Ocean Carbon
& Biogeochemistry

# **OCB:** Ocean Carbon and Biogeochemistry Program

#### **OCB Mission:**

to establish the evolving role of the ocean in the global carbon cycle, in the face of environmental change, through studies of marine biogeochemical cycles and associated ecosystems









Promote, plan, and coordinate collaborative, multidisciplinary research opportunities within the U.S. research community and with international partners





#### **OCB Overarching Science Themes**

Improve understanding and prediction of:

- 1) oceanic uptake and release of atmospheric CO<sub>2</sub> and other greenhouse gases;
- 2) climate-sensitivities of biogeochemical cycles and interactions with ecosystem structure



### **OCB Currently Identified Priorities**

- Ocean acidification
- Terrestrial/coastal carbon fluxes and exchanges
- Climate sensitivities of and change in ecosystem structure and associated impacts on biogeochemical cycles
- Mesopelagic ecological and biogeochemical interactions
- Benthic-pelagic feedbacks on biogeochemical cycles
- Ocean carbon uptake and storage



### **OCB** Implementation

- Annual Summer OCB Science Workshop
- Targeted scoping meetings on implementing critical science meetings
  - Ocean Acidification (Oct. 9-11, 2007; La Jolla CA)
  - TBD (Spring, 2008)
- Core NSF funds as well as NASA and NOAA announcements of opportunity













Federal Agency Involvement (to date)NSFDon Rice, Fred Lipschultz, Phil TaylorNASAPaula BontempiNOAAKathy Tedesco, Mete UzCCSP Program OfficeRoger Hanson













#### The Biological and Chemical Oceanography Data Management Office (BCO-DMO)

The BCO-DMO was created to serve PIs funded by the NSF Biological and Chemical Oceanography Sections. It is a location from which marine biogeochemical and ecological data and information developed in the course of scientific research can easily be disseminated, protected, and stored on short and intermediate time-frames.

The Office is located at the Woods Hole Oceanographic Institution

The Web-site is: www.bco-dmo.org

The Office is managed by: Robert Groman (rgroman@whoi.edu) Cyndy Chandler (cchandler@whoi.edu) David Glover (dglover@whoi.edu) Peter Wiebe (pwiebe@whoi.edu)





science data and supporting documentation.



### **Moving OCB Forward**

#### OCB is already underway!

- •Continued funding for  $CO_2$  survey, HOT, BATS, etc.
- •OCB Project Office and BCO-Data Management Office are up and running
- •Scoping workshops (Fall 2007 and Spring 2008)
- •PIs encouraged to submit OCB-related proposals to NSF-core and special programs, NASA & NOAA opportunities
  - •NSF Chemical Oceanography committing \$3M/year beginning in FY08 (Feb. proposal submission target)
  - •NASA pledge of additional FY2008 funds for OCB
  - •Ocean acidification encouraged NSF-OCE theme

# Coordinate NACP and OCCC to give a continuum from dry land to the open ocean



OCCC has primary responsibility for shelf-open ocean exchanges