

## Programm 6th International Influenza Meeting

### Highlight Topic „Visualizing Flu“

#### **Sunday, September 2, 2018**

15:00 Registration

#### **18.00 – 22.00 OPENING**

18.00 Welcome notes by the organizers

#### **18.15 Opening Lecture:**

Takeshi Noda, Kyoto, Japan

*"Packaging of segmented genome in influenza virus"*

*19.00 Poster viewing & Reception at the meeting site (food and drinks)*

#### **Monday, September 3, 2018**

09:00 – 10:30 Session 1: Visualizing flu (Chair: Stephan Ludwig, Muenster, Germany)

#### **Keynote Lecture:**

John Briggs, Cambridge, United Kingdom

Enveloped viruses revealed by cryo-electron tomography

Charles Russel, Memphis, USA

Visualizing influenza and parainfluenza virus infection non-invasively in living mice with non-attenuated reporter viruses

David L.V. Bauer Oxford, United Kingdom

The Structure of the Influenza A Virus Genome

Edward Hutchinson, Glasgow, United Kingdom

Molecular Anatomy of an Influenza Virion

*10:30 Coffee break*

11:00 – 12:40 Session 2: Innate Immunity (Chair: Martin Schwemmle, Freiburg, Germany)

Ye Liang, Freiburg, Germany

IFN- $\lambda$  enhances influenza immunity by stimulating TSLP release during intranasal immunization

Dörthe Masemann, Muenster, Germany

Oncolytic influenza virus infection restores immunocompetence of lung tumor-associated alveolar macrophages

Tim Krischuns, Muenster, Germany

Phosphorylation of TRIM28 enhances the expression of IFN- $\beta$  and proinflammatory cytokines during HPAIV infection of human lung epithelial cells

Nora Schmidt, Zürich, Switzerland

An Infection-Triggered SUMO Switch Controls Induction of an Antiviral Program by TRIM28

Dennis Lapuente, Bochum, Germany

Interleukin-1 $\beta$  paves the way for protective lung-resident memory T cells: implications for a universal flu vaccine?

*12:40 – 13:40 Lunch*

*13:40 – 14:30 Poster Viewing*

14:30 – 16:00 Session 3: Evolution and Emerging viruses (Chair: Stephan Pleschka, Gießen, Germany)

**Keynote Lecture:**

Martin Schwemmle, Freiburg, Germany

Influenza-like viruses from bats

Philipp P. Petric, Freiburg, Germany

Eurasian avian-like swine influenza viruses harbor increased pandemic potential due to MxA escape mutations in their nucleoprotein

Xiangjie Sun, Atlanta, USA

Risk assessment of fifth-wave H7N9 influenza A viruses in mammalian models

Elisa Vicenzi, Milan, Italy

Evolution of influenza A virus nucleoprotein is influenced by the E3 ubiquitin ligase activity of the interferon-inducible Tripartite Motif (TRIM)22 protein

*16:00 – 16:40 Coffee break*

16:40 – 18:00 Session 4: Viral Replication (Chair: Thorsten Wolff, Berlin, Germany)

Angeles Mecate-Zambrano, Münster, Germany

Phosphorylation of tyrosine 132 of influenza A virus matrix protein 1 is essential for efficient viral genome packaging and particle assembly

Hongbo Guo, Utrecht, The Netherlands

Kinetic analysis of the influenza A virus HA/NA balance reveals contribution of NA to v51irus-receptor binding and NA-dependent rolling on receptor-containing surfaces

Gert Zimmer, Bern, Switzerland

Mutational analysis of the M2 ion channel proteins of avian and bat influenza A viruses

Robert Rawle, Charlottesville, USA

Fusion peptides mediate influenza viral fusion via two sequential mechanisms

19:00 Conference Dinner

## **Tuesday, September 4, 2018**

09:00 – 10:50 Session 5: Vaccines and antivirals (Chair: Oliver Planz, Tübingen, Germany)

### **Keynote Lecture:**

Guus Rimmelzwaan , Hanover, Germany

Cytotoxic T lymphocytes to influenza virus: Cat and mouse

Dorien De Vlieger, Ghent, Belgium

Bispecific Fc gamma receptor engaging molecules directed against the conserved viral M2 ectodomain protect against influenza A virus infections

Alfred Ho, London, United Kingdom

The stalk domain of influenza pH1 HA tolerates substitutions that may confer decreased susceptibility to broadly neutralizing antibodies

André Schreiber, Muenster, Germany

Viral activation of the Raf/MEK/ERK kinase cascade promotes nuclear export of viral ribonucleoproteins (RNPs) by regulating matrix protein binding to the RNPs

Evelien Vanderlinden, Leuven, Belgium

Prodrugs of the Phosphoribosylated Forms of Hydroxypyrazinecarboxamide Pseudobase T-705 and its De-Fluoro-Analogue T-1105 as Potent Influenza Virus Inhibitors

*10:50 – 11:20 Coffee break*

11:20 – 12:40 Session 6: Pathogenesis (Chair: Peter Stäheli, Freiburg, Germany)

Wenjuan Du, Utrecht, The Netherlands

The 2nd sialic acid-binding site of influenza A virus neuraminidase contributes to the hemagglutinin-neuraminidase-receptor balance

Marco Gorka, Greifswald – Isle of Riems, Germany

Evaluation of the zoonotic potential of H18N11 virus variant tested in the ferret model

Hannah Limburg, Marburg, Germany

TMPRSS2 is the major HA-activating protease for IAV, but not for IBV in the human respiratory tract

Viktor Wixler, Muenster, Germany

The balance between intrinsic cellular innate, host innate and host adaptive immune responses matters for the outcome of influenza virus respiratory infection

*12:40 – 13:40 Lunch*

*13:40 – 14:40 Poster Viewing*

14:40 – 16:10 Session 7: Virus host cell interaction (Chair: Klaus Schughart, Braunschweig, Germany)

**Keynote Lecture:**

Wendy Barclay, London, United Kingdom

The interplay between influenza polymerase and the host

Benjamin G. Hale, Zurich, Switzerland

Species comparisons identify avian ANP32A splice variants that differentially impact influenza A virus polymerase host restriction

Katherine Fletcher, Cambridge, United Kingdom

LC3 punctae in IAV-infected cells do not represent double membrane autophagosomes but endosomes

Maria Joao Amorim, Lisbon, Portugal

Decay accelerating factor as a virulence determinant in influenza A virus infection

16:10 – 16:30 Discussion & Closing Remarks