



“Ask a Scientist at Sea!”

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Marine algal meadows and deep water coral reefs in Hawaii set the stage for learning about photosynthesis, ecology, and inquiry-based experiments with algae in classroom aquaria. The “Ask a Scientist at Sea” program connects highschool students and teachers in Maui with scientists at sea exploring deep coral reef ecosystems with submersibles and remotely operated vehicles (ROVs). With questions as varied as “What species of corals do you find?” to “How good is the food?”, students are able to candidly interact with scientists doing cutting-edge research, and are often exposed to discoveries of new species or processes while they are being encountered in the field. We also work with the boat crew, technicians, and submersible/ROV operations crew in answering the students’ questions. This provides a platform for discussing the diversity of careers available in marine science and technology. Integrated with the experience are lesson plans focusing on the main topics of my dissertation research - coral and algal ecology and physiology.

As a follow-up to the program, we create a poster for each highschool with the students’ questions and the ensuing answers. These posters include pictures taken during the course of the cruise that illustrate a particular question, or highlight an exciting discovery. I’ve found the pictures to be especially helpful with the students in reviewing concepts covered during the pre-cruise lessons, such as “How do you see this coral reef providing habitat” or “Can you tell me what adaptations this alga has made for living in a low light environment?” The students enjoy seeing their name next to their question, and often seek out the picture on the poster of the scientist that answered their question. All of a sudden, the science becomes real!

