

CURRICULUM VITAE

James L. Pinckney

Belle W. Baruch Institute for Marine and Coastal
Sciences
University of South Carolina
Columbia, SC 29208 USA

Office: 803.777.5288
Lab: 803.777.7133
Email: pinckney@sc.edu

EDUCATION

- 1992 Ph. D. Biological Sciences, University of South Carolina, Columbia, SC
(*Ecology*) Ecology of Intertidal Benthic Microalgal Communities in North Inlet
Estuary, South Carolina. (*R.G. Zingmark, Advisor*)
- 1987 M. Sci. Biology, College of Charleston, Charleston, SC
(*Marine Biology*) Estuarine Fronts in Charleston Harbor, South Carolina: A Physical and
Biological Description. (*P. Dustan, Advisor*)
- 1983 B. Sci. Biology, College of Charleston, Charleston, SC

EMPLOYMENT

- 2017 - Director, Baruch Institute for Marine and Coastal Sciences, University of South
Carolina, Columbia, SC
- 2014 - 16 Graduate Program Director, School of the Earth, Ocean, and Environment, University
of South Carolina, Columbia, SC
- 2014 - Professor, Marine Science Program and Department of Biological Sciences,
University of South Carolina, Columbia, SC
- 2005 - 13 Associate Professor, Marine Science Program and Department of Biological
Sciences, University of South Carolina, Columbia, SC
- 2004 - 05 Associate Professor, Department of Oceanography, Texas A&M University, College
Station, TX
- 1998 - 04 Assistant Professor, Department of Oceanography, Texas A&M University, College
Station, TX
- 1996 - 98 Graduate Faculty Appointment, Marine Sciences, UNC-Chapel Hill, NC
- 1995 - 98 Research Assistant Professor, Institute of Marine Sciences, UNC-Chapel Hill, NC
- 1993 - 95 US Department of Energy Global Change Distinguished Postdoctoral Fellow and
Postdoctoral Research Associate, Institute of Marine Sciences, UNC-Chapel Hill, NC
(*H. Paerl, Advisor*)
- 1990 - 92 Project Manager and Research Associate, Research Planning, Inc., Columbia, SC. Oil
spill contingency planning, natural resource damage assessment, and cleanup

PUBLICATIONS

* indicates student author

- *Van Meerssche, E., **J.L. Pinckney**. Salinity effect on domoic acid allelopathy for estuarine phytoplankton communities. *Harmful Algae* (May 2017)
- *Van Meerssche, E., **J.L. Pinckney**. Responses of estuarine phytoplankton and benthic microalgae to acute exposure to domoic acid. *Journal of Phycology* (March 2017)
- Pinckney, J.L.**, C.Tomas, K. Reale-Munroe, B. Castillo, Z Hillis-Starr, *E. Van Meerssche, *M. Zimberlin. Seasonal changes in phytoplankton community structure in a bioluminescent lagoon, St. Croix, USVI. *Marine Ecology Progress Series* (January 2017)
- Pinckney, J.L.**, *L Thompson, *S Hylton. 2017. Triclosan alterations of estuarine phytoplankton community structure. *Marine Pollution Bulletin*
<http://dx.doi.org/10.1016/j.marpolbul.2017.03.056>).
105. **Pinckney, J.L.**, A. Quigg, D. Roelke. 2017. Interannual and seasonal patterns of estuarine phytoplankton diversity in Galveston Bay, Texas, USA. *Estuaries and Coasts* **40**:310-316. (DOI 10.1007/s12237-016-0135-8).
104. *Kline, A., **J.L. Pinckney**. 2016. Size-selective toxicity effects of the antimicrobial tylosin on estuarine phytoplankton communities. *Environmental Pollution* **216**:806-810.
103. **Pinckney, J.L.**, T.L. Richardson. 2016. Phytoplankton diversity in the oligotrophic northwestern Sargasso Sea. Pgs. 239-250. IN P. Glibert & T. Kana (eds.). *Aquatic Microbial Ecology and Biogeochemistry: A Dual Perspective*, Springer.
102. *Reed, M.L., **J.L. Pinckney**, C.J. Keppler, L.M. Brock, S.B. Hogan, D.I. Greenfield. 2016. The influence of nitrogen and phosphorus on phytoplankton growth and assemblage composition in four coastal, southeastern USA systems. *Estuarine, Coastal and Shelf Science* **177**:71-82.
101. Dash, P., J.O. Ikenga, S. Silwal, **J.L. Pinckney**, Z. Arslan, R.E. Lizotte. 2015. Water quality of four major lakes in Mississippi, USA: Impacts on human and aquatic ecosystem health. *Water* **7**:4999-5030.
100. *Gordon A., T. Richardson, **J.L. Pinckney**. 2015. Ecotoxicology of bromoacetic acid on estuarine phytoplankton. *Environmental Pollution* **206**:369-375.
99. *Dorado, S., *T. Booe, *J. Steichen, *A. McInnes, *R. Windham, *A. Shepard, *A.E.B. Lucchese, *H. Preischel, **J.L. Pinckney**, S.E. Davis, D.L. Roelke, A. Quigg. 2015. Towards understanding of the interactions between freshwater inflows and phytoplankton communities in subtropical estuaries. *PLoS ONE* **10**(7): e0130931. doi:10.1371/journal.pone.0130931.
98. **Pinckney, J.L.**, C.R. Benitez-Nelson, R.C. Thunell, F. Muller-Karger, L. Troccoli, R. Varela. 2015. Phytoplankton community structure and depth distribution changes in the Cariaco Basin between 1996 and 2010. *Deep-Sea Research I* **101**:27-37.
97. *Sassenhagen, I., K. Ringefors, T. Richardson, **J.L. Pinckney**. 2014. Pigment composition and photoacclimation as keys to the ecological success of *Gonyostomum semen* (Raphidophyceae, Stramenopiles). *Journal of Phycology* **50**: 1146-1154.
96. **Pinckney, J.L.**, *I.M. Hagenbuch, R.A. Long, C.R. Lovell. 2013. Sublethal effects of the antibiotic tylosin on estuarine benthic microalgal communities. *Marine Pollution Bulletin* **68**:8-12.
95. Long, R.A., D. Eveillard, E. Reeves, *S.L.M. Franco, **J.L. Pinckney**. 2013. Antagonistic interactions between heterotrophic bacteria as a potential regulator of community structure of hypersaline microbial. *FEMS Microbiology Ecology* **83**:74-81.

94. *Hagenbuch, I.M., **J.L. Pinckney**. 2012. Toxic effect of the combined antibiotics ciprofloxacin, lincomycin, and tylosin on two species of marine diatoms. *Water Research* **46**:5028-5036.
93. *Swenson, G.J., *I.M. Hagenbuch, **J.L. Pinckney**, R.A. Long. 2012. Fluorometric estimation of surface associated microbial abundance. *Journal of Microbiological Methods* **88**:297-303.
92. *Gilde, K., **J.L. Pinckney**. 2011. Sublethal effects of crude oil on the community structure of estuarine phytoplankton. *Estuaries and Coasts* **35**:853-861.
91. **Pinckney, J.L.**, D.F. Millie, L. Van Heukelem. 2011. Appendix A. Update on filtration, storage, and extraction solvents. p. 627-635. IN S. Roy, C.A. Llewellyn, E.S. Egeland, G. Johnsen (eds.). *Phytoplankton Pigments: Characterization, Chemotaxonomy, and Applications in Oceanography*. Cambridge University Press, New York.
90. Johnsen, G., M.A. Moline, L.H. Pettersson, **J.L. Pinckney**, D.V. Pozdnyakov, E.S. Egeland, O.M. Schofield. 2011. *Chapter 14. Optical Monitoring of Phytoplankton Blooms Pigment Signatures*, p. 538-581. IN S. Roy, C.A. Llewellyn, E.S. Egeland, G. Johnsen (eds.). *Phytoplankton Pigments: Characterization, Chemotaxonomy, and Applications in Oceanography*. Cambridge University Press, New York.
89. Dash, P., N.D. Walker, D.R. Mishra, C. Hu, **J.L. Pinckney**, EJ D'Sa. 2011. Estimation of cyanobacterial pigments in a freshwater lake using OCM satellite data. *Remote sensing of the Environment* **115**:3409-3423.
88. *Siegel, A., *B Cotti-Rausch, D.I. Greenfield, **J.L. Pinckney**. 2011. Nutrient controls of planktonic cyanobacteria abundance in coastal stormwater detention ponds. *Marine Ecology Progress Series* **434**:15-27.
87. Hooker, S.B., C.S. Thomas, L. Van Heukelem, L. Schlüter, M.E. Russ, J. Ras, H. Claustre, L. Clementson, E. Canuti, J-F. Berthon, J. Perl, C. Normandeau, J. Cullen, M. Kienast, **J.L. Pinckney**. 2010. The Fourth SeaWiFS HPLC Analysis Round-Robin Experiment (SeaHARRE-4). NASA/TM-2010-215857. National Aeronautics and Space Administration, Goddard Space Flight Center, Greenbelt, Maryland.
86. **Pinckney, J.L.**, R.A. Long, H.W. Paerl. 2011. Structural and functional responses of microbial mats to reductions in nutrient and salinity stressors in a Bahamian hypersaline lagoon. *Aquatic Microbial Ecology* **62**: 289-298.
85. Xu, C., P.H. Santschi, C-C. Hung, S. Zhang, K.A. Schwehr, K.A. Roberts, L.D. Guo, G.-C. Gong, A. Quigg, R. Long, **J.L. Pinckney**, S.W. Duan, R. Amon, C-L. Wei. 2009. Controls of Th-234 removal from the oligotrophic ocean by polyuronic acids and microbial activity. *Marine Chemistry* **123**:111-126.
84. *Lawrenz, E., **J.L. Pinckney**, *M.L. Ranhofer, H.L. MacIntyre, T.L. Richardson. 2010. Spectral irradiance and phytoplankton community composition in a blackwater-dominated estuary, Winyah Bay, South Carolina, USA. *Estuaries and Coasts* **33**:1186-1201.
83. Hung, C-C., C. Xu, PH Santschi, S Zhang, K.A. Schwehr, A. Quigg, L. Guo, G-C. Gong, **J.L. Pinckney**, R. Long, C-L Wei. 2010. Comparative evaluation of sediment trap and ²³⁴Th-derived POC fluxes from the upper oligotrophic waters of the Gulf of Mexico and the subtropical northwestern Pacific Ocean. *Marine Chemistry* **121**:132-144..
82. Richardson, T.L., *E. Lawrenz, **J.L. Pinckney**, R.C. Guajardo, *E.A. Walker, H.W. Paerl, H.L. MacIntyre. 2009. Spectral fluorometric characterization of phytoplankton community composition using the algae online analyzer *Water Research* **44**:2461-2472.
81. Roelke, D.L., G.M. Gable, T.W. Valenti, J.P. Grover, B.W. Brooks, **J.L. Pinckney**. 2010. Hydraulic flushing as a *Prymnesium parvum* bloom-terminating mechanism in a subtropical lake. *Harmful Algae* **9**:323-332.

80. **Pinckney, J.L.**, J. Wee, A. Hou, N. Walker. 2009. Phytoplankton community structure responses to urban effluent input following Hurricanes Katrina and Rita. *Marine Ecology Progress Series* **387**:137-146.
79. *Schwierzke, L., D.L. Roelke, B.W. Brooks, J.P. Grover, **J.L. Pinckney**. 2010. *Prymnesium parvum* population dynamics during bloom development: A role assessment of grazers and virus. *Journal of the American Water Resources Association* **46**:63-75.
78. Roelke, D.L., *L. Schwierzke, B.W. Brooks, J.P. Grover, *R.M. Errera, T.W. Valenti, **J.L. Pinckney**. 2010. Factors influencing *Prymnesium parvum* population dynamics during bloom initiation: Results from in-lake mesocosm experiments. *Journal of the American Water Resources Association* **46**:76-91.
77. *Ranhofer, M.L., *E. Lawrenz, **J.L. Pinckney**, C.R. Benitez-Nelson, T.L. Richardson 2009. Cell-specific alkaline phosphatase expression by phytoplankton in Winyah Bay, South Carolina, USA. *Estuaries and Coasts* **32**:943-957.
76. *McCall, D.D., C.F. Rakocinski, **J.L. Pinckney**. 2009. Effects of grass shrimp versus nutrient addition on functional groups of epiphytic algae associated with the ephemeral SAV, *Ruppia maritima*. *Marine Ecology Progress Series* **379**:151-162.
75. First, M.R., H.L. Miller, P.J. Lavrentyev, **J.L. Pinckney**, AB Burd. 2009. Microzooplankton growth and trophic interactions and their effects on herbivory in coastal and offshore environments. *Aquatic Microbial Ecology* **54**:255-267.
74. *Errera, R.M., D.L. Roelke, R. Kiesling, B.W. Brooks, J.P. Grover, *L. Schwierzke, F. Ureña-Boeck, J.W. Baker, **J.L. Pinckney**. 2008. The effect of imbalanced nutrients and immigration on *Prymnesium parvum* community dominance and toxicity: Results from in-lake microcosm experiments, Texas, USA. *Aquatic Microbial Ecology* **52**:33-44.
73. **Pinckney, J.L.**, *A.R. Lee. 2008. Spatiotemporal patterns of subtidal benthic microalgal biomass and community composition in Galveston Bay, Texas, USA. *Estuaries and Coasts* **31**:444-454.
72. *Marshallonis, D., **J.L. Pinckney**. 2007. Respiration rates of dominant hydromedusae in the North Inlet tidal estuary during summer and winter. *Journal of Plankton Research* **29**:1031-1040.
71. *Marshallonis, D., **J.L. Pinckney**. 2008. Grazing and assimilation rate estimates of hydromedusae from a temperate tidal creek system. *Hydrobiologia* **606**:203-211.
70. Roelke, D., *R. Errera, R. Kiesling, B. Brooks, J. Grover, *L. Schwierzke, F. Ureña-Boeck, J. Baker, **J.L. Pinckney**. 2007. Effects of nutrient enrichment on *Prymnesium parvum* population dynamics and toxicity: Results from field experiments, Lake Possum Kingdom. *Aquatic Microbial Ecology* **46**:125-140.
69. **Pinckney, J.L.** 2006. System-scale nutrient fluctuations in Galveston Bay, Texas (USA), p. 141-164. In J.C. Kromkamp, J.F.C. de Brouwer, G.F. Blanchard, R.M. Forster, V. Creách (eds.). *Functioning of Microphytobenthos in Estuaries*, Royal Netherlands Academy of Arts and Sciences, Amsterdam.
68. Richardson, T.L., **J.L. Pinckney**, *E. Walker, *D. Marshallonis. 2006. Photopigment radiolabeling as a tool for determining the *in situ* growth rates of the toxic dinoflagellate *Karenia brevis* (Dinophyceae). *European Journal of Phycology* **41**:415-423.
67. Millie, D.F., G.R. Weckman, H.W. Paerl, **J.L. Pinckney**, B.J. Bendis, R.J. Pigg, G.L. Fahnenstiel. 2006. Neural net modeling of estuarine indicators: Hindcasting phytoplankton biomass and net ecosystem production in the Neuse (North Carolina) and Trout (Florida) Rivers, USA. *Ecological Indicators* **6**:589-608.
66. Valdes-Weaver, L.M., M.F. Piehler, **J.L. Pinckney**, K.E. Howe, K. Rossignol, H.W. Paerl. 2006. Long-term temporal and spatial trends in phytoplankton biomass and class-level taxonomic

- composition in the hydrologically variable Neuse-Pamlico estuarine continuum, North Carolina, USA. *Limnology and Oceanography* **51**:1410-1420.
65. See, J.H., L. Campbell, T.L. Richardson, **J.L. Pinckney**, R. Shen, N. Guinasso. 2005. Combining new technologies for determination of phytoplankton community structure in the Northern Gulf of Mexico. *Journal of Phycology* **41**:305-310.
 64. Paerl, H.W., J. Dyble, **J.L. Pinckney**, L.M. Valdes, D.F. Millie, P.H. Moisander, J.T. Morris, B. Bendis, M.F. Piehler. 2005. Using microalgal indicators to assess human and climatically induced ecological change in estuaries. p. 145-174. IN Bortone, S.A. (Ed.), *Estuarine Indicators*. CRC Press, Boca Raton, FL
 63. Richardson, T.L., **J.L. Pinckney**. 2004. Monitoring of the toxic dinoflagellate *Karenia brevis* using gyroxanthin-based detection methods. *Applied Phycology* **16**:315-328.
 62. *Örnólfssdóttir, E.B., *S. Lumsden, **J.L. Pinckney**. 2004. Phytoplankton community growth-rate-response to nitrate pulses in a shallow turbid estuary, Galveston Bay, Texas. *Journal of Plankton Research* **26**:325-339.
 61. *Örnólfssdóttir, E.B., **J.L. Pinckney**, *S. Lumsden. 2003. Nutrient pulsing as a regulator of phytoplankton abundance and community composition in Galveston Bay, Texas. *Journal of Experimental Marine Biology and Ecology* **303**:197-220.
 60. Paerl, H.W., L. Valdes, **J.L. Pinckney**, M. Piehler, J. Dyble, P. Moisander. 2003. Phytoplankton photopigments as indicators of estuarine and coastal eutrophication. *Bioscience* **53**:953-964.
 59. Paerl, H.W., J. Dyble, P. Moisander, R. Noble, M. Piehler, **J.L. Pinckney**, T. Steppe, L. Twomey, L. Valdes. 2003. Microbial indicators of aquatic ecosystem change: Current applications to eutrophication studies. *FEMS Microbiology Ecology* **46**:233-246.
 58. Hung, C-C., L. Guo, G. Schultz, **J.L. Pinckney**, P. Santschi. 2003. Production and fluxes of carbohydrate species in the Gulf of Mexico. *Global Biogeochemical Cycles*. **17**:1055, doi:10.1029/2002GB001988,2003
 57. Santschi, P., C-C. Hung, L. Guo, **J.L. Pinckney**, G. Schultz, I. Walsch. 2003. Control of acid polysaccharide production and ²³⁴Th/POC export flux by marine organisms. *Geophysical Research Letters* **30**: 1044, doi:1029/2002GLO6046
 56. **Pinckney, J.L.**, K.R. Carman, *S.E. Lumsden, S.N. Hymel. 2003. Microalgal - meiofaunal trophic relationships in muddy, intertidal estuarine sediments. *Aquatic Microbial Ecology* **31**:99-108.
 55. Steppe, T., **J.L. Pinckney**, *J. Dyble, H.W. Paerl. 2001. Diazotrophy in modern marine Bahamian stromatolites. *Microbial Ecology* **41**:36-44
 54. Paerl, H.W., *J. Dyble, L. Twomey, **J.L. Pinckney**, J. Nelson, L. Kerkhof. 2002. Characterizing man-made and natural modifications of microbial biodiversity and activity in coastal ecosystems. *Antonie von Leeuwenhoek International Journal of General and Molecular Microbiology* **81**:487-507.
 53. Piehler, M., *J. Dyble, *P. Moisander, **J.L. Pinckney**, H.W. Paerl. 2002. Effects of modified nutrient concentrations and ratios on the structure and function of the native phytoplankton community in the Neuse River estuary, North Carolina, USA. *Aquatic Ecology* **36**:371-385
 52. *Örnólfssdóttir, E., **J.L. Pinckney**, P. Tester. 2003. Quantification of the relative abundance of the toxic dinoflagellate, *Karenia brevis*, using photopigment biomarkers. *Journal of Phycology*. **39**:449-457.
 51. Luettich, R., J. McNinch, H.W. Paerl, C. Peterson, J. Wells, C. Martens, M. Alperin, **J.L. Pinckney**. 2000. Neuse River Estuary Modeling and Monitoring Project Stage 1: Hydrography and circulation, water column nutrients and productivity, sedimentary processes and benthic-

pelagic coupling, and benthic ecology. UNC Water Resources Research Institute Report No. 325-B, Raleigh, NC. 172 pgs.

50. **Pinckney, J.L.**, *E. Örnólfsson, *S. Lumsden. 2002. Estuarine phytoplankton responses to sublethal concentrations of the agricultural herbicide, atrazine. *Marine Pollution Bulletin* **44**:1109-1116.
49. Buzzelli, C., S. Powers, R. Luettich, J. McNinch, H. Paerl, C. Peterson, **J.L. Pinckney**. 2002. Estimating the spatial extent of bottom-water hypoxia and habitat degradation in a shallow estuary. *Marine Ecology Progress Series* **230**:103-112.
48. *Bergmann, T., T. Richardson, H. Paerl, **J.L. Pinckney**, O Schofield. 2002. Synergy between light and nutrients on the photosynthetic efficiency of phytoplankton populations from the Neuse River Estuary, North Carolina. *Journal of Plankton Research* **24**:923-933.
47. **Pinckney, J.L.**, T. Richardson, D. Millie, H. Paerl. 2001. Application of photopigment biomarkers for quantifying microalgal community composition and *in situ* growth rates. *Organic Geochemistry* **32**:585-595.
46. **Pinckney, J.L.**, H. Paerl, P. Tester, T. Richardson. 2001. The role of nutrient loading and eutrophication in estuarine ecology. *Environmental Health Perspectives* **109**:699-706.
45. *Borsuk, M., C. Stow, R. Luettich, H. Paerl, **J.L. Pinckney**. 2001. Modelling oxygen dynamics in an intermittently stratified estuary: Estimation of process rates using field data. *Estuarine, Coastal, and Shelf Science* **52**:33-49.
44. Litaker, W., P. Tester, C. Duke, B. Kenney, **J.L. Pinckney**, J. Ramus. 2002. Seasonal niche strategy of the bloom forming dinoflagellate *Heterocapsa triquetra*. *Marine Ecology Progress Series* **232**:45-62.
43. Richardson, T., **J.L. Pinckney**, H. Paerl. 2001. Responses of estuarine phytoplankton communities to nitrogen form and mixing using microcosm bioassays. *Estuaries* **24**:828-839.
42. Reid, R.P., P. Visscher, A. Decho, J. Stolz, B. Bebout, I. Macintyre, C. Dupraz, **J.L. Pinckney**, H. Paerl, L. Prufert-Bebout, *T. Steppe, D. DesMarais. 2000. The role of microbes in accretion, lamination, and early lithification of modern marine stromatolites. *Nature* **406**:989-992.
41. Paerl, H.W., **J.L. Pinckney**, *J. Fear, *B. Peierls. 1999. Fish kills and bottom-water hypoxia in the Neuse River Estuary: Reply to Burkholder et al. *Marine Ecology Progress Series* **186**:307-309.
40. Paerl, H.W., **J.L. Pinckney**, *J. Fear, *B. Peierls. 1999. Ecosystem responses to internal and watershed organic matter loading: Consequences for hypoxia in the eutrophying Neuse River Estuary, North Carolina. *Marine Ecology Progress Series* **166**:17-25.
39. Paerl, H.W., **J.L. Pinckney**, *T. Steppe. 2000. Cyanobacterial-bacterial consortia: Examining the functional unit of microbial survival and growth in extreme environments. *Environmental Microbiology* **2**:11-26.
38. Piehler, M., *J. Swistak, **J.L. Pinckney**, H. Paerl. 1999. Stimulation of diesel fuel biodegradation by indigenous nitrogen fixing bacterial consortia. *Microbial Ecology* **38**:69-78.
37. **Pinckney, J.L.**, H. Paerl, E. Haugen, P. Tester. 2000. Responses of phytoplankton and *Pfiesteria*-like dinoflagellate zoospores to nutrient enrichment in the Neuse River Estuary, NC (USA). *Marine Ecology Progress Series* **192**:65-78.
36. **Pinckney, J.L.**, H. Paerl, *M. Harrington. 1999. Responses of the phytoplankton community growth rate to nutrient pulses in variable estuarine environments. *Journal of Phycology* **35**:1455-1463.
35. Dame, R., M Alber, D. Allen, M. Mallin, C Montague, A Lewitus, A Chalmers, R Gardner, C Gilman, B Kjerfve, **J.L. Pinckney**, N Smith. 2000. Estuaries of the South Atlantic Coast of North America: Their geographical signatures. *Estuaries* **23**:793-819.

34. Sandulli, R., **J.L. Pinckney**. 1999. Patch sizes and spatial patterns of meiobenthic copepods and benthic microalgae in sandy sediments: A microscale approach. *Journal of Sea Research* **41**: 179-187.
33. Priscu, J., C. Fritsen, E. Adams, S. Giovannoni, H. Paerl, C. McKay, P. Doran, B. Lanoil, **J.L. Pinckney**. 1998. Perennial Antarctic lake ice: An oasis for life in a polar desert. *Science* **280**:2095-2098.
32. **Pinckney, J.L.**, H. Paerl, *M. Harrington, K. Howe. 1998. Annual cycles of phytoplankton community-structure and bloom dynamics in the Neuse River Estuary, North Carolina. *Marine Biology* **131**:371-382.
31. **Pinckney, J.L.**, *F. Micheli. 1998. Microalgae on seagrass mimics: Does epiphyte community structure differ from live seagrasses? *Journal of Experimental Marine Biology and Ecology* **221**:59-70.
30. Piehler, M., *J. Swistak, **J.L. Pinckney**, H. Paerl. 1997. Sublethal effects of coastal petroleum pollution on *Spartina alterniflora* stem epiphytes. *Chemosphere* **35**:2665-2674.
29. **Pinckney, J.L.**, D Millie, B. Vinyard, H. Paerl. 1997. Environmental controls of phytoplankton bloom dynamics in the Neuse River Estuary, North Carolina, USA. *Canadian Journal of Fisheries and Aquatic Sciences* **54**:2491-2501.
28. **Pinckney, J.L.**, H. Paerl. 1997. Anoxygenic photosynthesis and nitrogen fixation by a microbial mat community in a Bahamian hypersaline lagoon. *Applied and Environmental Microbiology* **63**:420-426.
27. Paerl, H., J. Willey, M. Go, *B. Peierls, **J.L. Pinckney**, M. Fogel. 1999. Rainfall stimulation of primary production in western Atlantic Ocean waters: Roles of different nitrogen sources and co-limiting nutrients. *Marine Ecology Progress Series* **176**:205-214.
26. **Pinckney, J.L.**, R.P. Reid. 1997. Productivity and community composition of stromatolitic microbial mats in the Exuma Cays, Bahamas. *Facies* **36**:204-207.
25. **Pinckney, J.L.**, D. Millie, K. Howe, H. Paerl, J. Hurley. 1996. Flow scintillation counting of ¹⁴C-labeled microalgal photosynthetic pigments. *Journal of Plankton Research* **18**:1867-1880
24. **Pinckney, J.L.**, H.W. Paerl. 1996. Lake ice algal phototroph community composition and growth rates, Lake Bonney, Dry Valley Lakes, Antarctica. *Antarctic Journal of the US* **31**:215-216.
23. Paerl, H.W., **J.L. Pinckney**. 1996. Ice aggregates as microbial habitat in Lake Bonney, Dry Valley Lakes, Antarctica: Nutrient-rich microzones in an oligotrophic ecosystem. *Antarctic Journal of the US* **31**:220-222.
22. Paerl, H.W., **J.L. Pinckney**. 1996. A mini-review of microbial consortia: their roles in aquatic production and biogeochemical cycling. *Microbial Ecology* **31**:225-247.
21. **Pinckney, J.L.**, H. Paerl, M. Fitzpatrick. 1995. The impacts of seasonality and nutrients on microbial mat community structure and function. *Marine Ecology Progress Series* **123**:207-216.
20. Paerl, H.W., **J.L. Pinckney**, *S. Kucera. 1995. Clarification of the structural and functional roles of heterocysts and anoxic microzones in the control of pelagic nitrogen fixation. *Limnology and Oceanography* **40**:634-638.
19. **Pinckney, J.L.**, H. Paerl, P. Reid, B. Bebout. 1995. Ecophysiology of stromatolitic microbial mats on Stocking Island, Exuma Cays, Bahamas. *Microbial Ecology* **29**:19-37.
18. **Pinckney, J.L.**, B. Bebout, H.W. Paerl. 1995. Salinity control of benthic microbial mat community production in a Bahamian hypersaline lagoon. *Journal of Experimental Marine Biology and Ecology* **187**:223-237.

17. Paerl, H.W., B. Bebout, C. Currin, M. Fitzpatrick, **J.L. Pinckney**. 1994. Nitrogen fixation dynamics in microbial mats, pp. 325 - 337. IN L. Stal & P. Caumette (eds.). *Microbial Mats: Structure, Development, and Environmental Significance*. NATO ASI Series G35, 463 pgs.
16. **Pinckney, J.L.** 1994. Development of an irradiance-based ecophysiological model for intertidal benthic microalgal production, pp. 55-83. IN W. Krumbein, D. Paterson, & L. Stal (eds.). *Biostabilization of Sediments*. Universität Oldenburg, Oldenburg, Germany.
15. **Pinckney, J.L.**, *Y. Piceno, C. Lovell. 1994. Short-term changes in the vertical distribution of benthic microalgal biomass in intertidal, muddy sediments. *Diatom Research* **9**:143-153.
14. **Pinckney, J.L.**, *R. Papa, R. Zingmark. 1994. Comparison of high performance liquid chromatographic, spectrophotometric, and fluorometric methods for determining chlorophyll a concentrations in estuarine sediments. *Journal of Microbiological Methods* **19**:59-66.
13. Sandulli, R., **J.L. Pinckney**. 1994. Modelli spaziali di distribuzione di copepodi meiobentonici e microalghe bentoniche in sedimenti sabbiosi. *Boll. Mus. Ist. Biol. Univ. Genova* **58-59**:153-169.
12. **Pinckney, J.L.**, R. Zingmark. 1993. Modelling the annual production of intertidal benthic microalgae in estuarine ecosystems. *Journal of Phycology* **29**:396-407.
11. **Pinckney, J.L.**, R. Zingmark. 1993. Biomass and production of benthic microalgal communities in estuarine habitats. *Estuaries* **16**:887-897.
10. **Pinckney, J.L.**, R. Zingmark. 1993. Photophysiological responses of intertidal benthic microalgal communities to in situ light environments: methodological considerations. *Limnology and Oceanography* **38**:1373-1383.
9. *Steward, C., **J.L. Pinckney**, *Y. Piceno, C. Lovell. 1992. Bacterial numbers and activity, microalgal biomass and productivity, and meiofaunal distribution in sediments naturally contaminated with biogenic bromophenols. *Marine Ecology Progress Series* **90**:61-72.
8. **Pinckney, J.L.**, R. Zingmark. 1991. The effects of tidal stage and sun angles on intertidal benthic microalgal productivity. *Marine Ecology Progress Series* **76**:81-89.
7. Sandulli, R., **J.L. Pinckney**. 1991. Models of the distribution of meiofauna and microflora of an intertidal beach through spatial autocorrelation analysis. *Riv. Idrobiol.* **30**:263-281.
6. **Pinckney, J.L.** 1990. Correlation analysis of adult female, egg, and hatchling sizes in the loggerhead turtle, *Caretta caretta* (L.), nesting at Kiawah Island, South Carolina, USA. *Bulletin of Marine Science* **47**:670-679.
5. **Pinckney, J.L.**, R. Sandulli. 1990. Spatial autocorrelation analysis of meiofaunal and microalgal populations on an intertidal sandflat: Scale linkage between consumers and resources. *Estuarine and Coastal Shelf Science* **30**:341-353.
4. **Pinckney, J.L.**, P. Dustan. 1990. Ebb-tidal fronts in Charleston Harbor, South Carolina: Physical and biological characteristics. *Estuaries* **13**:1-7.
3. Dustan, P., **J.L. Pinckney**. 1989. Tidally induced estuarine phytoplankton patchiness. *Limnology and Oceanography* **34**:410-419.
2. Collins, M., **J.L. Pinckney**. 1989. Size and age at maturity for vermilion snapper (*Rhomboplites aurorubens*) (Lutjanidae) in the South Atlantic Bight. *Northeast Gulf Science* **10**:51-53.
1. Collins, M., D. Schmidt, W. Waltz, **J.L. Pinckney**. 1989. Age and growth of king mackerel, *Scomberomorus cavalla*, from the Atlantic coast of the United States. *Fishery Bulletin* **87**:49-61.

BOOK CHAPTERS

Kremer, H.H., **J.L. Pinckney** (eds.). 2012. Volume 11. Management of Estuaries and Coasts. In E. Wolanski, D. McLusky (Editors in Chief). Treatise on Estuarine and Coastal Science. Elsevier, New York.

Pinckney, J.L. 2003. Estuaries, pp. 37-41. In E.D. Julius (ed.). Water Science and Issues, Volume 2. Macmillan Reference USA. New York.

TECHNICAL REPORTS

Author or Co-Author on **16** Technical Reports on oil and hazardous substances pollution incidents: planning and response considerations for major estuaries in the continental US. Bibliography available on request.

BOOKS REVIEWED

Enger, E.D., B.F. Smith. 2000. Environmental Science, A Study of Interrelationships (7th Ed.). McGraw-Hill Co., Inc. NY. 431 p. (*ASB Bulletin* **47**:230-231)

Descy, J-P., C. Reynolds, J. Padisák (eds.). 1996. Phytoplankton in Turbid Environments: Rivers and Shallow Lakes. (*European J. Phycol.* **31**:108-110)

Patrick, Ruth. 1995. Rivers of the United States. Volume II. Chemical and Physical Characteristics. John Wiley & Sons, Inc. New York. 237 p. (*ASB Bulletin* **42**:214-215).

RESEARCH GRANTS

2013 - 16	Assimilation rates of dissolved organic carbon by photomixotrophic estuarine phytoplankton	NSF Biological Oceanography	\$355,659
2012 - 13	Ecological characterization of bioluminescence in Mangrove Lagoon, Salt River Bay, St. Croix, USVI	National Park Service	\$124,871
2010 - 11	Anthropogenic pharmaceutical impacts on the structure, function, and antibiotic resistance of estuarine benthic microbial communities	NOAA/South Carolina Sea Grant	\$9,996
2008 - 10	Physical controls on benthic fluxes of microalgae and particulate organic matter in estuarine environments (G. Voulgaris Co-PI)	NOAA/South Carolina Sea Grant	\$126,909
2006 - 08	Collaborative Research-BES: FerryMon, unattended water quality monitoring utilizing advanced environmental sensing (H. Paerl, R. Luettich, T. Richardson, Co-PIs)	NSF Environmental Engineering	\$237,255
2006 - 08	Determining the potential for algal bloom in Lake Maurepas: Effects of changing nutrient load from freshwater diversion and changes in human population (P. Voegel, Co-PI)	Western Lake Pontchartrain Basin Research Program	\$22,363
2006 - 07	Effects of sublethal concentrations of agricultural herbicides in the structure and function of estuarine phytoplankton communities	NOAA/ South Carolina Sea Grant	\$63,276
2005 - 06	Gulf Oyster Industry Initiative: A training workshop on pigment-based detection of the harmful dinoflagellate <i>Karenia brevis</i> (T. Richardson, Co-PI)	NOAA/ South Carolina Sea Grant	\$29,048
2004 - 06	Use high-resolution spatial mapping to estimate plankton response to freshwater inflows entering to Galveston Bay: Importance to watershed development and ecosystem health (S. Davis, D. Roelke Co-PIs)	Texas Commission on Environmental Quality	\$132,434
2004 - 06	Physical control of nutrient fluxes in Galveston Bay (A. Anis, G. Gill Co-PIs)	NOAA/Texas Sea Grant	\$191,513
2004 - 07	Collaborative Research: Th(IV) and Pa(IV,V) binding to exopolymeric acid polysaccharides in marine environments (P. Santschi Co-PI)	NSF – OCE Chemical Oceanography	\$550,000
2004 - 05	<i>Gymnodinium breve</i> in the Gulf of Mexico: Supplement to Research on gyroxanthin-based estimates of carbon-specific growth rates (T. Richardson Co-PI).	EPA ECOHAB	\$37,671
2003 - 04	Biotic responses to reduced freshwater inputs into Texas bays: Hypersalinity effects on benthic microalgal community structure and function (A. Lee, Co-PI)	Texas WRRRI	\$4,182
2002 - 07	Anhydrophilic, halotolerant microbial mats of San Salvador Island, Bahamas (T. Steppe, H. Paerl, A. Decho, Co-PIs)	NSF Microbial Observatories	\$203,035

2001 - 02	Gulf Oyster Industry Initiative: Gyroxanthin-based detection of <i>Gymnodinium breve</i> (T. Richardson, Co-PI)	NOAA Sea Grant	\$42,787
2001 - 03	<i>Gymnodinium breve</i> in the Gulf of Mexico: Gyroxanthin-based estimates of carbon-specific growth rates under varying environmental conditions (T. Richardson, Co-PI)	EPA ECOHAB	\$100,400
2000	Utilization of carbon substrates by the estuarine microbial community in Galveston Bay, Texas	Texas A&M Faculty Minigrant	\$1,491
1999 - 00	Development of HPLC technology for detection of <i>Gymnodinium breve</i>	NOAA/NMFS Texas PWD	\$27,530
1998 - 99	Development of a program to assess the importance of atmospheric deposition of pollutants to near shore waters of the Gulf of Mexico (L. Cifuentes & G. Gill, Co-PIs)	EPA	\$47,400
1998 - 99	Biologically-mediated nitrogen dynamics in eutrophying estuaries: Assessing denitrification and N ₂ fixation responses to proposed N loading reductions in the Neuse River Estuary (H. Paerl & M. Piehler, Co-PIs)	UNC WRRI	\$55,014
1999 - 01	CISNet for the Neuse River Estuary, NC: A program for evaluating nitrogen-driven eutrophication associated with changing land use in a coastal watershed. (R. Luettich & H. Paerl, Co-PIs)	EPA NCERQA	\$576,740
1998 - 01	Water stress dynamics in anhydrophilic microbial mats: Assessing the limit of planetary life. (H. Paerl & M. Potts, Co-PIs)	NSF LEXEN	\$337,000
1998 - 00	The role of phytoplankton community composition on eutrophication and hypoxia dynamics in the Neuse River Estuary, NC. (H. Paerl, Co-PI)	NC Sea Grant	\$139,336
1998	Acquisition of an HPLC system for diagnostic photopigment detection and characterization of aquatic microalgae. (H. Paerl, Co-PI)	USDA NRICGP	\$37,210
1997 - 00	Biologically-mediated nitrogen dynamics in eutrophying estuaries: Assessing denitrification and N ₂ fixation responses to proposed N loading reductions in the Neuse River Estuary. (H. Paerl, Co-PI)	UNC WRRI	\$209,730
1997 - 00	Anthropogenic pollutant effects on aquatic ecosystems: Impacts of atmospheric nitrogen deposition on phytoplankton dynamics and eutrophication. (H. Paerl, D. Millie, O. Schofield, G. Kirkpatrick, Co-PIs)	US EPA Air Quality	\$383,000
1996 - 99	Nitrogen-driven eutrophication of the Neuse River, NC: Phytoplankton ecophysiological responses to changing N-input dynamics. (H. Paerl, D. Millie, O. Schofield, and G. Kirkpatrick, Co-PI's)	USDA NRICGP	\$319,000
1996 - 98	Anthropogenic nitrogen sources and coastal eutrophication: Does N composition control	NC Sea Grant	\$86,000

	phytoplankton biodiversity and water quality? (H. Paerl, Co-PI)		
1996 - 99	Lamination in modern marine stromatolites: A geomicrobiological investigation of processes forming lithified micritic layers. (Subcontract under R.P. Reid, PI) (Total Award \$297,000)	NSF Marine Geology and Biological Oceanography	\$10,000
1995 - 97	Environmental control of <i>Pfiesteria piscicida</i> outbreaks: The role of anthropogenic nutrient loading. (H. Paerl, Co-PI)	NC Sea Grant	\$114,000
1995 - 98	Carbon fixation and partitioning dynamics in marine microbial mats. (H. Paerl, Co-PI)	NSF Biological Oceanography	\$295,000
1993 - 96	Coastal eutrophication dynamics: Linking acute and chronic new nitrogen loading to enhanced phytoplankton production and community structure alterations. (H. Paerl, Co-PI)	NC Sea Grant	\$222,000
1993 - 96	Physiological and ecological controls of cyanobacterial bloom dynamics in hypereutrophic waters: Mechanisms and management options. (H. Paerl & D. Millie, Co-PIs)	USDA NRICGP	\$264,000
1990 - 92	Photophysiological adaptations and production periodicities of estuarine benthic microalgae	Sigma Xi, Slocum-Lunz, PSA	\$4,300
1988 - 90	Biomass, distribution, and productivity of benthic microalgae at North Inlet, South Carolina	Slocum-Lunz Foundation	\$3,300
1985 - 86	Estuarine fronts of Charleston Harbor, SC	Slocum-Lunz and CCSEF	\$7,600

FELLOWSHIPS AND AWARDS

- 2003 Texas A&M Association of Former Students Distinguished Achievement Award for Teaching (University Level Award), Texas A&M University
- 2003 Outstanding Reviewer for the journal *Limnology and Oceanography*
- 2002 College of Geosciences Distinguished Achievement Award for Faculty Teaching, Texas A&M University
- 2001 Center for Teaching Excellence Scholar Award, Texas A&M University
- 1993 US Department of Energy Global Change Distinguished Postdoctoral Fellowship
- 1991 Gordon Belser Fellowship in Botany
- 1989 Friends of Baruch Predoctoral Fellowship
- 1982 Charleston Naval League Marine Biology Award

SERVICE

Review Panelist, NSF Biological Oceanography (2016)

Session Organizer, Estuarine Research Federation Meeting, Portland, OR (November 2015)

Review Panelist, NSF Ocean Acidification Program (2013)

Editorial Board, *Estuaries and Coasts* (2012-)

Trustee, Slocum-Lunz Foundation (2012-)

Review Panelist, NOAA/Ecology and Oceanography of Harmful Algal Blooms (2011 & 2010)

Associate Editor, *Treatise on Estuarine and Coastal Science*

Expert Panelist, The National Academies, National Research Council, Committee to Review the St. Johns River Cumulative Impact Assessment (2008 - 2010).

Participant, National Aeronautics and Space Administration (NASA), Phytoplankton Pigment Intercalibration Exercise Workgroup, SeaHARRE 4 & 5 (2007-2009)

Participant, United Nations Environment and Scientific Organization (UNESCO) - Scientific Committee on Ocean Research (SCOR), Phytoplankton Pigment Methodology Workshop, Monaco (2006)

Session Organizer, Estuarine Research Federation Meeting, Providence, RI (November 2007)

Session Moderator, Southeastern Estuarine Research Society Meeting, Pine Knoll Shores, NC (March 2007)

Associate Editor, *Estuarine, Coastal and Shelf Science* (2007 -)

Review Editor, *Aquatic Microbial Ecology* (2006 - 2010)

Associate Editor, *Applied and Environmental Microbiology* (2005 - 2011)

Review Panelist, National Oceanic and Atmospheric Administration, Center for Sponsored Coastal Ocean Research, Northern Gulf of Mexico Ecosystem Research Program, Silver Spring, MD, November 2005.

Review Panelist, National Science Foundation, Biological Oceanography Program, Washington, DC, November 2005.

Expert Science Judge, National Ocean Science Bowl, University of South Carolina, Columbia, SC, March 2005, 06, 07, 08, 09

Science Judge, National Ocean Science Bowl, Texas A&M University, College Station, TX, February 2004

Invited Workshop, Committee on Ocean Research and Education (CORE), Ocean Research Interactive Observation Networks (ORION), San Juan, PR, January 2004

Review Panelist, National Science Foundation, Office of Polar Programs, Washington, DC, October 2003

Review Panelist, NOAA/COP/ South Florida Research Program, Key Largo, FL, October 2003

Review Panelist, Florida Sea Grant, Gainesville, FL, September 2001

Review Panelist, Dissertations Initiative for the Advancement of Limnology and Oceanography (DIALOG IV), American Society for Limnology and Oceanography, Washington, DC, July 2001

Review Panelist, Ecology and Oceanography of Harmful Algal Blooms (ECOHAB) Program, National Oceanic and Atmospheric Administration (NOAA), Silver Spring, MD, July 1999

Invited Expert Panel, Ecological Monitoring in the National Estuarine Research Reserve System Workshop, Charleston, SC, October 1998

Organizing Committee, Fourth International Conference on Toxic Cyanobacteria, Beaufort, NC, October 1998

Associate Editor, Journal of Elisha Mitchell Scientific Society, NC Academy of Science

Invited Co-Leader, Workgroup on Options and Research Needs to Address Environmental Issues, Weiss Symposium, Chapel Hill, NC, April 1996.

Invited Participant in NOAA's Estuarine Eutrophication Survey, South Atlantic Regional Workshop, Charleston, SC, February 1996.

Invited Participant in the Coastal Benthic Optical Properties (CoBOP) Workshop sponsored by the Environmental Optics Program of the Office of Naval Research, Washington, DC, January 1996.

Invited Participant in the Dissertations Initiative for the Advancement of Limnology and Oceanography (DIALOG) Symposium, Bermuda Biological Station, Bermuda, December 1994.

Program Chairman and Host for the 16th Annual Meeting of the Southeastern Phycological Colloquy, Duke University Marine Lab, Beaufort, NC, October 1994.

Marine Ecology Summer Course, Marine Biological Laboratory, Woods Hole, MA, Summer 1988.

PRESENTATIONS (Primary Presenter Only – Since 2005)

Lethal and sublethal effects of triclosan on estuarine phytoplankton communities. Coastal and Estuarine Research Federation, Portland, OR. November 2015 **(Invited)**

Ecological Characterization of Bioluminescence in Salt River Bay, National Park Service, St. Croix, USVI. May 2014, **(Invited)**

Three case studies of long-term changes in phytoplankton functional diversity. Department of Biology, College of Charleston, Charleston, SC. October 2012 **(Invited)**

Phytoplankton photopigment composition as an indicator of community structure, function, and ecosystem health. Coastal and Estuarine Research Federation, Daytona Beach, FL. November 2011 **(Invited)**

3.5 Billion Years and Counting - Survival Strategies of Cyanobacteria. Department of Biology and Geology, USC Aiken, Aiken, SC. 19 March 2010 **(Invited)**.

Physical and Biogeochemical Controls of Ecosystem Structure and Spatiotemporal Dynamics in Anthropogenically-impacted Estuaries. Center for Coastal Physical Oceanography, Old Dominion University, Norfolk, VA. 19 November 2007 **(Invited)**.

Spatiotemporal patterns of subtidal benthic microalgal biomass and community composition in Galveston Bay, TX. Estuarine Research Federation Meeting, Providence, RI. 07 November 2007 **(Session Chair)**.

Benthic microalgal community composition and spatiotemporal dynamics in a shallow, turbid estuary. Southeastern and Atlantic Estuarine Research Society Meeting, Pine Knoll Shores, NC. 17 March 2007.

Untreated urban effluent effects on phytoplankton community structure and function in Lake Pontchartrain, LA. Southeastern Estuarine Research Society Meeting, GTM NEER Environmental Education Center, Ponte Vedra Beach, FL. April 2006.

Biogeochemical and physical controls of estuarine phytoplankton community structure. Department of Marine Sciences, University of Georgia, Athens, GA. March 2006. **(Invited)**

To HAB and HAB Not: Biogeochemical and physical controls of estuarine phytoplankton community structure. Department of Oceanography, Florida State University, Tallahassee, FL. April 2005. **(Invited)**.

ACADEMICS

* indicates graduation

Graduate Students - Major Advisor

- *Buschur, Jean Marie (M.Sci.), Marine Science, USC (May 2007)
- *Butz, Shelby (M.Sci.), Marine Science, USC (August 2015)
- *Cotti-Rausch, Bridget (M.Sci.), Marine Science, USC (August 2010)
- *Gordon, Ana, (M.Sci.), Marine Science, USC (May 2015)
- Gore, Miranda (M.Sci.), Marine Science, USC (May 2015)
- *Hagenbuch, Isaac (Ph.D.), Biological Sciences, USC (August 2013)
- Judy, Nicole (M.Sci.), Marine Science, USC
- Knotts, Eilea (Ph.D.), Biological Sciences, USC
- *Lee, Alyce R. (Ph.D.), Oceanography, TAMU (May 2009)
- *Marshallonis, Daniel (Ph.D.), Biological Sciences, USC (May 2008)
- *Muggelberg, Leslie (M.Sci.), Biological Sciences, USC (May 2013)
- *Örnólfsson, Erla B. (Ph.D.), Oceanography, TAMU (May 2002)
- *Salazar, Alicia (M. Sci.), Oceanography, TAMU (May 2004)
- *Siegel, Amy (M.Sci.), Marine Science, USC (May 2010)
- Van Meerssche, Elise (Ph.D.), Biological Sciences, USC
- *Zimmerlin, Michele (M.Sci.), Marine Science, USC (October 2013)

Courses Taught at Texas A&M University

Introduction to Oceanography (undergraduate, non-majors)

Ecology of the Continental Shelf: Estuarine and Coastal Ecosystem Processes (graduate, revised course)

Oceanographic Data Collection and Analysis Methods (graduate, new course)

Courses Taught at University of South Carolina

Data Collection and Analysis Methods in Marine Science (MSCI/BIOL 599/758)

Oceans and Society (MSCI 210)

Estuarine Oceanography (MSCI/GEOL 581)

Marine Ecology (MSCI/BIOL 575)

Field and Lab Methods in Marine Science (MSCI 460)