C•MORE-Agouron Summer Symposia

A symposium series on microbial oceanography presented at the University of Hawai'i

linking genomes to biomes

Metabolic Balance of the Open Sea

Moderated by Matthew Church

Symposium 2: Saturday, July 7, 2007

8:30 am to 5 pm • East-West Center Asia Room

Visit cmore.soest.hawaii.edu/agouron2007/agouron_syllabus.htm for details

Globally, ocean ecosystems are responsible for nearly half of the total organic matter and oxygen produced in the biosphere. Photosynthesis by marine microorganisms constitutes the major pathway of organic matter production in the sea. Unlike terrestrial ecosystems, where organic matter may be buried and resist degradation for long periods of time, the vast majority of organic matter produced in the ocean is rapidly consumed by planktonic respiration. The balance between photosynthesis and respiration in marine ecosystems forms a key component to our understanding of the cycling of elements (including carbon and oxygen) in the biosphere. However, a number of studies now suggest that in large areas of the world's oceans, planktonic respiration exceeds net photosynthesis; a condition described as net heterotrophy. Such findings have resulted in considerable debate over the role of ocean ecosystems as net consumers or producers of carbon.

Speakers for this Symposium represent some of the world's leading experts on planktonic respiration and production. Please join us for what promises to be an engaging and lively discussion of this important topic.

Invited Speakers:

Mike Sieracki • *Bigelow Laboratory for Ocean Sciences*

Zackary Johnson • *University of Hawai'i*

Peter J. leB Williams • *University of Wales, Bangor*

Paul del Giorgio • *University of Québec at Montréal*

David M. Karl • *University of Hawai'i*

Lunch will be provided, reception to follow. Space is limited;
RSVP to **Matthew Church** (mjchurch@hawaii.edu) by Tuesday, July 3.

c•more
center for microbial oceanography: research and education

AGOURON INSTITUTE

SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY
UNIVERSITY OF HAWAI'I AT MĀNOA

NSF