

Program of ProSynFest2020 Conference, Cordoba (Spain), March 18-21, 2020

Keynote talks:

Keynote 1 (introduction): *Prochlorococcus*: Then and now by Sallie W. (Penny) Chisholm

Keynote 2: Four decades of research on marine *Synechococcus* by David J. (Dave) Scanlan

Keynote 3 (closure): Cyanobacteria in symbiosis: learning from new models by Jonathan P. (Jon) Zehr

Sessions of the Conference:

Session 1: Ecology, distribution and dynamics: past, present and future

Session 2: Physiology, gene regulation and metabolism

Session 3: Predation and trophic interactions

Roundtable topics (March 21st, 16:00-17:00)

R1: Phylogenomics and species/genus concept. Chairs: F. Partensky + TBD

R2: New flow technologies for analyzing picocyanobacteria. Chairs: K. Hunter-Cevera, G.J. van den Engh + TBD

R3: Exploiting the wealth of metagenomics data. Chairs: O. Bèjà, D.J. Scanlan, L. Garczarek + TBD

Duration of talks: keynote speeches: 50' (40' talk+10' questions); invited talks: 25' (20'+5'); attendee talks: 15' (12'+3').

Duration of breaks: Coffee breaks: 20' (or 30' during workshop) / Lunch breaks: 60'

List of confirmed the 27 invited speakers to the Conference

Keynote	Session 1	Session 2	Session 3
Sallie W. (Penny) Chisholm	Kristen Hunter-Cevera	Solange Duhamel	Debbie Lindell
David J. (Dave) Scanlan	Mikhail Zubkov	Frédéric Partensky	Erik Zinser
Jonathan P. (Jon) Zehr	Lisa R. Moore	David M. Kehoe	Steven J. Biller
	Liu Hongbin	Claudia Steglich	Jeffrey Morris
	Mak Saito	Douglas Campbell	Oded Bèjà
	Zackary Johnson	Christophe Six	
	Adam C. Martiny	Jose Garcia Fernandez	
	Laurence Garczarek	Oswaldo Ulloa	
	Stephanie Dutkiewicz	Paul M. Berube	
		Rachel Foster	

Preliminary schedule

Date	Time	Event or Talk	Organizers, speakers or teachers
Wed March 18 th WORKSHOP Wed March 18 th WORKSHOP	8:30-9:30	Welcome participants (breakfast tea, coffee, croissants...) and registration for the workshop attendants	Organizers: Conference center staff + organizing committee members not attending the workshop
		Introduction	
		Culturing picocyanobacteria & The Future of ProSyn Culture Collections	Organizers: Allison Coe, Lisa Moore, John Waterbury
		Vesicles and Lipids	Organizer: Steve Biller
		Marine Cyanophages	Organizer: Debbie Lindell
		Genetics in Cyanobacteria	Organizers: David Kehoe, Raphael Laurenceau, David Lea-Smith
		Databases and Resources	Organizer: Frederic Partensky
	17:00-20:00	Welcome of other participants of the conference Drinks + food (appetizers?)	Organizers: Conference center staff + organizing committee members not attending the workshop
	Evening	Dinner in town	Attendees on their own
Thursday March 19 th CONFERENCE DAY 1	8:30-9:30	Welcome participants: breakfast / registration of the remaining participants	Organizers: Conference center staff/organizing committee with help from granted students
	9:30-10:20	Keynote speech : <i>Prochlorococcus</i> : Then and now	Keynote speaker: Sallie W. (Penny) Chisholm
		Session 1: Ecology, distribution and dynamics: past, present and future. Chairs: A.C. Martiny (morning) / L.R. Moore (afternoon)	
	10:20-10:45	S1-invited talk 1: Seasons of <i>Syn</i> : insights into the annual patterns of a coastal <i>Synechococcus</i> population from <i>in-situ</i> flow cytometry	Invited speaker: Kristen Hunter-Cevera
	10:45-11:10	S1-invited talk 2: Faster growth of the major prokaryotic versus eukaryotic CO2 fixers in the oligotrophic ocean	Invited speaker: Mikhail Zubkov
	11:10-11:30	Coffee break	Organizers: Conference center staff
	11:30-11:55	S1-invited talk 3 : Inquiries into marine cyanobacteria in the Southern hemisphere	Invited speaker: Lisa R. Moore
	11:55-12:10	S1-short talk 1	conference attendee
	12:10-12:25	S1-short talk 2	conference attendee
	12:25-12:40	S1-short talk 3	conference attendee
	12:40-12:55	S1-short talk 4	conference attendee
	13:00-14:00	Lunch in conference center	Organizers: Conference center staff
	14:00-14:25	S1-invited talk 4: Diversity and adaptation of <i>Synechococcus</i> in estuarine waters	Invited speaker: Liu Hongbin
	14:25-14:50	S1-invited talk 5: Exploring the diverse functional attributes of marine cyanobacteria in natural populations	Invited speaker: Mak Saito
14:50-15:15	S1-invited talk 6: The diversity and activity of <i>Prochlorococcus</i> and <i>Synechococcus</i> across space and time	Invited speaker: Zackary Johnson	

Thursday March 19 th CONFERENCE DAY 1 (cont'd)	15:15-15:40	S1-invited talk 7: Understanding ocean biogeochemical cycles through the lens of <i>Prochlorococcus</i> and <i>Synechococcus</i>	Invited speaker: Adam C. Martiny
	15:40-16:00	Coffee break	Organizers: Conference center staff
	16:00-16:25	S1-invited talk 8: Ecological genomics of marine picocyanobacteria at the global scale using <i>Tara Oceans</i> data	Invited speaker: Laurence Garczarek
	16:25-16:50	S1-invited talk 9: Using computer models and theory to infer controlling mechanisms of <i>Prochlorococcus</i> and <i>Synechococcus</i> global distributions	Invited speaker: Stephanie Dutkiewicz
	16:50-17:05	S1-short talk 5	conference attendee
	17:05-17:20	S1-short talk 6	conference attendee
	17:20-17:35	S1-short talk 7	conference attendee
	17:35-17:50	S1-short talk 8	conference attendee
	17:50-19:30	1 st Poster session (drinks + appetizers)	All attendees
19:30-20:30	Banquet	Organizers: Conference center staff	
Friday March 20 th CONFERENCE DAY 2	9:00-9:50:	Keynote speech 2 : Four decades of research on marine <i>Synechococcus</i> : a globally important phototroph	Keynote speaker: David J. Scanlan
	Session 2: Physiology, gene regulation and metabolism. Chairs: P. Berube (morning) / S. Duhamel (afternoon)		
	9:50-10:15	S2-invited talk 10: Ecophysiology of marine picocyanobacteria, one cell at a time	Invited speaker: Solange Duhamel
	10:15-10:40	S2-invited talk 11: Diversity and evolution of phycobilisomes in picocyanobacteria	Invited speaker: Frédéric Partensky
	10:40-11:00	Coffee break	
	11:00-11:25	S2-invited talk 12: Processes controlling light color acclimation in marine <i>Synechococcus</i>	Invited speaker: David M. Kehoe
	11:25-11:40	S2-short talk 9	conference attendee
	11:40-11:55	S2-short talk 10	conference attendee
	11:55-12:10	S2-short talk 11	conference attendee
	12:10-12:35	S2-invited talk 13: Gene regulation with non-coding RNAs in <i>Prochlorococcus</i>	Invited speaker: Claudia Steglich
	12:35-13:00	S2-invited talk 14: Feeling Blue? Feeling Low? <i>Prochlorococcus</i> , light & oxygen	Invited speaker: Douglas Campbell
	13:00-14:00	Lunch in conference center	Organizers: Conference center staff
	14:00-14:25	S2-invited talk 15: Light utilization across latitudes in marine <i>Synechococcus</i>	Invited speaker: Christophe Six
	14:25-14:50	S2-invited talk 16: From glutamine synthetase to glucose uptake: 25 years working on N and C metabolism in marine picocyanobacteria	Invited speaker: Jose Garcia Fernandez
	Afternoon	Free time or commented visit of the Mosque (16:00-17:00)	Organizers: Conference center staff?
Evening	Dinner in town	Attendees on their own	
	9:00-9:25	S2 (cont'd)- invited talk 17: Indigenous <i>Prochlorococcus</i> from oxygen-depleted oceanic waters	Invited speaker: Osvaldo Ulloa
	9:25-9:50	S2-invited talk 18: Emerging complexity of N cycling in <i>Prochlorococcus</i> populations	Invited speaker: Paul M. Berube

Saturday March 21st CONFERENCE DAY 3	9:50-10:15	S2-invited talk 19: Identifying the role of transport in open ocean cyanobacterial symbionts by expression in model heterologous systems	Invited speaker: Rachel Foster
	10:15-10:30	S2-short talk 12	conference attendee
	10:30-10:45	S2-short talk 13	conference attendee
	10:45-11:00	S2-short talk 14	conference attendee
	11:00-11:20	Coffee break	Organizers: Conference center staff
	11:20-11:35	S2-short talk 15	conference attendee
	11:35-11:50	S2-short talk 16	conference attendee
	Session 3: Predation and trophic interactions. Chairs: E. Zinser (morning) / D. Lindell (afternoon) / S.J. Biller (after roundtables)		
	11:50-12:15	S3-invited talk 20: Cyanobacteria-cyanophage interactions	Invited speaker: Debbie Lindell
	12:15-12:30	S3-short talk 17	conference attendee
	12:30-12:45	S3-short talk 18	conference attendee
	12:45-13:00	S3-short talk 19	conference attendee
	13:00-14:00	Lunch in conference center	Organizers: Conference center staff
	14:00-14:25	S3-invited talk 21: <i>Prochlorococcus</i> and <i>Synechococcus</i> : Friends, enemies, frenemies?	Invited speaker: Erik Zinser
	14:25-14:50	S3-invited talk 22: Cyanobacterial extracellular vesicles: origins, contents, and community interactions	Invited speaker: Steven J. Biller
	14:50-15:05	S3-short talk 20	conference attendee
	15:05-15:20	S3-short talk 21	conference attendee
	15:20-15:35	S3-short talk 22	conference attendee
	15:35-16:00	Coffee break	Organizers: Conference center staff
	16:00-17:00	2 nd Poster session + 3 parallel roundtables: - R1: Phylogenomics and species/genus concept - R2: New flow technologies for analyzing picocyanos - R3: Exploiting the wealth of metagenomics data	Attendees circulate among the 4 parallel events
17:00-17:25	S3-invited talk 23: Experimental Evolution of a Simple <i>Prochlorococcus</i> Community	Invited speaker: Jeffrey Morris	
17:25-17:50	S3-invited talk 24: Oceanic viral 'photosynthesis'	Invited speaker: Oded Béjà	
17:50-18:40	Keynote speech 3: Cyanobacteria in symbiosis: learning from new models	Keynote speaker: Jonathan P. (Jon) Zehr	
18:40-19:00	Wrap up, general discussion and concluding remarks	Z. Johnson, J. Garcia-Fernandez, F. Partensky & S.W. Chisholm	
19:00	End of conference Dinner in town	Attendees on their own	