

The Danish Microbiological Society  
**Annual Congress 2022**

14 NOVEMBER 2022  
COPENHAGEN · DENMARK



# SYMCEL o

What would you see if you could monitor the metabolism of your microbial culture in real-time?

Find out with a demo of the **calScreener™**. From monocultures to biofilms and mammalian infection models.

Discover a new technique. Acquire new data. Gain new insight.

Completely label-free and non-destructive  
Works with any sample  
Monitor kinetics real-time



## Content

Programme .....	4
Floor plan .....	10
Industry symposia .....	14

# DMS CONGRESS - Programme

		Room 1	Room 2	Room 3
09:00	Registration & Coffee			
09:00	Poster mounting			
10:00	Welcome and opening address	<b>Kasper Nørskov Kragh</b> DMS board member	<b>Katrine Uhrbrand</b> DMS board member	
10:15		<b>Keynote 1</b> <b>Michael Kühl</b> 'Photosynthesis in the "dark": Exploring the ecology of cyanobacteria with unusual chlorophylls'	<b>Keynote 2</b> <b>Tine Rask Licht</b> 'Microbial metabolism in the gut – From diet to host signalling'	
10:45		<b>Industry symposium 1</b> Symcel Biocalorimetry: what can a continuous metabolic readout tell you about your microbial cultures?	<b>Industry symposium 2</b> LumiraDx Fast Lab Solutions - Lab revolution with a 20min PCR	
11:05	Coffee and exhibition			
	PARALLEL SESSIONS			
11:30		<b>Session 1: Methane, microbes, and climate</b> Chair introduction: Amelia-Elena Rotaru Speakers: Jana Milucka, Cornelia Welte and Amelia Elena Rotaru	<b>Session 2: Yeast Biotechnology</b> Chair introduction: Irina Borodina Speakers: Michael Krogh Jensen, Nick Milne and Irina Borodina	<b>Session 3: Enteric bacterial pathogens: From the clinic to vaccine development</b> Chair introduction: Lotte Jelsbak Speakers: Kristian Schønning, Lotte Jelsbak and Rene Jørgensen
12:30	LUNCH IN THE EXHIBITION AREA			
12:45			GENERAL ASSEMBLY: Det Danske Pasteur Selskab Speaker: Michela Gambino	
13:00-14:00	<b>POSTER SESSION 1</b> PARALLEL SESSIONS - speakers are chosen from submitted abstracts			
14:00		<b>Session 4: Ecology/Basic microbiology</b> Chair introduction: Leise Riber, DMS board member Speakers: Sarah Camera-Wilpert, Elisa Hernandez-Magan and Christian Castenschield	<b>Session 5: Applied microbiology</b> Chair introduction: Rikke Louise Meyer, DMS board member Speakers: Clarissa Schwab, Athina Zampara and Anders Lander Mogensen	<b>Session 6: Clinical microbiology</b> Chair introduction: Katrine Uhrbrand, DMS board member Speakers: Morten Eneberg Nielsen, Mastaneh Afshar and Anne Kristine Iversen
14:45		<b>Industry flash presenter 1</b> SniprBiome Applying CRISPR to treat life-threatening diseases	<b>Industry flash presenter 2</b> BioSite Standardizing Microbiomics - Removing Bias in Collection, Purification and Analyses	
15:00	Coffee and exhibition			
15:00-16:10	<b>POSTER SESSION 2</b>			
16:10-16:20		<b>Lottery</b>		
16:20-17:00		<b>Keynote 3: Michael Bang Petersen</b> 'The Importance of Trust During a Health Crisis: Evidence From the Covid-19 Pandemic'		
17:00-18:00	Reception with fermented beverages			
18:00-21:30	<b>Congress dinner</b> (tickets must be purchased) Dinner starts at 18.30 at Food Club, Madklubben Nørrebro			

## Programme - Room 1

10:00	<b>Welcome and opening address</b> <b>Kasper Nørskov Kragh</b> DMS board member
10:15	<b>Keynote 1</b> <b>Michael Kühl</b> Professor, Department of Biology, University of Copenhagen <b>'Photosynthesis in the "dark": Exploring the ecology of cyanobacteria with unusual chlorophylls'</b>
10:45	<b>Industry symposium 1</b> Symcel Biocalorimetry: what can a continuous metabolic readout tell you about your microbial cultures?
11:05	<b>Coffee and exhibition</b>
	<b>PARALLEL SESSIONS</b>
11:30	<b>Session 1: Methane, microbes, and climate</b> Chair introduction: Amelia-Elena Rotaru
11:35	<b>Jana Milucka</b> Dr. and Group leader, Max Planck Institute für Marine Mikrobiologie, DE Microbial regulation of methane emissions from seagrass meadows
12:00	<b>Cornelia Welte</b> Associate Professor, Radboud University, NL Methanogenesis from methoxylated aromats
12:15	<b>Amelia Elena Rotaru</b> PhD, University of Southern Denmark, DK Symbiotic partners connected by a grain to make methane
12:30	<b>LUNCH IN THE EXHIBITION AREA</b>
14:00	<b>Session 4: Ecology/Basic microbiology</b> Chair introduction: Leise Riber, DMS board member
14:00	<b>Sarah Camara-Wilpert</b> PhD Student, University of Copenhagen, DK Phages subvert CRISPR-Cas immunity via RNA-based anti-CRISPRs
14:15	<b>Elisa Hernandez-Magana</b> PhD, University of Southern Denmark, DK Novel insights into the physiology of ammonia-oxidizing archaea during oxygen production, in oxygen-limited conditions
14:30	<b>Christian Castenschild</b> PhD, Aarhus University, DK Linking Microbial Taxa to Ice-Nucleation Protein Production in Arctic Marine Environments
14:45	<b>Industry flash presenter 1</b> SniprBiome Applying CRISPR to treat life-threatening diseases
15:00	<b>Coffee and exhibition</b>
16:10-16:20	<b>Lottery</b>
16:20-17:00	<b>Keynote 3:</b> <b>Michael Bang Petersen</b> Professor, Department of Political Science, Aarhus University <b>'The Importance of Trust During a Health Crisis: Evidence From the Covid-19 Pandemic'</b>

## Programme - Room 2

10:00	<b>Welcome and opening address</b> <b>Katrine Uhrbrand</b> DMS board member
10:15	<b>Keynote 2</b> <b>Tine Rask Licht</b> Professor, Deputy Head of Institute, National Food Institute, Technical University of Denmark: <b>'Microbial metabolism in the gut – From diet to host signalling'</b>
10:45	<b>Industry symposium 1</b> LumiraDx Fast Lab Solutions - Lab revolution with a 20min PCR
11:05	<b>Coffee and exhibition</b>
	<b>PARALLEL SESSIONS</b>
11:30	<b>Session 2: Yeast Biotechnology</b> Chair introduction: Irina Borodina
11:35	<b>Michael Krogh Jensen</b> Senior Researcher & group leader DTU Biosustain Brewing anticancer medicine in yeast
12:00	<b>Nick Milne</b> Co-founder and CSO at Octarine Producing improved new-to-nature compounds: The next frontier of industrial biotechnology
12:15	<b>Irina Borodina</b> Professor, The Novo Nordisk Foundation Center for Biosustainability Fermented pheromones – a sustainable solution for plant protection from insect pests
12:30	<b>LUNCH IN THE EXHIBITION AREA</b>
12:45	GENERAL ASSEMBLY: Det Danske Pasteur Selskab Speaker: Michela Gambino, PhD Evolution of Enterotoxigenic E.coli phages and other stories from Southern California
14:00	<b>Session 5: Applied microbiology</b> Chair introduction: Rikke Louise Meyer, DMS board member
14:00	<b>Clarissa Schwab</b> Associate Professor, Aarhus University, DK Fucose but not fucoidan enhances propionate formation of intestinal microbiota through microbial cross-feeding
14:15	<b>Athina Zampara</b> Postdoc, University of Copenhagen, DK Novel phage-derived antibacterials against Campylobacter
14:30	<b>Anders Lander Mogensen</b> Student Teacher, Aarhus University, DK The Microbiome of Danish Ant Species and its Potential Use in Biological Control
14:45	<b>Industry flash presenter 2</b> BioSite Standardizing Microbiomics - Removing Bias in Collection, Purification and Analyses
15:00	<b>Coffee and exhibition</b>

## Programme - Room 3

	PARALLEL SESSIONS
11:30	<b>Session 3: Enteric bacterial pathogens: From the clinic to vaccine development</b> Chair introduction: Lotte Jelsbak
11:35	<b>Kristian Schönning</b> MD, DMSc, Rigshospitalet and Associate Professor, University of Copenhagen, DK Resistance in E. coli to penicillin/ -lactamase inhibitors including piperacillin/ tazobactam, a first line antibiotic in Danish hospitals
12:00	<b>Lotte Jelsbak</b> Associate professor RUC, DK Autoinducer-3 in Salmonella Typhimurium: From its biosynthesis to physiological role
12:15	<b>Rene Jørgensen</b> PhD. Scientist at SSI, DK Development of a vaccine against Clostridium difficile infections
12:30	<b>LUNCH IN THE EXHIBITION AREA</b>
14:00	<b>Session 6: Clinical microbiology</b> Chair introduction: Katrine Uhrbrand, DMS board member
14:00	<b>Morten Eneberg Nielsen</b> Research assistant, Aalborg University, DK A Nanopore approach for metagenomic pathogen identification in blood plasma
14:15	<b>Mastaneh Afshar</b> Postdoc, Aarhus University, DK Staphylococcus saccharolyticus: a harmless skin colonizer or a well-armed opportunistic pathogen?
14:30	<b>Anne Kristine Iversen</b> PhD Student, University of Copenhagen, DK Imprint: Novel sampling and cultivation method maintaining 2D organization of microbes
15:00	<b>Coffee and exhibition</b>



Redefining next-generation  
**diagnostic solutions**

## SARS-CoV-2 RNA STAR Complete

Innovative qSTAR technology transforms molecular diagnostics and lab efficiency with fast direct amplification within 20 minutes on open RT-PCR systems.

### RNA STAR Complete offers:



#### High throughput

Direct amplification within 20 minutes (lysis and amplification)



#### High sensitivity

Accurate results in minutes







Email [customerservices.uk@lumiradx.com](mailto:customerservices.uk@lumiradx.com)  
or call us on **01 172 842535** for further information.

SD-COM-ARTF-00180 R1

**Floor plan:  
14 NOVEMBER, 2022**

Booths from group B and C are reserved for Platinum, Gold and Silver sponsors

**Signaturforklaring:**

-  UD GANG / EXIT
-  FLUGTVEJ / PATHWAY
-  Reserved booth
-  Booked booth



## Your distributor in Scandinavia

In business for more than 20 years, Nordic BioSite is recognized as a leader in supply of products for research and diagnostic, Immunology and Molecular Biology, to Pharmaceutical, Biotech, Diagnostic and to academic researchers.

*By Your Side™ in Life Science Research*



### Millions of products for your research!

Discover an extensive product range within numerous research areas. Search among more than 5.000.000 products for life science research and read about trends in biological sciences, technical tips and suggestions, and much more in our Life Science Blog.



**Simon Briks - MSc**  
 +45 (0) 51717383  
 simon.brinks@nordicbiosite.com

**Nordic BioSite**  
 - in Life Science Research  
 info@nordicbiosite.com  
 www.nordicbiosite.com

# Fidelity amplified.

## Q5® High-Fidelity DNA Polymerase

NEB's Q5 High-Fidelity DNA Polymerase sets the standard for both fidelity and performance. With the highest fidelity amplification available (>280× higher than Taq), Q5 DNA Polymerase results in ultra-low error rates. Its unique buffer system provides superior performance for a broad range of amplicons, regardless of GC content. Available in master mix and hot start formulations, Q5 DNA Polymerase represents the finest in fidelity.



For more information, including our FREE SAMPLE\* special offer, visit:  
**Q5pcr.com**

\* As long as stocks last. Limited to 1 sample/working group.

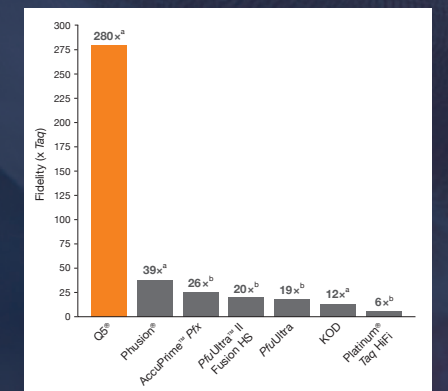
NEW ENGLAND BIOLABS®, NEB® and Q5® are registered trademarks of New England Biolabs, Inc.

PHUSION® and THERMO SCIENTIFIC® are registered trademarks and property of Thermo Fisher Scientific. PHUSION® DNA Polymerase was developed by Finnzymes Oy, now a part of Thermo Fisher Scientific.

PLATINUM® is a registered trademark of Life Technologies, Inc. ACCUPRIME™ is a trademark of Life Technologies, Inc. PFUULTRA™ is a trademark of Agilent Technologies, Inc.



Q5 High-Fidelity DNA Polymerase exhibits the highest fidelity of all tested PCR polymerases.



Thus, Q5 HiFi DNA Polymerase is the optimal choice for PCR cloning workflows and other applications in which the DNA sequence must be correct after amplification.

*Mandarin Ducks (Aix galericulata) are frequently featured in Chinese art and are regarded as a symbol of fidelity.*

# SYMCEL

## Symcel symposium

Biocalorimetry: what can a continuous metabolic readout tell you about your microbial cultures?

---

**Time** 10.45-11.05  
**Room** 1  
**Speaker** Dr. Katrin Beilharz  
Guest DMS Member: Kasper Nørskov Kragh

"Symcel is leading a new era in metabolic measurements for use in microbiology research. Symcel provides a novel and simple assay for real-time biological activity measurements based on a powerful technique called biocalorimetry. Their solution is a fast, label-free and kinetic phenotypic screening technology for direct measurements of microbial responses to their environment including complex community dynamics and treatment effects. Symcel's instrument, the calScreener has been used by researchers all over the world to investigate such diverse fields as; antimicrobial resistance, organotypic infection models, multispecies microbial communities, and potentiators of antimicrobial activity. The sensitive and kinetic monitoring of microbial responses to different stimuli allows you to see your microbial samples in a completely different way. Symcel was founded by leading authorities in microcalorimetry and the current team at Symcel has extensive experience within the biotechnology industry and diagnostics. For more information, go to [symcel.com](http://symcel.com)."



## LumiraDx symposium

Fast Lab Solutions - Lab revolution with a 20min PCR

---

**Time** 10.45-11.05  
**Room** 2  
**Speaker** Chris Orzessek

Innovative qSTAR technology transforms molecular diagnostics & laboratory efficiency with fast, direct amplification within 20 minutes on open RT-PCR systems

### Dansk:

Innovativ qSTAR teknologi transformerer molekylær diagnostik & laboratorieeffektivitet med hurtig, direkte amplifikation indenfor 20 minutter på åbne RT-PCR-systemer





### SniprBiome symposium

Applying CRISPR to treat life-threatening diseases

---

**Time** 14.45-15.00  
**Room** 1  
**Speaker** Katja Brunner

SNIPR BIOME uses CRISPR technology to programmable and selectively target human microbiomes

- SNIPR001, the leading program, aims at the prevention of fluoroquinolone-resistant E. coli bloodstream infections in haematological cancer patients
- SNIPR001 is progressing in clinical development with an IND cleared and FDA Fast Track Designation granted
- First human subjects dosed with SNIPR001 in spring 2022, trial currently ongoing



### BioSite/Zymo Research symposium

Standardizing Microbiomics – Removing Bias in Collection, Purification and Analyses

---

**Time** 14.45-15.00  
**Room** 2  
**Speaker** Florian Lübben

The rapid growth of Microbiomics has increased the demand for standard methods to improve the reproducibility and quality of the data being generated. To address these fundamental challenges, the scientists at Zymo Research have created standards, reference materials and bioinformatic tools for the development of the most accurate and unbiased workflows from sample collection to analyses.



# SAVE THE DATE

## Reconnect at the 10th Congress of European Microbiologists

9 - 13 July 2023 • Hamburg, Germany



Welcome to FEMS 2023 in Hamburg.

It is a great pleasure to announce the 10th Congress of European Microbiologists, FEMS 2023, which will be held 9-14 July 2023 in Hamburg, Germany. FEMS2023 will bring together leading scientists spanning different fields of microbiology to celebrate the best of microbiology.

This congress will showcase the most recent developments in microbiology to address some of the global challenges we face today, such as antimicrobial resistance, environmental pollution and the emergence of pathogenic disease.

**We invite you to reconnect with us and be part of the FEMS2023 Congress. We hope to see you there!**

### KEYNOTE SPEAKERS

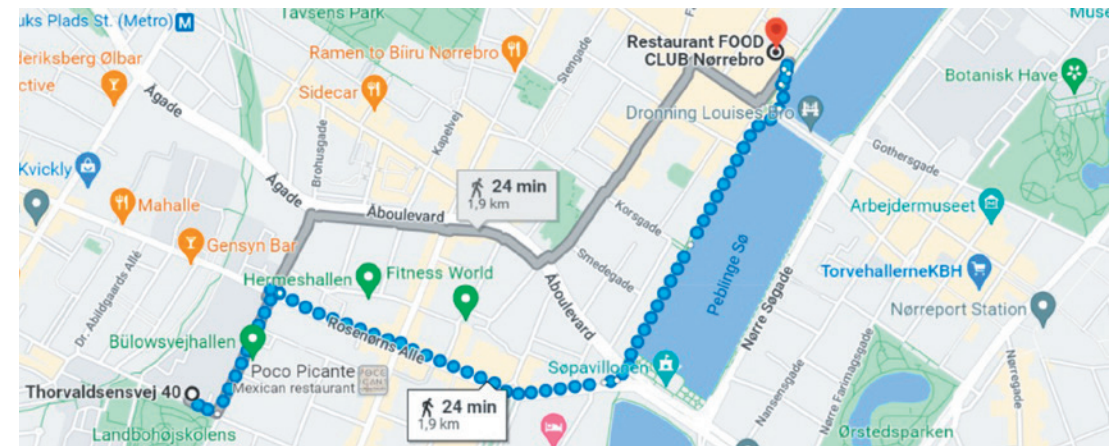
- Jorge Galan, USA
- Maria Dominguez-Bello, USA
- Julia Vorholt, Switzerland
- Carmen Buchrieser, Austria
- Paul Lehner, UK

### PROGRAMME TOPICS

Include all microbiological specialties: Applied Microbiology; Biotechnology; Environmental Microbiology; Food Microbiology; Microbiology Education; Pathogens; Physiology - Biochemistry ; Taxonomy - Systematics and Virology

### MORE INFORMATION

FEMS 2023 Congress Secretariat at [fems2023@fems-microbiology.org](mailto:fems2023@fems-microbiology.org)  
[www.fems2023.org](http://www.fems2023.org)



### University of Copenhagen (Frederiksberg Campus)

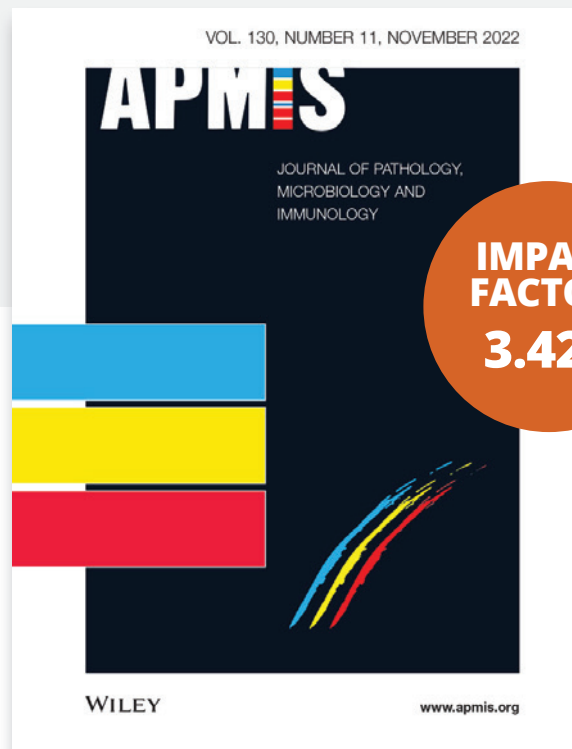
Thorvaldsensvej 40  
1871 Frederiksberg

- ↑ Head southeast on Thorvaldsensvej toward Bülowssvej - (72 m) -
- ← Turn left onto Bülowssvej - (290 m) -
- Turn right onto Rosenørns Allé - (750 m) -
- ↖ Slight left to stay on Rosenørns Allé - (30 m) -
- ← Turn left onto Peblinge Dosseringen - (350 m) -
- ↑ Continue onto Peblinge Dosseringen - (350 m) -
- ↑ Continue onto Sortedam Dossering - (124 m) -
- ↖ Slight left to stay on Sortedam Dossering - (Destination will be on the left) -

### Restaurant FOOD CLUB Nørrebro

Sortedam Dossering 7C  
2200 København N

# Journal of Pathology, Microbiology and Immunology



IMPACT  
FACTOR:  
3.428

Since 1924, APMIS has been publishing original research in the fields of pathology, microbiology and immunology, and from related developing areas of modern biomedicine.

## Abstract Book

All accepted abstracts for the DMS 2022 Congress are available at the DMS website. Please see below the abstract numbers and scan the QR code below to see the DMS 2022 Abstract Book.

### Index

Oral abstracts	Basic/Ecological microbiology	no. O1-O3
	Applied microbiology	no. O4-O6
	Clinical microbiology	no. O7-O9
Poster abstracts	Basic/Ecological microbiology	no. P1-P55
	Applied microbiology	no. P56-P81
	Clinical microbiology	no. P81-P92



### Contact information

DMS Secretariat  
info@dmselskab.dk  
www.dms.dk  
Tel: +45 70200305

Submit your  
paper now!

Aim your camera here  
for further information





# Thank you to our sponsors and exhibitors

## Platin Sponsors

# SYMCEL

## Gold Sponsors

Nordic  **BioSite**

 **LumiraDx™**

 **SNIPRBIOME**  
A CRISPR COMPANY

## Silver Sponsors

**RAMCON**   
PRODUCTS PEOPLE SOLUTIONS

 **Copenhagen  
Biotech  
Supply**

 **TRIOLAB** 

**sbi** **SCIENTIFIC  
BIOPROCESSING**

 **nordic  
diagnostica**

**BIO  
LAB** 

## Exhibitors

**AH** **diagnostics**

**AIDIAN**

**AMPLIQON**   
PCR ENZYMES & REAGENTS

 **avantor™**

 **BioNordika**  
YOUR SCIENTIFIC SUPPLIER

  
**nzytech**  
GENES & ENZYMES