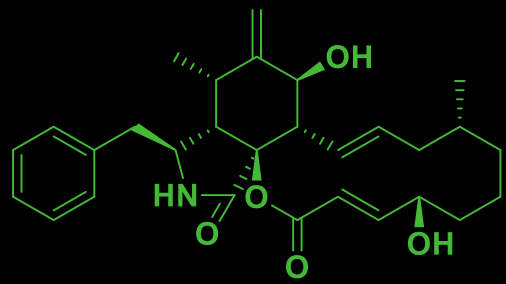
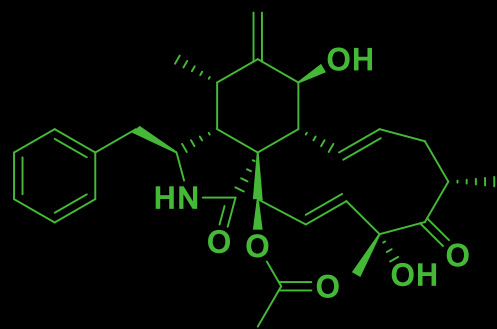


# Cytolabs Symposium

## Cytochalasans: actin and beyond



Cytochalasin B



Cytochalasin D

### Invited Speakers:

Peter Bieling (Dortmund, DE)

Jun Deng (Tianjin, China)

Olga Genilloud (Granada, ESP)

Jessica Henty-Ridilla (Syracuse, USA)

Jennifer Herrmann (Saarbrücken, DE)

Inari Kursula (Bergen, NO)

Pekka Lappalainen (Helsinki, FI)

Tianyang Liu (London, UK)

Serge Mostowy (London, UK)

Bastien Nay (Palaiseau, F)

Matthias Preller (Bonn, DE)

Guillaume Romet-Lemonne (Paris, F)

Deniz Tasdemir (Kiel, DE)

May 21<sup>th</sup>-23<sup>th</sup> 2024

Helmholtz Centre for Infection Research – HZI

Registration is open now:

<https://konferenz.uni-hannover.de/event/114/>

### Organizers:

Russell Cox, (Hannover, DE)

Klemens Rottner, (Braunschweig, DE)

Theresia Stradal, (Braunschweig, DE)

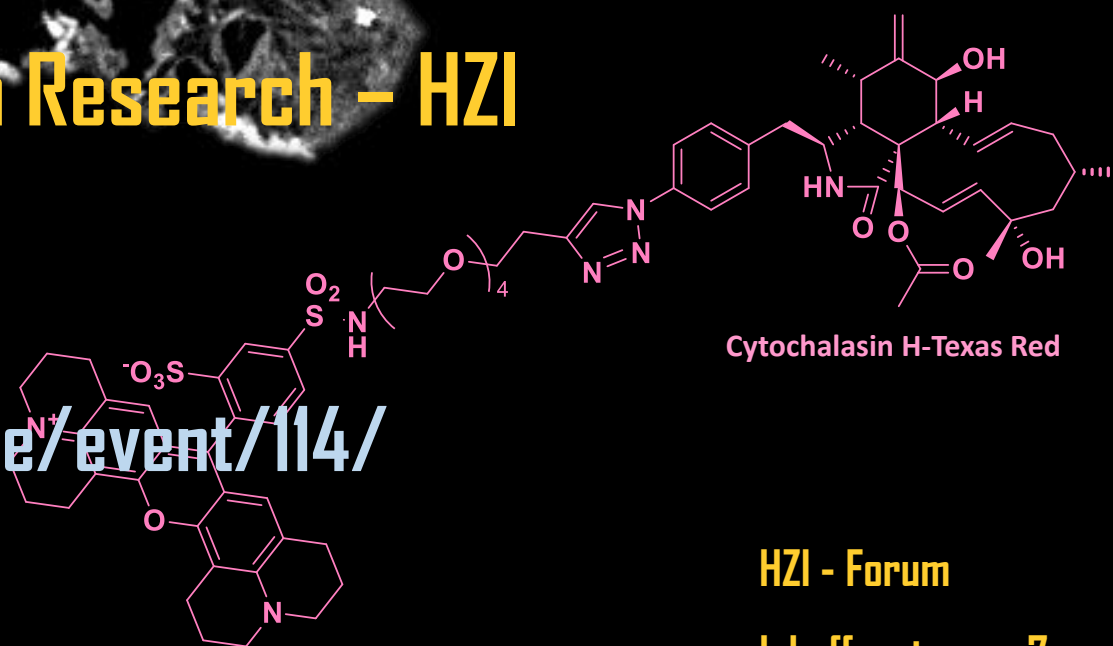
Christopher Lambert, (Braunschweig, DE)

Marc Stadler, (Braunschweig, DE)

HZI - Forum

Inhoffenstrasse 7

38124 Braunschweig



Cytochalasin H-Texas Red

# CYTOLABS SYMPOSIUM

May 21<sup>st</sup> – 23<sup>rd</sup>, 2024

**Helmholtz Centre for Infection Research (HZI)**

*Braunschweig main campus*

Tuesday, May 21<sup>st</sup>

- 11:30 Registration and Coffee (+Speakers-Lunch)
- 13:00 Introduction
- 13:15 SESSION 1
- 13:15 **Serge MOSTOWY – KEYNOTE LECTURE 1**  
*'Use of the cytoskeleton to control Shigella infection'*
- 14:15 **Peter BIELING**  
*'Control of actin assembly dynamics by end-binding proteins'*
- 15:00 **Jessica HENTY-RIDILLA**  
*'Coordination of actin plus-end dynamics by IQGAP1, formin, and capping protein'*
- 15:45 Coffee and Cake
- 16:30 SESSION 2
- 16:30 **Inari KURSULA**  
*'Peculiar actins in the malaria parasite'*
- 17:15 **Jennifer HERRMANN**  
*'Discovery of natural products from myxobacteria and their development towards drugs for human therapy'*
- 18:00 **Christine BEEMELMANNS, Marie DAYRAS**

***Structural diversity of cytochalasins in bacterial-fungal co-culture and evaluation of the underlying NRPS promiscuity***

18:30

END OF DAY 1 – FREE EVENING

Wednesday, May 22<sup>nd</sup>

9:30

SESSION 3

9:30

**Olga GENILLOUD – KEYNOTE LECTURE 2**

***‘Microbial natural products and drug discovery: opportunities to leverage natural products chemical diversity’***

10:30

**Jun DENG**

***‘Chemical emulation of the biosynthesis of natural products’***

11:15

Coffee and Cake

11:45

**Bastien NAY**

***Development of photoactivatable chemical tools to study actin dynamics***

12:30

**Anna Maria KÖHLER**

***‘Engineering the biosynthesis of new cytochalasins’***

13:00

LUNCH

14:00

SESSION 4 – SHORT TALKS

14:00

**Laura HANEY (Henty-Ridilla-lab)**

***‘Role of TDP-43 in regulating cytoskeletal dynamics’***

14:15

**Kjeld GERDES (Kalesse-lab)**

***‘Studies towards the Total Synthesis of [11]-Cytochalasins: A Pathway to the Derivatization Toolbox’***

14:30

**Ernest OPPONG-DANQUAH (Tasdemir-lab)**

***‘Metabolomics and bioactivity analyses of marine fungi co-cultivated with phytopathogens’***

14:45

**Mervic DONGOCK KAGHO (Klahn-lab)**

*'From molecular modeling to semi-synthetic modification of [11] and [14]-cytochalasans'*

15:00

**Katharina SCHMIDT** (Stradal lab)  
*'Structure function analysis of the bioactivity of cytochalasin B & curation of a systematic cytochalasan database'*

15:20

Coffee and Cake

16:00

SESSION 5

16:00

**Deniz TASDEMIR**  
*'Untargeted metabolomics-assisted discovery of biologically active marine fungal natural products'*

16:45

**Esteban Charria GIRON**  
*'Integrated omics insights into the diversity of cytochalasans: A discovery approach'*

17:15

**Blondelle MATIO KEMKUIGNOU**  
*'Insights into the chemical and biological diversity of cytochalasans produced by manifold species within the phylum Ascomycota'*

17:45

**Matthias PRELLER**  
*'Structural and mechanistic basis of cytoskeletal modulators with anticancer potential'*

18:30

END OF DAY 2 – TRANSFER TO CITY CENTRE

19:00

SPEAKERS' DINNER AT HOTEL DEUTSCHES HAUS

# Thursday, May 23<sup>rd</sup>

09:00

SESSION 6

09:00

**Pekka LAPPALAINEN - KEYNOTE LECTURE 3**

*'Assembling functionally distinct actin filaments for cell adhesion, migration and mechanosensing'*

10:00

**Tianyang LIU**

*'The structural diversity and regulation of Arp2/3 iso-complexes'*

10:30

Coffee and Cake

11:00

SESSION 7

11:00

**Christopher LAMBERT**

*'Towards understanding the impact of cytochalasins on actin-dependent structures'*

11:30

**Guillaume ROMET-LEMONNE**

*'Life, death, and resurrection of actin filament branches'*

12:15

CONCLUDING REMARKS

12:30

**LUNCH AND DEPARTURE**