

26-30 June 2023 · Copenhagen · Denmark

All sessions take place at Niels Jerne Auditorium on 1st floor

Monday, 26 June 2023

16:00	Registration opens
17:00-17.15	Opening Søren J. Sørensen
17:15-18:00	[K1] Opening lecture: Seeing is understanding: Next generation chemical imaging for super-fast functional analyses of microbiomes Michael Wagner
18:00-19:30	Welcome Reception (15th floor)

Tuesday, 27 June 2023

Theme 1: Microbe-microbe interactions

Chairs: Ines M. Mulec and Mette Burmølle

08:00	Registration
	Session 1
09:00-09:35	[K2] Multi-level selection favours the evolution of mutualistic cooperation in microbial communities Christian Kost
09:35-09:55	[O1] Cell-cell connection mediated by bacterial stalks facilitates metabolic cross-feeding Miaoxiao Wang
09:55-10:15	[O2] Succession of microbial community composition mirrors the secondary metabolite potential during marine biofilm development Pernille Bech
10:15-10:35	[O3] Cooperation facilitates bacterial niche expansion Chunhui Hao
10:35-10:55	Coffee break (1st floor, stair area)
	Session 2
10:55-11:30	[K3] Functional impacts of interspecies interactions in mixed biofilms Mette Burmølle
11:30-11:50	[O4] Pseudomonas stutzeri changes the fitness landscape of evolving Bacillus velezensis Xinli Sun
11:50-12:10	[O5] Nutrient-dependent interactions between Salmonella enterica serovar Typhimurium and Bacillus subtilis in biofilms Eli Podnar
12:10-13:10	Lunch (1st floor, stair area)
12:20-12:50	Symposium: Atrandi Biosciences Microfluidic platform for single cell metagenomic sequencing Meilee Ling
13:10-14:10	Postersession 1 (area around the auditorium on 1st floor)
	Session 3
14:10-14:45	[K4] Bacterial biodiversity drives the evolution of CRISPR-based phage resistance Edze Westra
14:45-15:05	[O6] Bacterial predators drive the evolution and maintenance of antibiotic resistance in complex microbial communities Samay Pande
15:05-15:25	[O7] Characterising active virus infection of nitrifying archaea and bacteria in soil Graeme Nicol
15:25-15:40	Coffee break (1st floor, stair area)

Theme 2A: Horizontal gene transfer and barriers

Chairs: Kornelia Smalla and Jonas S. Madsen

	Session 4
15:40-16:20	[K5] From micro to macroscales: Challenges to incorporate horizontal gene transfer into risk assessment of AMR Heike Schmitt
16:20-16:40	[O8] Pseudomonas plasmids revisited: new insights and comprehensive analysis of their features for horizontal gene transfer Masaki Shintani
16:40-17:00	[O9] β-lactamase production by gut commensals rescues sensitive bacteria and sustains microbiome diversity Asmus Kalckar Olesen
17:00-18:00	Postersession 2 (area around the auditorium on 1st floor)

Wednesday, 28 June 2023

Theme 3: Host-microbe symbioses

Chairs: Itzik Mizrahi and Rodrigo Costa

08:00	Registration
	Session 5
09:00-09:35	[K6] Capturing unique inter-individual features of host-microbiome interaction processes through personalization of human gut models Tom Van de Wiele
09:35-09:55	[O10] Digestive exophagy of bacterial biofilms by the amoeba predators histolytica and its impact on stress tolerance, antibiotic resistance, and cytotoxicity Ilana Kolodkin-Gal
09:55-10:15	[O11] Sex predicts gut microbiota variations in wild yellow baboons (Papio cynocephalus) Marina Bambi
10:15-10:35	[O12] Composting in ant-plant nests? Metabolic potential of bacterial communities for degrading chitin- and cellulose-rich substrates in ant-made patches Verónica Barrajón-Santos
10:35-10:55	Coffee break (1st floor, stair area)
	Session 6
10:55-11:30	[K7] Gut Microbial Synthetic communities to study how microbial ecologic networks collaboratively ferment glycans from diet and mucin Clara Belzer
11:30-11:50	[O13] Fragrant or stinky - The nasal microbiome and its role in human olfactory performance Christina Kumpitsch
11:50-12:10	[O14] Partners forever! A surprisingly high diversity of Acetobacter is maintained throughout long-term experimental evolution of Drosophila simulans populations. Bosco Gracia-Alvira
12:10-13:10	Lunch (1st floor, stair area)
13:10-14:10	Postersession 3 (area around the auditorium on 1st floor)
	Session 7
14:10-14:45	[K8] Rumen Ecosystem as a Model for Understanding Trophic Networks: A Top-Down Bottom-Up Approach to Deciphering the Microbiome-Metabolome Interplay Itzik Mizrahi
14:45-15:05	[O15] Predicting the stability of gut microbial communities using viral-prokaryotic genome-centric analysis machine learning in atopic eczema patients Die Hu
15:05-15:25	[O16] How to drive the transmission of seed bacterial communities to seedling Alain Sarniguet
15:25-15:40	Coffee break (1st floor, stair area)
	Session 8: shared session of all themes
15:40-16:00	Quantification of microbial ecology in natural communities: Pathway selection in anaerobic fermentation Rebeca Gonzalez-Cabaleiro
16:00-16:20	[O18] Control of Bacillus subtilis by large prophage elements – physiology, ecology and evolution perspective. Anna Dragos
16:20-16:40	[O19] The global ecology of archaea Alexander Mahnert
16:40-17:00	[O20] A previously uncharacterised hydrogenase dominates fermentation in the human gastrointestinal tract Caitlin Welsh
17:00-18:00	Postersession 4 (area around the auditorium on 1st floor)
18:45-20:00	Boat trip Free tickets at registration on a first-come-first-serve basis

Thursday, 29 June 2023

Theme 2B: Horizontal gene transfer and barriers

Chairs: Kornelia Smalla and Jonas S. Madsen

08:00	Registration
	Session 9
09:00-09:35	[K9] Breaking barriers: exploring novel immune evasion paradigms Rafael P. Redondo
09:35-09:55	[O21] CRISPR-Cas immunity hitchhikes with beneficial mobile genetic elements increasing the spread of drug resistance Iolanda Domingues
09:55-10:15	[O22] High diversity of the emerging pathogen Acinetobacter baumannii in livestock and human wastewaters Stefanie Glaeser
10:15-10:35	[O23] Diverse anti-defense systems in the leading region of plasmids David Burstein
10:35-10:55	Coffee break (1st floor, stair area)
	Session 10
10:55-11:30	[OK10] Differences in vertical and horizontal transmission dynamics shape plasmid distribution in clinical enterobacteria Alvaro San Millan
11:30-11:50	[O24] Carbapenem hyper-resistance mediated by bla_{NDM-1} gene adaptive amplification Mario Pulido-Vadillo
11:50-12:10	[O25] Anti-defense systems in archaeal viruses: predicting novel acrs and acas, redefining AcrIII-1, and perspectives on the defense landscape of archaea Laura Martinez Alvarez
12:10-13:10	Lunch (1st floor, stair area)
13:10-14:10	Postersession 5 (area around the auditorium on 1st floor)

Theme 4: New approaches/technologies in microbial ecology

Theme 5: Microbes and the green transition

Chairs: Stefan Bertilsson, Timothy M. Vogel and Christoph C. Tebbe

	Session 11
14:10-14:45	[K11] Disentangling plant- and environment-mediated drivers of active rhizosphere bacterial community dynamics during short-term drought Ashley Shade
14:45-15:05	[O26] Natural product biosynthetic potential reflects macroevolutionary diversification within a widely distributed bacterial taxon Rodrigo Costa
15:05-15:25	[O27] Microplastics increase the selective potential of antibiotics at sub-inhibitory concentrations Concepcion Sanchez-Cid
15:25-15:40	Coffee break (1st floor, stair area)
	Session 12
16:00-16:20	[K12] Towards more sustainable agriculture through managing soil and root-associated microbiomes Kornelia Smalla
16:20-16:40	[O28] The fate of pathogens, antibiotics, and resistance genes in treated wastewater irrigated soils and crops Osnat Gillor
16:40-17:00	[O29] The hidden effects of liming on microbial community members Jasper Schierstaedt
17:00-18:00	Postersession 6 (area around the auditorium on 1st floor)
19:00-01:00	Conference Dinner at Banegården/Copenhagen

Friday, 30 June 2023

Theme 4: New approaches/technologies in microbial ecology

Theme 5: Microbes and the green transition

Chairs: Stefan Bertilsson, Timothy M. Vogel and Christoph C. Tebbe

08:00	Registration
	Session 13
09:00-09:35	[K13] Illuminating Microbial Collectives through Transcriptome Imaging Daniel Dar
09:35-09:55	[O30] Improvement of hydrogen production by genetic modification of cyanobacterial strains Galyna Kufryk
09:55-10:15	[O31] How do two strains of lactic acid bacteria cooperate to improve soy juice fermentation? Hélène Falentin
10:15-10:35	[O32] De novo assembled single-cell transcriptomes from aquatic phytoflagellates reveal metabolically distinct dormant cell types Aditya Jeevannavar
10:35-10:55	Coffee break (1st floor, stair area)
	Session 14
10:55-11:30	[K14] Microbial Metabolism Under the Microscope: A Cellular View of Host-Microbe Interactions Manuel Liebeke
11:30-11:50	[O33] New perspectives on pangenomes, intra-species diversity and ecological and evolutionary dynamics in freshwater bacteria Stefan Bertilsson
11:50-12:10	[O34] Analysis of over 100,000 genome-scale metabolic reconstructions indicates a non-random distribution of tyrosine metabolic niches in the prokaryotic phylogenetic tree Ulisses Nunes da Rocha
12:10-13:10	Lunch (1st floor, stair area)
13:10-14:10	Postersession 7
	Session 15: Shared session of all themes
14:10-14:30	T6SS-mediated competition limits seedling transmission of Xanthomonas campestris pv. campestris and drives assembly of seed-associated bacterial communities in vitro Tiffany Garin
14:30-14:45	[O36] Gut microbiome functions enriched in C. elegans Johannes Zimmermann
14:45-15:05	[O37] Biosynthetic amplicon geneFISH for selective extraction of secondary metabolite producers from environmental microbiomes Yannick Buijs
15:05	Closing Local Committee