Rachel Todd Noble

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EDUCATION

Carnegie Mellon University. B.S. Molecular Biology, 1991.

University of Southern California. Ph. D. Marine Biology, 1998. Dissertation: *Fates of Viruses in the Marine Environment*

PROFESSIONAL EXPERIENCE

Associate Professor

July 1, 2007-present

University of North Carolina at Chapel Hill, Institute of Marine Sciences: Joint appointment between the Institute of Marine Sciences and the Institute for the Environment

Assistant Professor

July 1, 2001-June 30, 2007

University of North Carolina at Chapel Hill, Institute of Marine Sciences: Joint appointment between the Institute of Marine Sciences and the Carolina Environmental Program

FIVE RECENT PUBLICATIONS

Converse, R. R., Piehler, M. F., and **R. T. Noble**. 2011. Contrasts in concentrations and loads of conventional and alternative indicators of fecal contamination in coastal stormwater. Accepted. Journal of Water Research.

Gronewold, A. D., Myers, L., Swall, J. L., and R. T. Noble. 2010. Addressing uncertainty in fecal indicator bacteria inactivation rates. Water Research. In press. 2010.

Parker, J. P., D. A. McIntyre, and **R. T. Noble**. Characterizing fecal contamination in stormwater runoff in coastal North Carolina, USA. Water Research. 44 (14): 4186-4194

Comeau, A. M., and **R. T. Noble**. 2010. Preparation and application of fluorescently labeled virus particles. Limnology and Oceanography Manual of Aquatic Viral Ecology. Chapter 3:19–29

Danovaro, R., Dell'Anno, A., Corinaldesi, C., Magagnini, M., **Noble, R.**, Tamburini, C., and M. Weinbauer. Major viral impact on the function of global deep-sea ecosystems. Nature, August 28, 2008: vol. 454, no. 7208, pp. 1029-1150.

FIVE OTHER RELEVANT PUBLICATIONS

Wetz, J. J., A. D. Blackwood, J. S. Fries, Z. F. Williams, and **R. T. Noble.** 2008. Trends in total *Vibrio* spp. and *Vibrio* vulnificus concentrations in the eutrophic Neuse River Estuary, North Carolina, during storm events. Aquatic Microbial Ecology. 53:141-149.

Coulliette, A. D., Money, E. S., Serre, M. L., **R. T. Noble**. 2009. Space/time analysis of fecal pollution and rainfall in an eastern North carolina estuary. Environmental Science and Technology. 43(10):3728–3735.

Fries, J. S. **Noble, R.T**., Kelly, G.M., and Characklis, G.W. 2008. Sediment-water exchange of Vibrio sp. and fecal indicator bacteria: implications for persistence and transport in the Neuse River Estuary, North Carolina, USA. Journal of Water Research. 42:941-950.

Hsieh, J. L., Fries, J. S., and **R. T. Noble**. 2008. Dynamics and predictive modeling of *Vibrio Spp*. in the Neuse River Estuary, NC. Journal of Environmental Microbiology. 10 (1): 57-64.

McGhee, T., J. A. Morris, Jr., **R.T. Noble**, and P.K. Fowler. Comparative microbial dynamics in *Crassostrea virginica* (Gmelin, 1791) and *Crassostrea ariakensis* (Fujita, 1913). 2008. Journal of Shellfish Research. 27 (3):559-565.

SYNERGISTIC ACTIVITIES

PI, NSF-funded workshop on the Ecology of Marine Infectious Disease, February 2011 Visiting Professor, Polytechnic Univ. of Le Marche, Italy, Dept. Marine Sci.,March- June 2009 Director, Institute for the Environment, UNC Chapel Hill Morehead City Undergraduate Field Site Invited Professor. Theoretical and Practical Course CIMA-IMAR University of Algarve, Portugal Chair, Committee on Standard Methods for Enterococcus (SM 9230) and Rapid Detection Methods (SM 9211)

Co-PI NSF HBCU-RISE:Project to train students from Historically Black Colleges and Universities in Research Infrastructure in Science and Engineering, specific role in project to train undergraduate minorities in molecular-based water quality and microbial ecology methods

COLLABORATORS (NOT AT UNC): Valerie J. Harwood (USF), Jed A. Fuhrman (Graduate advisor, USC), Stephen B. Weisberg (Postdoctoral advisor, SCCWRP), Troy Scott (Source Molecular, Inc.), Pia Moisander (UC Santa Cruz), Nancy White (UNC CSI), John F. Griffith (SCCWRP), James Bowen (UNC Charlotte), James Oliver (UNC Charlotte), Henry Williams (FAMU), Jay Grimes (DIML), Chuck Hagedown (VT), Julie Kinzelman (City of Racine), Rebecca Bushon (USGS), Sam Dorevitch (UIC).

STUDENTS ADVISED IN PAST 4 YEARS: Angela Coulliette (Advisor, Ph. D. July 2008), Sandra Mesquita (Advisor, Ph. D. Candidate), Jennifer Murphy (Committee member, Ph. D. May 2006), Stephanie Friedman (Committee member, Ph. D. July 2008), Jennifer Joyner (Committee member, Ph. D. July 2007), Jeremy Weisz (Committee member, Ph. D. April 2006), Jennifer Parker (Advisor, Honors Thesis), David Love (Committee Member, Ph. D. May 2007), Drew Gronewold (Ph. D. August 2008), Leigh-Anne Krometis (Ph.D. April 2009), Ben Peierls (Committee Member, Ph. D. May 2009), Reagan Converse (Advisor, Ph.D. Fall 2009), Emma Susick (Co-advisor, M. Sc. April 2010), Rebecca Schwartz (Committee member, M. Sc. conferred July 2010), Curt Stumpf (Ph. D. Spring 2011, Advisor), Raul Gonzalez (Advisor, Ph. D. student), Jennifer Shields (Committee Member, Ph. D), Tim Otten (Committee Member, Ph. D.), Dendy Lofton (Committee Member, Ph. D.), Amy Pflaumer (Committee Member, Ph. D.), Teri O'Meara (Committee Member, Ph. D.), Yvonne Yuen (Committee Member, Ph.D.)