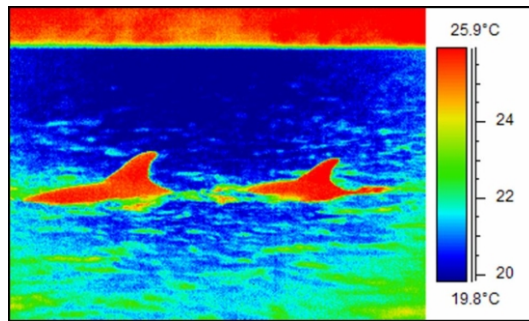


# GK-12 Graduate Fellows Program

Funded by National Science Foundation under Grant No. 0139171



**Dr. D. Ann Pabst:**  
asking interesting questions about interesting critters and more



Professionally, Dr. D. Ann Pabst wears a few different hats: researcher, professor, and administrator. Dr. Pabst studies functional morphology. In other words, how the form and function of animal body designs helps them survive in the wild, and applies the questions about this to marine mammals; in short, how to be a 'wet mammal'. Dr. Pabst is a passionate educator who loves teaching and challenging her students expectations in themselves. Outside of the classroom, Dr. Pabst further demonstrates her devotion to student interests and development in her position as the current graduate student coordinator. In this role she helps keep track of the courses graduate students take, the progress they make so they graduate on time, and that they have a productive and enjoyable experience during their education at UNCW.

The work performed in Dr. Pabst's lab focuses mainly on the design of skeletal muscle and thermoregulatory function (maintenance of body temperature) in cetaceans (whales, dolphins and porpoises). Her lab utilizes stranded marine mammals in their research and employs quantitative morphology techniques, image analysis, and new tools emerging from the field of biomechanics, to pose hypotheses about animal function. They then test these hypotheses, using non-invasive research methods, with wild and captive marine mammals at many sites around the world. The marriage of anatomical and physiological studies has permitted insight into understanding the how marine mammals have evolved to survive an entirely aquatic existence. Additionally, Dr. Pabst's lab works cooperatively with colleagues at North Carolina State University, Duke University Marine Lab, National Marine Fisheries Service, North Carolina Maritime Museum, and Virginia Marine Science Museum, to develop long-term, interdisciplinary studies of our local marine mammal species. The goal of these efforts is to better understand the biology of these species so as to ensure their conservation. Nowhere is there a more compelling need for such a program than in the mid-Atlantic, because our coastal waters are a critical habitat for a number of threatened or endangered cetacean species. Techniques we use include shore-based and aerial survey methods, as well as investigation of strandings, which are beached live or dead marine mammals.

The interesting research described above is the result of many years of hard, but fun and rewarding work. Dr. Pabst's interest in the environment and conservation began at a young age, and was cultivated by Jacques Cousteau's documentaries and Mutual of Omaha's 'Wild Kingdom' (can you believe that once wildlife shows were not as accessible as simply tuning to the Discovery channel?). Upon hearing about the netting of dolphins by tuna fishermen as a teenager, she became an activist against purchasing tuna unless it was marked 'dolphin safe'. Always the serious student, Dr. Pabst's devotion to her school work has obviously paid off, as seen by not only obtaining degrees from notable schools like the University of Maryland (for her B.S.) and Duke (for her PhD), but also in her successful career. She has not only become an admired scientist, but also a valued teacher and a respected graduate advisor.

