

JENNIFER DRYER

Explorer. Adventurer. Pioneer.

These words are more often descriptions of Hollywood heroes than job titles, but the people I most admire have made an avocation out of their dreams, passion and courage. Dr. Sylvia Earle, Jacques Cousteau and Dr. Robert Ballard are my role models. I hope someday to follow in their footsteps, probing the depths of the world's oceans while serving as an ambassador and advocate for this magnificent component of our planet.

The Dolores E. Fisher Award will help me take a significant step closer to this goal by allowing me to complete essential laboratory work towards my Masters in Geological Oceanography. I have been fascinated with the sea for most of my life. This fascination has shaped the direction of my life, from learning to SCUBA dive as a teenager, to earning my Bachelor's degree in Marine Science, to my current position as a Research Technician at the Monterey Bay Aquarium. Throughout, I've maintained the same inquisitiveness and appetite for exploration that characterized my childhood. I believe that these attributes are essential for a scientist and have made my life a constant learning process. During the summer of tenth grade, I enrolled in a marine biology summer camp in Monterey, California. By the time I came home in August, I was pleading with my parents to take a SCUBA diving class. I finally became a certified diver when I was 15 years old. Since then I knew marine biology had to be my life.

I have made and taken every marine science opportunity available to me to educate myself in both the scientific and physical skills required to work in my chosen field. I received my Bachelor's degree in Marine Science, participated in the MATE program at Monterey Peninsula College, specifically, submersible technology for which I received an "A". The submersible technology class was among the many steps that lead me to a career in Marine Science. I helped design and build the control box that would drive the submersible "Sea Monkey". I have also held an internship position for two cruises on the Oceanus in Woods Hole, Massachusetts, assisted in pore water analysis at the Baruch Marine Labs at the University of South Carolina and have been certified in many specialty SCUBA classes culminating in an Advanced Trimix certification.

During the time I was a dive store manager, I was working 50-hour weeks in addition to taking classes to expand my knowledge of the deep sea. I felt that somehow and someday I wanted to get closer to this life that looms just out of reach. My tireless efforts are coming to fruition after several years.

Currently, I am a Masters student at Moss Landing Marine Labs focusing my research on microbial communities in benthic sediments. I am attempting to determine the extent, occurrence and geochemical pathways of microbial activities in the subseafloor. I am looking at the effects microbial respiration has on carbonate diagenesis and dissolution and correlate these into the global carbon cycle. I also work full time at the Monterey Bay Aquarium in the Applied Research Department while pursuing several volunteer opportunities. In addition to my academic and professional pursuits, I also train for triathlons, teach surfing and water safety and have volunteered my time mentoring science students, young women in science programs, participating as a swim coach for Special Olympics and socializing animals at the local animal shelter.

I am tantalizingly close to completing my Masters degree. What I am lacking is a short leave from work that will provide me with several solid hours of uninterrupted time to complete the work for my thesis.

Today it is becoming clear that the ocean is much more than a fantastic backdrop for popular fiction. Our oceans are vital for not only the integrity of our planet's ecosystems, but also for our own survival. The oceans provide the basis of all terrestrial food chains as well as regulating our weather systems and atmospheric composition. We are just beginning to understand and learn how the entire ocean is involved, not just the surface waters. It is essential that accurate data on the deep oceans be collected and interpreted so that the health of our planet's life-support can be maintained. My graduate degree is an important step towards a leadership role in marine science, and there has never been a greater need for leaders.