



# cmfi 2023



## 3<sup>rd</sup> International Conference Controlling Microbes to Fight Infections

October 11–13, 2023  
Tuebingen, Germany  
[www.cmfi2023.com](http://www.cmfi2023.com)

GREEN  
EVENT  
BW

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## Program



Universitätsklinikum  
Tübingen



MAX PLANCK INSTITUTE  
FOR BIOLOGY TÜBINGEN

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German Research Foundation



Cluster of  
Excellence

Controlling Microbes to Fight Infections

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# ORGANIZATIONAL REMARKS

## Venue

University of Tübingen  
Hörsaalzentrum  
Auf der Morgenstelle 16 | 72076 Tübingen/DE

## Date

October 11–13, 2023

## Conference website

[www.cmfi2023.com](http://www.cmfi2023.com)

## Social media



@CoE\_CMFI #cmfi2023

## Local organization



Cluster of Excellence „Controlling Microbes to Fight Infections“ (CMFI)

Leon Kokkoliadis

Dirk Kraus

Silke Schultz

## Conference chairs

Heike Brötz-Oesterhelt

Andreas Peschel

Ruth Ley

Samuel Wagner

Lisa Maier

Nadine Ziemert

## Professional conference organizer

Conventus Congressmanagement & Marketing GmbH

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Dana Nostitz, Leon Kokkoliadis, Dirk Kraus

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## WELCOME NOTE

Dear colleagues and friends,

It is my great pleasure to invite you to CMFI 2023, the 3rd International Conference of our Cluster of Excellence “Controlling Microbes to Fight Infections” (CMFI). The conference will be held from October 11 to October 13, 2023, in Tuebingen, which combines the historical charm of a medieval German city with the vibrant atmosphere of a leading place for research.

The Cluster of Excellence CMFI at the University of Tübingen elucidates microbial interactions on molecular, cellular, and microbial community levels and unravels how microbial communities and host organisms control each other. CMFI is funded by the German Research Foundation (DFG) within the German Excellence Initiative as one of Germany’s top research networks in the field of microbiology and infectious diseases.

CMFI 2023 addresses pressing challenges of our time, such as the rise of multi-resistant pathogens and the roles of microbes in causing or preventing major chronic diseases. Our conference will bring together experts from different disciplines such as microbiology, infectious diseases, bioinformatics, biochemistry, natural products research, and microbiome science, to name just a few. Renowned experts from these fields confirmed to give a talk at CMFI 2023.

Our Cluster of Excellence collaborates closely in a multidisciplinary network of basic and clinical scientists. CMFI 2023 will further connect us with strong and vivid international networks, to advance collaborative science and to connect people.

We invite you to register for our conference and share your research with other excellent scientists. CMFI 2023 will enable you to meet friends and colleagues from around the globe to discuss your research topics.

Looking forward to meeting you in Tuebingen soon,

Andreas Peschel

Together with the conference chairs

Heike Brötz-Oesterhelt

Ruth Ley

Lisa Maier

Samuel Wagner

Nadine Ziemert

# 3<sup>rd</sup> International Conference

Scientific program




# PROGRAM OVERVIEW

WEDNESDAY, 11 OCT

THURSDAY, 12 OCT

FRIDAY, 13 OCT

Hörsaal N6	Foyer	Hörsaal N6	Foyer	Hörsaal N2	Hörsaal N6
		<b>09:00–10:30</b>			<b>09:00–10:30</b>
		<b>Session 3</b> Microbiome-derived bioactive compounds			<b>Session 6</b> Controlling invasive infection
		<b>Coffee break</b>			<b>Coffee break</b>
<b>11:00–13:00</b>		<b>11:00–11:45</b>			<b>11:00–11:45</b>
Registration		Flash talks 1			Flash talks 3
		<b>Lunch break</b>			
				<b>11:45–12:30</b>	<b>11:45–12:00</b>
				<b>Lunch talk</b> Effectively publishing data-rich science	Closing remarks and poster awards 
		<b>12:30–14:00</b>			
		<b>Session 4</b> Bacteria instructing mucosal immunity			
<b>13:00–13:15</b>			<b>14:00–15:00</b>		
Welcome remarks			Poster session		
<b>13:15–14:45</b>					
<b>Session 1</b> Enlisting commensals against pathogens					
<b>Coffee break</b>					
<b>15:15–16:45</b>		<b>15:00–15:45</b>			
<b>Session 2</b> How microbiomes shape major human diseases and drug availability		Flash talks 2			
		<b>Coffee break</b>			
<b>16:45–20:00</b>	<b>16:45–18:40</b>	<b>16:15–17:45</b>			
Get together	Poster session	<b>Session 5</b> Host cell manipulation by intracellular pathogens			
			<b>18:00–24:00</b>		
			Buffet, band, and DJ		
				<b>Key</b>	
				Welcome & closing remarks	
				Poster session	
				Talks	
				Main session	
				Registration	
				Lunch talk	
				Social program	

# SCIENTIFIC PROGRAM

## WEDNESDAY, 11 OCTOBER

### 11:00–13:00 Registration

Foyer

13:00–13:15 Welcome remarks

Lecture hall N6

13:00 President of the University of Tübingen  
Karla Pollmann

13:05 CMFI Spokesperson  
Andreas Peschel  
“Introducing the Cluster of Excellence CMFI”

### 13:15–14:45 Session 1

Lecture hall N6

Chair

#### Enlisting commensals against pathogens

Heike Brötz-Oesterhelt (Tuebingen/DE)

13:15 Resurrecting the intestinal microbiota to combat  
IT01 antibiotic-resistant pathogens  
Eric Pamer (Chicago-IL/US)

virtual

13:45 A probiotic to prevent *Staphylococcus aureus* infection?  
IT02 Michael Otto (Bethesda-MD/US)

14:15 Evolutionary trajectories of gut bacteria determine resistance against  
FT01 pathogen colonization  
Simon Woelfel (Munich/DE)

14:30 Microbiota context dependent dual protective role of *Klebsiella oxytoca*  
FT02 against *Salmonella* infection  
Till Strowig (Braunschweig/DE)

### 14:45–15:15 Coffee break

### 15:15–16:45 Session 2

Lecture hall N6

Chair

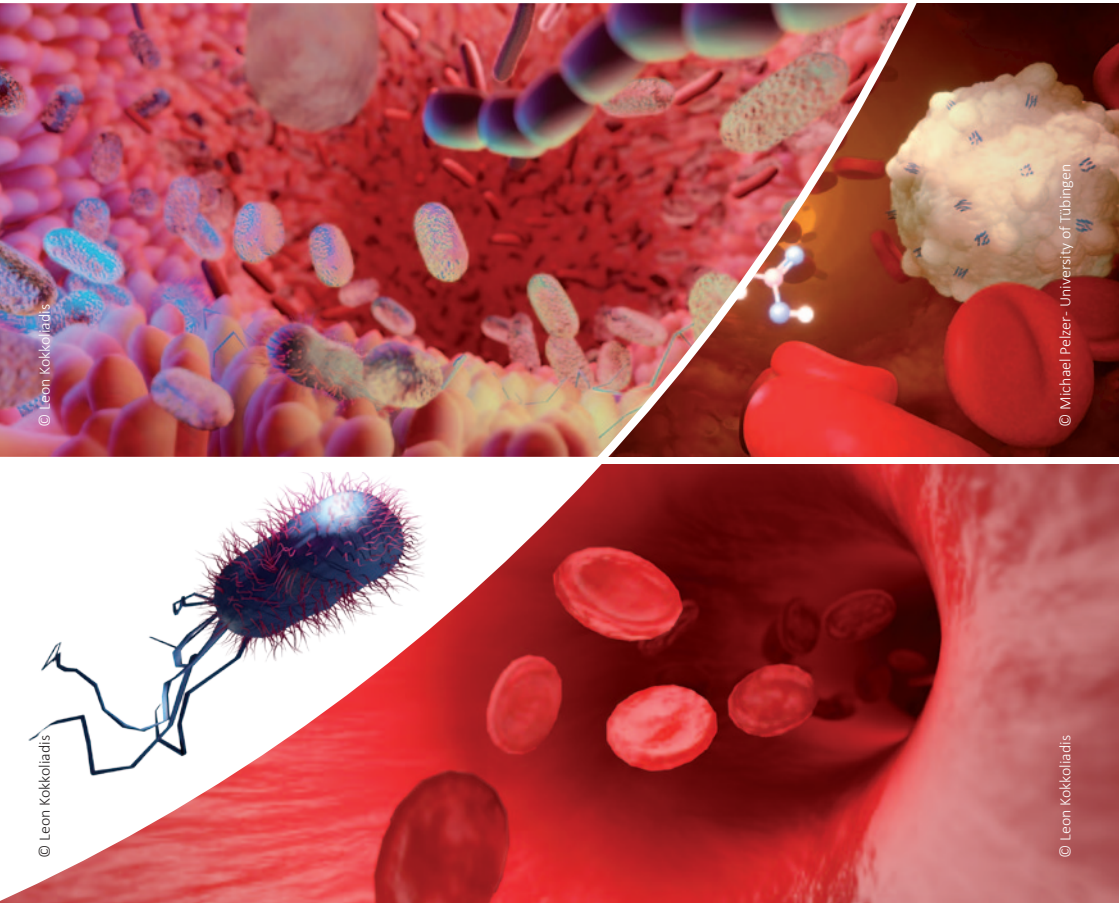
#### How microbiomes shape major human diseases and drug availability

Reiner Jumpertz-von Schwartzberg (Tuebingen/DE)

15:15 Gut microbiome in the development and type 2 diabetes  
IT03 Fredrik Bäckhed (Gothenburg/SE)

# SCIENTIFIC PROGRAM WEDNESDAY, 11 OCTOBER

- 15:45 IT04 The consequences of drugging the gut microbiome – from the individual microbe to the host  
Lisa Maier (Tuebingen/DE)
- 16:15 FT03 Impact of the microbiome composition on the fitness of antibiotic resistant mutants  
Michael Knopp (Heidelberg/DE)
- 16:30 FT04 Systematic evaluation of long-term drug effects on the gut microbiome in the Estonian Microbiome Cohort  
Elin Org (Tartu/EE)
- 16:45–21:00** Poster session (see page 13) incl. get together (see page 28)  
Foyer





SCIENTIFIC PROGRAM  
THURSDAY, 12 OCTOBER

09:00–10:30 Session 3

Lecture hall N6

Chair

**Microbiome-derived bioactive compounds**

Elke Dittmann (Potsdam/DE)

09:00

IT05

Understanding and redirecting the host immune response to *Staphylococcus epidermidis*  
Michael Fischbach (San Francisco-CA/US)

09:30

IT06

Exploring the untapped Chemical diversity of bacterial specialized metabolites  
Nadine Ziemert (Tuebingen/DE)

10:00

FT05

Mining antimicrobials in the human skin microbiome  
Uyen Thy Nguyen (Hamilton/CA)

10:15

FT06

Exploiting microbial metabolites as narrow-spectrum antibiotics  
Thomas Böttcher (Vienna/AT)

10:30–11:00 Coffee break

11:00–11:45 Flash talks 1

Lecture hall N6

Chair

Daniel Petras (Tuebingen/DE)

11:00

FT07

Naturally occurring variants of the antimicrobial lasso peptide Microcin J25  
Julian D. Hegemann (Saarbrücken/DE)

11:15

FT08

From regulon to stimulus to metabolite – Zur – zinc – Transvalencins  
Marius Spohn (Giessen/DE)

11:30

FT09

Metabolic bottlenecks decrease antibiotic efficiency in *Escherichia coli*  
Paul Lubrano (Tuebingen/DE)

11:45–12:30 Lunch break

SCIENTIFIC PROGRAM  
THURSDAY, 12 OCTOBER

**11:45–12:30** Lunch talk  
Lecture hall N1 **Effectively publishing data-rich science**  
Andrew Hufton (Editor-in-Chief; Patterns – Cell Press)

**12:30–14:00** Session 4  
Lecture hall N6 **Bacteria instructing mucosal immunity**  
Chair Alexander Weber (Tuebingen/DE)

12:30 Sugar-coating mucosal vaccines  
IT07 Emma Slack (Zurich/CH)

13:00 Evolutionary histories and adaptations of human gut microbiota  
IT08 Ruth Ley (Tuebingen/DE)

13:30 Transient intestinal colonisation of germ-free mice demonstrates long-lived  
FT10 microbiota-specific T<sub>H</sub> cell memory  
Jakob Zimmermann (Bern/CH)

13:45 Differential host response to *Staphylococcus aureus* Panton-Valentine  
FT11 leucocidin in Africans and Europeans  
Tobias Grebe (Muenster/DE)

Group photo

**14:00–15:00** Poster session (see page 13)  
Foyer

SCIENTIFIC PROGRAM  
THURSDAY, 12 OCTOBER

15:00–15:45 **Flash talks 2**

Lecture hall N6

Chair Effie Bastounis (Tuebingen/DE)

15:00 Glycan-mediated immune selection of bacterial species at host barrier sites  
FT12 Jasper Mol (Amsterdam/NL)

15:15 Studying the effects of gut microbiome dysbiosis on the outcomes of T-cell  
FT13 dependent cancer immunotherapies  
Shivendra Dixit (Tuebingen/DE)

15:30 Vaccine-induced fevers are associated with diet and the gut microbiome  
FT14 Kelsey Huus (Tuebingen/DE)

15:45–16:15 **Coffee break**

16:15–17:45 **Session 5**

Lecture hall N6

**Host cell manipulation by intracellular pathogens**

Chair Jorge Galan (New Haven-CT/US)

16:15 Development of a novel antiinfective that blocks invasion of *Salmonella*  
IT09 Samuel Wagner (Tuebingen/DE)

16:45 Transkingdom signalling via *Legionella pneumophila* small regulatory RNAs  
IT10 and extracellular vesicles  
Carmen Buchrieser (Paris/FR)

17:15 Using complex human skin models to study the immunological response to  
FT15 colonization by *Staphylococcus spp.*  
Julia Lang (Solna/SE)

17:30 Biomechanical alterations of endothelial cells exposed to bacterially-  
FT16 infected immune cells  
Marie Mönkel (Tuebingen/DE)

18:00 **Buffet, band, and DJ (see page 28)**

# SCIENTIFIC PROGRAM

## FRIDAY, 13 OCTOBER

### 09:00–10:30 Session 6

Lecture hall N6

Chair

#### Controlling invasive infections

Christoph Ratzke (Tuebingen/DE)

09:00

IT11

Dissecting the impact of malnutrition and dehydration on nosocomial infections

Victor Torres (Memphis-TN/US)

09:30

IT12

How staphylococci balance commensal vs. pathogen lifestyles

Andreas Peschel (Tuebingen/DE)

10:00

FT17

Sensing host asparagine controls group A *Streptococcal pathogenesis*

Emanuel Hanski (Jerusalem/IL)

10:15

FT18

Understanding and fighting urinary tract infections (UTIs) in an innovative human bladder microtissue model

Carlos Flores (Basel/CH)

### 10:30–11:00 Coffee break

### 11:00–11:45 Flash talks 3

Lecture hall N6

Chair

Bastian Molitor (Tuebingen/DE)

11:00

FT19

Diversification of two-partner secretion *Ralstonia solanacearum* systems in the bacterial plant pathogen *Ralstonia solanacearum*

Daria Evseeva (Tuebingen/DE)

11:15

FT20

Radiolabeled antibody for translational specific PET imaging of invasive infections: the example of Aspergillosis

Nicolas Bézière (Tuebingen/DE)

11:30

FT21

Adaptive evolution of virulence and persistence in carbapenem-resistant *Klebsiella pneumoniae* infections

Christoph Ernst (Cologne/DE)

### 11:45–12:00 Closing remarks and poster awards (see page 28)



# 3<sup>rd</sup> International Conference

Poster



Bacterial infections

- P01 Molecular cross-talk between Sa3int phages and their *Staphylococcus aureus* host  
Ronja Dobritz (Tuebingen/DE)
- P02 Cell death during nutrient starvation in *Staphylococcus aureus* cells lacking (p)ppGpp is linked to disturbed GTP homeostasis  
Andrea Salzer (Tuebingen/DE)
- P03 Differential survival of staphylococcal species in macrophages  
Janina Bayer (Tuebingen/DE)
- P04 Predicting phage infection in *Staphylococcus aureus* with receptor-binding proteins  
Janes Krusche (Tuebingen/DE)
- P05 ERK activation waves are key drivers in the mechanical cell competition that leads to collective onslaught of bacterially-infected cells  
Lara Hundsorfer (Tuebingen/DE)
- P06 Type III secretion chaperones and transmembrane proteins: elucidating the mechanisms underlying correct targeting to secretion  
Sara Pais (Tuebingen/DE)
- P07 Molecular characterization of the Ser/Thr kinase HipA in *Klebsiella pneumoniae*  
Payal Nashier (Tuebingen/DE)
- P08 *Klebsiella pneumoniae* brain abscess caused by dissemination of a virulent subpopulation from a urinary tract infection  
Christoph Ernst (Cologne/DE)
- P09 A hybrid computational approach to characterize the dynamics of epithelial cell monolayers during intracellular bacterial infection  
Raúl Aparicio-Yuste (Zaragoza/ES)
- P10 Leveraging microphysiological technology to study the effects of fluid shear stresses apically imposed on endothelial cells interacting with bacterial pathogens  
Eduardo Brás (Tuebingen/DE)
- P11 Role of the alternative sigma factor SigB on antibiotic tolerance in *Staphylococcus aureus*  
Izabela Simic (Tuebingen/DE)
- P12 Comparative genomics of disease associated *Clostridium perfringens* isolates  
Jan Franzen (Bern/CH)

## POSTER

- P13 BV200: an anti-virulence agent to prevent/treat *S. aureus* infections and/or *Staphylococcus aureus*-induced disease exacerbation  
Vincent Trebosc (Basel/CH)
- P14 Genome-scale metabolic modeling of *Rothia mucilaginosa* reveals insights into metabolic capabilities and antimicrobial strategies for cystic fibrosis  
Nantia Leonidou (Tuebingen/DE)
- P15 Identifying the cellular receptor for *Clostridium perfringens* NetF  
Filippo Cattalani (Bern/CH)
- P16 Resensitizing multiresistant strains with plasmid-delivered CRISPR systems  
Johannes Kippnich (Tuebingen/DE)
- P17 Skin microbiome dynamics as predictor and pathogenesis mechanism for severe radiodermatitis in breast cancer patients  
Claudia Hülpmusch (Augsburg/DE)
- P18 Invasive *Staphylococcus capitis* isolates from neonatal sepsis specified to oppose colonizers and resist antibiotics of last resort and human intestinal immunity  
Christoph Slavetinsky (Tuebingen/DE)
- P19 Frequency of Hepatitis C virus in diagnosed Tuberculosis cases  
Muhammad Farooq Baig (Mirpurkhas/PK)
- P20 Towards real-time imaging of the gut microbiome  
Eden Laing (Tuebingen/DE)
- P21 Dynamics of antibiotic resistance in *Staphylococcus aureus* during persistent airway infection in people with cystic fibrosis  
Christine Rumpf (Muenster/DE)
- P22 The efficacy of the MicroScan WalkAway40 Plus system in reporting antibiotic resistance pattern in patients with urinary tract infection, North India  
Lalit Kumar (Chandigarh/IN)
- P23 Machine learning and phylogenetic analysis allow for predicting antibiotic resistance in *M. tuberculosis*  
Alper Yurtseven (Braunschweig/DE)
- P24 2-deoxy-2-[<sup>18</sup>F]-fluoro-D-sorbitol: towards PET imaging of bacterial replacement strategies and bacterial infection  
Maria Gonzalez (Tuebingen/DE)

- P25 Assembly of the type III secretion system export apparatus is a fine-tuned process  
Eunjin Kim (Tuebingen/DE)
- P26 Increased temperature benefits *Staphylococcus aureus* competition against upper respiratory commensals  
Joshua Huffines (Birmingham-AL/US)
- P27 Microbial competition on human skin: *Staphylococcus aureus* versus *Staphylococcus lugdunensis*  
Mariam Shahata (Stockholm/SE)
- P28 Suppression of *Staphylococcus aureus* on human skin models by resident skin microbiota  
Keira Melican (Stockholm/SE)

### Bioactive compounds shaping microbial communities

- P29 Microbiome modulators for environmental enteric dysfunction  
Nermin Akduman (Tuebingen/DE)
- P30 Protecting *Bacteroidaceae* from macrolide antibiotics by antagonizing drug interactions  
Patrick Müller (Tuebingen/DE)
- P31 Autoinducer 3: a one-step construction of the DPO ring system and the formation of both DPO isomers  
Jacob Tofte (Hedehusene/DK)
- P32 Functional analysis on the iron-intake mechanisms of Corynebacteria species  
Mathias Witte Paz (Tuebingen/DE)
- P33 Characterization and bioactivities of exopolysaccharides from potential probiotics *Enterococcus faecium* MW725386 and *Streptococcus thermophilus* MW725391 and their impact on bovine milk rheology and gut microbiome composition  
Mohammed Tarique (Al Ain/AE)
- P34 Investigation of the function of the ECF transporter LgbSTA of *Staphylococcus lugdunensis*  
Kevser Bilici (Tuebingen/DE)
- P35 “Hot” BGCs from “Cool” microbes  
Ludek Sehnal (Tuebingen/DE)
- P36 Extremely short-lived peptide-polyene antimicrobial enables nasal commensal to eliminate *Staphylococcus aureus*  
Bernhard Krismer (Tuebingen/DE)



## POSTER

- P37 Unveiling the untapped potential: Exploring secondary metabolites in the genus *Pedobacter*  
Celine Mara Zumkeller (Giessen/DE)
- P38 Functional dissection of the transport process during glycopeptide antibiotic secretion  
Nicola Gericke (Tuebingen/DE)
- P39 Metabologenomic workflow development for strain prioritization  
Joana Bauer (Giessen/DE)
- P41 Characterization of the potentially microbiome-shaping epilancin A37 reveals a unique mechanism of action  
Jan-Samuel Puls (Bonn/DE)
- P42 Empowering microbial studies: Next-generation sequencing in microbiology and epidemiology  
Jennifer Müller (Tuebingen/DE)
- P43 Towards a structure-based understanding of “silent” flagellin-TLR5 interactions  
Michael E. W. Bell (Tuebingen/DE)
- P44 Development of a fungal heterologous host for enhanced production of Astin C  
Hannes Maier (Tuebingen/DE)
- P45 Non-antibiotic drugs break colonization resistance against enterobacterial pathogens  
Anne Griebshammer (Tuebingen/DE)
- P46 Microbial competition determines the requirement for a putative lipid transport operon in the human gut bacterium *Phocaeicola vulgatus*  
Yelizaveta Rassadkina (Durham-NC/US)
- P47 *In vivo* phenotypic response of *Escherichia coli* to epinephrine exposure in albino rats  
Tombari Pius Monsi (Port Harcourt/NG)
- P48 Turning the good against the bad: machine learning to maximize disease-suppressing microbial interactions by optimizing nutrient conditions  
Or Shalev (Tuebingen/DE)
- P49 Defining microbial functions in chronic infection with metatranscriptomics  
Carolyn Ibberson (Norman-OK/US)
- P50 Biotic resistance of native microbes determines pathogen invasion dynamics  
Xiaozhou Ye (Tuebingen/DE)

- P51 Neutrophil extracellular traps enhance *Staphylococcus aureus* skin colonization by the induction of oxidative stress in the skin and downregulation of epidermal barrier gene expression  
Jule Focken (Tuebingen/DE)
- P52 Identification of *in vitro* and *in vivo* nutritional interactions between nasal commensals and *Staphylococcus aureus*  
Laura Camus (Tuebingen/DE)
- P53 Co-stimulation of formyl-peptide receptor 1 and 2 leads to synergistic activation of neutrophils  
Janna Becker (Tuebingen/DE)
- P54 Understanding the role of formyl-peptide receptors in skin colonization and inflammation  
Marco Lebtig (Tuebingen/DE)
- P55 The microvirome – understanding phage-bacterial dynamics in the plant holobiont  
Sheila Roitman (Tuebingen/DE)
- P56 A novel parallel pathway for inositol sphingolipid synthesis in gut Bacteroidota  
Stacey Heaver (Tuebingen/DE)
- P57 Spatially resolved host-bacteria-fungi interactomes via spatial metatranscriptomics  
Haim Ashkenazy (Tuebingen/DE)
- P58 Insights into the diversity and fitness of the potential nasal probiotic *Corynebacterium accolens*  
Ahmed Elsherbini (Tuebingen/DE)
- P59 Revealing membrane insertion mechanisms of *Legionella's* integral membrane effector proteins in host cells  
Sarah-Maria Trenz (Tuebingen/DE)
- P60 LukAB is essential for *Staphylococcus aureus* exit from within macrophages  
Xiao Liu (Tuebingen/DE)
- P61 *Escherichia coli* Nissle 1917 flagellin outer sheath domains are dispensable for TLR5 recognition but modulate bacterial motility  
Johanna Jakob (Tuebingen/DE)

- P62 Apically applied shear stresses impact the rheotactic behavior, physical forces and transcriptomic profile of three different endothelial cell types  
Julio Cesar Sanchez Rendon (Tuebingen/DE)
- P63 Surviving unknown waters: The journey of *Salmonella's* integral membrane effector proteins SseF and SseG into eukaryotic membranes  
Sophie Schminke (Tuebingen/DE)
- P64 Mapping interactions of *Staphylococcus aureus* with the human nasal microbiome using high-throughput network analysis  
David Gerlach (Planegg/DE)
- P65 Role of *Staphylococcus aureus* Nuc1 in immune stimulation  
Ningna Li, Friedrich Goetz (Tuebingen/DE)
- P66 Exploration of the regulatory networks responding to environmental microbiota in the nematode *Pristionchus pacificus*  
Marina Athanasouli (Tuebingen/DE)
- P67 The community remembers: Role of collective memory in shaping complex microbial interactions  
Shubham Gajrani (Tuebingen/DE)
- P68 *Albugo* – plant pathogen with detrimental influence  
Monja Schmid (Tuebingen/DE)
- P69 Bacterial exometabolites function additively to regulate the growth of plant-pathogenic fungi  
Priscilla Tijesuni Adisa (Cologne/DE)
- P70 Uptake of pyrroloquinoline-quinone (PQQ) by *Escherichia coli*  
Klaus Hantke (Tuebingen/DE)
- P71 The role of secondary metabolites in plant associated microbial communities  
Franziska Höhn (Tuebingen/DE)
- P72 SynTracker differentiates evolution via mutation or recombination on a per-species basis in complex microbiomes  
Hagay Enav (Tuebingen/DE)
- P73 Unraveling bacterial-archaeal interactions within the human oral microbiome – insights into the etiology of periodontal disease  
Sarah Akinci (Tuebingen/DE)

## POSTER

- P74 Bacterial sensing regulates metabolism in the *Drosophila* intestine  
Sofie Burgmer (Cologne/DE)
- P75 How to get rid of *S. aureus* – Siderophore-based interactions between *Staphylococcus aureus* and the nasal microbiota  
Alina Bitzer (Tuebingen/DE)
- P76 Neurotransmitter-producing commensal bacteria at the interface of host metabolism  
Samane Rahmdel (Tuebingen/DE)
- P77 Quorum sensing autoinducer-3 in *Salmonella* Typhimurium – from its biosynthesis to its impact on cell physiology  
Lotte Jelsbak (Roskilde/DK)
- P78 Fecal microbiota transplant from EstMB participants repeatedly using antibiotics results in gut barrier malfunction in mice  
Elin Org (Tartu/EE)
- P79 *S. aureus* strains derived from healthy and atopic hosts differ in metabolite responses to AE-like environmental stress  
Jamie Afghani (Augsburg/DE)
- P80 Predictive value of the gut microbiome in immunotherapy responses of hepatocellular carcinoma patients  
Ronald Keller (Tuebingen/DE)
- P81 An approach to investigate interbacterial interactions in a community of human gut microbes  
Julia Schumacher (Tuebingen/DE)
- P82 Codiversification of salivary microbiota with humans  
Xiaoying Liu (Tuebingen/DE)
- P83 Getting to know the neighborhood: using proximity dependent biotinylation to identify protein interactions  
Lena Schiele (Tuebingen/DE)
- P84 Maternal microbiota-derived metabolites drive embryonic epidermal formation and set neonatal skin barrier  
Mariachiara Aloisi (Wuerzburg/DE)

## POSTER

- P85 Peptidoglycan salvage enables the periodontal pathogen *Tannerella forsythia* to survive within the oral microbial community  
Marina Borisova-Mayer (Tuebingen/DE)
- P86 Distinct colonisation niche and immune system interaction between commensal and pathogenic *Staphylococcus epidermidis* strains  
Parul Chandorkar (Wuerzburg/DE)
- P87 Gut colonization with a branched chain amino acid synthesis mutant of *Phocaeicola (Bacteroides) vulgatus* affects host organ metabolism  
Jessica McCann (Durham-CS/US)
- P88 Measurement of proteome dynamics in bacterial co-cultures  
Philipp Spät (Tuebingen/DE)
- P89 Harnessing the CRISPR Immunological memory of bacteria to track the spread and transmission of resistant pathogens in microbiomes  
Axel Fehrenbach (Tuebingen/DE)
- P90 Bacteriophages influence the *Arabidopsis thaliana* phyllosphere microbial community  
Leonie Zott (Tuebingen/DE)
- P91 Receptor identification and structure function analysis of *Clostridium perfringens* beta-toxin  
Basma Tarek (Bern/CH)
- P92 Cervix-infection-on-chip: A microphysiological model of Chlamydia and *Neisseria gonorrhoeae* infection for mechanist studies and development of therapeutic interventions  
Hui-Yu Liu (Tuebingen/DE)



## POSTER

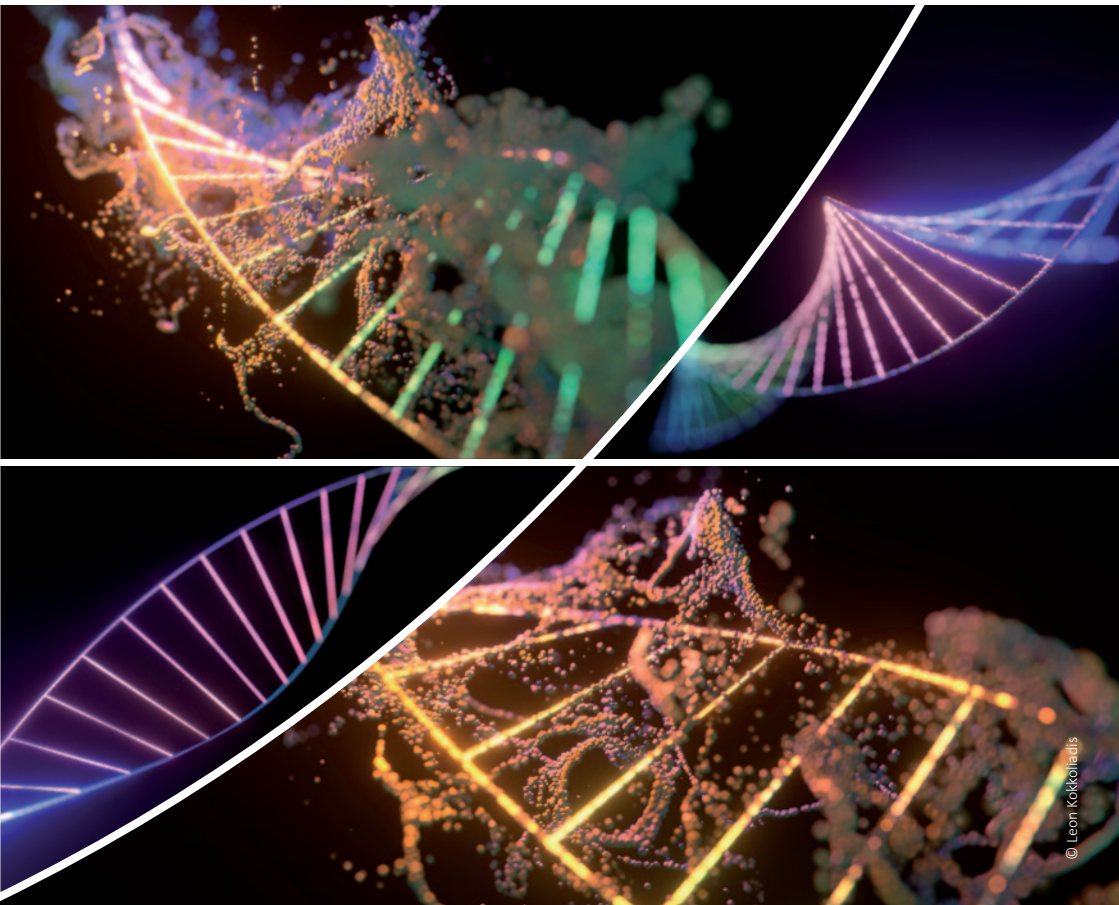
- P93 Unveiling reproducible gut microbiome alterations in anxiety – enhanced aromatic amino acid metabolism across cohorts  
Alexander Tyakht (Tuebingen/DE)
- P94 Bifidobacteria confer microbiome-acquired lactose tolerance in genetically lactase-non persistent humans  
Liam Fitzstevens (Tuebingen/DE)
- P95 Unraveling the role of biofilm forming microbes in complex leaf microbiome – insights from a synthetic community study  
Vasvi Chaudhry (Tuebingen/DE)
- P96 A rewired human probiotic prevents pathogen colonization by signal interference and antibiotic production  
Muthiah Kumaraswami (Houston-TX/US)
- P97 The two-component system ArlRS is essential for  $\beta$ 1,4-N-acetylglucosamine glycosylation of *Staphylococcus aureus* wall teichoic acid  
Marieke Kuijk (Amsterdam/NL)
- P98 Studying low-biomass microbiome in tumors and tissues  
Arnelyn Doloiras-Laraño (Tuebingen/DE)
- P99 From niche to niche: Investigating microbial communities and their specialised metabolite gene clusters in human microbiomes  
Alyaa Abdelhameed (Tuebingen/DE)

### Microbe-microbe & microbiome-host interaction

- P100 Establishing workflows for isolation and identification of tissue bacteria in order to build a cancer microbiome biobank  
Qianyi Liang (Tuebingen/DE)
- P102 Molecular basis of methanogen-virus interactions  
Mohamed Balboul (Tuebingen/DE)
- P103 Secretory IgA impacts the microbiota density in the human nose  
Rob van Dalen (Tuebingen/DE)

## POSTER

- P104 PUL-dependent cross-feeding mechanisms between the gut commensal *Bacteroides thetaiotaomicron* and the enteric pathogen *Salmonella* Typhimurium  
Lena Amend (Wuerzburg/DE)
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- P106 High-throughput analysis of primary metabolites with mass spectrometry-based metabolomics  
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- P107 Changes in oral and fecal microbiome of patients with pancreatic ductal adenocarcinoma undergoing chemotherapy and their correlations with clinical outcomes  
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- P108 Characterisation of the genetic determinants for *R. hominis* flagellin-host interactions  
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- P109 Studying the role of the microbiome in carcinogenesis of pancreatic cancer  
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- P110 Characterizing environmental adaption and virulence of *Enterococcus spp.* isolated from immunocompromised patients  
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- P111 Updating microbial genetics tools for their application to the human gut microbiome  
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- P112 Methanogen diversity and evolutionary dynamics across global human populations  
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- P113 MMonitor: Tracking metagenomes using long read nanopore sequencing  
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- P119 Microbiome Metbolome Integration Platform (MMIP): a web-based platform for microbiome and metabolome data integration and feature identification  
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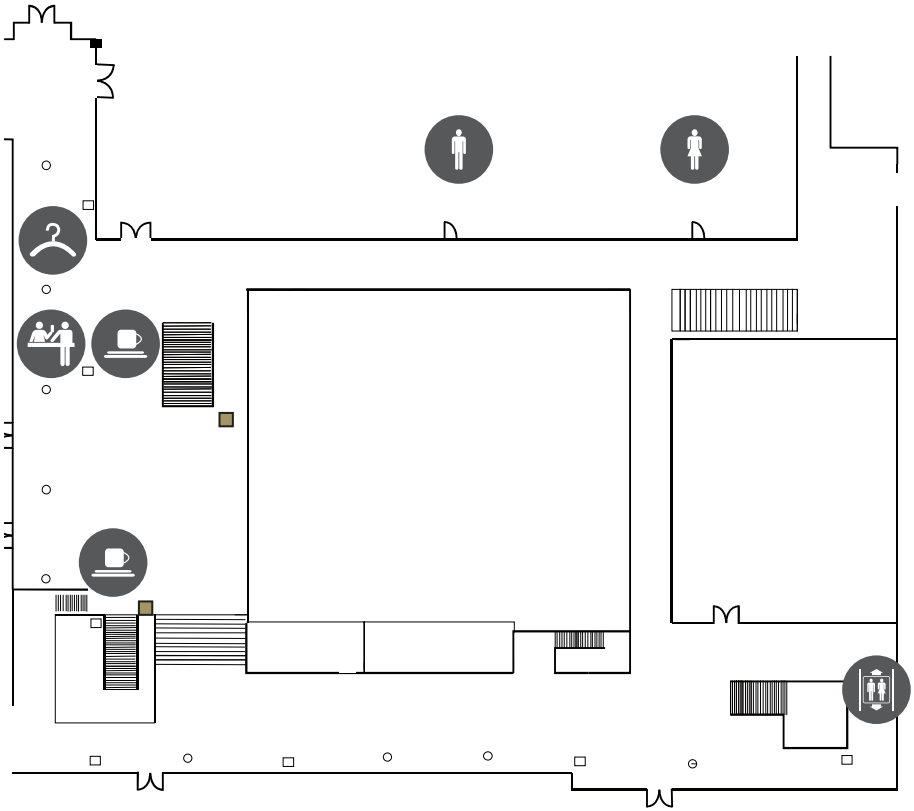


# 3<sup>rd</sup> International Conference

Exhibitors and other important information



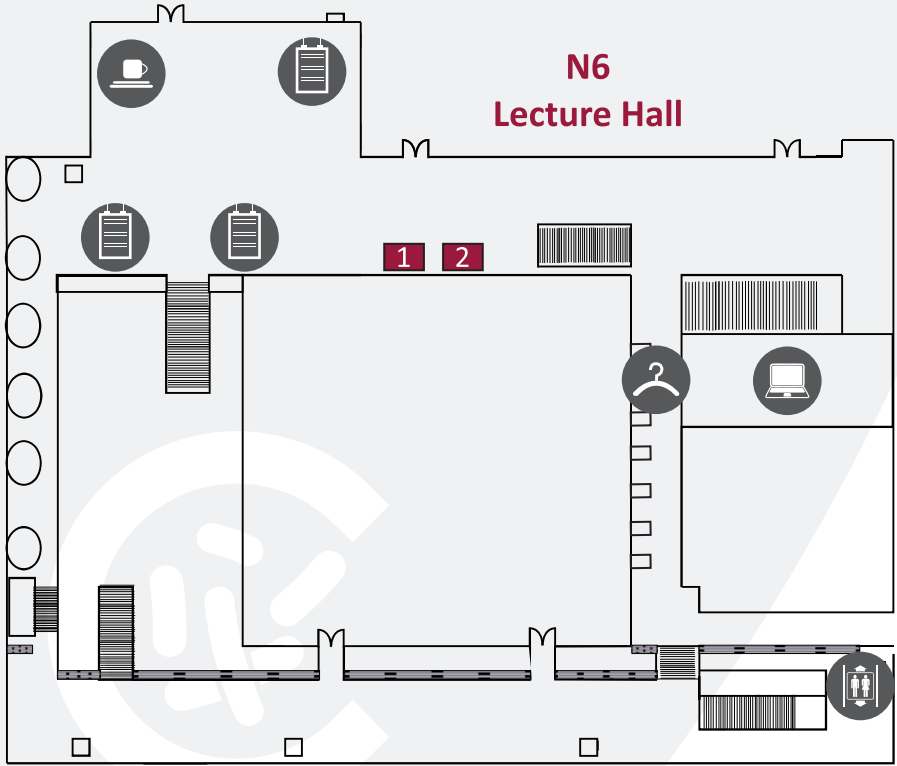
## FLOOR PLAN | 1<sup>st</sup> LEVEL











## EXHIBITORS AND BOOTH NUMBER

- 1 Biozym Scientific GmbH
- 2 New England Biolabs GmbH

# FLOOR PLAN | 2<sup>nd</sup> LEVEL



## Key

-  Toilets
-  Catering
-  Cloakroom
-  Media check-in
-  Elevator
-  Check-in
-  Posters
-  Exhibitors

# Social program

## Get together

Be our guest and enjoy the evening with food and drinks. Meet your colleagues, friends, and industrial partners in a relaxed atmosphere.

Date Wednesday, 11 October  
Time 16:45–20:00 (starts parallel with poster session)  
Location Foyer



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## Buffet, band, and DJ

We invite all participants to enjoy a casual evening at the Hörsaalzentrum. The evening program of day two will start with the big band of the University of Tübingen playing.

Afterwards we provide a nice atmosphere for conversations with colleagues and friends by fresh drinks and snacks.

Get to know each other even better – socialize and extend your network! A DJ will be playing your favorite songs, offering the possibility to celebrate and dance indoors and outdoors (depending on the weather).

Date Thursday, 12 October  
Time 18:00–00:00  
Location Foyer



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## GENERAL INFORMATION



### Catering

Catering will be served during the official coffee and lunch breaks and is covered by the registration fee. The get together (day 1) and social evening (day 2) will also take place at the conference venue. Here, too, catering is included in the registration fee.



### Certificate of attendance

Certificates of attendance will be sent to you via e-mail after the conference.



### Cloakroom

The coat and luggage room at the conference is free and unsecured.



### General terms and conditions

Please find our general terms and conditions at [www.cmfi2023.com](http://www.cmfi2023.com).



### Name badge

Please wear your name badge during all conference events, including the networking activities.

Admission to scientific sessions and to the industrial exhibition is restricted to participants wearing their badge. Participants will receive their name badge when collecting their conference documents at the check-in desk.



### Poster awards

The top **3** poster presentations will be awarded prize money of **200, 150 and 100 EUR**. The award ceremony will be held on **Friday, 13 October** during the closing remarks.



### Publication of abstracts

All abstracts will be available online in a secure area on the CMFI homepage to all registered participants. You can obtain access directly on site at the message board.

User name: cmfi2023  
Password: cm87342f9



### Wi-Fi access

Wi-Fi is available for free throughout the whole conference area.

SSID: Guest  
Name: cmfi2023  
Password: Microbe

## GENERAL TIPS FOR AUTHORS AND PRESENTERS



### Presentation upload

The media check-in for uploading your presentation is located in **room N06**. For submission, please use a USB flash drive, CD or DVD disc that is not protected by any software. Professional staff and equipment will be available for you to arrange and preview your presentation.



### Submitting your presentation/technical information

The presentation should be prepared as PDF, MS Office PowerPoint for Windows or Keynote for Macintosh in format 16:9. A presentation notebook with a PDF reader and MS Office PowerPoint 2016 will be provided. To guarantee a smooth-running program please upload your presentation on time – **at least 2 hours before your presentation starts**.



### Time allotment

Please prepare your presentation for the allotted amount of time. Session chairs may interrupt, should you overrun your time limit.



### Poster sessions

You can find your permanent poster ID in the poster part of this book. Every poster wall is marked with a permanent poster ID, so that authors can find their place within the poster exhibition.

All poster authors are asked to hang up their posters on Wednesday, 11 October from 11:00 and remove them on Friday, 13 October until 12:00. Mounting materials will be provided on each poster board. Please do not use any other type of pins than those provided.

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