

What is the Hawai'i Institute of Marine Biology (HIMB)?

As a research unit within the University of Hawai'i's School of Ocean and Earth Science and Technology, HIMB is home to world-class facilities for researchers and students in wide-ranging disciplines related to tropical marine science.

The island itself provides a unique living laboratory surrounded by 64 acres of coral reef designated by the State of Hawai'i as a Hawai'i Marine Laboratory Refuge.



Founded in 1947, HIMB is situated on Moku o Lo'e, more widely known as Coconut Island, in Kāne'ohe Bay, O'ahu, Hawai'i.

CONTACT US!

To schedule or inquire, email

HIMBED@hawaii.edu

and provide us with the following information:

- ✓ Name of school
- ✓ Group contact's name, address, phone, and email
- ✓ Title I status
- ✓ Number of students
- ✓ Number of chaperones (10:1 ratio recommended)
- ✓ Preferred dates
- ✓ 1st and 2nd choice of lab (if 1st is seasonal)



VISIT US ON THE WEB:
www2.hawaii.edu/~himbed

HAWAI'I INSTITUTE of MARINE BIOLOGY



HIGH SCHOOL
SCIENCE INQUIRY LABS



THE IDEAL LEARNING SETTING...



The HIMB Marine Science Research Learning Center is dedicated to providing science and research educational opportunities for high school students.

HANDS-ON LEARNING...



We offer four inquiry-based labs, in which students learn about the scientific method, hypothesis testing, and designing experiments in a marine biology context:

- ✓ OCEAN ACIDIFICATION
- ✓ SQUID NEUROETHOLOGY
- ✓ MARINE BIOACOUSTICS
- ✓ URCHIN FERTILIZATION

TESTING HYPOTHESES...

Ocean Acidification: using coral skeletons and manipulating pH with CO₂ gas to measure the effects on water hardness and Ca²⁺ dissolution

Marine Neuroethology: using marine invertebrates to produce ethograms and examine the mechanics of animal behavior

Marine Bioacoustics: using hydrophones to listen and analyze the sounds of marine invertebrate interactions

Sea Urchin Fertilization: using collector urchins to test the effects of water quality on fertilization and embryonic development (seasonal)

Coral Growth and Survival: using coral settlement tiles to examine and record how different environments influence the growth of coral colonies

Coral Reef Biodiversity: using Autonomous Reef Monitoring Structures (ARMS) to record and calculate the biodiversity of the reef cryptofauna community in different environment



A UNIQUE LEARNING EXPERIENCE...



Each lab is comprised of three parts:

FIRST, teachers are provided with science background reading and a practice exercise that they complete with their class.

NEXT, A FIELD TRIP TO HIMB, where students will have the chance to conduct their own experiments in our Marine Science Research Learning center under the guidance of marine biologists.

LAST, SCIENTIFIC COMMUNICATION in the form of a discussion/lab presentation should be completed at the home classroom or after the field trip.

OTHER LOGISTICS:

Fieldtrips start at 9AM and requires approximately 3½ to 4 hours to complete. For schools in the State of Hawai'i, the fee is \$125 for the first 20 participants, \$5 for each additional participant. Fees for out of state school differ. Max is 24-36 participants (not including chaperones). Lab fees are in addition to transportation cost, which is \$125 for a round trip boat ride from He'eia Kea Small Boat Harbor (approximately 20 minutes each way). Prices subject to change.