

27th Workshop on Retroviral Pathogenesis

August 24-27, Mülheim an der Ruhr, Germany

Monday, August 24th

17:00 - 17:45 – Registration/ Light refreshments

17:45 - 18:00 – Meeting Address: **Ulf Dittmer and Susan Ross**

18:00 - 18:40 – Keynote Lecture, **Hendrik Streeck**, University of Duisburg-Essen;

Multi-layered, multifaceted role of CD4 T cell immune responses in HIV infection

18:40 – 20:15 **Session I**

Entry and Early Events

Chair: **Stocking**

- 18:40 – 19:00 **Leslie Parent**, Penn State College of Medicine;
"Evidence that initial Gag-RNA interactions occur in the nucleus"
- 19:00 – 19:20 **Jiri Hejnar**, Institute of Molecular Genetics, Prague;
„Genetic diversity of NHE1, receptor for subgroup J avian leukosis virus, in domestic and wild bird species“
- 19:20 – 19:40 **Carlos de Noronha**, Albany Medical College;
"Sulforaphane inhibits HIV infection of macrophages through Nrf2"
- 19:40 – 20:00 **Dirk Lindemann**, Technical University of Dresden;
"Prototype Foamy Virus Gag interaction with host cell polo-like kinases is important for efficient virus entry"
- 20:00 – 20:15 **Xaver Sewald**, Yale University;
"Retrovirus spread in vivo depends on CD169/Siglec-1 mediated trans-infection of permissive lymphocytes"

Tuesday, August 25th

08:00 – 09:00 **Breakfast**

09:00 – 13:15 **Session II**

Replication

Chair: **Stoye**

- 09:00 – 09:20** **Karen Beemon**, Johns Hopkins University Baltimore;
“PTBP1 Protects Retroviral and Cellular mRNA from Nonsense-mediated mRNA Decay (NMD)”
- 09:20 – 09:40** **Leonard Evans**, Rocky Mountain Laboratories, Hamilton;
“Profound Elevation of Polytopic MuLV Infectivity After Superinfection with an Ecotropic MuLV”
- 09:40 – 10:00** **Monica Roth**, Rutgers-RW JMS Pharmacology;
“Murine Leukemia Virus Integration: Structural studies of IN for Viral and Target Recognition”
- 10:00 – 10:30** **Coffee Break**
- 10:30 – 10:50** **Marie-Louise Hammarskjöld**, University of Virginia;
“HIV, antisense RNA and ADAR editing”
- 10:50 – 11:10** **Stanislav Indik**, University of Veterinary Medicine Vienna;
“Steady state between the rate of DNA polymerization and the rate of RNA degradation during reverse transcription determines the sensitivity of MMTV to APOBEC3 proteins”
- 11:10 – 11:30** **David Rekosh**, University of Virginia;
HIV Rev/RRE sequence variation modulates viral replication by promoting the assembly of complexes with different levels of functional activity”
- 11:30 – 11:50** **Susan Ross**, University of Pennsylvania;
“Identification of cytosolic sensors that recognize retroviral and retroelement cytosolic DNA”
- 11:50 – 13:00** **Lunch**
- 13:00 – 13:20** **Birgitta Wöhrl**, University of Bayreuth;
“Biochemical characterization of a multiresistant subtype AG reverse transcriptase: AZT resistance and sensitivity to RNase H inhibitors”
- 13:20 – 13:35** **Lieve Dirix**, KU Leuven;
“A single-virus study of HIV-1 nuclear import”
- 13:35 – 14:15** **Keynote Lecture: Robin Weiss**, University College London;
“How llamas help HIV research”
- 14:15 – 16:15** **Poster Session**
- 17:30 – 19:00** **Guided Tour: "About Coal and Miners"**,
Meeting Point RUHR.VISITORCENTER Essen/Besucherzentrum Ruhr,
Areal A, Gelsenkirchener Str. 181, 45309 Essen
- 19:00** **Dinner – Restaurant & Café “Die Kokerei”**

Wednesday, August 26th

08:00- 09:00 **Breakfast**

9:00 – 13:20 Session III

Restriction Factors

Chair: Neil

09:00 – 09:20 Mario Santiago, University of Colorado Denver;
"IFN alpha subtypes in an ex vivo model of acute HIV-1 infection: expression, potency and effector mechanisms"

09:20 – 09:40 Hung Fan, University of California, Irvine;
"Human and Murine APOBEC3s Restrict Replication of Koala Retrovirus by Different Mechanisms"

09:40 – 10:00 Jonathan Stoye, MRC/NIMR Virology London;
"Evolution of restriction specificity in Fv1"

10:00 – 10:30 Coffee Break

10:30 – 10:50 Valgerdur Andresdottir, University of Iceland;
„The Vif protein of maedi-visna virus“

10:50 – 11:10 Ulrike Sauermann, Deutsches Primatenzentrum Göttingen;
"FAM26F expression levels in PBMCs before SIV infection inform about overall plasma viral load in the acute and postacute phase of infection"

11:10 – 11:30 Jaquelin Dudley, University of Texas at Austin;
"Rem as a Protein Antagonist of Apobec family members"

11:30 – 11:50 Christine Kozak, National Institute of Allergy and Infectious Diseases;
"Analysis of mouse leukemia viruses from geographically separated Mus taxa identify adaptive mutations at sites that interact with 4 host restriction factors"

11:50 – 13:00 Lunch

13:00 – 13:20 Richard Sloan, Queen Mary University of London;
"IFITM proteins restrict HIV protein synthesis"

13:20 – 14:00 Keynote Lecture: Christine Leib-Mösch, Helmholtzzentrum Munich;
"Endogenous retroviruses in the human genome: Do parasites control our genes?"

14:00 – 17:00 Session IV

Immune responses

Chair: Dudley

- 14:00 – 14:20** **Scott Kittchen**, David Geffen School of Medicine at UCLA;
"Characterization of immune exhaustion and type I IFN signaling during chronic HIV infection in humanized Bonemarrow/Liver/Thymus (BLT) mice"
- 14:20 – 14:50** **Torben Knuschke**, University of Duisburg-Essen;
"A nanocarrier-based approach to enhance anti-retroviral immunotherapy by reactivation of virus-specific T cell"
- 14:50 – 15:10** **Mireia Pelegrin**, Institute of Molecular Genetics of Montpellier;
"Antiviral monoclonal antibodies induce long-lasting antiviral immunity through FcγR-binding effector functions"
- 15:10 – 15:40** **Coffee break**
- 15:40 – 16:00** **Kim Hasenkrug**; Rocky Mountain Laboratories, Hamilton;
Cancelled
- 16:00 – 16:20** **Ulf Dittmer**; University of Duisburg-Essen;
"Regulatory T cells and inhibitory receptors suppress cytotoxic T cell and NK cell responses in retroviral infections"
- 16:20 – 16:40** **William Green**, Geisel School of Medicine at Dartmouth, Lebanon;
"Monocytic myeloid derived suppressor cells following LP-BM5 retrovirus infection: M-MDSC subsets and differential suppressive mechanisms, targeted cells, and regulation"
- 16:40 – 17:00** **Wibke Bayer**, University of Duisburg Essen;
"Advancement of adenovirus-based immunization strategies in the Friend retrovirus model"
- 18:30** **Dinner - Wolfsburg**
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Thursday, August 27th

08:00 – 09:00 **Breakfast**

9:00 – 11:20 Session V

Oncogenesis, Pathogenesis

Chair: Beemon

- 09:00 – 09:20** **James C. Neil**, University of Glasgow;
"Intrinsic barriers to zoonotic infection by feline leukemia viruses are frequently lost in malignant cells"
- 09:20 – 09:50** **Karin Peterson**, Rocky Mountain Laboratories, Hamilton;
"Neuropeptide Y negatively regulates monocyte/macrophage recruitment to the CNS during retrovirus infection"

- 09:50 – 10:10** **Paul Jolicoeur**, University of Montreal;
"Pathogenesis of HIV-induced kidney Disease"
- 10:10 – 10:40** **Coffee Break**
- 10:40 – 11:00** **Mary Poss**, Penn State University;
"Is there a retroviral etiology of large granular leukocyte leukemia?"
- 11:00 – 11:20** **Christiane Stahl-Henning**, Deustches Primatenzentrum, Göttingen;
"Attenuated phenotype of a SIV vpr deletion mutant in macaques"
- 11:45 – 13:00** **Lunch**

13:00 – 14:10 **Session VI**

New viruses and Endogenous retroviruses

Chair: Ross

- 13:00 – 13:20** **Martin Löchelt**, German Cancer Research Center (DKFZ), Heidelberg;
"In Vitro Evolution of High Titer Bovine Foamy Virus: Identification and Functional Characterization of Key Mutations"
- 13:20 – 13:50** **Sandra Quakenbush**, Colorado State University;
"Transmission of Bighorn Sheep Sinus tumors and Identification of Retroviral Sequences"
- 13:50 – 14:10** **Venkat Yedavalli**, National Institute of Allergy and Infectious Diseases, Bethesda;
"Sequence and functional characterization of a unique full-length endogenous retrovirus in the spumaretroviral ERV-L family found in *Xenopus tropicalis*"
- 14:10** **End of the meeting**
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