

Program

International Symposium

**Molecular Determinants of
Zoonotic Viruses and Beyond**

February 27 - March 1, 2025

Institute of Virology,
Medical Center - University of Freiburg



04:00 p.m. **Registration**

Institut für Virologie
Hermann-Herder-Straße 11
79104 Freiburg

06:00 p.m. **Welcome reception at City Hall**


Gerichtslaube, Unterer Saal
Turmstraße 20
79098 Freiburg im Breisgau



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| 08:00 a.m. | Registration | |
| 08:45 a.m. | Opening remarks <ul style="list-style-type: none">• Martin Schwemmler• Lutz Hein <i>Dean, Faculty of Medicine, University of Freiburg</i> | |
| 09:00 a.m. | Fabian Leendertz <i>Greifswald, Germany</i> | One Health approaches for better prevention |
| 09:40 a.m. | Martin Beer <i>Insel Riems, Germany</i> | HPAIV H5N1 – from panzootic to pandemic? |
| 10:20 a.m. | Ke Xu <i>Wuhan, China</i> | Directional virus-virus interactions drive respiratory viral epidemic patterns before and after the COVID-19 pandemic. |
| 10:50 a.m. | Coffee break | |
| 11:20 a.m. | Mathias Munschauer <i>Frankfurt, Germany</i> | An RNA-centric perspective on human pathogenic RNA viruses |
| 12:00 p.m. | Volker Thiel <i>Bern, Switzerland</i> | Combating Coronavirus infection by spotlighting translation |
| 12:40 p.m. | Lunch break | |
| 01:00 p.m. 30 min | MEET THE EDITOR I | Sonja Schmid <i>Senior Editor Nature Communications</i> <ul style="list-style-type: none">• Lecture Hall |

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| 02:00 p.m. | Max Josef Kellner <i>Vienna, Austria</i> | Reconstructing Bat Antiviral Immunity at Epithelial Surfaces Using Organoid Technology |
| 02:30 p.m. | Aaron Irving <i>Haining, China</i> | Comparative genomics reveals evolution of antiviral factors from Chinese horseshoe bats to humans |
| 03:10 p.m. | Tony Schountz <i>Fort Collins, USA</i> | Experimental Sarbecovirus Infection of Jamaican Fruit Bats |
| 03:50 p.m. | Coffee break | |
| 04:20 p.m. | Gisa Gerold <i>Innsbruck, Austria</i> | Discovery of alphavirus host factors |
| 05:00 p.m. | Ana Fernandez-Sesma <i>New York, USA</i> | Innate Immune Evasion by Arboviruses |
| 05:40 p.m. | Break | |
| 06:00 p.m. | Manon Laporte <i>Leuven, Belgium</i> | An orally efficacious coronavirus assembly inhibitor that targets the viral M protein |
| 06:30 p.m. | Johan Neyts <i>Leuven, Belgium</i> | Broader-acting antivirals for epidemic and pandemic preparedness |
| 07:10 p.m. | James Crowe <i>Nashville, USA</i> | Human monoclonal antibodies for emerging infections |
| 08:00 p.m. | Research, Rhythm & Networking: Poster Session with <i>Live Music</i> | |

Missing Link



DAY 3 - FRIDAY, FEBRUARY 28, 2025

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| 09:00 a.m. | Susanne Herold <i>Gießen, Germany</i> | Towards host-directed therapies for tissue repair after virus-induced lung injury |
| 09:40 a.m. | Christian Sieben <i>Braunschweig, Germany</i> | Advanced imaging to decipher mechanistic details of zoonotic viral infections |
| 10:20 a.m. | Coffee break | |
| 10:50 a.m. | Jean-Laurent Casanova <i>New York, USA</i> | Human genetic and immunological determinants of viral diseases |
| 11:30 a.m. | Ben Hale <i>Züri, Switzerland</i> | Engineered Decoys to Limit the Pathogenic Effects of Type I IFN Autoantibodies During Severe Viral Infections |
| 12:10 p.m. | Lunch break | |
| | 12:45 p.m. 30 min | Meet the editor II Melissa Vázquez Hernández <i>Senior Editor PLOS Biology</i> • Lecture Hall |

DAY 3 - FRIDAY, FEBRUARY 28, 2025

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| 02:10 p.m. | Wilhelm Furnon <i>Glasgow, UK</i> | Phenotypic evolution of SARS-CoV-2 spike during the COVID-19 pandemic |
| 02:40 p.m. | Gustavo Palacios <i>New York, USA</i> | A single difference between rodent and human Andes virus glycoprotein affects its trafficking and egress |
| 03:20 p.m. | Antoni Wrobel <i>Oxford, UK</i> | Molecular mechanisms of viral entry underlying viral evolution and host change |
| 04:00 p.m. | Coffee break | |
| 04:30 p.m. | Florian Full <i>Freiburg, Germany</i> | Poxviruses induce a nuclear environment in the cytoplasm to promote viral replication |
| 05:00 p.m. | Konstantin Sparrer <i>Ulm, Germany</i> | Sense and sensibility – The role of the cytoskeleton in innate immunity |
| 05:40 p.m. | Break | |
| 06:00 p.m. | Florian Krammer <i>New York, USA & Vienna, Austria</i> | Antibody responses to Puumala virus infection |
| 06:40 p.m. | Christian Drosten <i>Berlin, Germany</i> | Ongoing evolution of MERS-CoV |
| 08:00 p.m. | Speakers dinner | |

DAY 4 - SATURDAY, MARCH 1, 2025

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| 09:00 a.m. | Andreas Pichlmair <i>Munich, Germany</i> | Virus-host interactions identify pathogen restriction factors and novel functions of cellular proteins |
| 09:40 a.m. | Petr Chlanda <i>Heidelberg, Germany</i> | Influenza A virus assembly and vRNP clustering by in situ cryo-electron tomography |
| 10:20 a.m. | Hiromichi Matsugo <i>Kyoto, Japan</i> | Role of ANP32 family proteins in Borna disease virus replication and host specificity |
| 10:50 a.m. | Coffee break | |
| 11:20 a.m. | Peter Reuter Kevin Ciminski <i>Freiburg, Germany</i> | Another Receptor, another tropism. Lessons from bats as influenza virus reservoirs |
| 12:00 p.m. | Silke Stertz <i>Zurich, Switzerland</i> | MHC-II dependent entry of human and avian influenza A viruses |
| 12:40 p.m. | Adolfo Garcia-Sastre <i>New York, USA</i> | Newcastle disease virus as a vaccine platform for domestic animals and humans |
| 01:20 p.m. | Closing remarks + Acknowledgements | |
| 01:30 p.m. | Light Lunch | |
| 02:00 p.m. | End of Meeting | |