

4th Summer-School „Microbes, Host and Infection“ Program

Organisation: IGIM, TRR261 and CMFI

Venue: Tübingen, livestream and N10, Auf der Morgenstelle 3

Wednesday, 30.06.2021

13:50 – 14:00 Welcome: Samuel Wagner and Heike Brötz-Oesterhelt

14:00 – 16:20 Session 1: TRR261 (livestream)

Chair: Jens-Peter Rodler (Tübingen) and Jan-Samuel Puls (Bonn)

14:00 – 14:45 **Ana Rita Brochado, University of Würzburg, Germany**

Deciphering antimicrobial drug combinations using high-throughput approaches

14:45 – 15:05 **Dardan Beqai** (Project B01) - Spatial and temporal cellular assembly of the glycopeptide biosynthetic complex

15:05 – 15:25 **Nina Pfahler** (Project B08) - Structures of cellular machineries relevant for antibiotic synthesis and action

15:25 – 15:40 Coffee-Break

15:40 – 16:00 **Christina Braun** (Project Z01) - Totalsynthesis of farnesyl lipid I analogue

16:00 – 16:20 **Lara Behrmann** (Project A08) - Cellular effects of fosfomycin treatment on Wolbachia

16:30 – 18:30 Virtual Session: “Career Paths” (livestream)

Chair: Yvonne Thoma (Tübingen) and Melina Arts (Bonn)

Ana Rita Brochado
Alexander Zipperer
Miriam Fürst-Wilmes
Daniela Rausch
Christian Breitmeyer

Details in the additional program for the “Career Paths” Session

Thursday, 01.07.2021

8:00 – 8:30	Registration (Auf der Morgenstelle 3)
8:30 – 10:55	Session 2: DZIF (Lecture Hall N10 and livestream) Chair: Jule Focken and Lena Staudenmaier, AG Schitteck, UKT Dermatology
8:30 – 9:15	Jost Enninga, Institut Pasteur, France Imag(in)ing the intracellular niche formation of enteroinvasive bacterial pathogens
9:15 – 9:35	Lydia Michalek (AG Bohn) - Molecular Mechanisms of YgfB-mediated β -lactam resistance in <i>Pseudomonas aeruginosa</i>
9:35 – 9:55	Daniel Gomez (AG Kemen) - Amyloid proteins in microbe-microbe interactions
9:55 – 10:15	Coffee-Break (Outdoor area, Auf der Morgenstelle 3)
10:15 – 10:35	Jule Focken (AG Schitteck) - Neutrophil extracellular traps promote <i>S. aureus</i> colonization via TLR4/RAGE signaling and induction of oxidative stress in keratinocytes
10:35 – 10:55	Naybel Hernandez Perez (AG Stegmann) - The biodegradable chelating agent EDDS: Insights into biosynthesis and EDDS-mediated interactions in microbial communities
11:10 – 13:00	Hot Corner + Poster Session 1 (Outdoor area, Auf der Morgenstelle 3)
13:00 – 14:00	Lunch
14:00 – 15:30	Round tables – discussion about methodological problems (Outdoor area, Auf der Morgenstelle 3)
17:00 – 18:30	Microbiological Colloquium – Andreas Bäumlner (individually via zoom)

Friday, 02.07.2021

8:30 – 10:05 **Session 3 – First Part: CMFI (Lecture Hall N10 and livestream)**

12:00 – 12:45 Chair: Valentin Egle and Ole Eggers, IMIT AG Bohn

8:30 – 8:50 **Maximilian Bunz** (AG Schindler) - Dependency of Hepatitis C Virus on CD81 – Implications on Viral Translation and Replication

8:50 – 9:10 **Franziska Höhn** (AG Ziemert) - The role of secondary metabolites in bacterial communities

9:10 – 9:30 **Christian Beck** (AG Peschel) - Influence of opsonization on intracellular survival of *Staphylococcus aureus*

9:30– 9:45 Coffee-Break (Outdoor area, Auf der Morgenstelle 3)

9:45 – 10:05 **Miriam Rodi** (AG Held) - Understanding the neglected human malaria parasite: Development of a genotyping approach of *Plasmodium malariae*

10:05 – 12:00 **Hot Corner + Poster Session 2**
(Outdoor area, Auf der Morgenstelle 3)

Session 3 – Second Part: (Lecture Hall N10 and livestream)

12:00 – 12:45 **Vicki Auerbuch Stone, University of California, Santa Cruz, USA**

Broad spectrum inhibitors of the bacterial type III secretion systems

12:45 – 13:00 **Awards and farewell**