

## **PERSONAL DETAILS**

Name               Heath Kelsey  
Email              hkelsey@umces.edu

## **EDUCATION**

2006               PhD from the University of South Carolina  
2000               MSPH from the University of South Carolina  
1988               BA from St. Mary's College of Maryland

## **EMPLOYMENT**

2009-             Science Integrator. UMCES EcoCheck Program, Oxford, Maryland  
2008-             Adjunct Faculty. University of South Carolina Arnold School of Public Health  
2006-2009       Ecological Modeler. JHT Incorporated. NOAA CCCEHBR  
2002-2006       Laboratory Manager, GIS Manager. University of South Carolina Baruch  
                      Institute  
2000-2002       Research Associate. University of South Carolina Center for Environmental  
                      Policy

## **RESEARCH INTERESTS**

Environmental and Public Health Modeling, Science in Policy, Coastal Zone Management, Pollution Indicators, Bacterial Source Tracking, Land Use and Nonpoint Source Pollution, Geographic Information Systems, Remote Sensing, Hydrology, International Development.

## **STUDENT SUPERVISION**

Michelle Johnston. PhD. University of South Carolina. 2010. Bacterial communities in the American alligator in southeastern US estuaries. 4<sup>th</sup> reader.

Darrel Dodgens. MS. University of South Carolina. 2009. Modeling development thresholds causing fecal bacteria use impairment. 3<sup>rd</sup> reader.

Cameron Kerr. MS. University of South Carolina. 2010. Using lidar data for watershed delineation in coastal areas with low relief. 3<sup>rd</sup> reader.

## **SELECTED PRESENTATIONS/CONFERENCE PROCEEDINGS**

R. H. Kelsey, D. Porter, M. Fletcher. Beach advisory forecasts using integrated data from monitoring programs, remote sensing and observing systems. Coastal and Estuarine Research Foundation. Portland, OR, November 2009.

R. Langan, R. H. Kelsey, B. Henke, J. Carter, and M. Trice. 2007. Tools They Can Use: Focusing Science & Technology on the Needs of Coastal Resource Management. Extended Abstract: Coastal Zone 2007 Conference Proceedings.

R. H. Kelsey, D. E. Porter, G. I. Scott, C. E. Newell, and D. L. White. 2007. Shellfish Harvest Area

Closure Decision Making using Predictive Models. Abstract: Coastal GeoTools 2007 Conference Proceedings.

Jacobs, J.M., R. H. Kelsey, A.K. Leight, J. Lewis, S. McLaughlin, G. Messick, and B.Wood. 2007. Bio-Indicators of Estuarine Health: A Multivariate Approach Linking Source to Resource. 32nd Eastern Fish Health Workshop, Gettysburg, PA, July 18-22, 2007.

Wood, R., J.M. Jacobs, R. H. Kelsey, X. Zhang, and L. Bahner. 2007. An integrated assessment in Chesapeake Bay: linking stressors, water quality, and ecosystem goods and services. Estuarine Research Federation Annual Conference, Providence RI, November 4-8, 2007.

R.H. Kelsey, C. Marsh, D. L. White, P. Richards, D. E. Porter, G. I. Scott, and D. Dodgens. 2005. Working With Developers to Evaluate and Reduce Bacteria and Nutrient Loading in the South Carolina Lowcountry. Abstract: Coastal GeoTools 2005 Conference Proceedings.

R.H. Kelsey, D. E. Porter, G. I. Scott, and C. Newell. 2004. Shellfish Harvest Area Closure Prediction Using Remotely Sensed Precipitation Data and Digital Forecasting Products. Abstract: Society for Environmental Toxicology and Chemistry 2004 World Conference Proceedings.

R.H. Kelsey, D. E. Porter, G. I. Scott. 2001. Using GIS and Regression Modeling Techniques to Assess the Role of Land Use on Fecal Coliform Levels in Estuarine Receiving Waters. Abstract: Estuarine Research Foundation 2001 Biennial Conference Proceedings.

## HONORS AND SERVICE

- Session Co-Chair Ecosystem Based Management of Human Pathogens in Chesapeake Bay. Chesapeake Research Consortium Ecosystem Based Management Conference, March 2009
- Professional Achievement Award, JHT Incorporated - 2007
- Doctoral Student Award, University of South Carolina Arnold School of Public Health 2006
- Walter B. Jones NOAA OCRM Award for Excellence in Graduate Study 2005
- University of South Carolina ENHS Department Outstanding Student Award 2005
- Best Graduate Poster 2005 Southeast Estuarine Research Society Conference, Charleston, SC
- Invited Speaker 2005 Virgin Islands Water Resources Research Institute Conference
- Invited Speaker 2004 Society for Environmental Toxicology and Chemistry World Conference
- Invited Speaker 2003 University of the Virgin Islands Research Seminar Series
- Reviewer *Water Research, Environmental Management, Water Practice, Environmental Science and Technology, International Journal of Environment and Pollution*, National Estuarine Research Reserve Graduate Research Fellowship Program, USGS Water Resources Research Institutes Competitive Grants Program, Stormwater Utility for Beaufort County, SC
- US Peace Corps Volunteer Papua New Guinea. Rural Community Health and Sanitation 1995-1998.

## DISSERTATION

*Fecal Pollution Modeling, Source Identification, And Management In The Southeastern Coastal Zone* Dissertation Committee: Dr. Geoffrey Scott, Dr. Dwayne Porter, Dr. Tom Siewicki, Dr. Don Edwards, Dr. Hank McKellar