

Thursday, November 9<sup>th</sup>
**Session III: Infectious diseases & systems biology**

Chair: Frank Kirchhoff

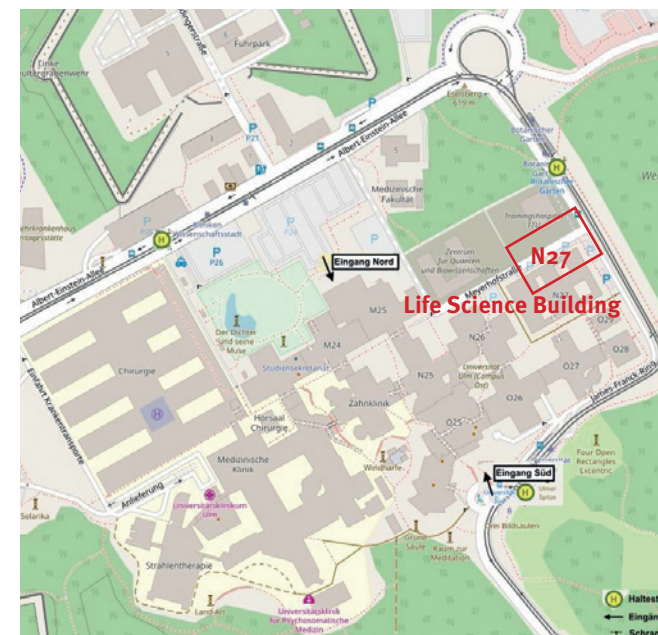
- 10:50-11:30 Björn Meyer, Magdeburg**  
 Learning basic biology when searching for targeted therapies
- 11:30-11:50 Nicole Stadler (IGradU, Ulm)** nanocarrier  
 Toxin-based multifunctional peptide nanocarrier for targeted modulation of breast cancer metastasis and osteolysis in the bone
- 12:10-12:30 Sebastian Heber (IGradU, Ulm)**  
 Inhibitors for bacterial protein toxins - repurposing of approved drugs and body own proteins
- 12:30-12:50 Marietta Hamberger (IGradU, Ulm)**  
 Advancing gene regulatory network reconstruction with machine learning and natural language processing
- 12:50-13:30 Lunch Break**


**Session IV: Aging, Degeneration, Trauma, Regeneration and Immune Modulation**

Chair: Sofia Meyer zu Reckendorf

- 13:30-14:10 Florence Bareyre, Munich**  
 Shaping circuits following spinal cord injury
- 14:10-14:30 Antonia Seitz (IGradU, Ulm)**  
 Effect of PPAR modulation on the molecular and functional outcome after peripheral nerve injury
- 14:30-14:50 Julian Niemann (IGradU, Ulm)**  
 Elevated levels of Ube2g1 expression in HSCs leads to premature aging of the haematopoietic system
- 14:50-15:10 Karla Rivera (IGradU, Ulm)**  
 Delivery of Pten inhibitory peptide PAP2 to promote neurite growth after injury
- 15:10-15:30 Svenja Mauer (IGradU, Ulm)**  
 Senolytic treatment using Dasatinib and Quercetin as potential therapeutic approach in Osteoarthritis
- 15:30-15:50 Coffee break**
- 15:50-16:10 Gautami Amarnath (IGradU, Ulm)**  
 Dissecting molecular determinants of differential vulnerability of dopaminergic neurons, in age and Parkinson's disease, as novel therapeutic targets
- 16:10-16:30 Selina Stahl (IGradU, Ulm)**  
 Revealing the causal relationship between age-associated immune-remodeling and changes in the gut microbiome
- 16:30-16:50 Sujin Kim (IGradU, Ulm)**  
 Investigating roles of the WASH complex in cardiac and neuromuscular development via loss-of function of WASH complex subunits

Closing remarks


**Contact**

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Chairman: Bernd Knöll

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**Fall Meeting 2023**

November 7<sup>th</sup> - 9<sup>th</sup>, 2023  
 Life Science Building  
 Multimediaraum

Meyerhofstraße | N27  
 D-89081 Ulm



International Graduate School  
 in Molecular Medicine Ulm

# Fall Meeting 2023

Tuesday, November 7<sup>th</sup>

Multimedia Room, Life Science Building

## Opening Remarks

Bernd Knöll

Chairman International Graduate School  
in Molecular Medicine Ulm (IGradU, Ulm)

17:00

## Opening lecture

Prof. Dr. Felix Engel

Chair Gilbert Weidinger

Heart repair: from zebrafish regeneration to  
3D printing, Felix Engel, Erlangen

ca. 18:00

## Graduation Ceremony

Student award

Get together party



Wednesday, November 8<sup>th</sup>

## Session I: Oncology

Chair: Lisa Wiesmüller

- 08:30-09:10 **Zdenek Kleibl**, Prague, Czech Republic  
Checking Hereditary Breast Cancer Predisposition: a CHEK2 Story
- 09:10-09:30 **Rebecca Jansche** (IGradU, Ulm)  
Characterization of TP53 and ABRAXAS1 variants by assays capturing non-canonical activities in DNA repair and replication
- 09:30-09:50 **Diana Huber** (IGradU, Ulm)  
Modulation of immune cell functions by exosomes of HNSCC patients
- 09:50-10.10 **Kathrin Niedermayer** (IGradU, Ulm)  
Connections between stem cell features, EMT and DNA damage response in breast cancer cells.
- 10.10-10.30 **Gregoire Najjar** (IGradU, Ulm)  
Alleviation of Aneuploidy-induced Replication Stress by Telomerase.
- 10.30-10.50 **Coffee Break**

## Session II: Neurology

Chair: Axel Freischmidt

- 10:50- 11:30 **Rüstem Yilmaz, Mannheim**  
The role of KIF5A in neurodegeneration: from gene discovery to pathomechanisms
- 11:30-11:50 **Elmira Khatamasaz** (IGradU, Ulm)  
Activation of parvalbumin positive interneurons in OFC impacts cerebral blood volume, connectivity, and social behaviors
- 11:50-12:10 **Sonja Menge** (IGradU, Ulm)  
Cellular defects associated with the loss of fragile x proteins in neurodegenerative disease
- 12:10-12:30 **Paula Klassen** (IGradU, Ulm)  
Identifying biomarkers for potential pathological mechanisms in neurological diseases

- 12:30-12:50 **Pietro Zanella** (IGradU, Ulm)  
Aberrant C-terminal sequence of KIF5A ALS leads to protein aggregation and protein synthesis impairment

12:50-13:30 **Lunch Break**

## Session III: Oncology II

Chair: Alexander Kleger

- 13:30-14:10 **Senthil Muthuswamy** (Bethesda, USA)  
Stem cell and tumor-derived organoid models for translational cancer research.
- 14:10-14:30 **Paul Lopatta** (IGradU, Ulm)  
Oncogenic GNAS and KRAS Signaling Collectively Drive Dysplasia in an iPSC-Derived Organoid Model for Cystic Pancreatic Neoplasia
- 14:50- 15:10 **Sarah Merz** (IGradU, Ulm)  
Single-cell profiling of GP2-enriched pancreatic progenitors to simultaneously create acinar, ductal, and endocrine organoids
- 15:10- 15:30 **Nika Khoshnevis** (IGradU, Ulm)  
Exosomal biomarkers in Pancreatic Ductal adenocarcinoma (PDAC): A comparative analysis of organoid derived and plasma sourced signatures for treatment response prediction
- 15:30-15:50 **Coffee Break**
- 15:50-16:10 **Naser Kazemitash** (IGradU, Ulm)  
Understanding the distribution and function of R-loops in Leukemic Stem Cell
- 16:10-16:30 **Chantal Allgöwer** (IGradU, Ulm)  
Characterising early oncogenic KRAS signaling in the context of pancreatic cancer

**Closing remarks**

Thursday, November 9<sup>th</sup>

## Session III: Infectious diseases & systems biology

Chair: Frank Kirchhoff

- 08:30-09:10 **Ya-Chi Ho**, New Haven, USA  
Finding the one-on-a-million - single-cell multiomic understanding of HIV persistence
- 09:10-09:30 **Alexandre Laliberté** (IGradU, Ulm)  
Nef counteracts HIV-1 sensing through actin stabilization
- 09:30-09:50 **Sabrina Noettger** (IGradU, Ulm)  
Impact of hACE2 N-glycosylation on SARS-CoV-2 Spike-mediated infection
- 09:50-10:10 **Chiara Pastorio** (IGradU, Ulm)  
Impact of Mutations Defining SARS-CoV-2 Omicron Subvariants BA.2.12.1 and BA.4/5 on Spike Function and Neutralization
- 10:10-10:30 **Dorina Haider** (IGradU, Ulm)  
Role of *S. anginosus* CRISPR-Cas System in Stress Response
- 10:30-10:50 **Coffee Break**

