



3rd International Conference on
Microbial Food and Feed Ingredients



19 - 21 April 2023
 Copenhagen · Denmark

MiFFI 2023 Programme

Wednesday, 19 April 2023

17:00-19:00	REGISTRATION
17:30-19:00	WELCOME RECEPTION
17.30	<p>Welcome and introduction By Egon Bech Hansen, Professor at DTU, Denmark and member of MiFFI Scientific Committee</p>
17.50-19.00	<p>Presentation: Tusen Vin – A tale of a Danish Wine and Cider Adventure By co-owner of Tusen Vin, Sofie Saerens, bioengineer and yeast geek! Room A2-70.02</p> <p>Cider tasting from Tusen Vin and fingerfoods, Marble Hall</p>

Thursday, 20 April 2023

08:30	MARBLE HALL: REGISTRATION & COFFEE	
	Room A2-81.01: Plenary session I	
09.30	Welcome - Opening ceremony	Chair: Dennis Sandris Nielsen
09.45	Integration of Multiomics data for Microbiome studies	Morten Arendt Rasmussen, Professor in Computational Food and Health Science, Microbiology and Fermentation, KU-FOOD and COPSAC
10.30	MARBLE HALL: COFFEE BREAK & EXHIBITION (& POSTER MOUNTING)	

Parallel sessions		Parallel sessions	
Room A2-81.01		Room A2-70.04	
Session 1: Microbially derived bioactive compounds		Session 2: Enzymes for food and feed applications	
11:00	Introduction	Chairs: Dennis Sandris Nielsen & Rosa Aragão Börner	Introduction Chairs: Lotte Bach Larsen & Karsten Kragh
11:05	Gut microbiota-derived metabolites in early life	Henrik Munch Roager , Associate Professor, University of Copenhagen	Sustainability benefits beyond phosphorus and calcium with a novel phytase feed enzyme Charlotte Poulsen , Sr. Principal Scientist, IFF Laureate, IFF Health and Biosciences
11:25	Insights into microbial foods as provided by omics approaches	Paul Cotter , professor, Head Food Biosciences, Teagasc and CTO/co-founder SeqBiome Ltd	Enzymes and microorganisms in baking: opportunities for synergies targeting processing and health Christophe Courtin , professor, Laboratory of Food Chemistry and Biochemistry, University of Leuven, Belgium
11:45	Fermentation-based process for the production of red beet color with an improved sustainability profile	Philip Tinggaard Thomsen , Technical University of Denmark	Constraint-based metabolic modelling of cyanobacteria for branched-chain amino acids overproduction Amit Kugler , Uppsala University, Sweden
11:55	Water Kefir and Derived Pasteurized Beverages Modulate Gut Microbiota, and promotes immunomodulation	Claire Boulangé , Nestlé Research, Switzerland	Structural characterization of multi-domain, extracellular proteases from lactic acid bacteria Lise Friis Christensen , Technical University of Denmark
12:05-13:00	MARBLE HALL: LUNCH & EXHIBITION		
12:30-13:00	Room A2-81.01: INDUSTRY SYMPOSIA: -		
13:00-13:30	Room A2-81.01: INDUSTRY SYMPOSIA: LALLEMAND "Meeting the new needs of the probiotic industry with yeast-based fermentation nutrients" Speaker: David Guerrand, Ph.D, Biotech Business Director - Lallemand Bio-Ingredients		
13:00-14:00	POSTER SESSION		
Parallel sessions		Parallel sessions	

	Room A2-81.01		Room A2-70.04	
	Session 3: Microbial feed ingredients for improved animal performance		Session 4: The human and animal microbiome and health	
14:00	Introduction	Chairs: Christel Thea Jørgensen	Introduction	Chairs: Dennis Sandris Nielsen & Ole Højberg
14:05	Stabilization of the healthy piglet gut microbiome using Binding Proteins	Sandra Wingaard Thrane, Bactolife, Denmark	Transplantation of maternal feces-filtrates to neonatal pigs reduces post-weaning diarrhea	Thomas Thymann, MSc, DVM, PhD, Professor, Department of Veterinary and Animal Science, Faculty of Health and Medical Sciences, University of Copenhagen
14:25	Turning sawdust into nutritious feed for aquaculture	Petri-Jaan Lahtvee, Assoc. Professor, Tallinn University of Technology	How micronutrients supplementation indicates improved anaerobicity of the gut lumen	Dr. H.J.M. Harmsen, Associate Professor, Department of Medical Microbiology and Infection prevention, University Medical Center Groningen
14:45	Fecal viromes depleted of enveloped viruses efficiently treats Clostridioides difficile-associated diarrhea in a murine model	Torben Sølbeck Rasmussen, University of Copenhagen	The effect of colonic pH on microbial activity and metabolite production using common prebiotics as substrates: an in vitro study	Zhuqing Xie, University of Copenhagen
14:55	Fermented Spirulina as a potential bioactive and nutritional food ingredient	Polona Jamnik, University of Ljubljana, Biotechnical Faculty	Supplementation with five human milk oligosaccharides changes the microbiome of formula-fed infants and brings microbial development closer to that of breastfed infants	Andrea Holst, Chr Hansen, Denmark
15:05-15.35	MARBLE HALL: COFFEE BREAK & EXHIBITION			

	Room A2-81.01: Plenary session II Probiotics for today and for the future	
15.35	Introduction	Chair: Dennis Sandris Nielsen & Egon Bech Hansen
15:40	Key lecture: Reverse translating the ketogenic diet for live biotherapeutic product development for the treatment of developmental epilepsies	Christopher Reyes , PhD, CEO, Bloom Science, USA
16:10	Key lecture: The future of symbiotics. How Microbiome science is playing an important role throughout life	Adam Baker , PhD, Director of Science, Chr Hansen, Denmark
16:40-17.00	Discussion	

19:00

CONFERENCE DINNER
at Vandværket, Rabarbervej 2, 2400 Copenhagen NV

NB: Conference Dinner ticket must be purchased separately in the registration system.

Friday, 21 April 2023

	Room A2-81.01: Plenary session III	
	Regulatory affairs: What does the EU GMO regulation need to be fit for purpose for use of microorganisms?	
09:00	Introduction	Chair: Svend Laulund
09:05	Opportunities by genome editing technologies for food cultures	Fabio Dal Bello ; PhD, Scientific Director Sacco System, Chair of the regulatory working group of EFFCA
09:25	Need for an update of the EU GMO legislation with regard to microorganisms obtained with new genomic techniques	Jens Litske Petersen , Special Adviser, PhD, Ministry of Food, Agriculture and Fisheries, Danish Veterinary and Food Administration
09.45	The Commission's work on new genomic techniques	Sirkku Heinimaa , Deputy Head of Unit, DG SANTE, European Commission
10:05	Discussion	
10:15-10:45	MARBLE HALL: COFFEE BREAK & EXHIBITION	
	Parallel sessions	Parallel sessions
	Room A2-81.01	Room A2-70.04

	Session 5: Plant-based fermented foods		Session 6: Applications of cultures, enzymes, and metabolites	
10:45	Introduction	Chairs: Dennis Sandris Nielsen & Herwig Bachmann	Introduction	Chair: Egon Bech Hansen
10:50	Controlling microbial contaminants in plant-based foods	Dr Marjon Wells-Bennik, NIZO Food Research, Ede, The Netherlands	Designing Microbial Communities for the Dairy Industry using AI: a case study on yogurt	Willi Gottstein, Senior Scientist, DSM
11:10	Next generation of plant-based food – improved by fermentation	Dr. Biljana Bogicevic, Group Leader and Expert, Technical Microbiology, Nestlé Research	Microbial modulation of flavour, texture, and nutritional value of plant bases	Vera Kuzina Poulsen, Principal Research Scientist, Chr Hansen, Denmark
11:30	Is there life in plant-based yogurt alternatives?	Ene Viiard, TFTAK, Estonia	Growth and metabolic profiling of <i>Lactiplantibacillus plantarum</i> in cheap alternative growth media	Sigurd Christensen, Lactobio, Denmark
11:40	HybPi-Cheese - a possibility for animal protein reduction without losing original product properties	Ueli von Ah, Agroscope, Switzerland	EXPLORING THE POTENTIAL ANTIHYPERTENSIVE PROPERTIES OF SELECTED LACTIC ACID BACTERIA AND THEIR INCORPORATION IN YOGURT PRODUCTION	Zeynep Ağırbaşı, İzmir Institute of Technology, Turkey
11:50	Room A2-81.01: INDUSTRY SYMPOSIA: SAMPLIX High-throughput screening in droplets Speakers: Dr Peter Mouritzen, VP Application & Market Development at Samplix Dr Volkan Besirlioglu, Schwaneberg Group, RWTH Aachen University Dr. Tatyana Eleanor Saleski, DTU – The Novo Nordisk Foundation Center for Biosustainability		Room A2-70.04: INDUSTRY SYMPOSIA: BASE CLEAR The Power of Microbial Genomics: Transforming Food and Feed Production through Regulatory Expertise Speaker: Dennis Kap, Product Manager Regulatory Affairs.	
12:20-12.50	MARBLE HALL: LUNCH & EXHIBITION			
12:50-13:30	POSTER SESSION			
	Parallel sessions		Parallel sessions	
	Room A2-81.01		Room A2-70.04	

	Session 7: Precision fermentation		Session 8: Microbial foods	
13:30	Introduction	Chairs: Lotte Bach Larsen & Irina Borodina	Introduction	Chairs: Rosa Aragão Börner & (Irina Borodina)
13:35	Challenges and bottlenecks in precision fermentation of milk proteins	Peter Ruhdal , Professor, Technical University of Denmark	Fungi fermentation - Creating the next generation food	Ramkumar Nair , PhD, Founder & CEO of Mycorena
13:55	High-yield production of human milk oligosaccharides using engineered <i>Escherichia coli</i>	Dr. Katja Parschat , Head of HMO R&D at the Chr. Hansen HMO GmbH	Innovative microalgae production, processing, and food applications	Alexander Mathys , Professor, Sustainable Food Processing, ETH Zurich
14:15	Modular metabolic engineering and synthetic coculture strategies for the production of aromatic compounds in yeast	Huadong Peng , The Novo Nordisk Foundation Center for Biosustainability, Technical University of Denmark	GastronOmics of <i>Pleurotus ostreatus</i> mycelium as a novel food	Loes Van Dam , Technical University of Denmark
14:25	Growth rate and limiting substrate define the nutritional composition and cell size of microbial biomass for food applications	Myrsini Sakarika , Ghent university, Belgium	Microbial protein from recovered nitrogen: nutritional quality, safety and feasibility assessment	Lotte Van Peteghem , Ghent university, Belgium
14:35-14:45	QUICK BREAK – GO TO ROOM A2-81.01 Room A2-81.01: Closing plenary session IIII Trajectories towards sustainable and healthy foods			
14.45-15.15	Why can we lose 36 minutes of healthy life per hot dog and would gain 25 minutes with a serving of peanuts? Within the wide choice and diversity of foods we can select from, how can targeted small changes make a substantial difference for the planet and for our health in our diets? But to reach absolute sustainability, which trajectories can move our food system from better to good enough?	Olivier Jolliet , Professor of Quantitative Sustainability Assessment, DTU-Sustain department of the Technical University Denmark		
15:15-15:25	Room A2-81.01: CLOSING SESSION CLOSING REMARKS AND POSTER PRIZES			