Symposium 3: Friday, July 17, 2009

Coffee: 8:30 am; Programs begins at 9 am • Asia Room, Imin Conference Center, East-West Center, UH Mānoa

Microbial oceanography is a relatively new discipline that integrates the principles of marine microbiology, microbial ecology and oceanography to study the role of microorganisms in the biogeochemical dynamics of natural marine ecosystems. Over the past ~3.5 billion years, microorganisms have shaped and defined Earth’s biosphere and have created conditions that allowed the evolution of macroorganisms and complex biological communities, including human societies. A general goal of microbial oceanography is to observe and understand microbial life in the sea well enough to make accurate ecological predictions, for example, of the impact of climate variability on microbial processes in the global ocean. Recent advances in technology have highlighted the vast and previously unknown genetic information that is contained in extant marine microorganisms, from new protein families to novel metabolic processes. Now there is a unique opportunity, using recent advances in molecular ecology, metagenomics, remote sensing of microorganisms and ecological modeling, to achieve a comprehensive understanding of marine microorganisms and their susceptibility to environmental variability and climate change. Contemporary microbial oceanography is truly a sea of opportunity and excitement. This symposium will present some of the grand challenges that confront us today, and present a research prospectus for the future.

Invited Speakers

Ken Buessler
Woods Hole Oceanographic Institute

Mick Follows
Massachusetts Institute of Technology

Tony Michaels
Proteus Environmental Technologies and University of Southern Californià

Chris Bowler
Ecole Normale Supérieure (France) and Stazione Zoologica (Italy)

John Dore
Montana State University

Dave Karl
University of Hawai‘i: Closing remarks

Visit cmore.soest.hawaii.edu/agouron/2009/syllabus.htm for details

Coffee service begins at 8:30 am; presentations begin at 9. Lunch will be provided with a reception to follow. Please RSVP to Sharon Sakamoto (sharons@soest.hawaii.edu) by Wednesday, July 15.