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**EDUCATION:**

1997 Ph.D. Marine Science Program, University of South Carolina  
Dissertation title: *The influence of behavior and physics on ecological processes*. Advisor: Dr. David S. Wethey.  
1990-1991 East/West Marine Biology Program, Northeastern University, Boston, MA  
1991 B.S. in Biology, Magna Cum Laude, Honors Program Graduate,  
St. Francis College, Loretto, PA

**PROFESSIONAL EXPERIENCE:**

2019 to Present Interim Executive Director, Center for Marine Science, University of North Carolina Wilmington  
2019 to Present Dean of the Graduate School, University of North Carolina Wilmington  
2018 to 2019 Interim Chair, Department of Mathematics and Statistics, University of North Carolina Wilmington  
2015 to Present Professor, University of North Carolina Wilmington  
*Biological-Physical Coupling, Oceanography, Marine Biology*  
2011 to 2017 Department Chair, Department of Biology and Marine Biology, University of North Carolina Wilmington  
2009 to 2015 Associate Professor, University of North Carolina Wilmington  
*Biological-Physical Coupling, Oceanography, Marine Biology*  
2006 to 2009 Assistant Professor, University of North Carolina Wilmington  
*Biological-Physical Coupling, Oceanography, Marine Biology*  
2005 to 2006 Associate Professor, Louisiana Universities Marine Consortium (LUMCON).  
*Biological-Physical Coupling, Benthic Ecology, Marine Science*  
1999 to 2005 Assistant Professor, Louisiana Universities Marine Consortium (LUMCON).  
*Biological-Physical Coupling, Benthic Ecology, Marine Science*  
1997 to 1999 Postdoctoral Research Associate, Academy of Natural Sciences  
*Organism-flow interactions, stream ecology*  
1993-1995 Graduate Research Assistant- NSF Grant IBN-922225: *Chemoreception in Turbulent Flow: How Blue Crabs Find their Prey*.  
1992-1993 Graduate Research Assistant- ONR Contract N0014-K-82-645: *Real-time Studies of Barnacle Larval Settlement*.  
1991-1996 Graduate Instructional Assistant:

**CRUISE/SUBMERSIBLE EXPERIENCE**

2013 Chief Scientist, *Biodiversity research and education in the coastal areas of Southeastern North Carolina*, Onslow Bay, NC, RV Cape Hatteras, January 27-30, 2013. PI: Christopher Finelli  
2010 Mission Scientist/Aquanaut, *Sponges on Florida Reefs: Basic data for conservation and management.*, Key Largo, FL, NOAA/NURC Aquarius Undersea Habitat, PI: Joseph Pawlik, UNCW  
2007, 2008, 2010 Scientist, *Chemical Ecology of Sponges*, Bahamas, NSF, RV Seward Johnson. PI: Dr. Joe Pawlik, UNCW.  
2002 Mission Scientist/Aquanaut, *Decoupling the effects of mass transfer, water motion and temperature on reef health*, Key Largo, FL, NOAA/NURC Aquarius Undersea Habitat, PI: Christopher Finelli

- 2000 Mission Scientist/Aquanaut, *Multiscale measurements of hydrodynamics and nutrient transfer over coral reefs*, Key Largo, FL, NOAA/NURC, Aquarius Undersea Habitat. PI: Christopher Finelli.
- 1999 Mission Scientist/Aquanaut, *Mass Transfer in Corals: Effects of Turbulent Flow*, Key Largo, FL, NOAA/NURC, Aquarius Undersea Habitat. PI: David Wethey, University of South Carolina.
- 1993 Mission Assistant/Submersible Observer, Cape Hatteras, NC, NOAA/NURC, 7 day cruise, R.V. Edwin Link. PI: Dr. Stephen E. Stancyk, University of South Carolina.

## RESEARCH INTERESTS

***Research in my lab follows two parallel tracks: ecology of reef dwelling benthic suspension feeders and chemoreception in predator-prey interactions. I typically try to work both locally on oyster reefs and in marshes, as well as in the tropics on coral reefs to widen the funding base and the opportunities for student involvement. Much of my research, especially that conducted on oyster reefs, has distinct application to environmental or fisheries problems (e.g. oyster reef restoration).***

***Filtration rates of benthic suspension feeders.*** Benthic suspension feeders filter particles, ranging in size from viruses to zooplankton, from the water column, thereby creating a pathway for the transfer of mass and energy between the water column and the benthos. We are currently investigating the environmental and physiological constraints on feeding rates of a variety of benthic invertebrates (sponges, oysters, ascidians). We are also studying the role of benthic suspension feeders in transforming suspended organic carbon into forms that are more readily available to the benthic food web.

***Oyster larval recruitment and oyster reef restoration.*** Oyster reefs are the dominant hard substratum along intertidal and shallow subtidal shores of the Atlantic and Gulf Coasts of the US. These reefs rely on consistent supply of juvenile oysters to replace adults lost to disease and predation, as well as to counter subsidence and sea level rise. Our group studies oyster recruitment, especially the role of chemical cues and predation, on natural and restored oyster reefs.

***Biology of the boring sponge, Cliona celata.*** The boring sponge, *Cliona celata*, is an important agent of bio-erosion on oyster reefs and is a nuisance for commercial clam and oyster fisheries. My students and I are studying the biology of the sponge with the goal of developing effective control strategies. We have successfully characterized the reproductive season for this sponge, which provides critical information for the timing of mitigation strategies. We are also investigating the behavior and chemoreceptive abilities of the lemondrop nudibranch, *Doriopsilla pharpa*, as a first step the use of *D. pharpa* on commercial oyster beds as a means of biological control of *C. celata*.

***Chemoreception in marsh snails.*** Chemoreception is the most widely used sense in biology. Our lab is using studying chemoreception in marsh periwinkles to tease apart both mechanisms of chemoreception and related higher ecological interactions. Working with marsh periwinkles, we are studying the effects of predators (blue crabs) on prey behavior (periwinkles). This question is basic to ecology, but has special emphasis in marsh systems where predators may be able to regulate marsh production via direct and indirect effects on periwinkles.

## PROFESSIONAL AWARDS and FUNDING:

- 2019 National Science Foundation;  
Conference Grant: Southeastern Regional PULSE Institute; \$99,552; Co-PI Mary Smith, NC A&T, Co-PI Alfredo Leon, Miami-Dade College; Submitted August 6, 2018.
- 2016 National Science Foundation;  
*Testing the sponge-loop hypothesis for Caribbean coral reefs*; \$818,016; PI Christopher Finelli; Co-PIs: Patrick Erwin, Joseph Pawlik; Submitted August 2015;
- 2014 UNCW Quality Enhancement Plan;  
*Aquaponics Demonstration Project*; \$3500; PI: Leslie Hossfeld, Co-PIs: Christopher Finelli, Jack Hall, Roger Shew, Anthony Snider, Aswani Volety, David Webster, Wade Watanabe.
- 2013 Duke-UNC Oceanographic Consortium;  
*Biodiversity research and education in the coastal areas of Southeastern North Carolina*; \$54,000; PI: Christopher Finelli; Co-PI's: Stuart Borrett, Zac Long, Wilson Freshwater.
- 2013 North Carolina Sea Grant – Fisheries Resource Grant;  
*Predicting and controlling recruitment of the shell-boring sponge, Cliona celata*. \$19,920. PI: Christopher Finelli; CoPI; John Carroll.
- 2011 St. Francis University Distinguished Alumnus in Science.
- 2011 UNCW Quality Enhancement Plan Pilot Project;  
*Enhancing applied learning through explorations of the natural world*; \$22,890; PI: Arthur Frampton; Co-PIs: Stuart Borrett, Steven Emslie, Christopher Finelli, Zachary Long, Ann Pabst, Sonja Pyott, Eric Schuettelz, Marcel van Tuinen, Amanda Williard.
- 2010 Aquarius Reef Base;  
*Sponges on Florida coral reefs: Anthropogenic threats and demographic changes*. \$150,000; Co-PI with Dr. Joseph Pawlik.
- 2009 North Carolina Sea Grant;  
*To seed or not to seed: The value for seeding restored oyster reefs for ecosystem function*; \$120,000; PI: Christopher Finelli; Co-PIs: Ami Wilbur, Troy Alphin, Martin Posey.
- 2009 UNCW Cahill Award;  
*Development of a high speed motion analysis system for biological research and education at UNCW*. \$3000; PIs: Alison Taylor & Christopher Finelli
- 2008 National Undersea Research Program/Coral Reef Conservation Program;  
*Sponges on Florida Reefs: Basic data for conservation and management*. \$69,000; Co-PI with Joseph Pawlik
- 2008-2012 National Science Foundation;  
*Pumping rates of the giant barrel sponge Xestospongia muta on Caribbean reefs: size scaling, environmental controls, and bleaching effects*. \$193,617; PI: Christopher Finelli.
- 2008 UNCW Cahill Award;  
*Preliminary investigations of the boring sponge, Cliona chelata, and its effects on the eastern oyster Crassostrea virginica*. \$3000; PI: Christopher Finelli
- 2006 Entergy Environmental Stewardship Program;  
*Expanding and Enhancing the Bayouside Classroom Science and Stewardship Program*. \$22,257.
- 2003-2007 National Science Foundation;  
*Collaborative Research + RUI: The effects of water movement and zooplankton escape behavior on planktivory by coral reef fishes in different microhabitats*.

- 2003-2008 \$383,724 (\$81,243 to LUMCON); Co-PI with Ed Buskey, University of Texas Marine Science Institute and Ray Clarke, Sara Lawrence College  
National Science Foundation;  
Supplement to *Career development plan: Interdisciplinary research and education in marine habitats*. \$44,800; PI: Christopher Finelli
- 2002-2005 National Science Foundation;  
*Faculty Institutes for Reforming Science Teaching (FIRST) II*. \$30,000; Team Leader: Christopher Finelli
- 2002 NOAA/NURC Aquarius Mission  
*Decoupling the effects of mass transfer, water motion and temperature on reef health*. \$50,000 (\$17,318 to LUMCON); Co-PI with David Wethey and Brian Helmuth, University of South Carolina.
- 2001-2008 National Science Foundation  
*Career development plan: Interdisciplinary research and education in marine habitats*. \$506,955; PI: Christopher Finelli
- 2001 Louisiana Board of Regents Support Fund  
*Enhancement of the basic oceanographic analytical capabilities at LUMCON*. \$110,000; Co-PI with Rodney Powell and Nancy Rabalais, LUMCON.
- 2000 NOAA/NURC Aquarius Mission  
*Multiscale measurements of hydrodynamics and nutrient transfer over coral reefs*. \$30,000; PI: Christopher Finelli.
- 1999-2000 Marsh Ecology Research Program  
*Odor-mediated foraging by blue crabs: Quantifying the structure of odor plumes* \$25,303; PI: Christopher Finelli
- 1997-1999 NOAA/NURC Aquarius Mission  
*Mass Transfer in Corals: Effects of Turbulent Flow*. UNCW9721, \$40,000; PI: David Wethey, University of South Carolina
- 1997 University of South Carolina, Graduate School Summer Fellowship, \$3,000
- 1997 Belle W. Baruch Institute Travel Award to present research at the meeting of the American Society of Limnology and Oceanography, \$200
- 1997 University of South Carolina Graduate School Travel Award to present research at the meeting of the American Society of Limnology and Oceanography, \$250
- 1997 Sigma Xi Travel Award to present research at the meeting of the American Society of Limnology and Oceanography, \$75
- 1996-1997 Belle W. Baruch Institute Graduate Student Fellowship, \$9,400
- 1995 Lerner-Grey Fund for Marine Research Grant  
*Tracking odor plumes in moving fluid: Chemical vs. physical cues*, \$900
- 1995 Slocum-Lunz Foundation Award for Marine Research  
*Tracking odor plumes in moving fluid: Chemical vs. physical cues*, \$930
- 1995 National Academy of Sciences Grant in Aid to Grad. Research from Sigma Xi  
*Tracking odor plumes in moving fluid: Chemical vs. physical cues*, \$500
- 1994 Sigma Xi Travel Award to present research at the Benthic Ecology Meeting, \$75
- 1993 Sigma Xi Grant in Aid to Graduate Research  
*Interactions of fluid flow and surface topography: Influences on Larval Settlement*, \$450
- 1993 Slocum-Lunz Foundation Award for Marine Research  
*Hydrodynamic Influences on Larval Settlement*, \$875
- 1992 National Science Foundation Pre-doctoral Fellowship Honorable Mention
- 1991 National Science Foundation Pre-doctoral Fellowship Honorable Mention
- 1987-1991 Presidential Scholar, St. Francis College, Loretto, PA

**PUBLICATIONS (Including those in press):**

41. Carroll, J.M., Stubler, A.D., Finelli, C.M., Peterson, B.J. (2019) The potential use of seagrass herbivory patterns as an indicator of herbivore community change after tropical marine protected area establishment. *Gulf and Caribbean Research*, DOI: 10.18785/gcr.3001.01
40. Carroll, J. M., Church, M. B., Finelli, C.M. (2018) Periwinkle response to chemical cues depends on home-marsh geography. *PeerJ*. 6:e5744 <https://doi.org/10.7717/peerj.5744>
39. Watts, J.C., Carroll, J.M., Munroe, D.M., and Finelli, C.M. (2018) Examination of the potential relationship between boring sponges and pea crabs and their effects on eastern oyster condition. *Diseases of Aquatic Organisms*. 130:25-36, DOI: 10.3354/dao03257
38. McMurray, S.E., A.D. Stubler, P.M. Erwin, C.M. Finelli, J.R. Pawlik (2018) A test of the sponge-loop hypothesis for emergent Caribbean reef sponges. *Marine Ecology Progress Series*, 588:1-14, <https://doi.org/10.3354/meps12466>. **Selected as Feature Article for MEPS vol 588**
37. McMurray, S.E., C.M. Finelli, and J.R. Pawlik (2017) Demography alters carbon flux for a dominant benthic suspension feeder: the giant barrel sponge on Conch Reef, Florida Keys *Functional Ecology* DOI: 10.1111/1365-2435.12908 **Selected by British Ecological Society for inclusion in virtual issue “to illustrate how theoretical, empirical and synthetic studies based in aquatic ecosystems are leading the way in many fields of ecology well beyond the scope of the particular study system.”**
36. Stubler, A.D., Stoker, H., Styron, H.J., Carroll, J.M., Finelli, C.M. (2017). Reproductive and recruitment dynamics of clonoid sponges on oyster reefs in North Carolina. *Invertebrate Biology* 136(4): 365–378. DOI: 10.1111/ivb.12188
35. McMurray, S.E., Z. Johnson, D. Hunt, J.R. Pawlik, and C.M. Finelli (2016) Selective feeding by the giant barrel sponge enhances foraging efficiency. *Limnology and Oceanography*. 61(4):1271-1286 DOI: 10.1002/lno.10287
34. Carroll, J.M., O’Shaughnessy, K.O., Diedrich, G., Finelli, C.M. (2015). Are eastern oysters being bored to death by *Cliona celata*? A comprehensive examination of oyster condition, growth, and survival. *Diseases of Aquatic Organisms* doi: 10.3354/dao02928
33. Thompson, J.R., Fonseca, D.M., Finelli, C.M., Farouk, B., Hart, D.D. (2015) Scale-dependent relationships between suspension-feeding stream insects and velocity in spatially heterogeneous flow environments. *Freshwater Biology*. doi:10.1111/fwb.12688
32. McMurray, S.E., C.M. Finelli, and J.R. Pawlik (2015) Population dynamics of giant barrel sponges on Florida coral reefs. *J. Exp. Mar. Biol. Ecol.* 473: 73-80 DOI: 10.1016/j.jembe.2015.08.007
31. Carroll, J.M., J. Marion, and C.M. Finelli (2015) A field test of the effects of mesopredators and landscape setting on juvenile oyster consumption on intertidal reefs. *Marine Biology* DOI: 10.1007/s00227-015-2643-7
30. Carroll, J.M., K. Riddle, K.E. Woods, and C.M. Finelli (2015) Recruitment of the eastern oyster, *Crassostrea virginica*, in response to settlement cues and predation in North Carolina. *J. Exp. Mar. Biol. Ecol.* DOI: 10.1016/j.jembe.2014.10.024
29. McMurray, S.E., J.R. Pawlik, and C.M. Finelli (2014) The effects of size and morphology on pumping rates of Caribbean giant barrel sponges. *Aquatic Biology*. DOI: 10.3354/ab00612. **Selected as Feature Article for Aquatic Biology Vol. 22**
28. Lewis, T.B. and C.M. Finelli (2014). Epizoic zoanthids reduce pumping in two Caribbean vase sponges. *Coral Reefs*. DOI: 10.1007/s00338-014-1226-2
27. Carroll, J. M.<sup>4</sup>, Finelli, C.M. (2014) Impacts of the ectoparasitic snail *Boonea impressa* on growth of post-set juvenile oysters. *Journal of Molluscan Studies*, DOI:10.1093/mollus/eyu070
26. Sumerel, A.N. and C.M. Finelli (2014) Particle size, flow speed, and body size interactions determine feeding rates of a solitary ascidian, *Styela plicata*: A flume experiment. *Marine Ecology Progress Series* 495:193-204, DOI: 10.3354/meps10571

25. Robinson, H.E., Finelli, C.M., Koehl, M.A.R. (2013) Interactions between benthic predators and zooplanktonic prey are affected by turbulent waves. *Integrative and Comparative Biology* 53 (5): 810-820.
24. Pawlik, J.R., T.L. Loh, S.E. McMurray, C.M. Finelli (2013). Sponge communities on Caribbean coral reefs are structured by factors that are top-down, not bottom-up. *PLOS-One* 8(5): e62573 DOI:10.1371/journal.pone/0062573.
23. Finelli, C.M., R.D. Clarke, H.E. Robinson, and E.J. Buskey (2009). Water flow controls the distribution and feeding behavior of two co-occurring coral reef fishes: I. Field measurements. *Coral Reefs* 28: 461-473
22. Clarke, R.D., C.M. Finelli, and E.J. Buskey (2009). Water flow controls the distribution and feeding behavior of two co-occurring coral reef fishes: II. Laboratory measurements. *Coral Reefs* 28:475-488
21. Finelli, C.M., D. Ebert-May, and J. Hodder. 2008. Collaborative learning: A jigsaw. In Ebert-May and Hodder, editors, Pathways to Scientific Teaching. Sinauer and Associates, Sunderland MA. Reprinted from original peer-reviewed publication in *Frontiers in Ecology and the Environment* 3(4):220-221
20. Finelli, C.M., B.S.T. Helmuth, N.D. Pentcheff, D.S. Wethey. 2007. Intracolony variability in photosynthesis by corals is driven by water flow via oxygen transport. *Marine Ecology Progress Series* 349:103-110.
19. Robinson, H.E., C.M. Finelli, and E. Buskey. 2007. The turbulent lives of copepods: laboratory flume studies of how flow over a coral reef affects their ability to detect and evade predators. *Marine Ecology Progress Series* 349:171-181.
18. Finelli, C.M., J. Kastler, R.T. Powell. In press. Improving undergraduate science education: The FIRST II Project in Louisiana. *Proceedings of the Louisiana Academy of Sciences*
17. Finelli, C.M., B.S.T. Helmuth, N.D. Pentcheff, and D.S. Wethey. 2006. Water flow influences oxygen transport and photosynthetic efficiency in corals. *Coral Reefs* 25(1) 47-57.
16. Finelli, C.M. 2005. Bioirrigation as a source of nutrients for benthic algae: A study of burrow ventilation by ghost shrimp (Thalassinidea) from the Northern Gulf of Mexico. *Geochemica et Cosmica Acta*. 69(10 Suppl) A114. (Published Abstract)
15. Finelli, C.M., D. Ebert-May, and J. Hodder. 2005. Collaborative learning: A jigsaw. *Frontiers in Ecology and the Environment* 3(4):220-221
14. Atilla, N., J.W. Fleeger, and C.M. Finelli. 2005. Effects of habitat complexity and hydrodynamics on the abundance and diversity of small invertebrates colonizing artificial substrates. *Journal of Marine Research* 63(6):1151-1172.
13. Stanzel, C.D. and C.M. Finelli. 2004. The effects of temperature and salinity on ventilation behavior of two species of ghost shrimp (Thalassinidea) from the northern gulf of Mexico: a laboratory study. *Journal of Experimental Marine Biology and Ecology* 312:19-41.
12. Soniat, T.M., Finelli C.M., and J.T. Ruiz. 2004. Vertical structure and predator refuge mediate oyster reef development and community dynamics. *Journal of Experimental Marine Biology and Ecology* 310:163-182.
11. Finelli, C.M. and D.S. Wethey. 2003. Behavior of oyster (*Crassostrea virginica*) larvae in flume boundary layer flows. *Marine Biology* 143:703-711.
10. Finelli, C.M., Hart, D.D., and R.A. Merz. 2002. Stream insects as passive suspension feeders: the effects of velocity and food concentration on feeding performance. *Oecologia* 131:145-153.
9. Finelli, C.M. 2000. Velocity and concentration distributions in turbulent odor plumes in the presence of vegetation mimics: a flume study. *Marine Ecology Progress Series* 207:297-309.
8. Finelli, C.M., N.D. Pentcheff, R.K. Zimmer-Faust, and D.S. Wethey. 2000. Physical constraints on ecological processes: a field test of odor-mediated foraging. *Ecology* 81:784-797.

7. Grove, M.W., C.M. Finelli, D.S. Wethey, and S.A. Woodin. 2000. The effects of symbiotic crabs on the pumping activity and growth rates of the parchment worm *Chaetopterus variegatus*. *Journal of Experimental Marine Biology and Ecology* 246:31-52
6. Finelli, C.M., D.D. Hart, and D.M. Fonseca. 1999. Evaluating the spatial resolution of an acoustic Doppler velocimeter and the consequences for measuring near-bed flows. *Limnology and Oceanography* 44(7): 1793-1801
5. Finelli, C.M., N.D. Pentcheff, R.K. Zimmer-Faust, and D.S. Wethey. 1999. Odor transport in turbulent flows: constraints on animal navigation. *Limnology and Oceanography* 44:1056-1071.
4. Finelli, C.M. and D.S. Wethey. 1999. Settlement in Balanomorpha Barnacles: The interaction of physics and settlement cues. Pages 275-292 in M.F. Thompson and R. Nagabushanam, editors, *Barnacles: The Biofoulers*. Regency, New Delhi, India.
3. Hart, D.D. and C.M. Finelli. 1999. Physical-biological coupling in streams: the pervasive effects of flow on benthic organisms. *Annual Review of Ecology and Systematics* 30: 363-395
2. Tamburri, M.N., C.M. Finelli, D.S. Wethey, and R.K. Zimmer-Faust. 1996. Chemical induction of larval settlement behavior in flow. *Biological Bulletin* 191:367-373.
1. Zimmer-Faust, R.K., C.M. Finelli, N.D. Pentcheff, and D.S. Wethey. 1995. Odor plumes and animal navigation in turbulent water flow: A field study. *Biological Bulletin* 118:111-116.

#### **PUBLICATIONS (Submitted or in prep):**

- Conti-Jerpe, I.E., Pawlik, J.R., Finelli, C.M (In Revision) Evidence for trophic niche partitioning among three sympatric species of gorgonian octocorals. Submitted to *Oecologia* January 15, 2018
- Goldey, E.S., Aguirre, K., Awong-Taylor, J., Belmont, H., Choi, J., Finelli, C., Fink, A., Harmon, C., Hill, A., Jacob, N., Lee-Brown, M., Musante, S., Romano, S., Smith, M. (In revision) Institutional change for STEM Success: Inspiring department-wide Reform at Twenty divers institution in the Southeast PULSE project. *CBE Life Sciences Education*

#### **MEETING PRESENTATIONS AND INVITED SEMINARS:**

- McMurray, S. E., Stubler, A. D., Erwin, P. M., Finelli, C. M., Pawlik, J.P. 2018. Another way to close the "loop": emergent sponges do not return detritus to Caribbean reefs. 47<sup>th</sup> Benthic Ecology Corpus Christi, TX.
- Gantt, S.E., McMurray, S.E., Stubler, A.D., Finelli, C.M., Pawlik, J.P., Erwin, P.M. 2018. Microbial symbionts and nutrient cycling in Caribbean Coral Reef Sponges. 47<sup>th</sup> Benthic Ecology Corpus Christi, TX.
- Stubler, A.D. and C.M. Finelli 2018. Can predator presence influence bioerosion? 47<sup>th</sup> Benthic Ecology Corpus Christi, TX.
- Finelli, C.M. and S.L. Lindsay 2017. Is there a Vision for Change in the Quest for Ocean Literacy? 46<sup>th</sup> Benthic Ecology Meeting, Myrtle Beach, SC.
- McMurray, S.E., J.R. Pawlik, and C.M. Finelli. 2017. Cultivating the carbon cycle: population growth alters carbon flux for the Caribbean giant barrel sponge *Xestospongia muta*. 46<sup>th</sup> Benthic Ecology Meeting, Myrtle Beach, SC
- Stubler, A.D., Carroll, J.M. and C.M. Finelli 2017. With or without nutrients, sponges are boring: the effects of eutrophication on bioerosion. 46<sup>th</sup> Benthic Ecology Meeting, Myrtle Beach, SC
- Carroll, J.M., Watts, J., Finelli, C.M., and D. Munroe. 2017. Not a fun threesome: the prevalence, impact and interaction of boring sponges and pea crabs on oysters. 46<sup>th</sup> Benthic Ecology Meeting, Myrtle Beach, SC
- Gantt SE, McMurray SE, Stubler AM, Finelli CM, Pawlik JR, Erwin PM. 2017. Microbial symbionts and carbon cycling in Caribbean coral reef sponges. North Carolina American Society for Microbiology Annual Meeting. Raleigh, NC.

- Finelli, C.M., Covi, J., Pabst, D. A., Posey, M. H., Williard, A. L. (2017). Taking the PULSE at UNCW: An updated plan for curriculum review and change, Department of Biology and Marine Biology. Association of Southeastern Biologists, Montgomery, AL.
- Finelli, C.M., Jack, T.P. , Brancaccio-Taras, L., Ribble, D. (2016) *PULSE Regional Networks* as a mechanism to stimulate departmental STEM education transformation. Transforming Undergraduate STEM Education: Implications for 21st-Century Society, AACU/PKAL Annual Meeting, Boston, MA.
- Watts, Jessica; Gius, Jennifer; Carroll, John; Munroe, Daphne; Finelli, Christopher. 2015. Not a fun threesome: the prevalence and impacts of two oyster pests on their host. Annual Meeting of the Coastal and Estuarine Research Federation, Portland, OR.
- Goldey, E. S., Aguirre, K., Awong-Taylor, J., Belmont, H., Choi, J., Finelli, C. M., Harmon, C., Hill, A., Jacob, N., Lee-Brown, M., Musante, S., Romano, S., Smith, M.. 2015. Moving Mountains: The Impact of the Southeastern Regional PULSE Initiative on Twenty Diverse Institutions Engaged in Department-Wide Undergraduate Biology Reform. Gordon Conference on Undergraduate Biology Education Research. Lewiston, ME.
- Goldey, E. S., Aguirre, K., Awong-Taylor, J., Belmont, H., Choi, J., Finelli, C. M., Harmon, C., Hill, A., Jacob, N., Lee-Brown, M., Musante, S., Romano, S., Smith, M.. 2015. Moving Mountains: The Impact of the Southeastern Regional PULSE Initiative on Twenty Diverse Institutions Engaged in Department-Wide Undergraduate Biology Reform. Crossing Boundaries: Transforming STEM Education, AACU/PKAL Annual Meeting, Seattle, WA.
- Carroll, J. M.<sup>4</sup>, Stubler, A. D.<sup>3</sup>, Peterson, B. J., Finelli, C.M.. 2015. Is the grass always greener on the other side? A tale of two herbivory studies from Discovery Bay, Jamaica. 44th Annual Benthic Ecology Meeting, Quebec City, Quebec, Canada.
- McMurray, S.<sup>3</sup>, Johnson, Z., Hunt, D., Pawlik, J. R., Finelli, C.M. 2015. Picky eaters at the plankton buffet: selective suspension feeding by giant barrel sponges increases foraging efficiency. 44th Annual Benthic Ecology Meeting, BEM Society, Quebec City, Canada.
- Finelli, C.M., Covi, J., Pabst, D. A., Posey, M. H., Williard, A. L. 2015. Taking the PULSE at UNCW: A plan for curriculum review and change, Department of Biology and Marine Biology. Association of Southeastern Biologists, Chattanooga, TN.
- Watts, J.<sup>1</sup>, Conti-Jerpe, I.E.<sup>2</sup>, Finelli, C.M. 2015. Trophic niche partitioning of two tropical Caribbean Sea gorgonian octocorals. UNCW Undergraduate Research and Creativity Showcase.
- Diedrich, G<sup>1</sup>, Carroll, J.M.<sup>4</sup>, Finelli, C.M. 2015. *Cliona celata*, the boring sponge or the “boring” sponge? UNCW Undergraduate Research and Creativity Showcase.
- Finelli, C.M. 2014. Context and Scale Dependent Ecological Processes: Why can’t life be simple? Department of Biology and Marine Biology, UNCW, Wilmington NC.
- Bleier, T.L., C.M. Finelli, and A.E. Wilbur. 2014. Susceptibility of oysters to infection by the boring sponge *Cliona celata*. 43<sup>rd</sup> Benthic Ecology Meeting, Jacksonville, FL.
- Carroll, J.M., J.P. Marion, and C.M. Finelli. 2014. Does size matter: Are mesopredators controlling oyster populations in southeast North Carolina intertidal marshes. 43<sup>rd</sup> Benthic Ecology Meeting, Jacksonville, FL.
- Conti-Jerpe, I.E., C.M. Finelli, and J.R. Pawlik. 2014. Whipping up dinner: measuring heterotrophic feeding by temperate Atlantic gorgonian octocorals using feeding experiments and stable isotope analysis. 43<sup>rd</sup> Benthic Ecology Meeting, Jacksonville, FL.
- McMurray, S.E., J.R. Pawlik, and C.M. Finelli. 2014. The effects of size and morphology on pumping rates of Caribbean giant barrel sponges. 43<sup>rd</sup> Benthic Ecology Meeting, Jacksonville, FL.
- Carroll, J.M., J.P. Marion, and C.M. Finelli. 2013. The importance of mesopredators on juvenile oyster predation: a field test. 22<sup>nd</sup> Biennial Meeting of the Coastal and Estuarine Research Federation, San Diego, CA.
- Finelli, C.M. 2013. What’s next? Teaching science in the era of budget cuts and Massive Online Open Courses. 42<sup>nd</sup> Benthic Ecology Meeting, Savannah, GA.



- McMurray, S.E., Z.I. Johnson, D.E. Hunt, J.R. Pawlik, and C.M. Finelli. 2013. Planktonic carbon flux mediated by the populations of the giant barrel sponge *Xestospongia muta* on coral reefs, 42<sup>nd</sup> Benthic Ecology Meeting, Savannah, GA.
- Conti-Jerpe, I.E., and C.M. Finelli, and J.R. Pawlik. 2013. Does size really matter? Relationships between polyp morphology and heterotrophic food sources in gorgonian octocorals, 42<sup>nd</sup> Benthic Ecology Meeting, Savannah, GA.
- McMurray, S.E., C.M. Finelli, and J.R. Pawlik. 2012. Demographics of the giant barrel sponge *Xestospongia muta* and carbon flux on coral reefs, 41<sup>st</sup> Benthic Ecology Meeting, Norfolk, VA.
- Conti-Jerpe, I.E., and C.M. Finelli. 2012. Fruit of the flume: patterns of heterotrophic feeding in gorgonian corals, 41<sup>st</sup> Benthic Ecology Meeting, Norfolk, VA.
- Jabanoski, K.E., and C.M. Finelli. 2012. The Contribution to Water Column Filtration by the Crested Oyster, *Ostrea equestris*: Effects of Flow Speed and Seston Concentration, 41<sup>st</sup> Benthic Ecology Meeting, Norfolk, VA.
- Finelli, C.M, A.E. Wilbur, M.P. Posey, T.A. Alphin. 2012. To seed or not to seed: The value of seeding restored oyster reefs for ecosystem function. 41<sup>st</sup> Annual Benthic Ecology Meeting, Norfolk, VA.
- Finelli, C.M, A.E. Wilbur, M.P. Posey, T.A. Alphin. 2011. To seed or not to seed: The value of seeding restored oyster reefs for ecosystem function. 40<sup>th</sup> Annual Benthic Ecology Meeting, Mobile, AL.
- Jabanoski, K.E., C.M. Finelli. 2011. The effects of flow speed on filtration by the crested oyster, *Ostrea equestris*. 40<sup>th</sup> Annual Benthic Ecology Meeting, Mobile, AL.
- Finelli, C.M. 2010. Filtration rates of the Giant Barrel Sponge, *Xestospongia muta*: Size scaling and geographical variation. 39<sup>th</sup> Annual Benthic Ecology Meeting, Wilmington, NC
- Lewis, T.B., C.M. Finelli. 2010. Influence of zoanthid inhabitants on pumping rates of two Caribbean vase sponges. 39<sup>th</sup> Annual Benthic Ecology Meeting, Wilmington, NC
- Muzyczek, L.A., C.M. Finelli. 2010. Feeding Behavior of *Upogebia Affinis*: Food Source Partitioning and Effects on Benthic-Pelagic Coupling. 39<sup>th</sup> Annual Benthic Ecology Meeting, Wilmington, NC
- Church, M.B., C.M. Finelli. 2010. Responses of the marsh periwinkle, *Littoraria irrorata*, to predator (*Callinectes sapidus*) odors: Indications of a trait mediated indirect effect? 39<sup>th</sup> Annual Benthic Ecology Meeting, Wilmington, NC
- Weychert, C., C.M. Finelli. 2010. Olfactory responses of the lemon-drop nudibranch, *Doriopsilla pharpa*, to its prey, the boring sponge *Cliona celata*. 39<sup>th</sup> Annual Benthic Ecology Meeting, Wilmington, NC
- Sumerel, A.N., C.M. Finelli. 2010. Flume study of particle-size dependent filtration rates of a solitary ascidian: The influence of body size, flow speed, and drag. 39<sup>th</sup> Annual Benthic Ecology Meeting, Wilmington, NC
- Robinson, H.E., C.M. Finelli, E.J. Buskey. 2010. Turbulence over a coral reef interferes with zooplankton escape behavior. Annual Meeting of the Society for Integrative and Comparative Biology, Seattle, WA.
- Finelli, C.M., R.D. Clarke, E.J. Buskey, H.E. Robinson. 2009. Water flow controls distribution and feeding behavior of two syntopic coral reef fishes: Field and laboratory studies. 38<sup>th</sup> Annual Benthic Ecology Meetings, Corpus Christi, TX.
- Muzyczek, L.A., S.R. Borrett, C.M. Finelli. 2009. Feeding behavior of *Upogebia affinis*: Food source partitioning and effects on benthic-pelagic coupling. 38<sup>th</sup> Annual Benthic Ecology Meetings, Corpus Christi, TX.
- Lewis, T.B., C.M. Finelli. 2009. Influence of epizoic zoanthid infestation on filtration of Caribbean sponges. 38<sup>th</sup> Annual Benthic Ecology Meetings, Corpus Christi, TX.
- Hopkins, C.E., C.M. Finelli. 2009. Odor mediated climbing behavior of *Littoraria irrorata* when exposed to blue crabs. 38<sup>th</sup> Annual Benthic Ecology Meetings, Corpus Christi, TX.
- Riddle, K., C.M. Finelli. 2009. Recruitment of the eastern oyster, *Crassostrea virginica*, in response to settlement cues and predation. 38<sup>th</sup> Annual Benthic Ecology Meetings, Corpus Christi, TX.

- Hopkins, C.E., C.M. Finelli. 2009 Odor mediated climbing behavior of *Littoraria irrorata* when exposed to blue crabs. 4<sup>th</sup> Annual Undergraduate Research Symposium, UNCW, Wilmington NC.
- Riddle, K., C.M. Finelli. 2009 Recruitment of the eastern oyster, *Crassostrea virginica*, in response to settlement cues and predation. 4<sup>th</sup> Annual Undergraduate Research Symposium, UNCW, Wilmington NC.
- Finelli, C.M. 2008. Pumping rates of the giant barrel sponge *Xestospongia muta* on Caribbean reefs: Size scaling, environmental controls, and bleaching effects. 11<sup>th</sup> International Coral Reef Symposium, Ft. Lauderdale, FL.
- Woods, K.E. and C.M. Finelli. 2008. Enhancement of oyster settlement on artificial substrates by using chemical cues. 3<sup>rd</sup> Annual Undergraduate Research Symposium, UNCW, Wilmington NC.  
\*Awarded Department of Biology and Marine Biology award for best non-honors student poster.
- Hopkins, CE and C.M. Finelli. 2008. Climbing behavior of *Littoraria irrorata* when exposed to blue crab scent. 3<sup>rd</sup> Annual Undergraduate Research Symposium, UNCW, Wilmington NC.
- Peterson, C.T., Seabrease, Z.A. and C.M. Finelli. 2008. Analysis of adult *Crassostrea virginica* siphonal flow, feeding trends, and larval escape responses. 3<sup>rd</sup> Annual Undergraduate Research Symposium, UNCW, Wilmington NC.
- Finelli, C.M. 2008. Pumping rates of the giant barrel sponge *Xestospongia muta* on Caribbean reefs: Size scaling, environmental controls, and bleaching effects. American Society of Limnology and Oceanography, Orlando, FL.
- Finelli, C.M. 2007. Physical-Biological Coupling & Benthic Suspension Feeders. Meeting of the Duke-UNC Oceanographic Consortium, Beaufort, NC.
- Finelli, C.M., L.B. Rodrigue, D.P. Chauvin. 2007. The effects of hurricanes and hydrologic modification on water quality along an estuarine gradient in the Terrebonne Basin in southeast Louisiana. Atlantic Estuarine Research Society, Pine Knoll Shores, NC.
- Clarke R.D., E.J. Buskey, C.M. Finelli. 2007. Microhabitat affects water motion and prey capture by two chaenopsid blennies. American Society of Limnology and Oceanography Meeting, Santa Fe, NM.
- Clarke R.D., E.J. Buskey, C.M. Finelli. 2007. Feeding adaptations of two chaenopsid blennies to water motion in different microhabitats. Benthic Ecology Meetings, Atlanta, GA.
- Clarke R.D., E.J. Buskey, C.M. Finelli. 2006. Effects of water motion on prey capture by two chaenopsid blennies (genus *Acanthemblemaria*): field and laboratory studies. Ecology and Evolutionary Ethology of Fishes, Soka University of America, Aliso Viejo, CA.
- \*Finelli, C.M. 2006. The turbulent lives of tube blennies: water flow modulates the distribution and feeding performance of two coral reef planktivores. University of North Carolina, Wilmington, NC
- \*Finelli, C.M. 2006. The turbulent lives of tube blennies: water flow modulates the distribution and feeding performance of two coral reef planktivores. University of North Carolina, Chapel Hill, NC
- \*Finelli, C.M. 2006. The turbulent lives of tube blennies: water flow modulates the distribution and feeding performance of two coral reef planktivores. University of North Carolina Marine Science Institute, Moorehead City, NC
- \*Finelli, C.M. 2005. Water flow, flux, and the ecology of marine benthos. University of Texas Marine Science Institute, Port Aransas, TX.
- Prerost, J.E. and C.M. Finelli. 2005. Going with the flow: The possibility of chemical communication in the Ghost Shrimp underground. International Crustacean Meeting, Glasgow, Scotland
- Soniat, T.M., C.M. Finelli, J. Ruiz. 2005. Vertical structure and predator refuge mediate set and recruitment of eastern oysters, *Crassostrea virginica*. Meeting of the National Shellfish Association, Philadelphia, PA.
- Prerost, J.E. and C.M. Finelli. 2005. Going with the flow: The possibility of chemical communication in the Ghost Shrimp underground. Benthic Ecology Meeting, Williamsburg VA.
- \*Finelli, C.M. 2005. Bioirrigation as a source of nutrients for benthic algae: A study of burrow ventilation by ghost shrimp (Thalassinidea) from the Northern Gulf of Mexico. The 15th Annual Goldschmidt Conference. Moscow, Idaho. Invited to speak at special session on Bioirrigation. The Goldschmidt Conference is the premier annual meeting in geochemistry and mineralogy.

- Finelli, C.M., R. Clarke, C. Gaebe, E. Buskey. 2005. The Turbulent Lives of Tube Blennies: Field Measurements of Flow in the Feeding Volumes of Coral Reef Planktivores. 2005 Meeting of the American Society of Limnology and Oceanography, Salt Lake City, UT.
- Johnson, T., C.M. Finelli, P. Johnson. 2005. More Time, Space, and Mobility for Doing Authentic Science. 2005 Meeting of the National Science Teachers Association, Dallas, TX.
- Prerost, J.E. and C.M. Finelli. 2005. Going with the flow: The possibility of chemical communication in the Ghost Shrimp underground. Gulf Coast Graduate Student Symposium, Chauvin, LA
- \*Soniati, T.M., C.M. Finelli, E.J. Melancon. 2004. Oysters in the Estuarine Landscape. Environmental State of the State Conference IX. New Orleans, LA.
- \*Finelli, C.M. 2004. What I Learned in my Senior Year of College: Interdisciplinary Research and Education in Marine Habitats. Benthic Ecology Meeting, Mobile, AL; Special 20<sup>th</sup> Anniversary Session for East/West Marine Biology Program
- Helmuth, B.S.T., C.M. Finelli, D.S. Wethey, N.D. Pentcheff. 2004. Too Much of a Good Thing: Hydromechanical Control of Oxygen Efflux and Photosynthesis in Corals. Symbiofest 2004, Athens, GA.
- Finelli, C.M., J.A. Kastler, R.T. Powell. 2004. FIRST in Louisiana: Inquiry, assessment, and reform in undergraduate science teaching. Louisiana Academy of Sciences, Lake Charles, LA; Special Session for FIRST Program in Louisiana
- Helmuth, B.S.T., C.M. Finelli, D.S. Wethey, N.D. Pentcheff. 2004. How do we measure the environment?: An organism's eye view of remote sensing. Workshop on Comparison of Models and Connectivity and Reef Processes in the Pacific and Caribbean. Columbia, SC.
- Finelli, C.M., C.K. Stanzel, D.P. Chauvin, J. Prerost. 2004. Can burrow ventilation by macro-infauna enhance porewater flow: evidence from the northern Gulf of Mexico. American Society of Limnology and Oceanography Meeting, Honolulu HI.
- \*Finelli, C.M. 2004. Career Development Plan: Interdisciplinary research and education in marine habitats. NSF CAREER Workshop, Washington DC.
- Helmuth, B.S.T., C. Dryden, C.M. Finelli, D.S. Wethey, N.D. Pentcheff. 2004. Living in the Sea. Junior Science and Humanities Symposium, Columbia, SC.
- \*Finelli CM. 2003. Too much of a good thing? Hydromechanical control of oxygen flux in corals. University of New Orleans (Department of Biological Sciences)
- Kastler, J.A., and C.M. Finelli 2003. Bayouside Classroom: Downloading water quality data for use in the classroom. PT3 and LACUE Technology Workshop, Nicholls State University, Thibodaux, Louisiana, November 2003.
- Salmonsens, C., J.A. Kastler, C.M. Finelli 2003. Dissolved Oxygen and Bayouside Classroom. National Marine Educators Association Annual Meeting, Wilmington, NC, July 2003.
- Finelli, C.M., N.D. Pentcheff, B.S.T. Helmuth, D.S. Wethey. 2003. Flow mediation of oxygen flux from coral tissues: effects on coral photosynthesis and health? Benthic Ecology Meeting, Groton CT.
- Finelli, C.M. and J.K. Kastler. 2003. Bayouside Classroom: Connecting kids to science and watersheds to the Gulf through stream sampling. Benthic Ecology Meeting, Groton CT.
- Stanzel, C.K. and C.M. Finelli. 2003. The influence of temperature and salinity on burrow ventilation rates of *Callinectes islagrande* and *Lepidophthalmus louisianensis* (Crustacea: Decapoda: Thalassinidea). Benthic Ecology Meeting, Groton CT (Student Talk).
- Ruiz, J, T. Soniat, and C.M. Finelli. 2003. The effect of vertical structure and refuge on oyster settling and recruitment. Louisiana Academy of Sciences. Gonzales, LA (Student Talk)\*Finelli CM. 2003. Flow, flux, and the ecology of marine benthos. Louisiana State University, Baton Rouge, LA (Department of Oceanography and Coastal Studies)
- \*Finelli CM. 2003. Flow, flux, and the ecology of marine benthos. University of South Florida, Tampa, FL (Department of Biology)
- \*Finelli CM. 2003. Flow, flux, and the ecology of marine benthos. University of Delaware, Lewes DE (College of Marine Studies)

- \*Finelli CM. 2003. Flow, flux, and the ecology of marine benthos. Dauphin Island Sea Lab, Dauphin Island, AL
- Dryden, C, B Helmuth, K Castillo, DS Wethey, ND Pentcheff, C Finelli and H Bush 2003. Coral reef ecology in the classroom: research and education using the Aquarius underwater habitat. Southeast Coastal Ocean Science Meeting, Charleston, SC.
- Dryden, C, B Helmuth, K Castillo, D Wethey, ND Pentcheff, C Finelli and H Bush. 2003. Coral reef ecology in the classroom: research and education using the Aquarius underwater habitat. Southeast Marine Educators Association, Myrtle Beach, SC.
- \*Finelli CM. 2002. Flow, flux, and the ecology of marine benthos. Bamfield Marine Lab, Bamfield, BC, Canada
- \*Finelli CM. 2002. Physical-biological coupling, macrofauna, and the ecology of marine sediments. Biocomplexity Workshop, Washington DC
- Finelli CM. 2002. Burrow Ventilation by Thalassinid Shrimp from the Northern Gulf of Mexico: Mechanics of Effluent Plumes and Effects on Benthic Communities. Benthic Ecology Meeting, Orlando, FL.
- \*Finelli CM. 2002. Life in a turbulent world: The effects of water flow on biological processes. Tulane University, New Orleans, LA (Department of Ecology and Evolutionary Biology).
- \*Finelli CM. 2001. Life in a turbulent world: The effects of water flow on biological processes. Environmental Protection Agency, Hatfield Marine Science Center, Newport, OR.
- Finelli CM. 2001. Turbulent mass transfer: An introduction to scaling, measurement, and impacts. Meeting of American Society of Limnology and Oceanography, Special Session on Turbulent Mass Transfer (CM Finelli, Chairman), Albuquerque, NM.
- Pentcheff, ND, DS Wethey and CM Finelli. 2001. Flow effects on coral physiology: field measurements on a natural coral reef. American Society of Limnology and Oceanography Meeting.
- \*Finelli CM. 2000. Life in a turbulent world: How does water flow constrain ecological processes. University of New Orleans, New Orleans, LA (Department of Biological Sciences).
- \*Finelli CM. 2000. Life in a turbulent world: How does water flow constrain ecological processes. University of Louisiana-Lafayette, Lafayette, LA (Department of Biological Sciences).
- \*Finelli CM. 2000. Life in a turbulent world: How does water flow constrain ecological processes. Louisiana State University, Baton Rouge, LA (Department of Biological Sciences).
- \*Finelli CM. 2000. Life in a turbulent world: How does water flow constrain organismal performance. Nicholls State University, Thibodeaux, LA.
- \*Finelli CM. 2000. Life in a turbulent world: How does water flow constrain organismal performance. Louisiana State University, Baton Rouge, LA (Department of Oceanography and Coastal Sciences).
- Finelli CM. 2000. The effects of emergent vegetation on odor dispersal in a turbulent boundary layer. Benthic Ecology Meetings, Special Symposium on Chemical Ecology, Wilmington NC.
- Finelli CM, Hart DD. 1999. Separating the ecological effects of mean flow speed from turbulence intensity: an experimental approach. American Society of Limnology and Oceanography, Santa Fe, NM.
- \*Finelli CM. 1998. Life and death in a turbulent ocean. Rider University, Trenton, NJ.
- Finelli CM, Hart DD, Fonseca DM. 1998. Acoustic Doppler velocimetry: the promise and perils of a new technology. North American Benthological Society, Special Symposium on Stream Hydraulics, Prince Edward Island, Canada.
- \*Hart DD, Finelli CM. 1998. Life in a turbulent world. North American Benthological Society, Special Symposium on Stream Hydraulics, Prince Edward Island, Canada.
- \*Finelli CM. 1997. Life and death in a turbulent ocean. Drexel University, Philadelphia, PA.
- \*Finelli CM. 1997. The effects of behavior and physics on ecological processes. University of Pennsylvania, Philadelphia, PA.
- Finelli CM, Pentcheff ND, Zimmer-Faust RK, Wethey DS. 1997. Dispersal of odors in estuarine boundary layer flows. American Society of Limnology and Oceanography, Santa Fe, NM.

- \*Finelli, CM. 1996. Green plumes and clam: Odor mediated foraging by blue crabs. Skidaway Institute of Oceanography, Savannah, GA.
- Finelli CM, Wethey DS. 1996. Hitting the deck hard: Dive bombing in oyster larvae. Benthic Ecology Meetings, Columbia SC.
- Grove M, Finelli CM, Wethey DS, Woodin SA. 1996. The effects of symbiotic crabs on the pumping activity of *Chaetopterus variopedatus*. Benthic Ecology Meetings, Columbia, SC.
- Tamburri MN, Finelli CM, Wethey DS, Zimmer-Faust RK. 1996. Analysis of chemically-mediated larval settlement behavior in flow. Benthic Ecology Meetings, Columbia, SC.
- Finelli CM, Pentcheff ND, Weissburg MJ, Wethey DS, Zimmer-Faust ND. 1995. Tracking odor plumes in moving fluid: Chemical vs. physical cues. Benthic Ecology Meetings New Brunswick, NJ.
- Finelli CM, Wethey DS. 1995. Patterns of settlement of the barnacle *Chthamalus fragilis* around small scale roughness. Larval Ecology Meetings, Ft. Pierce, FL.
- Pentcheff ND, Finelli CM, Wethey DS, Zimmer-Faust ND. 1995. Bug behavior in programmed plumes: Running code of running crabs to decode how crabs run. Benthic Ecology Meetings, New Brunswick, NJ.
- Pentcheff ND, Finelli CM, Wethey DS, Zimmer-Faust ND. 1995. Following odor plumes: How behavior is controlled by the interaction of fluid dynamics with sensory systems. Association of Chemoreception Sciences, Sarasota, FL.
- Wethey DS, Zimmer-Faust RK, Pentcheff ND, Finelli CM. 1995. How odor plumes are used in the field: A crustacean predator and its prey. American Society of Zoologists, Los Angeles, CA.
- Finelli CM, Wethey DS, Pentcheff ND, Zimmer-Faust RK. 1994. How blue crabs (*Callinectes sapidus*) find their prey in the field I: Measurement and modeling of odor plumes in turbulent flows. Benthic Ecology Meetings, Mystic, CT.
- Finelli CM, Wethey DS, Pentcheff ND, Zimmer-Faust RK. 1994. How blue crabs (*Callinectes sapidus*) find their prey in nature I: Measurement and modeling of odor plumes in turbulent flows. Association of Chemoreception Sciences, Sarasota, FL.
- Finelli CM, Wethey DS, Pentcheff ND, Zimmer-Faust RK. 1994. How blue crabs (*Callinectes sapidus*) locate their prey in the field: Measurement and modeling of odor plumes in naturally turbulent flows. Southeastern Estuarine Research Society, Jekyll Island, GA.
- \*Pentcheff ND, Finelli CM, Wethey DS, Zimmer-Faust RK. 1994. Turbulent odor plumes and chemoreception in nature. Association of Chemoreception Sciences, Sarasota, FL.
- Pentcheff ND, Finelli CM, Wethey DS, Zimmer-Faust RK. 1994. Navigating up an odor plume: combined rheotaxis and chemotaxis. American Society of Zoologists
- Pentcheff ND, Zimmer-Faust RK, Finelli CM, Wethey DS. 1994. How blue crabs (*Callinectes sapidus*) find their prey in the field II: Use of odor plume structure to follow a plume to its source. Benthic Ecology Meetings, Mystic, CT.
- Pentcheff ND, Zimmer-Faust RK, Finelli CM, Wethey DS. 1994. How blue crabs (*Callinectes sapidus*) find their prey in nature II: Mechanisms of orientation in turbulent odor plumes. Association of Chemoreception Sciences, Sarasota, FL.
- \* Invited seminars.

## OUTREACH THROUGH THE POPULAR PRESS

- Life on a coral reef: Insult is (sometimes) added to injury, National Science Foundation Bulletin, May 9, 2013
- UNC marine science program under review, Wilmington StarNews, February 28, 2013
- It's seaweed vs. sponge in battle for dying reefs, Miami Herald, August 26, 2010
- Aquanauts living on ocean floor come up for air, MSNBC.com, August 26, 2010
- Wrightsville Beach Magazine, October 2009.
- Students Head Outdoors to Study Bayous, Houma Courier, Houma, LA, October 2005
- Our Ocean World Radio Program, Going with the Flow: how corals get their food (September 2004).
- Our Ocean World Radio Program, Coral Bleaching (September 2004).
- Bringing the bayou into the classroom. Houma Courier, Houma LA, November 2003.

Science Friday with Ira Flatau, Comments on that status of coral reef bleaching, National Public Radio, October 2000.

LUMCON researcher readies for adventure/Life underwater can sometimes turn strange (2 article spread) Houma Courier, Houma LA, September 2000.

### TEACHING AND SYNERGISTIC ACTIVITIES

Administrative: Interim Department Chair for the Department of Mathematics and Statistics; all aspects of department administration, budgeting, faculty workload management, scheduling.

Department Chair for the Department of Biology and Marine Biology; all aspects of department administration, budgeting, faculty workload management, scheduling.

Member, UNCW Fixed Term Faculty Task Force

Member, UNCW Chancellor's Campus Climate Working Group

Member of UNCW Strategic Planning Committee

Chair, UNCW Strategic Planning Subcommittee for Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis. I led a team of faculty, staff, and administrators in a comprehensive SWOT Analysis as part of UNCW's strategic planning effort in Fall 2015. Our team solicited feedback from across campus via electronic surveys that was both quantitatively and qualitatively analyzed to produce a comprehensive final report to the Chancellor.

Member of Ad Hoc Committee, Fostering Undergraduate Student Success Initiative; I serve as a member of this university-wide committee that is responding to new requirements for undergraduate progress that have been mandated by the NC General Assembly.

Biology curriculum working group; University of North Carolina-North Carolina Community Colleges Comprehensive Articulation Agreement.

Coordinator, Coastal Research for Undergraduate Students in North Carolina, (CRUS-NC). This inter-institutional program expands the "flipped classroom" concept to a full semester curriculum by delivering content-focused coursework online thereby permitting students to engage in extensive independent research each day. Students lived at one of North Carolina's marine field stations while participating in this innovative program.

Co-Leader of UNCW's self-study and site review for UNC-GA Statewide Review of Marine Science Programs. Co-wrote review document and organized academic program presentations for site review.

Co-Chair, Undergraduate Program Working Group, State-wide review of marine science; Organized several proposals for coordinated, inter-institutional undergraduate programs

Member, Marine Science Consortium Planning Working Group, State-wide review of marine science; Participated in proposal development for new state-wide consortium of marine science institutions in North Carolina

Assistant Chair for the Department of Biology and Marine Biology; schedule classes, budget, meet with prospective students.

Undergraduate Assessment Coordinator for the Department of Biology and Marine Biology; develop and revise assessment tools and policies for undergraduate degrees in Biology (BS, BA) and Marine Biology (BS).

Chair, Ad hoc committee for the establishment of an international summer program in marine biology; coordinate the development of a proposal for a degree program for international students that incorporates significant summer research.

- K-12 Program: BayouSide Classroom, NSF sponsored program for K-12 students and teachers based on water quality monitoring and national science standards. The BayouSide Classroom has been used as an example of K-12/University partnerships in an NSF report to Congress, included in a “Best Of” volume produced by NSF Geosciences directorate, and featured in two articles in the popular press.
- Teacher Training: Students and Teachers as Educational Partners in Science (STEPS) Workshops. Annual workshops based on BayouSide Classroom program to encourage K-12 teachers to incorporate data collection and analysis into curriculum
- Faculty Development: East-Coast Regional Team Leader, Faculty Institutes Reforming Science Teaching (FIRST IV); Gulf Coast Regional Team Leader, Faculty Institutes Reforming Science Teaching II (FIRST II). NSF sponsored dissemination network. PULSE National Fellow; Southeastern Regional PULSE Fellow Leader
- Courses Taught: UNCW Advanced Topics: Topics in Coastal NC, BIO 485, 1 credits  
 UNCW Teaching Practicum, BIO 694, 2 credits  
 UNCW Oceanography and Environmental Science, BIO 601, 2 credits  
 UNCW Biological Oceanography, BIO 564, 3 credits + 1 credit lab  
 UNCW Marine Biology, BIO 362, 4 credits  
 UNCW Applied Learning Seminar, BIOL 495, 1 credit  
 LUMCON Marine Invertebrates in their Environment, 3 credits  
 LUMCON Changing Coastal Oceans, Video Course, 3 credits  
 USC Origins and Evolution of the Marine Environment Lab, MSCI 102L 1 cr  
     - Instructor/Honors College Instructor  
     - Laboratory Coordinator  
 USC Man and the Environment Lab, MSCI 210L  
     -Instructor  
     -Laboratory Coordinator  
 USC Biology of Marine Organisms Lab, MSCI 302L  
     -Instructor  
     -Laboratory Coordinator
- Associate Editor: Limnology and Oceanography (2008 to 2011)
- Journal Reviewer: Journal of Chemical Ecology, CBE – Life Sciences Education, Journal of Experimental Biology, Ecology, Limnology and Oceanography, Environmental Fluid Mechanics, Marine Ecology Progress Series, Marine Biology, Oecologia, Estuaries, Biological Invasions, Oikos, Australian Journal of Ecology, Journal of Coastal Research, Pacific Science, Journal of Foraminiferal Research, Journal of the North American Benthological Society, Coral Reefs.
- Panelist: National Science Foundation Biological Oceanography, National Science Foundation Education and Human Resources GK-12, National Science Foundation RCN-UBE
- Grant Reviewer: National Science Foundation (BIO, GEO, EHR, ENG, OPP, IBN), Hudson River Foundation, Marsh Ecology Research Program/New Jersey SeaGrant, Maryland SeaGrant, Florida SeaGrant
- Organizer: Special symposium on turbulent mass transfer, 2001 meeting of the American Society of Limnology and Oceanography; Special Session for FIRST Project in Louisiana, 2004 and 2006 meetings of the Louisiana Academy of Sciences

**PROFESSIONAL SOCIETIES:**

- 2000-2019 International Society for Reef Studies  
 1996-2019 Association for the Sciences of Limnology and Oceanography

1994-2019                      Sigma Xi

**OTHER SKILLS:**

Divers Alert Network, Emergency Oxygen First Aid for SCUBA Accidents Instructor  
YMCA SCUBA Instructor, Inactive  
American Safety and Health Institute, Basic Instructor, Inactive  
PADI Advanced Open Water SCUBA certification, 1990 (400+ logged dives).  
NOAA EAN/NITROX certification, 1999  
Design and construction of research caliber flumes.  
Laser induced fluorescence flow visualization.  
Acoustic Doppler, laser Doppler, hot film, and electromagnetic velocimetry.  
Design, construction, and testing of acoustic Doppler and thermistor velocimetry systems.  
Design and construction of field equipment.  
Small boat operation in open water and tidal estuaries.

**COLLABORATORS AND COAUTHORS (Within 48 months)**

Dr. Bradley Peterson, SUNY - Stony Brook, Stony Brook, NY  
Dr. Daphne Munroe, Rutgers University, New Brunswick, NJ  
Dr. Lisa Kellogg, Virginia Institute of Marine Science, Gloucester Point, VA  
Dr. Martin Posey, University of North Carolina Wilmington, Wilmington, NC  
Dr. Ami Wilbur, University of North Carolina Wilmington, Wilmington, NC  
Dr. Joseph Pawlik, University of North Carolina Wilmington, Wilmington, NC  
Dr. Ed Buskey, Marine Science Institute, The University of Texas-Austin, Port Aransas, TX

**POSTDOCTORAL ADVISEES**

Steven McMurray (2016-Present) – UNCW (Co-advised with Dr. Joe Pawlik)  
Amber Stubler (2016-2017) – UNCW (Currently Assistant Professor at Occidental College)  
John Carroll (2012-2015) – UNCW (Currently Assistant Professor at Georgia Southern University)

**GRADUATE STUDENTS (Primary Supervisor)**

Sasha Giametti, M.S. (Current) – UNCW (Major Professor)  
Steven McMurray, Ph.D. (2015) – UNCW (Major Professor; Currently Postdoctoral Associate, UNCW)  
Heather Stoker, M.S. (2015) – UNCW (Major Professor)  
Inga Conti-Jerpe, M.S. (2014) – UNCW (Major Professor)  
Kristen Jabanoski, M.S. (2013) – UNCW (Major Professor)  
Julie Prerost, Ph.D. (2012) – Louisiana State University (Major Professor)  
Tiffany Lewis, M.S. (2010) – UNCW (Major Professor)  
Louis Muzyczek, M.S. (2010) – UNCW (Major Professor)  
Andrew Sumerel, M.S. (2009) – UNCW (Major Professor)  
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