

DWAYNE E. PORTER, PHD
ABBREVIATED CURRICULUM VITAE

Work Address:

Department of Environmental Health Sciences
Arnold School of Public Health
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Education:

PhD	Geographic Information Processing	University of South Carolina	1995
MS	GIS and Remote Sensing	University of South Carolina	1988
BA	Spatial Analysis	West Virginia University	1985

Relevant Professional Experience:

2007-Present Chair, Department of Environmental Health Sciences, Arnold School of Public Health
2006-2009 Graduate Director, Department of Environmental Health Sciences, Arnold School of Public Health
2004-Present Associate Professor, Department of Environmental Health Sciences, Arnold School of Public Health, and Marine Science Program, USC
1998-2004 Assistant Professor, Department of Environmental Health Sciences, Arnold School of Public Health, and Marine Science Program, USC
1993-Present Director, Geographic Information Processing Lab, and Research Associate, Baruch Institute for Marine and Coastal Sciences, USC
1994-Present Director, NOAA National Estuarine Research Reserve System Centralized Data Management Office, Georgetown, SC
1995-Present Associated Faculty, School of Earth, Ocean and the Environment, USC
1996-Present Adjunct Professor, Geophysical Department, Irkutsk State Technical University, Irkutsk, Russia

Research Interests:

GIS and remote sensing, Resource management and risk assessment, Public health and the environment, Spatial modeling, Coastal zone management, Environmental data management, Ecological synthesis, Coastal and ocean observing systems

Relevant Synergistic Service:

2013-2014 Student Programs Like Aquatic Science Sampling Headquarters Advisory Board
2013 Water Quality Expert Team, NOAA Observing Systems Council Observing Systems Committee
2013 Hudson River Environmental Conditions Observing System Expert Review Panel
2012-2013 NOAA National Integrated Drought Information System Carolinas Seafood Safety Forecast Committee
2012 Reviewer, *IOOS Summit White Paper Series*
2011-Present Public Health Delegate, Consortium of Universities for the Advancement of Hydrologic Science, Inc.
2011-Present Institutional Representative, Southeast Coastal Ocean Observing System Regional Association
2010 Expert Team Reviewer, NOAA Marine Protected Areas Center MPA/IOOS Expert Team
2009-Present Data Management and Communications Committee, Gulf of Mexico Coastal Ocean Observing System
2008-2012 SC Ocean Planning Task Force
2008-Present Town of Bluffton Water Quality Task Force
2007-2010 Co-chair, Southeast Ocean Data Partnership
2007-Present SC Environmental Justice Advisory Committee
2008-2011 Ocean Observing Sub-panel, Ocean Research and Resources Federal Advisory Panel
2008 Florida Oceans and Coastal Resources Council Review Team
2006-2008 Advisory Committee, NOAA/NOS/HML Center of Excellence in Oceans and Human Health
1996-Present Delegate, University Consortium on Geographic Information Sciences
1995-Present NOAA/NOS/OCRM/ERD/NERRS Data Management Committee
2006 Conceptual Design Review Team, National Science Foundation NEON Program
2000, 2005 Site review team, National Science Foundation Long-Term Ecological Research Program
2001-Present Coordinator, NOAA National Estuarine Research Reserve System Technicians' Training Workshop.

Current Research Grants and Funding:

- 2014-2018 National Institutes for Health. \$2,904,660 as a co-PI (PI Pate – USC) on “Physical Activity During the Transition from Elementary School to High School”
- 2013-2014 South Carolina Department of Health and Environmental Control. \$19,000 as PI on “Leaders in Environmental Action Pilots”.
- 2013-2014 National Oceanic and Atmospheric Administration, National Ocean Service. \$349,146 as PI on “Continuing Support of the National Estuarine Research Reserve System Centralized Data Management Office”.
- 2013-2014 National Oceanic and Atmospheric Administration. \$50,000 as PI on “Assessment and Potential Integration of the EPA’s Virtual Beach Model into SCDHEC’s Beach Water Quality Modeling Ensemble”.
- 2013-2014 National Oceanic and Atmospheric Administration. \$37,209 as PI on “SECOORA: A Framework for Monitoring, Prediction and Assessment to Support Decision-Makers Needs for Coastal and Ocean Data and Tools - Water Quality Modeling”.
- 2013-2014 National Oceanic and Atmospheric Administration. \$192,387 as PI on “SECOORA: A Framework for Monitoring, Prediction and Assessment to Support Decision-Makers Needs for Coastal and Ocean Data and Tools - Data Management and Communications”.
- 2013-2014 South Carolina Department of Health and Environmental Control. \$3,600 as PI on “Development of a Water Quality Model for the Lower Saluda River”.
- 2012-2014 National Oceanic and Atmospheric Administration. \$30,379 as PI on “Enabling Coastal and Marine Spatial Planning in the South Atlantic through User Engagement, Comprehensive Data Management and Development of Decision Support Tools – Phase II”.
- 2009-2014 National Heart, Lung and Blood Institute. \$3,318,559 as a co-Investigator (PI Pate – USC) on “Physical Activity during the Transition from Elementary School to Middle School”.

Pending Grants:

- National Ocean Partnership Program. \$9,026,728 as a co-PI (PI Hernandez – SECOORA) on “Demonstration of a U.S. Marine Biodiversity Observation Network (MBON)”.
- US Geological Survey. \$20,749 as PI on “Using Spatial Models to Predict Vulnerable Areas for Pesticides into Receiving Waters in Beaufort, South Carolina During Extreme Hydrological Events: Drought and Flooding”.

Recent (≥ 2011) and Other Relevant Publications (underlined authors are my students; total referred publications = 83):

- Liese, A., T.L. Barnes, N. Colabianchi, J.D. Hibbert, D.E. Porter and A.B. Lawson. In press. Exploring neighborhood boundaries in the food environment via the relationship between supermarket access measures and socioeconomic characteristics. *Spatial and Spatio-temporal Epidemiology*.
- Lamichhane, A.P., J. Warren, R. Puett, D.E. Porter, M. Bottai, E. Mayer-Davis and A. Liese. In press. Spatial patterning of supermarkets and fast food outlets with respect to neighborhood characteristics. *Health and Place*.
- Scott, G., M. Fulton, M. DeLorenzo, E. Wirth, P. Key, P. Pennington, D. Kennedy, D. Porter, G. Chandler, C. Scott, J. Michel and J. Ferry. 2013. The environmental sensitivity index and oil and hazardous materials impact assessments: linking pre-spill contingency planning and ecological risk assessment. *Journal of Coastal Research*. 81:69(100-113).
- Liese, A.D., R.C. Puett, A.P. Lamichhane, M.D. Nichols, D. Dabelea, A.B. Lawson, D.E. Porter, J.D. Hibbert, R.B. D’Agostino and E.J. Mayer-Davis. 2012. Neighborhood level risk factors for type 1 diabetes in youth: the SEARCH case-control study. *International Journal of Health Geographics*. 11(1):1.
- Trilk, J.L., D.S. Ward, M. Dowda, K.A. Pfeiffer, D.E. Porter, J. Hibbert and R.R.Pate. 2012. Do physical activity facilities near schools affect physical activity in high school girls? *Health and Place*. 17(2):651-657.
- Lamichhane, A.P., R. Puett, D.E. Porter, M. Bottai, E.J. Mayer-Davis and A.D. Liese. 2012 Associations of built food environment with body mass index and waist circumference among youth with diabetes. *International Journal of Behavioral Nutrition and Physical Activity*. 9:81.
- Lamichhane, A.P., E.J. Mayer-Davis, R. Puett, M. Bottai, D.E. Porter and A.D. Liese. 2012. Associations of built food environment with dietary intake among youth with diabetes. *Journal of Nutrition Education and Behavior*. 44(3):217-24.
- Dowda, M., K.A. Pfeiffer, F. Lobelo, D.E. Porter and R.R. Pate. 2012. Cardiorespiratory fitness and proximity to commercial physical activity facilities among 12th grade girls. *Journal of Adolescent Health*. 50:497-502.
- Tufford, D., R. Kloot, A. Shea, D. Porter, D. Foote, W. Hankinson and T. Donelan. 2012. Water quality monitoring and research at Lake Wateree, SC. *Proceedings of the 2012 Water Resources Conference*.

- Ragsdale, R., E. Vowinkel, D. Porter, P. Hamilton, R. Morrison, J. Kohut, B. Connell, H. Kelsey and P. Trowbridge. 2011. Water quality success stories: integrated assessments from the IOOS[®] regional associations and National Water Quality Monitoring Network. *Marine Technology Society Journal*. 45(1): 19-28.
- VanMeter, E., A.B. Lawson, N. Colabianchi, M. Nichols, J. Hibbert, D.E. Porter and A.D. Liese. 2011. Spatial accessibility and availability measures and statistical properties in the food environment. *Spatial and Spati-temporal Epidemiology*. 2(1):35-47.
- Pfeiffer, K.A., N. Colabianchi, M. Dowda, D. Porter, J. Vincent, J. Hibbert and R. Pate. 2011. Examining the role of churches in adolescent girls' physical activity. *Journal of Physical Activity and Health*. 8:227-233.
- Johnston, M.A., D.E. Porter, G.I. Scott, W.E. Rhodes and L.F. Webster. 2010. Isolation of fecal coliform bacteria from the American alligator (*Alligator mississippiensis*) in South Carolina. *Journal of Applied Microbiology*. 108(3), pp. 965-973.
- Sanger, D., D. Hernandez, S. Libes, G. Volgaris, B. Davis, E. Smith, R. Shuford, D.E. Porter, E. Koepfler and J. Bennett. 2010. A case history of the science and management collaboration in understanding hypoxia events in Long Bay, South Carolina. *Environmental Management*. 46:340-350.
- Finewood, M.H., D.E. Porter and B. Davis. 2010. Theorizing an alternative understanding of 'disconnects' between science and management. *Southeastern Geographer*. 50(1), pp. 130-146.
- Kelsey, R.H., G.I. Scott, D.E. Porter, D. Edwards, T.C. Siewicki. 2010. Improvements to shellfish harvest area closure decision-making using GIS, remote sensing, and predictive models. *Estuaries and Coasts*. Vol. 33, Issue 3, pp. 712-723.
- White, D.L., D. Wolfe, D.E. Porter, D. Sanger, G. Reikirk, G. Didonato, F. Holland and D. Dabney. 2009. Development of a data management framework in support of southeastern tidal creek research. *Environmental Monitoring and Assessment*. Vol. 150, pp. 323-331.
- Gray, B., D. Bushek, W. Drane and D.E. Porter. 2009. Associations between land use and *Perkinsus marinus* infection of eastern oysters in a high salinity, partially urbanized estuary. *Ecotoxicology*. Vol. 18, No. 2, pp. 259-269.
- Fletcher, M., J. Cleary, J. Cothran and D.E. Porter. 2008. Southeast Atlantic Coastal Ocean Observation System (SEACOOS) information management: evolution of a distributed community system. *Marine Technology Society Journal*. Vol. 42, No. 3, pp. 28-34.
- White, D.L., D.E. Porter, A.J. Lewitus and J. Keese. 2008. Spatial gradient analyses of nutrients and chlorophyll a biomass in an urbanized lagoonal estuary: a comparison between wet and dry periods. *Journal of Coastal Research*. Vol. 24, No. 3, pp. 649-659.
- Bushek, D., M. Heidenreich and D.E. Porter. 2007. The effects of several common anthropogenic contaminants on proliferation of the parasitic oyster pathogen *Perkinsus marinus*. *Journal of Marine Environmental Research*. 64:535-540.
- DeVoe, M.R., E. Buckley, J. Dorton, M. Fletcher, L. Leonard, P. Lumpkin, C. Mooers, L. Pietrafesa, D. Porter, H. Seim, S. Sheldon, R. Weisberg and L. Xie. 2007. Regional coastal IOOS development in the South Atlantic Bight. *Marine Technology Society Journal*. 40(4):110-117.
- Kleppel, G., D.E. Porter and M.R. DeVoe. 2006. Urban typology and estuarine biodiversity in rapidly developing coastal watersheds. In *Changing Land Use Patterns in the Coastal Zone: Managing Environmental Quality in Rapidly Developing Region*. G.S. Kleppel, M.R. DeVoe and M.V. Rawson (eds.). Springer Series on Environmental Management. pp. 69-89.
- Morris, J.T., D. Porter, M. Neet, P. A. Noble, L. Schmidt, L. A. Lapine, and J. Jensen. 2005. Integrating LIDAR, multispectral imagery and neural network modeling techniques for marsh classification. *International Journal of Remote Sensing*. 26(23):5221-5234.
- Gaines, K., D.E. Porter, T. Punshon and I. Brisbin. 2005. A spatially explicit model of the wild hog (*Sus scrofa*) for ecological risk assessment activities at the Department of Energy's Savannah River Site. *Human and Ecological Risk Assessment*. 11(3):567-589.
- Gaines, K., C.S. Boring and D.E. Porter. 2005. The development of a spatially explicit model to estimate radiocesium body burdens in raccoons (*Procyon lotor*) for ecological risk assessment. *Science of the Total Environment*. 341(1-3):15-31.
- Gaines, K., D.E. Porter, S. Dyer, G. Wein, J. Pinder and I. Brisbin. 2004. Using wildlife as receptor species: a landscape approach to ecological risk assessment. *Environmental Management*. 34(4):528-545.
- Porter, D.E., T. Small, D. White, M. Fletcher, A. Norman, D. Swain and J. Friedmann. 2004. Data management in support of environmental monitoring and coastal management. *Journal of Coastal Research*. 45: 9-16.

- Kelsey, H., D.E. Porter, G. Scott, M. Neet and D. White. 2004. Using geographic information systems and regression analysis to evaluate land use impacts on fecal coliforms bacterial pollution. *Journal of Experimental Biology and Ecology*. 298: 197- 209.
- White, D., D.E. Porter and A.J. Lewitus. 2004. Spatial and temporal analyses of water quality and phytoplankton biomass in an urbanized versus pristine salt marsh estuary. *Journal of Experimental Biology and Ecology*. 298:255-273.
- Schill, S., J.R. Jensen, G.T. Raber and D.E. Porter. 2004. Temporal modeling of bi-directional reflection distribution function (BRDF) in coastal vegetation. *GISciences and Remote Sensing*. 41(2):116-135.
- Seim, H., B. Bacon, C. Barans, M. Fletcher, K. Gates, R. Jahnke, E. Kearns, R. Lea, M. Luther, C. Mooers, J. Nelson, D. Porter, L. Shay, M. Spranger, J. Thigpen, R. Weisberg and F. Werner. 2004. SEA-COOS - A model for a multi-state, multi institutional regional observation system. *Marine Technology Society Journal*. 37:92-101.
- Vo, M., D.E. Porter, G.T. Chandler, H. Kelsey, S. Walker and B.E. Jones. 2004. Integrating techniques to assess photo-induced toxicity of PAH within an urbanized estuary. *Ecology and Society*. 9(5):3. [online] URL: <http://www.ecologyandsociety.org/vol9/iss5/art3>.
- Tufford, D.L., C.L. Samarghitan, H.N. McKellar, D.E. Porter and J.R. Hussey. 2003. Impact of urbanization on nutrient concentrations in small Southeastern coastal streams. *Journal of American Water Resources Association*. April. pp. 301-312.
- Kelsey, H., G. Scott, D.E. Porter, B. Thompson and L. Webster. 2003. Using multiple antibiotic resistance and land use characteristics to determine sources of fecal pollution. *Journal of Environmental Monitoring and Assessment*. 81:337-348.
- Jensen, J.R., G. Olsen, S.R. Schill, D.E. Porter and J. Morris. 2002. Remote sensing of biomass, leaf-area-index, and chlorophyll a and b content in the ACE Basin National Estuarine Research Reserve Using Sub-meter digital camera imagery. *Geocarto International*. Vol. 17(3):25-34.
- Gardner, R. and D.E. Porter. 2001. Stratigraphy and geologic history of a southeastern salt marsh basin, North Inlet, South Carolina, USA. *Wetlands Ecology and Management*. 9:371-385.
- Sundareshwar, P.V., J.T. Morris, P.J. Pellechia, H.J. Cohen, D.E. Porter and B.C. Jones. 2001. Occurrence and ecological implications of pyrophosphate in estuaries. *Limnology and Oceanography*. 46(6):1570-1577.
- Bushek, D., J. Keese, B. Jones, D. White, M. Neet and D.E. Porter. 2000. Shellfish health management: a system level perspective for *Perkinsus marinus*. *Journal of Shellfish Research*. 19(1):642-644.
- Kawaguchi, T., D.E. Porter, D. Bushek and B. Jones. 1999. Mercury in the American oyster, *Crassostrea virginicus*, in South Carolina, USA and public health concerns. *Marine Pollution Bulletin*. 38(4):324-327.
- Jensen, J.R., D.E. Porter, C. Coombs, B. Jones, D. White and S. Schill. 1998. Extraction of smooth cordgrass (*Spartina alterniflora*) biomass and leaf area index parameters from high resolution imagery. *Geocarto International*. 13(4):25-34.
- White, D.L., D. Bushek, D.E. Porter and D. Edwards. 1998. Geographic Information Systems (GIS) and kriging: analysis of the spatial and temporal distributions of *Perkinsus marinus* in a developed and an undeveloped estuary. *Journal of Shellfish Research*. 17(5):1473-1476.
- Corbett, C., M. Wahl, D.E. Porter, D. Edwards and C. Moise. 1997. Nonpoint source runoff modeling: a comparison of a forested watershed and an urban watershed on the coast of South Carolina. *Journal of Experimental Marine Biology and Ecology*. 213:133-149.
- Little, L.S., D. Edwards and D.E. Porter. 1997. Kriging in estuaries: as the crow flies or as the fish swims. *Journal of Experimental Marine Biology and Ecology*. 213:1-12.
- Porter, D.E., D. Edwards, G. Scott, B. Jones and S. Street. 1997. Assessing the impacts of anthropogenic and physiographic influences on grass shrimp in localized salt marsh estuaries: a multi-disciplinary approach. *Aquatic Botany*. 58:289-306.
- Porter, D.E., W.K. Michener, Siewicki, T., Edwards, D. and C. Corbett. 1997. Utilizing the tools of Geographic Information Processing to assess the impacts of urbanization on a localized coastal estuary: a multi-disciplinary approach. In *Urbanization in Southeastern Estuaries*. F.J. Vernberg, W.B. Vernberg and T. Siewicki (eds.). Belle W. Baruch Library in Marine Science. pp. 355-388.

Graduate Student Mentoring:

- Chaired 13 PhD Dissertation Committees (Committee member on 20 additional)
- Chaired 45 Master Thesis Committees (Committee member on 24 additional)

Graduate Advisors:

- Dr. David J. Cowen, Dr. John Jensen, Dr. Hank McKellar, Dr. H. Wayne Beam