

Workshop 2: Metabolic diversity and evolution in marine biogeochemical cycling and ocean ecosystem processes

**Day 1 Monday
2 October**

Time	Speaker	Title
09:00 - 09:45	Welcome to IMBIZO5!	
09:45 -10:30	Eddie Allison	Keynote address for Critical Constraints workshop
<i>10:30 -11:00</i>	<i>Morning Tea</i>	
11:00 -11:45	Mary Ann Moran	Keynote address for Metabolic Diversity workshop
12:00 -12:45	André Punt	Keynote address for MSE workshop
<i>12:45-14:00</i>	<i>Lunch</i>	
14:00-14:30	Overview: goals for the workshop	
14:30-15:30	Small group discussions: What we know and what we do not know regarding climate change and metabolism, and climate change and evolution	
15:30-16:00	<i>Afternoon tea</i>	
	METABOLISM 1	
16:00-16:15	Nina Bednarsek	Pelagic calcifiers use avoidance mechanisms and activated oxidative pathways under multiple stressors
16:15-16:30	Justin Suca	Competing or sharing? Comparisons of early life trophic ecology of Tuna species in the Gulf of Mexico
16:30-16:45	Stacy Deppeler	Southern Ocean phytoplankton in a changing climate
16:45-17:00	Christian Tamburini	Biodegradation of <i>Emiliana huxleyi</i> aggregates by NE Atlantic prokaryotic communities under increasing hydrostatic pressure
17:00-20:00	Poster session	

Day 2 Tuesday, 3 October		
Time	Speaker	Title
	METABOLISM (1) – 4 talks	
09:00-09:15	Oscar Sosa	Bacterial degradation of phosphonates: a key methanogenic pathway in the ocean
09:15-09:30	Daniel Repeta	Microbial acquisition of iron in the oligotrophic ocean through siderophore production and uptake
09:30-09:45	Barbara Bayer	Comparative proteomics of three <i>Nitrosopumilus</i> species and their interaction with a heterotrophic <i>Alphaproteobacterium</i>
09:45-10:00	Federico Baltar	Metabolic evolution in marine biogeochemical cycling is not only a matter of the living things: cell-free enzymes and factors controlling their activity
	EVOLUTION	
10:00-10:15	Colin Kremer	Anticipating the consequences of climate change: detecting and modeling evolutionary constraints to thermal adaptation
10:15-10:30	Gerhard Herndl	Deep ocean chemolithoautotrophy and the contrasting ecological strategies of ammonia and nitrite oxidizers
10:30-11:00	Morning Tea	
	EVOLUTION (cont)	
11:00-11:15	Elena Litchman	Theoretical and experimental approaches to understand ecology and evolution of different metabolic strategies
11:15-11:30	Punyasloke Bhadury	Exploring the functional diversity of marine phytoplankton assemblages across ocean realms
11:30-11:45	Tatiana Rynearson	The implications of global dispersal of phytoplankton on projections of climate change
11:45-12:00	Olivia Ahern	Co-evolutionary relationships between diatoms and bacteria
12:00-12:45	Posters: (half poster group)	
12:45-14:00	Lunch	
14:00-14:40	Posters: (other half poster group)	
14:40-15:30	Small group discussions: What are the big questions in metabolism/evolution and climate change?	
15:30-16:00	Afternoon tea	
16:00-18:00	Cross-workshop 'sticky note' activity	

Day 3 Wednesday, 4 October		
Time	Speaker	Title
9:00 -10:00	David VanderZwaag	Cross-workshop Key note talk
10:00-10:30	<i>Morning Tea</i>	
10:30 -11:15	Report back from small group discussions	
11:15-12:45	Discussion & brainstorming about group manuscript based on small group discussions, talks and posters	
12:45-14:00	<i>Lunch</i>	
14:00-15:30	Discussion/ writing activities. Self-assignment to writing teams. (either separate papers or sections of one paper)	
15:30-16:00	<i>Afternoon tea</i>	
16:00-17:00	Debate (Moderator: Eric Galbraith)	
19:00	IMBIZO dinner	

Day 4 Thursday, 5 October		
Time	Speaker	Title
9:00 -10:00	Writing teams strategize. Sections/ figures/ toy models/ conceptual diagrams	
10:30-11:00	<i>Morning Tea</i>	
11:00 -12:45	Discuss timeline for postworkshop writing plan. Work on writing.	
12:45-14:00	<i>Lunch</i>	
14:00-15:00	Summary from the workshops (Infographic and oral presentations)	
15:00-15:30	<i>Closing ceremony</i>	