anticipated graduation TBD

Tyler O’Keefe, 2021- (UNC-CH); “Environmental and socioecological dynamics of shellfish mariculture in temperate estuaries”; anticipated graduation TBD

Heather Bruck, 2023- (UNC-CH); TBD

Nadya Gutierrez, 2023- (UNC-CH); TBD

Post-Doctoral Mentor

Dr. Lauren Yeager, 2013-2014 (UNC-CH); Research theme: “Landscape ecology of temperate seagrass meadows”. Transitioned to: Assistant Professor, University of Texas

Dr. James Morley, 2017-2019 (UNC-CH); Research theme: “Effects of oyster grow-out cages on the condition and ecosystem-services of seagrass communities”. Transitioned to: Assistant Professor, East Carolina University

Dr. Chris Baillie, 2018-2019, 2022 (UNC-CH); Research theme: “Shellfish mariculture planning”. Transitioned to: Research Scientist, North Carolina Coastal Federation

Dr. Stacy Zhang, 2020-2022 (UNC-CH); Research Theme: “Environmental and anthropogenic drivers of decadal-scale changes in estuarine fish alpha and beta diversity from local to biogeographic scales”. Transitioned to: Assistant Professor, North Carolina State University

Dr. Joseph Reustle, 2020-2022 (UNC-CH SPIRE program); Research Topic: “Interactions of larval population connectivity and microbiome development in oyster-reef communities”. Transitioned to: Assistant Professor, Hampton University

Masters Committees

Karen Fisher, 2009-2011 (USA)
Shanna Madsen, 2009-2011 (USA)
Rebecca Gericke, 2010-2011 (USA)
Lacy Lee, 2011-2014 (USA)
Jason Peters, 2013-2014 (NCSU)
Walt Rogers, 2013-2015 (ECU)
Kathleen Onorevole, 2013-2016 (UNC-CH)
Greg Sorg, 2015-2017 (UNC-CH)
Charlie Deaton, 2015-2018 (UNC-CH)
Mariah Livernois, 2017-2018 (USA)
Olivia Torano, 2017-2018 (UNC-CH)
Lauren Goodman, 2017-2020 (UNC-CH)
Amy Bartenfelder, 2017-2019 (UNCW)
Erin Spencer, 2018-2019 (UNC-CH)
Sarah Donaher, 2018-2020 (UNC-CH)
Aliyah Griffith, 2019-2022 (UNC-CH)
Jenelle Estrada, 2019-2020 (UT)
Savannah Ryburn, 2019- (UNC-CH)

Ph.D. Committees

Lindsey Carr, 2009-2016 (UNC-CH)
Erika Young, 2010-2016 (UNC-CH)
Rachel Gittman, 2011-2013 (UNC-CH)
Luke Dodd, 2011-2015 (UNC-CH)
Meagan Schrandt, 2011-2014 (USA)
Avery Paxton, 2012-2018 (UNC-CH)
Nate Geraldi, 2012 (UNC-CH)
Chris Baillie, 2012-2018 (NEU)
Charles Bangley, 2014-2016 (ECU)
Carter Smith, 2015-2019 (UNC-CH)
Stephanie Bühler, 2015-2019 (NCSU)
Stacy Zhang, 2016-2019 (Duke)

Lewis Naisbett-Jones, 2017-2022 (UNC-CH)
Stacy Trackenberg, 2018- (ECU)
Stephanie Valdez, 2021- (Duke)
Ian Grace, 2021- (NCSU)
Illeana Fenwick, 2021- (UNC-CH)
Yasamin Sharifi, 2022- (UNC-CH)
Eve Eisemann, 2022- (UNC-CH)
Colin Eimers, 2022- (UNC-CH)
Mahsa Yazarloo, 2023- (GUASNR)
Madelina Marquez, 2023- (UNC-CH)
Matt Pierce, 2023- (UNC-CH)

National Science Foundation Research Experience for Undergraduates

Shanna Madsen, 2007 (SUNY at USA, co-mentored with SP Powers)
Rachel Bouchillon, 2012 (UF at UNC-CH; included as a coauthor on a peer-reviewed paper)
Riley Brady, 2013 (USC at UNC-CH, co-mentored with MF Piehler)
Taylor Burns, 2014 (LUNO at UNC-CH; included as a coauthor on a peer-reviewed paper)

Undergraduate Independent Research (UNC-CH Institute for the Environment Field Site): *
denotes honors thesis completed

Ruslan Grigoriev, 2009
Allison Davis, 2010
Kelsey Ellis, 2011*
Parker Ellis, 2012
Madelyn Roycroft, 2013
Danielle Doucett, 2014
Matthew Dwinell, 2014
Kayla Pehl, 2015
Lexie Weber, 2016
Marianne Miller, 2016
Lily Olmo, 2017
Connor Albrecht, 2017
Savannah Swinea, 2018*
Emmali Tsai, 2018*
Rachael Rankin, 2019*
Ellie Kremer, 2020*
Karli Meckler, 2020*
Logan Timm, 2021*
Rebecka McMorris, 2021
Noelle Keister, 2022
Sophia Palmieri, 2022*

Undergraduate Research (UNC-CH)

Camryn Blawas, 2018-2019

Undergraduate Honors Directed (outside of UNC-CH)

Mariah Livernois, 2014-2015 (NEU, College of Science co-op program) “Habitat fragmentation alters *Zostera marina* seed abundance and distribution”

David Barbarich, 2015-2016 (Plymouth University) “Effects of the rigid pen shell *Atrina rigida* on shoalgrass *Halodule wrightii*”

Research Technicians

Tai Deloney (Whittenberg) 2023-

Lillian Doll (USC) 2023-

Cole Castillo (UNC-CH) 2023; Transitioned to: UNC-CH undergraduate student

Noelle Keister (UNC-CH) 2023; Transitioned to: UNC-CH undergraduate student

Caitlin O’Brien (UNC-CH) 2022; Transitioned to: UNC-CH undergraduate student

Kayla Shotwell (UNC-CH) 2022; Transitioned to UNC-CH undergraduate student

Savannah Paliotti (NCSU) 2021-2023; Transitioned to: NCSU graduate student

Shayla Birath (UNC-CH) 2020-2021; Transitioned to: UCLA law student

Creed Branham (CoC) 2020-2021; Transitioned to: LSU graduate student

Savannah Swinea (UNC-CH) 2019-2020; Transitioned to: NEU graduate student

Ellie Kremer (UNC-CH) 2020; Transitioned to UNC-CH undergraduate

Karli Meckler (UNC-CH) 2020; Transitioned to: UNC-CH undergraduate

Marianna Miller (UNC-CH) 2018-2020; Transitioned to: NCDEQ biologist

Grace Roskar (FAU) 2019; Transitioned to: Knauss Fellow

Mary Conroy (RWU) 2018-2019; Transitioned to: NEMFC biologist

Jade Danford-Klein (UNC-CH) 2019; Transitioned to: UNC-CH undergraduate student

Cori Lopazanski (UNC-CH) 2017-2019; Transitioned to: UCSB graduate student

Andrew McMains (UWM) 2018-2019; Transitioned to: NCDMF biologist

Eliza Schlein (UVA) 2018; Transitioned to: NEU graduate student

Rich Mahoney (UWSP) 2015-2018; Transitioned to: UCF graduate student

Lauren Clance (UNC-CH) 2017-2018; Transitioned to: DISL Graduate student

Francesca Peay (UNC-CH) 2017-2018; Transitioned to: Cape Lookout National Seashore

Ranger

Emory Wellman (GU) 2018; Transitioned to: ECU graduate student

Owen Mulvey-McFerron (Stockton) 2017; Transitioned to: UNC-CH graduate student

Molly Bost (UNC-CH) 2016-2017; Transitioned to: UNC-CH graduate student

Tessa Pfeifer (UNCW) 2017; Transitioned to: CofC graduate student

Lexie Weber (UNC-CH) 2017; Transitioned to: Researcher

Julie Geyer (Cornell) 2015-2017; Transitioned to: UNC-CH graduate student

Carson Miller (UNC-CH) 2016-2017; Transitioned to: UNC-CH graduate student

Quin Walker (UNC-CH) 2015-2016; Transitioned to: NOAA researcher

Mariah Livernois (NEU) 2014; Transitioned to: DISL graduate student

Gray Redding (UNC-CH) 2013-2014; Transitioned to: CBL graduate student

Stacy Zhang (UNC-CH) 2013-2014; Transitioned to: Duke graduate student

Laura Alexander (UDel) 2010-2014; Transitioned to: Scientist with NC Coastal Federation
 Alexia Pool (URI) 2012-2014; Transitioned to: UNCW graduate student (in education)
 Chris Baillie (UNC-CH) 2010-2012; Transitioned to: NEU graduate student
 Kenny Namkoong (UNC-CH) 2012; Transitioned to: NCSU graduate student (in medicine)
 Erin Voigt (St. Mary's) 2011-2012; Transitioned to: SDSU graduate student
 Sara Gutekunst (U Miami) 2011; Transitioned to: UM undergraduate student
 Josh Hancock (UNC-CH) 2011; Transitioned to: UNC-CH graduate student (in accounting)
 Sam Fuller (NCSU) 2010-2011; Transitioned to: United States Coast Guard Rescue Diver
 Xan Chandler (UNC-W) 2010; Transitioned to: UNCW undergraduate student
 Olivia Rhoades (Brown) 2009-2010; Transitioned to: UC-Davis graduate student

Courses (last 10 years)

Fall 2023 Instructor: Undergraduate course “Marine and Coastal Ecology” (EMES448);
 University of North Carolina at Chapel Hill; Enrollment: 15

Fall 2023 Instructor: Graduate course “Marine Ecology” (MARSCI273/ENV773); Duke
 University; Enrollment: 12

Spring 2023 Instructor: Graduate Course “Press and Pulse Disturbance” (MASC490);
 University of North Carolina at Chapel Hill; Enrollment: 7

Fall 2022 Instructor: Undergraduate course “Marine and Coastal Ecology” (ENEC 448);
 University of North Carolina at Chapel Hill; Enrollment: 11

Fall 2022 Instructor: Graduate course “Marine Ecology” (MARSCI273/ENV773); Duke
 University; Enrollment: 14

Spring 2022 Co-Instructor: Graduate course “Biological Oceanography” (MASC 504);
 University of North Carolina at Chapel Hill; Co-taught with lead instructor, Dr.
 Adrian Marchetti; Enrollment: 18

Spring 2021 Co-Instructor: Graduate course “Biological Oceanography” (MASC 504);
 University of North Carolina at Chapel Hill; Co-taught with lead instructor, Dr.
 Adrian Marchetti; Enrollment: 10

Spring 2020 Lead Instructor: Graduate course “Biological Oceanography” (MASC 504);
 University of North Carolina at Chapel Hill; Enrollment: 13

Fall 2019 Lead Instructor: Graduate seminar “Statistical Versus Ecological Significance”
 (MASC 490); University of North Carolina at Chapel Hill; Enrollment: 9

Spring 2019 Co-Instructor: Graduate course “Biological Oceanography” (MASC 504);
 University of North Carolina at Chapel Hill; Co-taught with lead instructor, Dr.
 Adrian Marchetti; Enrollment: 15

- Spring 2018 Co-Instructor: Graduate course “Biological Oceanography” (MASC 504); University of North Carolina at Chapel Hill; Co-taught with lead instructor, Dr. Adrian Marchetti; Enrollment: 15
- Spring 2017 Co-Instructor: Graduate course “Biological Oceanography” (MASC 504); University of North Carolina at Chapel Hill; Co-taught with lead instructor, Dr. Adrian Marchetti; Enrollment: 14
- Spring 2017 Lead Instructor: Graduate seminar “Marine Community Ecology Foundations” (MASC 490); University of North Carolina at Chapel Hill; Enrollment: 5
- Spring 2016 Co-Instructor: Graduate course “Biological Oceanography” (MASC 504); University of North Carolina at Chapel Hill; Co-taught with lead instructor, Dr. Adrian Marchetti; Enrollment: 20
- Spring 2015 Co-Instructor: Graduate course “Biological Oceanography” (MASC 504); University of North Carolina at Chapel Hill; Co-taught with lead instructor, Dr. Adrian Marchetti; Enrollment: 20
- Summer 2014 Lead Instructor: Undergraduate study abroad course “Interdisciplinary Marine Ecology and Conservation” (MASC 490); University of North Carolina at Chapel Hill; Galápagos Islands; Enrollment: 11

Other UNC-CH Appointments

Environment, Ecology and Energy Program (Affiliated Faculty)
 Biology Department (Adjunct Faculty)
 Center for Galápagos Studies (Faculty Fellow)

PROFESSIONAL SERVICE:

Manuscript and Book Reviews (>150 total)

Ambio (1)
 Aquaculture (1)
 Aquatic Biology (2)
 Aquatic Conservation (1)
 Aquatic Ecology (1)
 Bulletin of Marine Science (2)
 California Fish and Game (1)
 Chesapeake Bay Trust (1)
 Diversity and Distributions (1)
 Diversity (1)
 Ecological Applications (1)
 Ecological Engineering (2)
 Ecological Monographs (1)
 Ecology (5)

Ecology Letters (2)
Environmental Biology of Fishes (1)
Environmental Research Letters (2)
Environmental Toxicology (1)
Estuaries and Coasts (12)
Estuarine, Coastal and Shelf Science (6)
Fisheries Ecology and Management (1)
Fisheries Oceanography (4)
Fishery Bulletin (1)
Gulf of Mexico Science (5)
ICES Journal of Marine Sciences (2)
Journal of Animal Ecology (1)
Journal of Applied Ecology (1)
Journal of Experimental Marine Biology and Ecology (7)
Journal of Fish Biology (1)
Journal of Sea Research (1)
Limnology and Oceanography (5)
Living Shore Proceedings, Chesapeake Bay Trust (1)
Marine and Coastal Fisheries (2)
Marine Ecology (4)
Marine Ecology Progress Series (44)
Marine Environmental Research (2)
North American Journal of Fisheries Management (1)
Oecologia (5)
Pacific Marine and Estuarine Fish Habitat Partnership (1)
PeerJ (1)
Philosophical Transactions of the Royal Society B (1)
PLoS One (4)
Proceedings of the Royal Society B (2)
Restoration Ecology (3)
Science Advances (2)
Transactions of the American Fisheries Society (2)

Proposal Reviews (>50 total, separate from participation on review panels)

Albemarle-Pamlico National Estuarine Partnership (1)
CAMEO (Comparative Analysis of Marine Ecosystem Organization)(1)
CHHE (Center for Human Health and the Environment)(2)
Connecticut Sea Grant (1)
Duke University Data Expeditions: Climate + Health (3)
Florida Sea Grant (1)
Harbor Branch Oceanographic Institute Foundation Specialty License Plate Fund (2)
Henry Van Peters Wilson Memorial Fund (6)
Maine Sea Grant (3)
Marine Fisheries Initiative – MARFIN (1)
Marsden Fund – the Royal Society of New Zealand (1)

National Geographic (3)
 National Marine Fisheries Service Cooperative Research Program (1)
 National Science Foundation: Biological Oceanography; Ocean Sciences Postdoctoral Research Fellowships (12)
 New Jersey Sea Grant (1)
 North Carolina Sea Grant (2)
 North Pacific Research Board (1)
 Oregon Sea Grant (1)
 Texas Sea Grant (5)
 US-Israel BARD (3)
 Virginia Sea Grant (1)
 Washington Sea Grant (1)
 Woods Hole Sea Grant (1)

Tenure and Promotion External Reviews for:

Georgia Southern University
 Louisiana State University
 Texas A&M University at Galveston
 University of Florida (2)
 University of Maryland (2)
 University of Rhode Island
 University of South Alabama
 University of South Carolina
 University of South Florida
 University of Texas
 Rutgers, The State University of New Jersey

Synergistic Activities: Panels, Committees, Workgroups, Etc.

2023	PROMoting Geoscience Research, Education, and SuccesS Mentor (2 undergraduate mentees)
2023	Department of Earth, Marine and Environmental Sciences Post-Doctoral Search Committee
2023	South Carolina Sea Grant Core Funding Proposal Panelist (1 of 6): handled ~5 proposals
2023	National Science Foundation Proposal Panelist (1 of 8): handled 10+ proposals
2023	California Sea Grant Graduate Fellowship Panelist (1 of 5 members): 20 preproposals; ~10 proposals
2022-	Frontiers in Marine Science, Associate Editor, Marine Conservation and Sustainability (handle ~6 submissions each year)

- 2022-2024 Department of Earth, Marine and Environmental Sciences Promotion and Tenure Committee
- 2022 Midterm Site Review Committee, NSF LTER Program
- 2022- Department of Earth, Marine and Environmental Sciences Undergraduate Program Planning Committee
- 2021 Diversity, Equity, and Inclusion in Research (DEIR) Training Certificate
- 2021- South Atlantic Fishery Management Council Habitat Protection and Ecosystem-Based Management Advisory Panel
- 2021-2022 Chair, Institute of Marine Sciences 75th Anniversary Planning Committee
- 2021-2022 Department of Earth, Marine and Environmental Sciences Graduate Program Planning Committee
- 2021 Five-Year Review Committee, Center for Galapagos Studies
- 2021 South Carolina Sea Grant Core Funding Panelist (1 of 6 members): 10+ proposals
- 2020- Ecosphere, Subject Matter Editor, Coastal and Marine Ecology (handle 1-2 submissions each month)
- 2020 New York - Connecticut Sea Grant, Long Island Sound Study Funding Panelist (1 of 3 members): 16 proposals
- 2020 Department of Marine Sciences (UNC-CH) Graduate Admissions Committee
- 2019 Session Convener: "Population and Community Ecology" (45 presentations). Coastal and Estuarine Research Federation Biannual Meeting. Mobile, AL.
- 2019 Long-Term Ecological Research Network Office Synthesis Working Group Proposals Funding Panelist (1 of 9 members): 13 proposals
- 2019 Connecticut Sea Grant Core Funding Panelist (1 of 5 members): 10 proposals
- 2019 South Carolina Sea Grant Core Funding Panelist (1 of 6 members): 10+ proposals
- 2018-2019 Institute of Marine Sciences Fisheries and Conservation Ecology Search Committee – two positions (Chair)
- 2017- Department of Marine Sciences (UNC-CH) Graduate Student Awards Committee (Chair)

- 2017 National Science Foundation Proposal Panelist (1 of 13): handled 30+ proposals
- 2017 Maryland Sea Grant Core Funding Panelist (1 of 4 members): 10+ proposals
- 2017 Connecticut Sea Grant Core Funding Panelist (1 of 6 members): 10+ proposals
- 2016 National Academy of Sciences, Gulf Research Program, Capacity Building Grants Panelist (1 of 5 members): 5+ proposals
- 2015-2016 Faculty Host/Manager: NC Blue Heron Bowl and National Ocean Sciences Bowl
- 2015- North Carolina Seafood Festival Presenter: “Oyster Reefs as Essential Fish Habitat”
- 2015-2018 California Sea Grant Core Funding Panelist (1 of 6 recurring members)
2015: 100+ preproposals, 20+ proposals
2016: 20+ preproposals, 5 proposals
2017: 100+ preproposals, 15+ proposals
2018: 14 proposals
- 2015 Intertidal Flats Habitat Review Team for Fishery Ecosystem Plan II of the South Atlantic Region
- 2014-2015 National Science Foundation Graduate Research Fellowship Program Selection Panelist
- 2014-2017 Zostera Experimental Network (zenscience.org), North Carolina Site Principal Investigator
- 2013- North Carolina Division of Marine Fisheries Habitat and Water Quality Advisory Committee
- 2012- Workgroup Participant, “Quantitative value of Coastal Habitats for Exploited Species”, International Council for the Exploration of the Sea (ICES), Copenhagen, Denmark.
- 2010 Panelist, Capitol Hill Ocean Week (National Marine Sanctuary Program) “Clean Energy and a Healthy Ocean: Navigating the Future” / “Today’s Energy Mix: Impacts on Ocean and Coastal Resources”
- 2009- Albemarle-Pamlico National Estuary Partnership Science and Technical Advisory Committee, Living Aquatic Resources Workgroup, and Submerged Aquatic Vegetation Workgroup (APNEP STAC)
- 2009 Judge, Oral and Poster Student Presentations: “2009 Gulf of Mexico Graduate Student Symposium” Dauphin Island, AL.

- 2007 Session Chair: “Complex predator-prey interactions” Benthic Ecology Meetings. Atlanta, GA.
- 2005-2006 Student Representative: Director’s Committee for the SIO Analytical Facility. La Jolla, CA.
- 2001-2002 Organizer: Scripps Ecology Luncheon Seminar Series. La Jolla, CA.

Non-Refereed Reports

- McCandless, CT, **FJ Fodrie** (2021) Standardized index of abundance for scalloped hammerhead sharks from the University of North Carolina shark longline survey south of Shackleford Banks. SEDAR77-DW33. 11 pp.
- Branham, CC, **FJ Fodrie** (2021) Ecologic and socioeconomic outcomes of the 1994 North Carolina flynet ban in waters south of Cape Hatteras. North Carolina Marine and Estuary Foundation. 10 pp.
- Branham, CC, **FJ Fodrie** (2021) Ecologic and socioeconomic outcomes of the 2012 large purse seine ban in North Carolina. North Carolina Marine and Estuary Foundation. 12 pp.
- Branham, CC, **FJ Fodrie** (2021) Ecologic and socioeconomic outcomes of large-mesh gillnet fishery closures in the Back Sound - North River - Core Sound D1 management unit. North Carolina Marine and Estuary Foundation. 19 pp.
- Baillie, CJ, **FJ Fodrie** (2020) Coastal fisheries management: a state-by-state synthesis of fisheries resource allocation, habitat management, and administrative frameworks. North Carolina Marine and Estuary Foundation. 64 pp.
- Fodrie, FJ**, CH Peterson, CM Voss, and CJ Baillie (2018) North Carolina strategic plan for shellfish mariculture: a vision to 2030. Shellfish Mariculture Advisory Committee, serving the North Carolina General Assembly. 177 pp.
- ICES (2012) Report of the workshop on the value of coastal habitats for exploited species (WKVHES), 25-29 June 2012, Copenhagen, Denmark. ICES CM 2012/SSGSUE:05. 55 pp.
- Herzka, SZ, DE Conklin, M Drawbridge, **FJ Fodrie**, JP Lazo, R Piedrahita (2003) Current research efforts on California halibut focus on aquaculture practices and utilization of nursery habitat. California Bight Bulletin **7**: 4-9.
- Powers, SP, and **FJ Fodrie** (2008) Determining the ecosystem services of Phillips Ocean Park (Florida) mitigation artificial reef through monitoring and analyses. Report provided to CSA International; Stuart, FL. 22 pp.

MEMBERSHIPS:

2010	Diver's Alert Network
2009	American Society of Limnology and Oceanography
2007	Coastal and Estuarine Research Federation
2005	American Fisheries Society
2001	Ecological Society of America
2001	Sigma Xi