DNA Barcoding
A powerful new tool to engage high school students in deep explorations of science and nature

Date: Saturday December 4, 2010 (8:45 a.m. – 10:30 a.m.)
Contact: Linda Santschi, Ph.D., 805-289-9275, santschi@coastalmarinebiolabs.org
Location: Coastal Marine Biolabs, 1559 Spinnaker Dr. Suite 101, Ventura, CA 93001

Would you like to guide your students through an innovative, hi-tech, real-world scientific project of global significance within your own science classrooms? If so, Coastal Marine Biolabs is currently recruiting high school science teachers to participate in a comprehensive professional development workshop series that will equip them with the scientific training, instructional materials, and physical resources needed to engage their students in the International Barcode of Life Project (iBOL) – the largest biodiversity genomics project ever undertaken.

Of the estimated 10 million species on the planet, fewer than two million have been named. In fact, our current knowledge of biological diversity is so incomplete that we are at risk of losing species before they can even be discovered. To better catalog biodiversity, scientists within an emerging global community are now creating a genetic encyclopedia of Earth’s plants and animals using short DNA sequences (DNA barcodes) that uniquely identify species groups in much the same way that supermarket scanners use black and white Universal Product Codes to identify grocery products. In addition to addressing basic issues in taxonomy research and accelerating the discovery of new species, the genetic information generated through this international scientific initiative holds significant promise for addressing a variety of important applied environmental problems, including protecting endangered species, controlling agricultural pests, sustaining natural resources, stopping disease vectors, managing our coastal marine resources, and monitoring ecosystem change through time.

Coastal Marine Biolabs (CMB) is a pioneering leader in ongoing efforts to recruit student participation in this landmark international project. Over the last two years, more than 200 students representing 17 California cities have joined a scientific campaign to create a DNA barcode library for the fish and invertebrate species that inhabit the waters of the Channel Islands National Park and Marine Sanctuary. We enthusiastically invite teachers to explore the unique educational merits of DNA barcoding as a STEM teaching and learning tool, and to join CMB scientists in their efforts to broaden the participation of high school students in iBOL. The seminar is free and open to all high school science teachers.

RSVP by November 20, 2010