

SPEAKERS

Keynote - Henry Higgs | *Dartmouth College, USA*

Philippe Chavrier | *Institut Curie, France*

Irene Chiolo | *University of Southern California, USA*

Daniel Fisher | *University of Montpellier, France*

Naoyuki Inagaki | *Nara Institute of Science and Technology, Japan*

Peter Lenart | *MPI for Biophysical Chemistry, Germany*

Uri Manor | *Salk Institute for Biological Studies, USA*

Klemens Rottner | *University of Braunschweig, Germany*

Gudula Schmidt | *University of Freiburg, Germany*

Theresia Stradal | *HZI, Braunschweig, Germany*

Maria Vartiainen | *University of Helsinki, Finland*

Roland Wedlich-Söldner | *University of Münster, Germany*

Matthew Welch | *University of California, Berkeley, USA*

+ Selected Speakers from Abstracts!

VENUE

Institute of Experimental and
Clinical Pharmacology and Toxicology
„Otto-Krayer-Haus“ | Lecture Hall | 1st floor
Albertstraße 25 | 79104 Freiburg

SCIENTIFIC ORGANIZATION

Medical Center - University of Freiburg
Institute of Experimental and Clinical Pharmacology
and Toxicology
Albertstraße 25 | 79104 Freiburg

Prof. Dr. Robert Grosse
robert.grosse@pharmakol.uni-freiburg.de
phone: +49 761/203-5301
<http://portal.uni-freiburg.de/pharmakologie/i>

ORGANIZATION

Medical Center - University of Freiburg
Eventmanagement
Breisacher Str. 153 | 79110 Freiburg
Melanie Springmann
melanie.springmann@uniklinik-freiburg.de
phone: +49 0761/270-84611

www.conftool.com/aaif2020

SPONSORS

www.uniklinik-freiburg.de/aaif/sponsoring



KEYNOTE SUPPORTED BY



Actin Assembly for Intracellular Functions

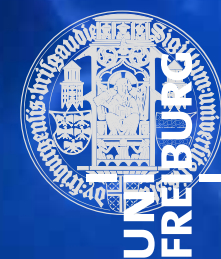
February, 20th -
February, 21st 2020
Freiburg | Germany

Organizing Team

Robert Grosse
Marion Zehner
Gerhard Wetterer
Carsten Schwan



www.uniklinik-freiburg.de/aaif



PROGRAM
THURSDAY, 20.02.2020

12:00 Registration

Session Chair: Robert Grosse

14:00 Opening

14:10 **Keynote Lecture:**
Actin-mitochondrial communication: a two-way street with multiple on-ramps
Henry Higgs

15:10 Coffee Break

Session 1: Intracellular Actin Functions

Session Chair: Gudula Schmidt

15:30 „New Methods for High Spatiotemporal Resolution Imaging of Actin-Dependent Organelle Dynamics“
Uri Manor

16:00 Discrimination of disease-linked INF2 variants by quantitative cellular profiling
Roland Wedlich-Söldner

16:30 Novel redox function of BCAT1 plays a role in cell division
Liliana Francois

16:50 Myosin 19 couples filopodia formation and mitochondria transfer to their tips under stress
Arnon Henn

17:10 Coffee Break

Session Chair: Norbert Klugbauer

17:30 Mechanobiology of Actin-Driven Neuronal Network Formation
Naoyuki Inagaki

18:00 Actin filaments store elastic energy to produce nanoscale forces
Marion Jasnin

18:20 Role of the actin-binding proteins cofilin 1 and inverted-formin 2 (INF2) on mitochondrial and cellular resilience
Carsten Culmsee

After-wards Get Together and Poster Session 1

PROGRAM
FRIDAY, 21.02.2020

Session 2: Trafficking and Organelle Dynamics

Session Chair: Carsten Schwan

09:00 The protease-dependent invasion program of breast cancer cells
Philippe Chavrier

09:30 Assembling actin filaments for effective motility
Klemens Rottner

10:00 DLC3 suppresses MT1-MMP-dependent matrix degradation by controlling RhoB and actin remodeling at endosomal membranes
Bettina Noll

10:20 The first CLIC-GEEC cargo adaptor links Rab21-bound integrins to endocytosis in breast cancer cells
Paulina Moreno-Layseca

10:40 Coffee Break

Session Chair: Robert Grosse

11:20 Photorhabdus Toxin Complex (PTC) as variable protein injection machinery: A tool to analyze local regulation of the cytoskeleton
Gudula Schmidt

11:50 Dissection of actin assembly pathways by CRISPR/Cas9
Theresia Stradal

12:20 Back on track: Highly dynamic F-actin filaments in apicomplexan parasites
Markus Meißner

12:40 Cell matrix invasion requires Myosin isoform polarity mediated Nuclear-Force Coupling
Tobias Zech

13:00 Lunch and Posters

PROGRAM
FRIDAY, 21.02.2020

Session 3: Actin Dynamics and Nuclear Functions

Session Chair: Liliana Francois

15:00 Actin' on transcription
Maria Vartiainen

15:30 Roles of nuclear actin in structuring DNA replication
Daniel Fisher

16:00 Highways for heterochromatin repair
Irene Chiolo

16:30 Myosin VI moves on nuclear actin filaments and supports long-range chromatin rearrangements
Christof Gebhardt

16:50 Coffee Break

Session Chair: Roland Wedlich-Söldner

17:10 Viral mobilization of actin in the nucleus
Matthew Welch

17:40 A novel, F-actin-driven mechanism of nuclear envelope rupture
Peter Lenart

18:10 Nuclear F-actin and genome stability in mammalian oocytes
Binyam Mogessie

18:30 GPCR-induced calcium transients trigger nuclear actin assembly for chromatin dynamics
Ying Wang

18:50 Closing Remarks

After-wards Buffet Dinner