

FIRST HEIDELBERG INTERFERONS SYMPOSIUM

July 8th Foyer and lecture hall Marsilius Kolleg (INF 130.1)

8:30 Registration and coffee

9:00 Welcome note (M. Binder, M. Essers)

9:15 **Keynote: Ursula Klingmüller (DKFZ)**

„A Systems Biology Approach to Type-I Interferon Signal Transduction - Bridging from the Receptor to the intracellular Level“

10:00 Coffee break

10:30 Short talks – **IFNs in Antimicrobial Responses**

Chair: Frauke Müksch

Ann-Kathrin Mehnert (CIID) – *‘The hepatitis E virus capsid protein controls a replication-limiting bottleneck of the antiviral response in hepatocytes‘*

Sarah Prallet (University Hospital Heidelberg) – *‘Human intestinal organoids to study the stem cell niche as a potential reservoir for hepatitis E virus infections‘*

Hao-En Huang (University Hospital Heidelberg) – *‘Limited impact of hepatitis A virus 3C protease-mediated cleavage on the functions of NEMO in human hepatocytes‘*

Elisabeth Seebach (University Hospital Heidelberg) – *‘cGAS/STING regulation in Staphylococcus aureus biofilm environments‘*

Jian Song (CIID) – *‘HIV-1 capsid shields the HIV-1 reverse transcription products from cGAS-mediated innate immune sensing‘*

11:45 Poster Flash Talks

12:00 Lunch and Poster Session

13:30 **Keynote: Axel Roers (University Hospital Heidelberg)**

‘Leveraging Pathogenetic Principles of Type I Interferonopathies to Envigorate the T Cell Response against Solid Tumors‘

14:15 Short talks – **Induction Pathways (PPRs)**

Chair: Axel Roers

Sergio Acebron (COS) – *‘Spatio-temporal analysis of the innate immune response to cytoplasmic dsDNA using a novel cGAMP biosensor‘*

Tengfeng Li (University Hospital Heidelberg) – *‘RBM39 shapes innate immunity through transcriptional and splicing control of key factors of the interferon response‘*

Matteo Agostini (CIRI INSERM) – *‘Dynamics of type I and III interferon responses against viral infections at single-cell resolution‘*

15:00 Poster Flash Talks

15:15 Coffee Break and Poster Session

16:30 **DKFZ Distinguished Lecture by Andy Minn (University of Pennsylvania)**
'Inflammatory Memory and the Opposing Roles of Interferon in Cancer Immunotherapy'

18:00 Get-Together with BBQ and Drinks
Area in front of ATV building (INF 242)

July 9th Ground floor seminar room, DKFZ ATV building (INF 242)

9:00 **Keynote: Jan Rehwinkel (University of Oxford)**
'MDA5 Guards Against Infection by Surveying Cellular RNA Homeostasis'

9:45 Short Talks – **IFNs in Stem Cells and Cancer**
Chair: Mick Milsom

Nikolaus Dietlein (DKFZ) – '*Usp22 deficiency triggers ISG expression and enhances innate immunity in vivo*'

Abdul Itani (DKFZ) – '*Impact of Intrinsic Interferon Signaling Heterogeneity in Stem Cells on Leukemia Progression*'

Borhane Guezguez (DKTK Mainz) – '*Targeting H3K9 dimethylation suppress cancer cells by activation of the interferon pathway*'

10:30 Coffee Break

11:00 Short Talks – **IFNs in Cancer Therapy**
Chair: Stefan Wiemann

Ashish Goyal (DKFZ) – '*Epigenetic therapies induced antigens – a novel class of immunotherapy targets*'

Sebastian Stegmaier (DKFZ) – '*Involvement of antiviral pathways in cell death decisions and their exploitation for tumor therapy*'

Riccardo Pecori (DKFZ) – '*Optimization of ADAR1-recruiting guide RNAs (gRNAs) toward the generation of RNA-derived neoepitopes*'

11:45 **Keynote: Ana Martin-Villalba (DKFZ)**
'Interferons: Beyond Antiviral Warriors – Key Modulators of Stemness in the Young and Old Brain'

12:30 Concluding remarks & farewell note

12:40 Light lunch