Controls and Structure of the Microbial Loop

SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY

AGOURON INSTITUTE

A symposium organized by the Microbial Oceanography summer course sponsored by the Agouron Foundation

Saturday, July 1, 2006

Asia Room, East-West Center, University of Hawaii

http://hahana.soest.hawaii.edu/agouroninstitutecourse

Symposium Speakers:
Peter J. leB Williams (University of Bangor, Wales)
David L. Kirchman (University of Delaware)
Daniel J. Repeta (Woods Hole Oceanographic Institute)
Grieg Steward (University of Hawaii)

The oceans constitute the largest ecosystems on the planet, comprising more than 70% of the surface area and nearly 99% of the livable space on Earth. Life in the oceans is dominated by microbes; these small, singled-celled organisms constitute the base of the marine food web and catalyze the transformation of energy and matter in the sea. The microbial loop describes the dynamics of microbial food webs, with bacteria consuming non-living organic matter and converting this energy and matter into living biomass. Consumption of bacteria by predation recycles organic matter back into the marine food web. The speakers of this symposium will explore the processes that control the structure and functioning of microbial food webs and address some of these fundamental questions: What aspects of microbial activity do we need to measure to constrain energy and material flow into and out of the microbial loop? Are we able to measure bacterioplankton dynamics (biomass, growth, production, respiration) well enough to understand the contribution of the microbial loop to marine systems? What factors control the flow of material and energy into and out of the microbial loop? At what scales (space and time) do we need to measure processes controlling the growth and metabolism of microorganisms? How does our knowledge of microbial community structure and diversity influence our understanding of the function of the microbial loop?

Program:

9:00 am	Welcome and Introductory Remarks followed by: Peter J. leB Williams (University of Bangor, Wales) Daniel J. Repeta (Woods Hole Oceanographic Institute) Grieg Steward (University of Hawaii)
12:00 pm	Lunch David L. Kirchman (University of Delaware)
2:00 pm	Round table discussion
4:00 pm	Reception
6:00 pm	Symposium Closes

Seating is limited; please contact Dr. Matthew Church (mjchurch@hawaii.edu) for reservations & information.