

Ocean Carbon Biogeochemistry (OCB) Scoping Workshop
New Frontiers in Southern Ocean Biogeochemistry and Ecosystem Research

All science presentations will be in the Lewis Science Library Auditorium.
 All meals/breaks will be in the Jadwin Brush Gallery, unless otherwise indicated.

Monday, June 8, 2009

theme: New Frontiers in Observations of Ecosystems, Biogeochemistry, and Climate

8:15–8:45	Continental Breakfast
8:45–9:00	Introduction and Welcome - Jorge Sarmiento
9:00–9:45	“Long-term Warming Trends in the Southern Ocean: Links to Winds and Frontal Migration” - Sarah Gille
9:45–10:30	“Local to global and seasonal to interannual aspects of organic matter utilization in Polar seas” - Hugh Ducklow
10:30–11:00	Coffee Break
11:00–11:45	“Wind driven upwelling in the Southern Ocean and its Impact on atmospheric CO ₂ concentrations” - Bob Anderson
11:45–12:00	General Discussion
12:00–1:30	Buffet Lunch
1:30–2:15	“The Upper Cell” - Kevin Speer
2:15–3:00	Breakout Sessions theme: The past and present Southern Ocean carbon cycle 1) Quantifying and understanding the cumulative Southern Ocean anthropogenic CO ₂ sink and its interannual variability moderator: Joellen Russell rapporteur: Thomas Arsouze room: 121 2) Quantifying and understanding the natural carbon cycle and its influence on the cumulative air-sea CO ₂ flux in the Southern ocean and its interannual variability moderator: Colm Sweeney rapporteur: Taka Ito room: 134 3) Determining the impacts of climate change on Southern Ocean ecosystems moderator: Walker Smith rapporteur: Veronica Lance room: 122
3:00–3:30	Coffee Break
3:30–5:00	Breakout Sessions, continued
5:00–7:00	Workshop Reception, Beer/Wine & Hors D'Oeuvres

Tuesday, June 9

theme: New Frontiers in Modeling of Ecosystems, Biogeochemistry, and Climate

8:30–9:00	Continental Breakfast
9:00–9:45	“Response of the Southern Ocean to climate variability and trends” - Mike Meredith
9:45–10:30	“Changes in the Southern Ocean CO ₂ sink: A large-scale modeling perspective” - Nikki Lovenduski
10:30–11:00	Coffee Break
11:00–11:45	“Simulating Southern Ocean Dynamics in Coupled Climate Models” - Scott Doney
11:45–12:00	General Discussion
12:00–1:30	Buffet Lunch

1:30–2:15	“Spatial and temporal operation of Southern Ocean food webs” – Eileen Hofmann
2:15–3:00	Breakout Sessions theme: Predicting the future Southern Ocean carbon cycle 1) What will it take to provide greatly improved projections of the future response of the Southern Ocean carbon budget? moderator: Jorge Sarmiento rapporteur: Stephanie Downes room: 121 2) What is required to develop the scientific basis for predicting the impacts of climate change on Southern Ocean ecosystems? moderator: Kevin Arrigo rapporteur: Jill Peloquin room: 122
3:00–3:30	Coffee Break
3:30–5:00	Breakout Sessions, continued
7:00–9:00	Workshop Dinner (Prospect House)

Wednesday, June 10

theme: Interdisciplinary Approaches to Investigating Ecosystem, Biogeochemistry, and Climate Interactions

8:30–9:00	Continental Breakfast
9:00–9:45	“Climate Change and Upper Trophic Level Predators” – Dan Costa
9:45–10:30	“Drivers of temporal and spatial variability in Southern Ocean primary production and export flux” – Philip Boyd
10:30–11:00	Coffee Break
11:00–11:45	“Southern Ocean Food Web Research and Outcomes from the Southern Ocean Sentinel Workshop” – Andrew Constable
11:45–12:00	General Discussion
12:00–1:30	Buffet Lunch
1:30–2:15	“Net community production in the spring and summertime Southern Ocean” – Mike Bender
2:15–3:00	OCB Floats & Gliders Workshop: Southern Ocean breakout group report – Taka Ito
3:00–3:30	Coffee Break
3:30–5:00	Breakout Sessions theme: An integrated Southern Ocean biogeochemistry science research plan Topics TBD based on discussions from Mon and Tues

Thursday, June 11

8:30–9:00	Continental Breakfast
9:00–10:30	Breakout Session Summaries (moderators/rapporteurs), wrap-up, writing assignments
10:30–11:00	Coffee Break
11:00–12:00	Summary, continued
12:00–1:30	Buffet Lunch
1:30	Participants Depart