

Final Symposium SFB1129

Integrative Analysis of Pathogen Replication and Spread

May 10–12, 2026 · BioQuant Heidelberg

Scientific Program

Sunday, May 10th – Kick-off Meeting

- 03:30 PM: Registration and Meet & Greet with snacks and drinks
- 04:30 PM: Welcome by the SFB1129 Spokesperson
- 04:40 PM: **Alexander Ploss**
Leveraging viral sequence heterogeneity to delineate host-pathogen interactions
- 05:20 PM: **Ralf Bartenschlager**
Architecture and biogenesis of plus-strand RNA virus replication factories
- 06:00 PM: End of day 1
- 07:00 PM: Speaker's Dinner

Monday, May 11th

- 09:00 AM: **Alexander Borodavka**
What viral genomic jigsaws teach us about nature's self-organisation rules
- 09:30 AM: **Alessia Ruggieri**
Dynamic control of the integrated stress response by RNA viruses: from cells to droplets
- 10:00 AM: **Viet Loan Dao Thi**
Liquid–liquid phase separation drives the formation of amyloid-like fibrils by the hepatitis E virus capsid protein to dampen antiviral responses

10:30 AM: COFFEE BREAK (30 min)

11:00 AM – 11.30 AM: SHORT TALKS

- Ning Meng:** *Nanoscale characterisation of integrin-virus interactions*
- Kevin Walz:** *Imaging malaria parasite formation and migration in the mosquito*
- Katharina Scholz:** *Contact dynamics of cytoadhering Plasmodium falciparum-infected erythrocytes in flow*

11:30 AM: **Viola Introiini**
Modelling complex host-parasite interactions in vitro

12:00 PM: **Moritz Treeck**
How Apicomplexan parasites change your cells to their needs

12.30 PM: LUNCH BREAK (one hour)

01.30 PM – 02.00 PM: SHORT TALKS

- Kim-Loreen Carlstedt:** *Oligomerization of KAHRP as molecular basis of knob formation in malaria-infected red blood cells*
- Aiste Kudulyte:** *Plasmodium proliferation in the blood: How, why, and what?*
- Zeynab Tavasolyzadeh:** *Hydrogel-based 3D microfabricated scaffolds for investigation of Plasmodium Sporozoite motility*

02:00 PM: **Victoria Ingham**
How insecticides impact malaria parasite infectivity

02:30 PM: **Oliver Fackler**
HIV spread and immune recognition in tissue environments

03:00 PM: COFFEE BREAK (30 min)

03.30 PM – 03.50 PM: SHORT TALKS

- Anja Schollmeier:** *The nuclear roadmap of HIV-1: Capsid transport from nuclear pore complex to nuclear speckles*
- Carlotta Penzo:** *The role of altered affinity of HIV-1 Integrase for RNA:DNA hybrids in retargeting HIV-1 integrations*

03:50 PM: **Frauke Mücksch**
Cellular control of HIV-1 persistence and reactivation

04:20 PM: **Leo James**
How retroviruses use IP6 to build their capsids

05:00 PM: Get Together & time for discussion

Tuesday, May 12th

08:30 AM: **Christian Sieben**
Dissecting the virus-cell interface with advanced live-cell Imaging

09:00 AM: **Edward Hutchinson**
Inside story: how respiratory viruses behave within their hosts

09:30 AM: **Petr Chlanda**
Zooming into Influenza A virus entry by Cryo-EM: Membrane fusion and viral spread

10:00 AM: COFFEE BREAK (30 min)

10:30 AM: **Pamela Bjorkman**
A COVID-19 booster that could prevent another pandemic

11:00 AM: **John Briggs**
The HIV-1 matrix protein

11:30 AM: LUNCH BREAK (30 min)

12:00 PM: **Walther Mothes**
Viral spike-receptor interaction and membrane fusion monitored by cryo-electron tomography

12:40 PM: **Hans-Georg Kräusslich**
HIV-1 capture and spread at nanoscopic resolution

01:20 PM: END of MEETING with snacks