Programme

bageco2023

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 blaNDM-1 gene adaptative 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