

Ocean Carbon and Biogeochemistry (OCB) Summer Workshop
Woods Hole Oceanographic Institution, Clark 507
July 21-24, 2014

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.

The Coupled North Atlantic-Arctic System: Processes and Dynamics (Monday, 7/21)

- B. E. Bachman** et al., Anticyclones enhance *Prochlorococcus* and particle export in the Sargasso Sea
- J. J. Bisagni**, Inter-annual variability of the shelf break front position between 75° and 50° W
- E. Montes** et al., Climate-driven changes in oxygen inventories of North Atlantic Subtropical Underwater captured by oceanographic time-series stations

Ocean Time-Series and the Biological Pump (Monday, 7/21)

- C. R. Benitez-Nelson** et al. (presenter: **E. Montes**), Elemental composition (C, N and P) of sinking and suspended particulate matter in the Cariaco Basin, Venezuela
- P. M. Berube**, S. W. Chisholm, *Prochlorococcus* through the lens of time-series studies: Temporal dynamics of ecotypes and nitrate utilizing genotypes in the Pacific and Atlantic Oceans
- J. A. Bryant** et al., Wind and solar radiation drive microbial community diversity in the North Pacific Subtropical Gyre
- M. J. Church** et al., The Hawaii Ocean Time-Series (HOT) Program: Highlights from more than a quarter century of sustained ocean observations in the subtropical North Pacific
- M. H. Conte**, J. C. Weber, The Oceanic Flux Program (OFP) time-series of particle flux in the deep Sargasso Sea: Linkages with upper ocean physics and biology
- F. De Martini** et al. (presenter: **S. Neuer**), Predator-prey relationships and their link to carbon export at the Bermuda Atlantic Time-Series Station
- S. C. Doney** et al., Numerical modeling and remote sensing studies of regional marine biogeophysical variability around the Hawaii Ocean Time-Series (HOT) station ALOHA
- T. Eglinton** et al. (presenter: **S. Manganini**), Time-series investigations of settling particle flux and composition in the deep Canada Basin, Arctic Ocean
- M. L. Estapa** et al., Interpretation of particulate carbon flux data from bio-optical profiling floats at BATS

- S. Flickinger, T. Rynearson*** (*presenter), Characterizing variability: The benefits of long-term monitoring in Narragansett Bay 1959-2014
- L. Fujieki** et al. (presenter: **M. Church**), HOT-DOGS: A user friendly graphical interface to access and retrieve Hawaii Ocean Time-series program data
- K. M. Fontanez**, E. F. DeLong, Microbial community structure and function on sinking particles at station ALOHA
- W. Z. Haskell II** et al., Coupling O₂/Ar and triple oxygen isotope distribution with estimates of vertical transport to constrain biological production in the coastal ocean
- T. D. Hennon** et al., Observations of net community production by Argo floats
- D. M. Karl** et al., Variability in particle export at Station ALOHA
- M. W. Lomas** et al., The Bermuda Atlantic Time-Series Study: Sustained physical, biogeochemical, ecosystem, and ocean change observations and linkages in the subtropical North Atlantic
- L. Lorenzoni** et al., An integrated observation system of biogeochemical time-series
- L. Lorenzoni** et al., The CARIACO Ocean Time-Series: 19 years of international collaboration in ocean biogeochemistry and ecological research
- A. M. P. McDonnell** et al., Sinking velocities and microbial respiration rates alter the transfer efficiencies of particulate carbon fluxes through the mesopelagic zone
- P. Quay** et al., Rates of primary production and organic carbon export at HOT
- J. M. Smith** et al., Nitrification as a tracer of particle flux and remineralization in the twilight zone of the Northeast Pacific Ocean
- H. M. Sosik** et al., Plankton time series at the Martha's Vineyard Coastal Observatory
- G. T. Taylor** et al., Atypical behavior of the biological carbon pump in an oxygen-depleted water column: The Cariaco Basin case study
- B. Valencia-Ramirez** et al. (presenter: **M. Décima**), Temporal variations in mesozooplankton contributions to export flux at Stn. ALOHA
- E. Wear** et al., Effects of photobleaching on dissolved organic matter bioavailability to bacterioplankton in an upwelling-driven coastal system
- A. E. White** et al., In situ bio-optics and remote sensing of Station ALOHA

The Biological Pump: Transport Mechanisms and Mesopelagic Processes (Tuesday, 7/22)

- J. P. Balmonte**, C. Arnosti, Regional and depth-related differences in the capabilities of Arctic microbial communities to degrade organic matter
- D. W. Bell** et al., Dissolved organic phosphorus isolation: Implementation of a bench-top electrodialysis-reverse osmosis unit
- A. Bourbonnais** et al., A mesoscale eddy natural tracer experiment to investigate N-loss isotope effects off the Peru coast
- S. R. Brody**, M. S. Lozier, Changes in active mixing as a driver of subpolar phytoplankton blooms: An examination at large and small scales
- E. F. Brownlee** et al., Automated imaging to examine ciliate communities
- S. Bushinsky**, S. Emerson, Accurate oxygen from self-calibrating Argo floats in the North Pacific

- J. R. Collins** et al., Constraints on observationally intractable aspects of the mesopelagic carbon cycle: Comparison of direct observations and results from multi-parameter sensitivity analyses
- T. DeVries** et al. (presenter: **J.-H Liang**), A mechanistic particle flux model applied to the oceanic phosphorus cycle
- B. R. Edwards** et al., The response of particle associated microbes to diatom derived oxylipins: A tale of enhanced nutrient recycling on sinking particles
- S. Essink**, A. Mahadevan, Benefit of a patchy habitat for a kinesis-exhibiting particle population
- M. K. Jennings** et al., Distribution of transparent exopolymer particles across an organic carbon gradient from a North Atlantic bloom to the Sargasso Sea
- R. T. Letscher**, J. Keith Moore, Non-Redfield DOM dynamics and preferential remineralization of dissolved organic phosphorus in the global ocean
- A. R. Margolin** et al., Biogeochemistry of the deep Gulf of Mexico
- M. Pedulli** et al., Export production for the Western Antarctic Peninsula (WAP) region: Implications in a warming ocean
- C. Romera-Castillo**, R. Jaffé, Antioxidant activity (free radical scavenging) of dissolved organic matter
- S. Z. Rosengard** et al., Beyond minerals: Probing the mechanisms of particulate organic carbon transfer across the Great Calcite Belt
- D. Siegel** and EXPORTS Science Plan Writing Team, EXport Processes in the Ocean from Remote Sensing (EXPORTS): Science plan for a NASA field campaign to quantify the biological pump using satellite observables
- K. Allison Smith** et al., Group behavior among model bacteria influences particulate carbon remineralization depths
- K. Stamieszkin** et al., The carbon flush – an inductive model explaining variability in copepod fecal pellet flux
- Y.-C. Teng** et al. (presenter: **F. W. Primeau**), Global-scale variations in the carbon to phosphorus ratio of exported marine organic matter
- C.-M. Tseng**, P.-Y. Shen, Air-sea exchange of CO₂ in the East China Sea: Synthesis, time-series and mechanisms
- J. S. Turner**, A. M. P. McDonnell, Evaluating particle abundances and chlorophyll *a* concentrations in the northern coastal Gulf of Alaska
- W. Wang** et al., Using likelihood method and total inverse method towards the MedFlux sediment trap data to investigate particle cycling in the ocean
- E. B. Ward** et al., Spatial and temporal flux variability of diatom species, biogenic silica, and particulate organic carbon in the Gulf of Maine
- Z. Xue** et al., Modeling *p*CO₂ variability in the Gulf of Mexico
- E. J. Zakem**, M. J. Follows, Exploring a microbial ecosystem approach to modeling deep ocean biogeochemical cycles

Advances in our Understanding of the Role of Sea Ice in the Global Carbon Cycle (Wednesday, 7/23)

- S. Bercovici**, D. Hansell, Biogeochemical modifications of water masses on the Ross Sea shelf
- J.-H. Liang** et al., Parameterizing bubble-mediated air-sea gas exchange and its effect on ocean ventilation
- C. C. Manning** et al., Quantifying biological production during seasonal ice melt in the Bras d'Or Lakes, an inland sea in Nova Scotia, Canada
- O. Ogunro** et al., Modeling the impacts of organic macromolecules and chlorophyll on Arctic sea ice
- M. G. Prokopenko** et al., The role of sea ice in regulating potential ecosystem export efficiency on the Eastern Bering Sea shelf – implications for benthic vs. pelagic ecosystem proliferation
- R. Sambrotto**, J. Zhang, Sea ice flow patterns and ice edge blooms in the eastern Bering Sea
- W. O. Smith** et al., Future scenarios in the Ross Sea: Climate change impacts on circulation, water mass formation and biological responses
- S. Wang** et al., Impact of sea ice on the marine iron cycle and phytoplankton productivity
- C. J. Zappa** et al., Effects of ice floes and leads on air-sea gas transfer

General Interest (Wednesday, 7/23)

- V. J. Coles** et al., Emergent microbial metagenomes and metatranscriptomes in a model ocean
- Y. Liu** et al., Impacts of natural and anthropogenic climate variability on the Gulf of Mexico
- M. Stukel** et al., The Amazon River Plume, diatom-diazotroph assemblages, and biogeochemistry of the tropical Atlantic