

The Danish Microbiological Society  
**Annual Congress 2024**

11 November 2024  
Copenhagen · Denmark



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abstract  
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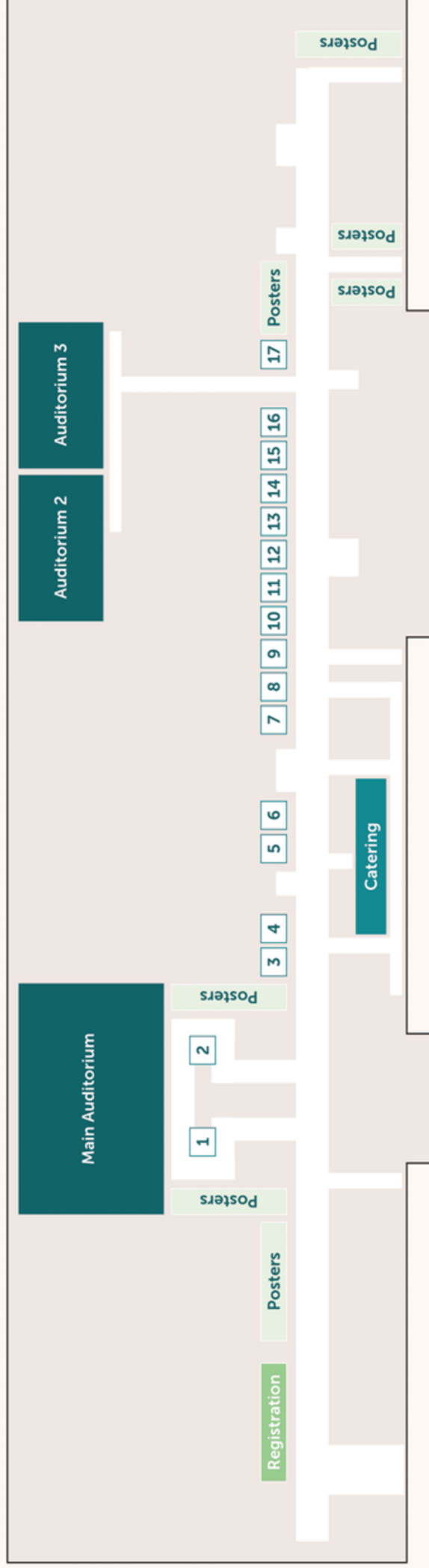
# Programme

	AUDITORIUM 1	AUDITORIUM 2	AUDITORIUM 3
09:00	REGISTRATION & COFFEE		
09:00	POSTER MOUNTING		
10:00	Welcome and opening address	DMS President, Thomas Bjarnsholt	DMS Vice president, Trine Rolighed Thomsen
10:05	Morning keynotes 1 & 2	Dennis Sandris Nielsen, Food Microbiology, Gut Health, and Fermentation, University of Copenhagen Oh no. My gut microbiome got a virus infection. The role of bacteriophages in the gut – and their potential use for gut microbiome manipulation	Rikke Meyer, Interdisciplinary Nanoscience Center, Aarhus University The multifunctional role of extracellular DNA in bacterial interactions and biofilm
10:40	Industry Symposium	Nordic Biosite Anneli Kadel: Standardizing Microbiomics – How to detect bias in collection, purification, and analysis	
10:55	COFFEE AND EXHIBITION		
	MORNING PARALLEL SESSIONS		
11:30	<b>Microbiology in disease</b> Chair introduction: Ismael Gogenur, Center for Surgical Science, Department of Surgery, Zealand University Hospital, Region Zealand. Co-chair: Thomas Bjarnsholt, University of Copenhagen, DMS Board	<b>Food and agriculture</b> Chair introduction: Leonie Johanna Jahn, Center for Biosustainability, Technical University of Denmark Co-chair: Michael Poulsen, University of Copenhagen, DMS Board	<b>Systems microbiology</b> Chair introduction: Sine Svenningsen, Department of Biology, University of Copenhagen. Co-chair: Ditlev Brodersen, Aarhus University, DMS Board
11:35	<b>Blaine Fritz, Department of Immunology and Microbiology, University of Copenhagen</b> Gut Microbiota and Colorectal Cancer: Functional Characterization of Host-Microbe Dynamics in the Tumor Microenvironment	<b>Mette Lübeck, Department of Chemistry and Bioscience, Aalborg University</b> Fungal protein production: precision fermentation and mycoproteins	<b>Aura Raulo, Department of Biology, University of Oxford</b> Metacommunity ecology of microbiomes in social networks of wild mice
12:00	<b>Ismael Gogenur, Center for Surgical Science, Department of Surgery, Zealand University Hospital, Region Zealand.</b> Microbiota in surgical oncology	<b>Veronica M. Sinotte, Center for Evolutionary Hologenomics, Globe Institute, University of Copenhagen</b> Origins of Fermented Food Microbes: from Ants to Yogurt to Sourdough	<b>Namiko Mitarai, Biocomplexity group, Niels Bohr Institute, University of Copenhagen</b> Self-organized coexistence of phage and bacteria
12:15	<b>Astrid L. B. Bennedsen, Center for Surgical Science, Department of Surgery, Zealand University Hospital, Region Zealand</b> Intraluminal Spray Application of Fosfomycin and Metronidazole in Patients with Right-Sided Colon Cancer and the effect on the tumour microenvironment	<b>Leonie Johanna Jahn, Center for Biosustainability, Technical University of Denmark</b> Sustainability guided microbial food development	<b>Amin Doostmohammadi, Active intelligent matter Research group, Niels Bohr Institute, University of Copenhagen</b> Microbial active matter: morphology, competition, and mesoscale turbulence
12:30	ORAL ABSTRACT PRESENTATIONS		
	<b>Obinna Ajunwa:</b> G-quadruplex DNA - hemin interactions induce Staphylococcal extracellular electron transfer	<b>Tanvi Taparia:</b> From single strain bioinoculants to consortia	<b>Lara Alvaro:</b> Streamlined cells display more efficient metabolic and biomanufacturing performance
12:40	<b>Mads Christensen:</b> Bringing the heat: Using isothermal microcalorimetry for rapid diagnostics and antimicrobial susceptibility testing	<b>Seven Nazipi:</b> Back to Basics – The Fundamentals of the Black Soldier Fly ( <i>Hermetia illucens</i> ) Microbiome	<b>Umit Akbey:</b> Structural insights into Biofilms and Biofilm Forming Functional Amyloids



	AUDITORIUM 1	AUDITORIUM 2	AUDITORIUM 3
	<b>INDUSTRY SYMPOSIA</b>		
12:50	<b>NEB/BioNordika</b> (New England Biolabs) <b>Klaus Tangsgaard:</b> Enzymes for Microbial studies	<b>Atrandi</b> <b>Justina Pupkaite:</b> High-Throughput Single-Microbe Genomics Enabled by Semi-Permeable Capsules	<b>SBT Instruments</b> <b>Peter Lüttge Jordal:</b> Easy, Label-Free Bacterial Counting in Real Time Using Impedance Flow Cytometry
13:00	<b>LUNCH IN THE EXHIBITION AREA</b>		
13:00		<b>GENERAL ASSEMBLY:</b> <b>The Danish Pasteur Society</b> Speaker: Pasteur Travel Grant recipient, 2023: Julie Zimmermann, Infectious Disease Immunology, Statens Serum Institut	
13:30	<b>POSTER SESSION 1</b>		
	<b>AFTERNOON PARALLEL SESSIONS</b>		
14:20	<b>Molecular mechanisms</b> Chair: Rene Jørgensen, Department of Science and Environment, Roskilde University, Co-chair: Ditlev Brodersen, Aarhus University, DMS Board	<b>Archaea</b> Chair introduction: Andreas Schramm, Department of Biology, Aarhus University Co-chair: Ole Højberg, Aarhus University, DMS Board	<b>Microbial ecology and ecosystems</b> Chair introduction: Mads Albertsen, Department of Chemistry and Bioscience, Aalborg University Co-chair: Trine Rolighed Thomsen, Aalborg University, DMS Board
14:25	<b>René Jørgensen, Department of Science &amp; Environment, Roskilde University</b> Elucidating the intoxication mechanism of TcdA from <i>Clostridium difficile</i>	<b>Christa Schleper, Department of Functional and Evolutionary Ecology, University of Vienna</b> From greenhouse gas production to eukaryogenesis: A journey to the ecological and evolutionary impacts of Archaea	<b>Mads Albertsen, Department of Chemistry and Bioscience, Aalborg University</b> Microflora danica: the atlas of danish environmental microbiomes
14:50	<b>Flemming Scheutz, Department of Bacteria, Parasites &amp; Fungi, Statens Serum Institut, Copenhagen</b> Virulence genes in <i>E. coli</i> . What matters and what doesn't	<b>Florin Musat, Department of Biology, Aarhus University</b> Can Archaea form higher alkanes? Insights from back fluxes during anaerobic oxidation of butane support archaea-driven alkane formation	<b>Mette Haubjerg Nicolaisen, Department of Plant and Environmental Sciences, University of Copenhagen</b> Microbial ecology in the wheat rhizosphere
15:05	<b>Karen Leth Nielsen, Department of Clinical microbiology, Copenhagen University Hospital, Rigshospitalet</b> Molecular resistance markers in clinical bacterial isolates identified by sequencing	<b>Burak Avci, Department of Biology, Aarhus University</b> Imaging the dark side of the eukaryote-prokaryote interface: the potential for subcellular complexity in yet-uncultivated Asgard archaea	<b>Thomas Tørring, Department of Biological and Chemical Engineering, Aarhus University</b> Tiny Earth: Engaging High School Students in the Hunt for Antibiotics
15:20	<b>ORAL ABSTRACT PRESENTATIONS</b>		
	<b>Lise Goltermann:</b> Identification of genes involved in aggregate associated antimicrobial tolerance of <i>Pseudomonas aeruginosa</i> using Tn-Seq guided discovery	<b>Laura Martínez-Alvarez:</b> Redefining paradigms in the archaeal virus-host arms race	<b>Anne Winding:</b> Soil microbiome stability to agricultural practices and nitrification inhibitors
15:30	<b>Frederik Henriksen:</b> A molecular model for transcriptional regulation of a type II toxin-antitoxin system	<b>Paula Garcia Otero:</b> Seasonal dynamics and metagenomics of ammonia-oxidizing archaea in a seasonal anoxic and sulfidic basin in Mariager Fjord (Denmark)	<b>Jonathan Donhauser:</b> Cross-continental soil prokaryotic phenotypic traits driven by precipitation regime and land cover
15:40	<b>COFFEE AND EXHIBITION</b>		
15:40	<b>POSTER SESSION 2</b>		
16:30	<b>Closing Keynote: The Origin of Life · Auditorium 1</b> Johan Olsen, Department of Biology, University of Copenhagen		
17:10	<b>Prizes &amp; Closing session · Auditorium 1</b>		
17:15	<b>Networking and reception with fermented beverages</b>		
18:30	Optional congress dinner at Madklubben Food Club Nørrebro (tickets must be purchased)		

# Floor plan



## Exhibitors

1	Nordic Biosite	7	CPH Biotech Supply	13	Triolab
2	Shionogi	8	AH Diagnostics	14	Novogene
3	Astrand Biosciences	9	Dandiag	15	Berner Lab
4	NEB/BioNordika	10	Saveen & Werner	16	Ramcon
5	SBT Instruments	11	You Do Bio	17	mBioWorks
6	Biolab	12	Ampliqon		



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# Save the Date

10. november 2025

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2025

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