



PROGRAM

Monday, October 5

12:00 – 14:00 Registration, snacks & drinks (from 13:00 on)

14:00 – 14:15 Julia Frunzke Welcome



Organisation & regulation of the viral infection cycle (Goethe Saal)

Chairs: Kai Thormann & Ilya Osterman

14:15 – 14:45 Graham Hatfull (University of Pittsburgh, USA) Mycobacteriophages and their host interactions

14:45 – 15:00 Avigail Stokar-Aviail (EMBL Heidelberg) Discovery of capsid-packaged phage proteins injected into bacteria

15:00 – 15:20 Katharina Höfer (LIT Regensburg) Decoding NAD-RNAs in bacteriophage infection

15:20 – 15:35 Nandika Sanjog Sahani (MPIB Martinsried) Function of phage transfer-messenger RNA in a crAss-like phage phi14:2

15:35 – 16:05 Rob Lavigne (KU Leuven, BE) Fibrilysins: playing the Reverse Uno card against *Staphylococcus aureus*

16:05 – 16:35 Coffee break



Organisation & regulation of the viral infection cycle (Goethe Saal)

Chairs: Carolin Wendling & Avigail Stokar-Aviail

16:35 – 16:55 Jörg Vogel (HZI & University Würzburg) ASO-based functional genomics reveals new phenotypes of essential genes in nucleus-forming jumbo phages

16:55 – 17:15 Katharina Kohm (University Hohenheim) Functional dissection of the *Bacillus subtilis* SPβ prophage lysogeny-lysis system

17:15 – 17:30 Yael Litvak (The Hebrew University, IL) The bully phage: A Shiga toxin-encoding prophage interferes with the induction of co-hosted prophages

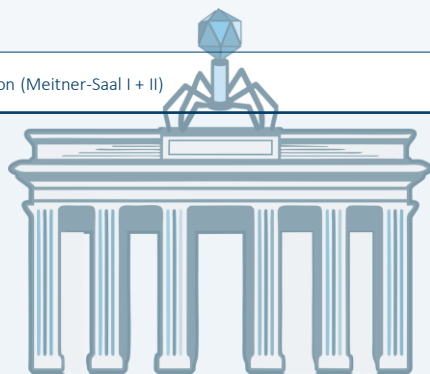
17:30 – 17:45 Milan Gerovac (HZI Braunschweig) The phage nucleus shapes the virulence spectrum in *Chimalliviridae*

17:45 – 17:55 Break

17:55 – 18:40 Helga Hengge Only the Sky Above

19:00 – 20:30 Dinner

20:30 – 22:30 Poster session (Meitner-Saal I + II)



PROGRAM

Tuesday, October 6



Viral impact on microbial communities (Goethe-Saal)

Chairs: Milan Gerovac & Ruth Schmitz-Streit

08:45 – 09:15 Jeremy J. Barr (Monash University, AU) Temperate bacteriophage populations in the human gut: culturomics and experimental insights

09:15 – 09:40 Kai Thormann (Justus Liebig University Gießen) No escape – the ARTs of host takeover

09:40 – 09:55 Enea Maffei (ETH Zurich, CH) The enemy of my enemy carries a colicin: engineering phages to redirect evolutionary trajectories of uropathogenic *E. coli*

09:55 – 10:15 Torben Sanders (Helmholtz Munich) Targeted antimicrobial peptide discovery and phage cocktail development against ESKAPE pathogens

10:15 – 10:30 Marla Gaissmaier (TU Munich) PhaDRiM-phage induced strain replacement in microbiomes

10:30 – 11:00 Coffee break & Group picture



Viral impact on microbial communities (Goethe-Saal)

Chairs: Jeremy Barr & Tanita Wein

11:00 – 11:30 David Bikard (Institut Pasteur, FR) Genetic perturbation of gut bacteria with engineered phage vectors and CRISPR-Cas systems

11:30 – 11:45 Sabine Schwarzer (University of Groningen, NL) Exploring virus dynamics in a *Nanobdellati* Co-culture system

11:45 – 12:05 Nicola Sekularac (RPTU Kaiserslautern) Viral take-over of host photosynthetic electron transport: Investigating the role of cyanophage-encoded plastocyanin

12:05 – 12:20 Ilya Osterman (EMBL Hamburg) Metabolic reconstitution in the NAD⁺ battlefield: phages and bacteria in a molecular arms race

12:20 – 12:50 Stineke van Houte (University of Exeter, UK) Understanding the role of bacterial anti-phage defences to inform phage therapy

12:50 – 14:00 Lunch

12:50 – 13:20 VAAM Student Network Meeting (Humboldt-Zimmer)



Novel anti-viral defence systems (Goethe-Saal)

Chairs: Rotem Sorek & Luuk Loeff

14:00 – 14:30 Karen Maxwell (University of Toronto, CA) Phage-induced membrane remodelling is a vulnerability targeted by bacterial immunity

14:30 – 14:45 Jens Hör (HIRI Würzburg) ApeA cleaves genomic RNA to defend against RNA phage infection

14:45 – 15:00 Jonas Juozapaitis (Vilnius University, LT) Deoxynucleotides activate the bacterial anti-phage defense system ApeA

15:00 – 15:20 Julia Frunzke (Forschungszentrum Jülich) Bacterial multicellular behaviour in antiviral defense

15:20 – 15:40 Stefan Miller (PolyQuant Bad Abbach) Using LC-MS/MS for identification and quantification of host contaminant protein during phage production

15:40 – 16:10 Coffee break



PROGRAM

Tuesday, October 6



Novel anti-viral defence systems (Goethe-Saal)

Chairs: Jens Hör & Katharina Kohm

16:10 – 16:40 Melanie Blokesch (EPFL Lausanne, CH) Horizontal gene transfer shapes bacterial defense in *Vibrio cholerae*

16:40 – 17:00 Juliana Geromiller (Tübingen University) Sulfonamide antibiotic rescues bacteria from phage-induced collapse

17:00 – 17:20 Adhvaiddhi Kuntran (Humboldt University Berlin) Zorya-mediated defence results in distinct cellular outcomes following phage infection

17:20 – 17:35 Oleg Dmytrenko (Forschungszentrum Jülich) Hidden functional diversity among Type V-A CRISPR effectors

17:35 – 18:05 Sanne Klompe (ETH Zurich, CH) From genetic conflicts to molecular innovation

18:05 – 20:00 Dinner

20:00 – 23:30 Mixer (Planck Lobby)

Wednesday, October 7



Novel anti-viral defence systems (Goethe-Saal)

Chairs: Oleg Dmytrenko & Clara Rolland

09:00 – 09:30 Uri Gophna (Tel Aviv University, IL) Diverse responses of an archaeal CBASS

09:30 – 09:50 Tanita Wein (Weizmann Institute Rehovot, IL) The ancient evolution of gasdermin-mediated immunity

09:50 – 10:10 Federico Corona (EMBL Heidelberg) Dozens of phage proteins block retron defense by targeting its toxicity on the ribosome

10:10 – 10:40 Rotem Sorek (Weizmann Institute Rehovot, IL) Bacteria-inspired exploration of immune functions in eukaryotes

10:40 – 11:10 Coffee break



Novel anti-viral defence systems (Goethe-Saal)

Chairs: Uri Gophna & Katharina Höfer

11:10 – 11:25 Anna Kanevskaya (CIRI Lyon, FR) A novel signaling system originating from a core metabolic enzyme

11:25 – 11:45 Marcel Sprenger (Friedrich-Schiller-University Jena) Hidden Amun defensive proteins within defense islands broaden protectivity against phage families

11:45 – 12:05 Thomas Gaudin (HIRI Würzburg) A compact Druantia defense clears phage infections via single-stranded DNA recognition and directional duplex unwinding

12:05 – 12:20 Luuk Loeff (Leiden University Medical Center, NL) Processing of forked DNA activates a helicase-nuclease immune system

12:20 – 12:40 Final remarks & Poster prize winners

12:40 – 14:30 Lunch