

For over 20 years, Florida was my home and the ocean was a major part of my life. I lived both on the East and West coasts of Florida, and over the years I grew to appreciate the dynamic environment of the ocean. I knew both the calm waters and flat sandy beaches of the West coast, and the active waves and rolling dunes of the East coast. As a child, I enjoyed fishing, surfing, boating, playing sports on the sand, and just relaxing with friends and family. I loved then, and still love, feeling the warmth of the sun and the sand under my feet, hearing the crash of the waves, feeling the strength of the ocean, and smelling the salt-sprayed air.

When I moved to Chapel Hill, North Carolina (3 hours away from the ocean) to attend graduate school at the UNC School of Public Health, I realized how much the ocean was part of my being. Although I lived on the gorgeous tree-filled UNC campus, I longed for the coast and ocean. I found myself driving to the beach often to replenish my soul. Luckily, after my coursework in the Department of Environmental Sciences and Engineering was completed, I was able to join a coastal river project at the UNC Institute of Marine Sciences. Now, once again, I am living by the ocean and feel at home, but this time I'm fortunate enough to combine my love for the ocean with my professional career.

The ocean is a diverse environment, and one needs numerous interdisciplinary theories and concepts to understand its geological characteristics, physical mechanisms, and chemical components. The ocean acts as a buffer for temperature, drives weather patterns, supplies water vapor for exchange with the atmosphere, and is a source of nitrogen, which is vital for primary production. The ocean covers 70% of the earth, houses abundant and diverse species of organisms ranging from very large to microscopic, and is a principal source of food for animals and humans. A disruption of the oceanic system would have hazardous effects on all species, regardless of their proximity to the coast.

I believe that all people have a right to enjoy the beauty of the ocean; however, there must be a balance between humans and the natural coastal/oceanic environment. More than half of Americans live on or near the coast (NOAA). Our hygiene practices, control of wastes, and development activities have had a detrimental impact on the coastal environment, and thus the ocean. Although the best way to protect the ocean would be to limit population and development, this is unrealistic. The coastal population will only increase, and environmental health risks will increase correspondingly. It is vitally important that the United States design a comprehensive strategy to protect the public's health, and to sustain important economic industries like fisheries, while protecting the natural coastal environment. Governmental agencies, academic institutions, and industrial operations must work together to forge an equilibrium between humans and nature.

My research focuses on the biological and microbiological aspects of coastal waters. My doctoral project entails studying human and animal wastes and fecal contamination in coastal waters and identifying the source, in order to protect the coastal river and shellfish beds. I hope that this project will lead to a career that combines an understanding of the coastal/oceanic dynamic and the surrounding populations from the large scale (i.e., ocean-river modeling, land-use and human impacts) to the microscopic (i.e., bacterioplankton, viruses).

My passion for the ocean will drive my efforts to sustain the oceanic habitat and the organisms living in it, while acknowledging the inevitable impact of humans. I want to educate the public for their own protection, as well as that of the ocean. My passion for the ocean has always been a part of my life and is now the foundation of my career.