The human health effects from harmful algal blooms are an emerging issue. Researchers know about shellfish poisonings, such as neurotoxic shellfish poisoning (NSP) that people may get when they eat shellfish contaminated with marine toxins. Researchers don’t, however, know much about the human health effects from environmental exposure to marine toxins. Dr. Lorraine Backer’s research interests include accessing the human environmental health impact of harmful algal blooms, including blue-green algae and red tide, drinking and recreational waters, and oceans and human health.

For the past seven years, Backer has led the National Center for Environmental Health’s Emerging Environmental Threats Team, which consists of epidemiologists and other public health professionals. This team primarily focuses on water-related issues such as health effects from exposure to drinking water contaminants and disinfection, and assessing the public health impacts of human interactions with the ocean.

Backer, in collaboration with scientists throughout the country, has recently studied occupational and recreational exposure to aerosolized red tide toxins in Florida. These studies were some of the first to compare respiratory symptoms with measured levels of airborne brevetoxin in order to verify human exposure and assess health effects.

Backer received her undergraduate degree in human ecology at Cornell University, went on to complete a master’s degree in genetics and a doctorate in genetic toxicology at the University of Kansas and continued her studies in epidemiology at the University of North Carolina, where she earned a master of public health degree.
The Planet Ocean Seminar Series
The Planet Ocean Seminar Series offers four lectures each academic year, featuring prominent speakers from our own faculty and other leading research institutions, from well-known environmental organizations, and from government agencies.

The Planet Ocean Seminar Series is free and open to the public. The seminar is held in the Hodder Hall of Mentors, the main auditorium at the UNCW Center for Marine Science, 5600 Marvin K. Moss Lane. The seminar will begin promptly at 6:30 pm. A reception with light hors d’oeuvres will follow.

Due to limited seating, reservations are required. Advance registration for Bluefish Society members will end August 22. The general public may begin registration on August 23. To make reservations or for further information, please call the UNCW Center for Marine Science at 910-962-2301.

Bluefish Society membership entitles you to preferred seating at Planet Ocean seminars and much more. Please join our "school" of Bluefish Society members and help us keep the outreach tradition at CMS "afloat." For details, call us at 910-962-2493.

Epidemiology at the Limits of Detection:
Harmful Algal Blooms and Public Health
with Dr. Lorraine C. Backer
Centers for Disease Control and Prevention
Tuesday, September 11, 2007 • 6:30 p.m.