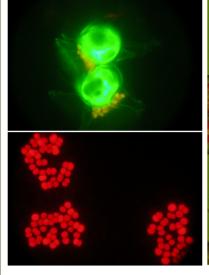
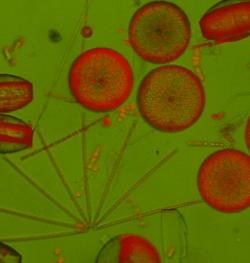
# MICROSCOPY WORKSHOP FOR PHYTOPLANKTON AND BACTERIOPLANKTON IDENTIFICATION

### HAWAI'I INSTITUTE OF MARINE BIOLOGY, COCONUT ISLAND, HAWAI'I





How to apply. Send the following materials to

- phytoworkshop@gmail.com
- 1. two letters of recommendation
- 2. Short Curriculum Vitae
- 3. A brief (not more than one page) summary/statement of how the course will advance your education and research.
- 4. Statement of financial needs for participating in workshop.
- 5. Optional Participant Information form (address below)

These should be provided before July 1, 2008.

## September 21-25, 2008



Although the integration of modern molecular assays into marine microbial ecology has provided an enormous amount of information about the diversity, distribution, and abundance of microbial populations, most often the information cannot be linked back to a particular cell or population. Light and epi-fluorescent microscopy are excellent platforms for enumerating and identifying planktonic (in particular, phytoplanktonic) populations. The individuals most and best trained in cell identification by microscopy and basic cell counting techniques are typically in the more senior positions and are reaching the point of retirement. It seems only necessary to provide a platform for the dissemination of the knowledge and invaluable skill sets of our most experienced microscopists to the next generation of scientists. Here, the National Science Foundation funded Center for Microbial Oceanography: Research and Education is proud to offer a 5-day workshop on phytoplankton and bacterioplankton identification led by experienced senior and junior marine microbial ecologists at the Hawai'i Institute of Marine Biology (HIMB), Coconut Island, Hawai'i.

#### **Course description**

Our microscopy workshop will be a practical guide for identifying the major phytoplanktonic groups of Kaneohe Bay, HI using light and blue/green epifluorescence microscopy. In addition, proper procedures (statistical considerations) for phytoplankton and bacterioplankton cell counting and various staining techniques (e.g. DAPI, FISH) will be reviewed and processed by participants. Participants will also collect and process their own field samples (whole water and net tows) using a small boat operation. Students will receive a "cookbook" of microscopy protocols, procedures, and cultivation strategies.

#### For more information

Visit the course web page at cmore.soest.hawaii.edu/education/courses/himb\_microscopy\_sep08.htm Download the following documents:

- Course Details PDF at cmore.soest.hawaii.edu/downloads/HIMB\_microscopy\_Sept08\_details.pdf
- Participant Information Form at cmore.soest.hawaii.edu/downloads/HIMB microscopy optional form.doc

Edward J. Carpenter, Professor (Romberg Tiburon Center, San Francisco State University, Tiburon, California)

Rachel A. Foster, Postdoctoral Scholar (University of California Santa Cruz, California);

Michael S. Rappé, Assistant Research Professor (Hawai'i Institute of Marine Biology, SOEST, University of Hawai'i)

John B. Waterbury, Scientist Emeritus (Woods Hole Oceanographic Institution, Woods Hole, Massachusetts)

Applications from students from under-represented groups are strongly encouraged.



.....