

**Ocean Carbon and Biogeochemistry (OCB) Summer Workshop**  
**Woods Hole Oceanographic Institution, Clark 507**  
**July 22-25, 2013**

**POSTER LIST**

On the morning of your designated poster session, please hang posters on the boards set up in the Clark 2 foyer (main entrance to the building) using the hanging materials provided. Posters must be taken down at the end of each day.

**Session 1. Narrowing in on key biological carbon fluxes:  
Estimates, approaches, and uncertainties (Monday, July 22  
poster session)**

- H. Alexander** et al., Eukaryotic metatranscriptomics illuminates physiological response of phytoplankton to nutrient pulses at Station ALOHA
- B. Bachman** et al., Biomass and primary productivity of picophytoplankton communities in warm-core and cold-core eddies in the Sargasso Sea
- A. Bourbonnais** et al., Mesoscale eddies as fixed N-loss hotspots in the oxygen minimum zone off Peru
- P. Bresnahan**, Best practices for autonomous measurements of seawater pH with the Honeywell Durafet
- H. Chen** et al., Observed dominance of submesoscale fronts to subtropical chlorophyll
- M. Claret** et al., Plankton resonant response to light and nutrients in mesoscale vortices
- R. Eveleth** et al., Physical and biological controls on gas saturation variability in the Central Arctic
- C. Follett** et al., Hidden cycle of dissolved organic carbon in the deep ocean
- M. Humphreys** et al., Increases in dissolved inorganic carbon at all depths measured in the eastern North Atlantic from 1989 to 2012: the Extended Ellett Line
- V. Kitidis** et al. (**Presenter: T. Smyth**), The Western Channel Observatory: A platform for carbon chemistry
- D. Y. Lee** et al., Microbial autotrophic and heterotrophic carbon cycles within oxyclines during seasonal oxygen transition in the Chesapeake Bay
- S. Milutinovic** et al., Partitioning phytoplankton carbon biomass into three size groups using satellite ocean colour observations
- F. Muller-Karger** et al., The CARIACO ocean time-series program: Long-term observations of key carbon fluxes in a tropical continental margin
- S. Noakes**, Carbon dioxide and water quality time-series observations at Gray's Reef National Marine Sanctuary
- C. Pilskaln** et al., Carbon budget for the Gulf of Maine from time-series data sets
- T. Richardson** et al., Characterization of phytoplankton size and taxonomic composition by shipboard streak imaging multivariate optical computing (SSIMOC)
- D. Siegel** & K. Buesseler, Export Processes in the Ocean from Remote Sensing (EXPORTS) - Planning a NASA field campaign

- M. Stukel & M. Landry**, Carbon and  $^{234}\text{Th}$  fluxes associated with a deep-water front in the California Current Ecosystem Long-Term Ecological Research site
- Y. Takeshita et al.**, Calibrating the Deep Sea Durafet
- C.-M. Tseng et al.**, Synthesis of observed air-sea  $\text{CO}_2$  exchange fluxes in the river-dominated East China Sea and improved estimates of annual and seasonal net mean fluxes
- A. White et al.**, Multi-scalar particle dynamics at Station ALOHA with an aside regarding the influence of colored dissolved organic material on chlorophyll retrievals
- P. Xiu & F. Chai**, Variability of sea surface  $\text{pCO}_2$  and  $\text{CO}_2$  flux in the North Pacific
- Z. Xue et al.**, Assess and project impacts of human activity and climate change on carbon and nutrient dynamics in the Gulf of Mexico

## **Session 2. Evolutionary responses of plankton to climate change (Wednesday, July 24 poster session)**

- D. Hutchins et al.**, A new Gordon Research Conference on Ocean Global Change Biology
- A. Marki & M. Pahlow**, Modelling responses in mesocosm food web succession to changes in nutrient stoichiometry
- A. Omta et al.**, On the potential role of marine calcifiers in glacial-interglacial dynamics
- H. Sosik & R. Olson**, Seasonality, interannual variability, and multi-year trends in phytoplankton of the New England Shelf

## **Session 3. Trace element-biota interactions (Wednesday, July 24 poster session)**

- R. Boiteau et al.**, Fe ligands produced by *Prochlorococcus*
- O. Matoo et al.**, Interactive effects of  $\text{CO}_2$  and trace metals on the proteasomal activity, metabolism and stress response of marine bivalves *Crassostrea virginica* and *Mercenaria mercenaria*
- M. Nielsdóttir et al.**, The uptake of iron during spring and summer in the Irminger and Iceland Basin using carrier free  $^{55}\text{Fe}$
- H. Traggis**, Iron limitation effects a massive shift in iron- and flavin-based antioxidant enzyme systems and their substrates in the chlorophyte alga *Dunaliella tertiolecta*

## **Session 4. Southern Ocean processes (Wednesday, July 24 poster session)**

- H. Brix & D. Menemenlis**, Air-sea gas exchange revisited: Improving Southern Ocean carbon fluxes in a global biogeochemical model

- M. Jiang** et al., Fe transport from the Antarctic shelf and the impacts on phytoplankton blooms in the southern Scotia Sea
- D. Kaufman** et al., Biogeochemical variability in the Ross Sea: Results from a glider deployment
- M. Kavanaugh** et al., Spatiotemporal variability of satellite-derived chl-*a* along the West Antarctic Peninsula: Role of submarine canyons
- Z. Lee**, Optical properties and primary production in the Southern Ocean (SO GasEx)
- S. Leung** et al. (**presenter: I. Marinov**), Response of phytoplankton to 21<sup>st</sup> century climate change in the Southern Ocean: an Earth System Model intercomparison
- O. Ogunro** et al., Marine aerosol and its possible contribution to the changing westerly winds
- M. Pedulli** et al., Use of a simplified analytical model to estimate potential new production (PNP) for the waters off the Western Antarctic Peninsula (WAP) region
- E. Salmon** et al., NPZD-iron lower level ecosystem model of the Ross Sea

### **Session 5. General (Wednesday, July 24 poster session)**

- F. DeGroff**, Carbon management in the post-Cap-and-Trade carbon economy: An economic model for limiting climate change by managing anthropogenic carbon flux
- F. Garcia Tigreros** & S. Yvon-Lewis, The combined effect of ocean acidification and eutrophication on water pH and aragonite saturation in the northern Gulf of Mexico
- E. Jones** & J. Wiggert, Biophysical interaction associated with the cross-shelf transport of the Mississippi River Plume
- A. Taalba** et al., Photooxidation of dimethylsulfide (DMS) in the Canadian Arctic