

## ExplorOcean

### Oceans of Opportunity: Mainly Microbe

By Dr. Wendy Marshall and Rachel Davis



The ExplorOcean team and the students of KidWorks Santa Ana sincerely thank the Center for Microbial Oceanography: Research and Education (C-MORE). The GEMS grant through C-MORE has helped ExplorOcean increase microbial education through the local Newport Beach and greater Orange County community. With this generous grant we were able to bring 90 7<sup>th</sup>-12<sup>th</sup>-grade students from the KidWorks afterschool program in Santa Ana to ExplorOcean once a week throughout the summer to participate in engaging, challenging, and rigorous, real-world learning experiences. These students are traditionally underserved and were learning about ocean microbiology for the first time. This group of students was taught the basics of plankton, how to build their own plankton net, and how to analyze their collected plankton under a microscope; they also participated in an eco-cruise around the harbor to catch their own plankton samples and competed in plankton races while learning about neutral buoyancy.

Beyond the intended 90 students from KidWorks we were able to expand this curriculum to many other areas of our work here at ExplorOcean. First, we often used these activities with our single day field trips. For example we recently educated 180 4<sup>th</sup> and 5<sup>th</sup> grade students from Miles Elementary School in Huntington Park while they were here for a fieldtrip. Also, we host science Saturdays free to the public every weekend where families and children of all ages were introduced to concepts related to plankton and microbiology. Finally, we also introduced 10 of our educators on the microbial curriculum so they could teach it to the public during our Ocean Literacy Center public hours.

Since plankton and other microorganisms are the backbone of our ocean system the education of our youth of these species is vitally important. The GEMS grant has helped us create new programs that we will continue to use into the future for educating the next generation of ocean scientists, and also for educating the public as a whole about these magnificent creatures that are so vital to the health and prosperity of our world ocean. The images are of our program in action, thank you once again for the opportunity and the tools to better our regions awareness of microbial studies.

