The 7th Workshop on

Trait-based Approaches to Ocean Life

Aug. 4 - Aug. 7, 2025

Asilomar Conference Grounds, Pacific Grove, California, USA

Monday 8/4

3-4	**Snacks available**		Merrill Hall
3-4	Poster set-up		Merrill Hall
4-4:30	Welcome and intro		
4:30-5	Icebreaker		
5-6	Posters: Group A		
6-7pm	**Dinner**		Crocker Dining Hall
7-8	Bonfire social		BBQ area (The Circle)

Tuesday 8/5

7:30-9am	**Breakfast**		Crocker Dining Hall
9-9:10	Regroup/Announcements		Merrill Hall
	Biogeography and biogeochemistry I		Merrill Hall
9:10-9:50	**Keynote:** Exploring the use of traits in ocean biogeochemical modeling – from a "master trait" to specialized traits	**Jessica Luo** NOAA GFDL	
9:50-10:10	Do higher trophic levels impact secondary production globally?	**Rémy Denéchère** UC San Diego	
10:10-10:30	Does mixotroph trait evolution drive a positive climate feedback loop?	**Holly Moeller** UC Santa Barbara	
10:30-11am	**Coffee break**		Merrill Hall
	Biogeography		Merrill Hall
11-11:20	Modeling fish swimming behavioral traits	**Colleen Petrik** UC San Diego	
11:20-11:40	Deriving the Arctic lipidscape by extracting traits from in situ images of copepods and the spatiotemporal variation in copepod ecosystem functions	**Patrick Pata** Universite Laval	
11:40-12	Data-driven models to inform on dinoflagellates trophic traits biogeography across surface open-ocean	**Gaspard Rihm** Muséum National d'Histoire Naturelle	
12-1pm	**Lunch**		Crocker Dining Hall
	Biogeography and biogeochemistry II		Merrill Hall
1:00-1:40	**Keynote:** Controlling Respiration Quotient: A Global Perspective	**Allison Moreno** UC Santa Cruz	
1:40-2:00	Trait-based Insights Into Copepod Migration: The Role of Size and Transparency in DVM Behavior	**Rocio B. Rodriguez-Perez** Arizona State U.	
2:00-2:20	Diagnosing the Impact of Migrating Zooplankton on the Inventory and Sequestration of Carbon in the Ocean Interior.	**Daniel Clements** Bigelow Laboratory	
2:20-3pm	**Coffee break**		Merrill Hall
3-4	Discussions & Chalk Talks: Session 1		Various breakout locations
	Biodiversity and community structure		Merrill Hall
4-4:20	A trait-based, mechanistic explanation for the increase in microbial diversity with depth in the ocean	**Liang Xu** Carnegie Science	
4:20-4:40	Combing optimized trait-based modeling with stable isotope probing and genomics to understand microbial food web structure and function	**Joe Vallino** Marine Biological Lab	
4:40-5	The mystery of gelatinous zooplankton mortality: a hidden trade-off	**Julie Lemonie** Sorbonne Universite	
5-6	Posters: Group B		
6-7pm	**Dinner**		Crocker Dining Hall
7-9	Bonfire social, **with s'mores**		BBQ area (The Circle)

Wednesday 8/6

7:30-9am	**Breakfast**		Crocker Dining Hall
9-9:10	Regroup/Announcements		Merrill Hall
	Symbiosis and beyond competitive interactions		Merrill Hall
9:10-9:50	**Keynote:** The extraordinary biogeochemical capabilities of fungi	**Jennifer Bhatnagar** Boston University	
9:50-10:10	Insights into Marine Microbial Interactions through High-Resolution Monitoring and Modeling	**Ewa Merz** Scripps, UC San Diego	
10:10-10:30	Microbial Interactions Matter for Biogeochemistry: Can Chemical Heterogeneity Explain Nitrite Accumulation in Anoxic Zones?	**Daniel McCoy** Carnegie Science	
10:30-11am	**Coffee break**		Merrill Hall
11-12	Discussions & Chalk Talks: Session 2		Various breakout locations
12pm	**Lunch (bagged lunches delivered to Merrill Hall)**		
12-4:30	Outings: Aquarium, whale watching, hikes, etc.		
4:30-5	**Coffee and snacks**		Merrill Hall
	Adaptation and evolution		Merrill Hall
5-5:20	Ecological constraints on optimal trait plasticity	**Colin Kremer** U. of Connecticut	
5:20-5:40	EcoTRACE: Exploring the evolutionary trajectories of phytoplankton communities in a model informed by experimental evolution	**Chase James** U. of Southern California	
5:40-6	Intra- and interspecific trait variation among harmful algal bloom taxa	**Elena Litchman** Michigan State University	
6-7pm	**Dinner**		Crocker Dining Hall
7-8	Bonfire social		BBQ area (The Circle)

Thursday 8/7

7:30-9am	**Breakfast**		Crocker Dining Hall
9-9:10	Regroup/Announcements		Merrill Hall
	Interspecific variability and review		Merrill Hall
9:10-9:30	Gephyrocapsa huxleyi lineages leverage distinct genes for temperature response	**Arianna Krinos** Brown University	
9:30-9:50	A Theoretical Framework for Trait-Based Eco-Evolutionary Dynamics: Population Structure, Intraspecific Variation, and Community Assembly	**Christopher Klausmeier** Michigan State University	
9:50-10:10	Trait-based approaches to global change ecology: Moving from description to prediction	**Miram Gleiber** University of Alberta	
10:10-10:40	**Coffee break**		Merrill Hall
10:40-11:40	What is the future of trait-based approaches? Group discussion and paper plan	**Facilitator:** **Elena Litchman** Michigan State University	
11:40-12	Feedback and closing		
12-1pm	**Lunch**		Crocker Dining Hall