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## Meeting Organizers:

Prof. Daniel Kolakofsky  
*University of Geneva, Geneva, Switzerland*  
Prof. Sean Whelan  
*Harvard Medical School, Boston, USA*  
Prof. Dominique Garcin  
*University of Geneva, Geneva, Switzerland*  
Prof. Laurent Roux  
*University of Geneva, Geneva, Switzerland*  
Prof. Paul Duprex  
*Boston University, Boston, USA*  
Prof. Maria Grazia Cusi  
*University of, Siena, Italy*

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# Program NSV 2015 Siena

## Sunday, June 14

**14:00-18:00**      **Registration:** Auditorium Department of Law  
Università degli Studi di Siena  
Via Mattioli 10, Siena

### **Poster session I-IV:**

Monday, June 15 and Tuesday, June 16

#### ***Poster Setup:***

11-37, 47-67, 78-102, 112-124 and 145-165

#### ***Poster Dismantling:***

Tuesday, June 16, at the end of the sessions

### **Poster session V-VIII:**

Wednesday, June 17 and Thursday, June 18

#### ***Poster Setup:***

166-197, 203-224, 239-277, 287-298 on Wednesday,  
June 17

**19:00-23:00**      **Opening reception:**

*Piazza del Mercato*

## Monday June 15

**08:45-09:00: Welcome by the Rector of University of Siena and introductory remarks Daniel Kolakofsky**

### Session I: In and Out and Moving About

Chairpersons: Silke Stertz and Benhur Lee

09:00-09:10: Chairpersons's remarks

|                    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| 09:10-09:30<br>20' | 1 | <b>STRUCTURE AND ACTIVATION OF PARAMYXOVIRUS FUSION GLYCOPROTEINS</b><br><u>Theodore Jardetzky</u> <sup>*1</sup><br><sup>1</sup> Structural Biology, Stanford University School of Medicine, Stanford, United States                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 09:30-09:50<br>20' | 2 | <b>X-RAY STRUCTURE OF VESICULAR STOMATITIS VIRUS GLYCOPROTEIN BOUND TO A FRAGMENT OF ITS CELLULAR RECEPTOR.</b><br><u>Aur lie A. Albertini</u> <sup>*1</sup> , Jovan Nikolic <sup>1</sup> , Pierre Legrand <sup>2</sup> , Yves Gaudin <sup>1</sup><br><sup>1</sup> Department of Virology, Institute for Integrative Biology of the Cell, <sup>2</sup> SOLEIL synchrotron, Gif sur Yvette, France                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 09:50-10:10<br>20' | 3 | <b>THE INTERACTION BETWEEN TIM-1 AND NPC1 IS IMPORTANT FOR THE CELLULAR ENTRY OF EBOLA VIRUS</b><br>Makoto Kuroda <sup>1</sup> , Daisuke Fujikura <sup>1</sup> , Asuka Nanbo <sup>2</sup> , Reiko Yoshida <sup>1</sup> , <u>Ayato Takada</u> <sup>*1</sup><br><sup>1</sup> Research Center for Zoonosis Control, Hokkaido University, <sup>2</sup> Department of Cell Physiology, Hokkaido University Graduate School of Medicine, Sapporo, Japan                                                                                                                                                                                                                                                                                                                                                                                                     |
| 10:10-10:20<br>10' | 4 | <b>HAPLOID GENETIC SCREEN REVEALS A PROFOUND AND DIRECT DEPENDENCE ON CHOLESTEROL FOR HANTAVIRUS MEMBRANE FUSION</b><br><u>Rohit K. Jangra</u> <sup>*1</sup> , Lara M. Kleinfelter <sup>1</sup> , Lucas T. Jae <sup>2</sup> , Andrew S. Herbert <sup>3</sup> , Eva Mittler <sup>1</sup> , Katie M. Stiles <sup>4</sup> , Ariel S. Wirchnianski <sup>3</sup> , Margaret Kielian <sup>4</sup> , Thijn R. Brummelkamp <sup>2</sup> , John M. Dye <sup>3</sup> , Kartik Chandran <sup>1</sup><br><sup>1</sup> Microbiology and Immunology, Albert Einstein College of Medicine, New York, United States, <sup>2</sup> Netherlands Cancer Institute, Amsterdam, Netherlands, <sup>3</sup> US Army Medical Research Institute of Infectious Diseases, Fort Detrick, <sup>4</sup> Cell Biology, Albert Einstein College of Medicine, New York, United States |
| 10:20-10:30<br>10' | 5 | <b>ENDOSOME-LYSOSOME FUSION INDUCED BY THE PROTEIN COMPLEX HOPS IS CRITICAL FOR EBOLA VIRUS ENTRY</b><br><u>Eva Mittler</u> <sup>*1</sup> , Jennifer S. Spence <sup>1</sup> , Kartik Chandran <sup>1</sup><br><sup>1</sup> Microbiology and Immunology, Albert Einstein College of Medicine, New York, United States                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**10:30-11:30 Coffee break**  
**Poster session I-IV**

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| 11:30-11:50 | 6 | <b>INSIGHTS INTO HUMAN METAPNEUMOVIRUS PARTICLE ASSEMBLY AND TRANSMISSION</b> |
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| 20'                |    | Farah El Najjar <sup>1</sup> , Nicolas Cifuentes <sup>1</sup> , Ursula J. Buchholz <sup>2</sup> , <b>Rebecca E. Dutch</b> <sup>*1</sup><br><sup>1</sup> Molecular and Cellular Biochemistry, University of Kentucky, Lexington,<br><sup>2</sup> Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, Bethesda, United States                                                                                                                                                                                                                                                                              |
| 11:50-12:10<br>20' | 7  | <b>INTRACELLULAR TRAFFICKING OF INFLUENZA VIRUS GENOME MEDIATED BY ENDOCYTIC RECYCLING COMPARTMENTS LOCATED AT THE CENTROSOME</b><br><b>Atsushi Kawaguchi</b> <sup>*1</sup> , Mikako Hirohama <sup>1</sup> , Kyosuke Nagata <sup>1</sup><br><sup>1</sup> Faculty of Medicine, University of Tsukuba, Tsukuba, Japan                                                                                                                                                                                                                                                                                                                            |
| 12:10-12:30<br>20' | 8  | <b>THE NECTIN-4/AFADIN PROTEIN COMPLEX AND INTERCELLULAR MEMBRANE PORES CONTRIBUTE TO RAPID MEASLES VIRUS SPREAD IN PRIMARY HUMAN AIRWAY EPITHELIA</b><br><b>Roberto Cattaneo</b> <sup>*1</sup> , Brajesh K. Singh <sup>2</sup> , Andrew A. Hornick <sup>2</sup> , Sateesh Krishnamurthy <sup>2</sup> , Anna Locke <sup>3</sup> , Crystal A. Mendoza <sup>1</sup> , Mathieu Mateo <sup>1</sup> , Catherine L. Miller-Hunt <sup>2</sup> , Patrick L. Sinn <sup>2</sup><br><sup>1</sup> Molecular Medicine, Mayo Clinic, Rochester, <sup>2</sup> Pediatrics, University of Iowa, Iowa City, <sup>3</sup> University of Iowa, Iowa, United States |
| 12:30-12:40<br>10' | 9  | <b>NIPAH VIRUS C PROTEIN FACILITATES EFFICIENT VIRUS BUDDING BY RECRUITING ESCRT TO SITES OF MATRIX BUDDING</b><br><b>Arnold Park</b> <sup>*1</sup> , Frederic Vigant <sup>1</sup> , Tatyana Yun <sup>2</sup> , Sohui Won <sup>1</sup> , Olivier Pernet <sup>3</sup> , Alexander Freiberg <sup>2</sup> , Benhur Lee <sup>1</sup><br><sup>1</sup> Microbiology, Icahn School of Medicine at Mount Sinai, New York, <sup>2</sup> Pathology, University of Texas Medical Branch, Galveston, <sup>3</sup> Microbiology, Immunology and Molecular Genetics, University of California Los Angeles, Los Angeles, United States                        |
| 12:40-12:50<br>10' | 10 | <b>VIRAL BUDDING REGULATED BY A CRITICAL RESIDUE LOCATED AT THE PUTATIVE DIMERIC INTERFACE OF THE CANINE DISTEMPER VIRUS MATRIX PROTEIN</b><br><b>Fanny Bringolf</b> <sup>*1</sup> , Nadine Ebert <sup>1</sup> , Mojtaba Khosravi <sup>1</sup> , Herren Michael <sup>1</sup> , Marianne Wyss <sup>1</sup> , Andreas Zurbriggen <sup>1</sup> , Philippe Plattet <sup>1</sup><br><sup>1</sup> Division of Experimental and Clinical Research, Vetsuisse faculty/ University of Bern, Bern, Switzerland                                                                                                                                           |

**12:50-14:20                      Lunch**  
**Poster session I-IV**

**Session II:                      Structure and function**

Chairpersons:    Stephan Becker and Juan Ortin

14:20-14:30:    Chairpersons's remarks

|                    |    |                                                                                                                                                   |
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| 14:30-14:50<br>20' | 38 | <b>STRUCTURES OF CHANDIPURA VIRUS GLYCOPROTEIN: NEW INSIGHTS IN THE EVOLUTION AND WORKING OF THE VESICULOVIRUS GLYCOPROTEIN FUSION MACHINERY.</b> |
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|                    |    | Eduard Baquero <sup>1</sup> , Aurélie Albertini <sup>1</sup> , Elisabetta Boeri <sup>2</sup> , Hélène Raux <sup>1</sup> , Linda Buonocore <sup>3</sup> , John K. Rose <sup>3</sup> , Jean Lepault <sup>1</sup> , Stéphane Bressanelli <sup>4</sup> , <b>Yves Gaudin</b> <sup>*1</sup><br><sup>1</sup> Department of Virology, Institute for Integrative Biology of the Cell, CNRS, Gif sur Yvette, <sup>2</sup> Institute of Structural Biology, Grenoble, France, <sup>3</sup> Department of Pathology, Yale University School of Medicine, New Haven, United States, <sup>4</sup> Department B3S, Institute for Integrative Biology of the Cell, CNRS, Gif sur Yvette, France                                                                                                                                                                                                    |
| 14:50-15:10<br>20' | 39 | <b>NEW STRUCTURE-BASED STABILIZATION OF RESPIRATORY SYNCYTIAL VIRUS FUSION PROTEIN SHEDS LIGHT ON THE FUSION MECHANISM</b><br><b>Johannes P. Langedijk</b> <sup>*1</sup> , Krarup anders <sup>1</sup> , Daphne Truan <sup>1</sup> , Polina Furmanova-Hollenstein <sup>1</sup> , Lies Bogaert <sup>1</sup> , Pascale bouchier <sup>1</sup> , Ilona Bisschop <sup>1</sup> , Richard Voorzaat <sup>1</sup> , Graham Whyteside <sup>1</sup> , Dominika Czapska <sup>1</sup> , Renske bolder <sup>1</sup> , Marjolein van der meer <sup>1</sup> , Myra Widjoatmodjo <sup>1</sup> , Roland Zahn <sup>1</sup> , Hanneke Schuitemaker <sup>1</sup> , Jason S. Mclellan <sup>2</sup><br><sup>1</sup> viral vaccines, Janssen Infectious Diseases and Vaccines, Leiden, Netherlands, <sup>2</sup> Department of Biochemistry, Geisel School of Medicine at Dartmouth, Hanover, United States |
| 15:10-15:30<br>20' | 40 | <b>MOLECULAR RECOGNITION OF HUMAN EPHRINB2 CELL SURFACE RECEPTOR BY AN EMERGENT AFRICAN HENIPAVIRUS</b><br>Benhur Lee <sup>1,2</sup> , Olivier Pernet <sup>1</sup> , Asim A. Ahmed <sup>3</sup> , Antra Zeltina <sup>4</sup> , Shannon M. Beaty <sup>2</sup> , <b>Thomas Bowden</b> <sup>*4</sup><br><sup>1</sup> Department of Microbiology, Immunology & Molecular Genetics, David Geffen School of Medicine at UCLA, Los Angeles, <sup>2</sup> Department of Microbiology, Icahn School of Medicine at Mount Sinai, New York, <sup>3</sup> Division of Infectious Disease, Boston Children's Hospital, Boston, United States, <sup>4</sup> Division of Structural Biology, University of Oxford, Oxford, United Kingdom                                                                                                                                                         |
| 15:30-15:40<br>10' | 41 | <b>STRUCTURAL ANALYSIS OF INFLUENZA VIRUS MEMBRANE FUSION BY ELECTRON CRYOTOMOGRAPHY</b><br><b>Lesley J. Calder</b> <sup>*1</sup> , Peter B. Rosenthal <sup>1</sup><br><sup>1</sup> National Institute for Medical Research / Francis Crick Institute, London, United Kingdom                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 15:40-15:50<br>10' | 42 | <b>THE USE OF SHOTGUN GLYCOMICS TO IDENTIFY ENDOGENOUS RECEPTORS FOR INFLUENZA VIRUSES IN NATURAL TISSUES</b><br><b>Lauren Byrd-Leotis</b> <sup>*1</sup> , David F. Smith <sup>2,3</sup> , David A. Steinhauer <sup>1</sup> , Richard D. Cummings <sup>3,4</sup><br><sup>1</sup> Department of Microbiology and Immunology, Emory University School of Medicine, <sup>2</sup> The Glycomics Center, Emory University, <sup>3</sup> Department of Biochemistry, <sup>4</sup> The Glycomics Center, Emory University School of Medicine, Atlanta, United States                                                                                                                                                                                                                                                                                                                      |

**15:50-16:50                      Coffee break**  
**Posters Session I-IV**

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| 16:50-17:10<br>20' | 43 | <b>THE F SPECIFICITY OF THE PARAINFLUENZA VIRUS HN IS NOT DEFINED SOLELY BY THE PRIMARY STRUCTURE OF THE HN STALK DOMAIN</b><br><b>Masato Tsurudome</b> <sup>*1</sup> , Morihiro Ito <sup>2</sup> , Machiko Nishio <sup>3</sup> , Tetsuya Nosaka <sup>1</sup><br><sup>1</sup> Microbiology and Molecular Genetics, Mie University Graduate School of Medicine, Tsu, <sup>2</sup> Biomedical Sciences, Chubu University, Nagoya, <sup>3</sup> Microbiology, Wakayama Medical University, Wakayama, Japan |
| 17:10-17:30<br>20' | 44 | <b>NEAR-ATOMIC STRUCTURE OF THE HELICAL MEASLES VIRUS NUCLEOCAPSID</b><br><b>Irina Gutsche</b> <sup>*1</sup> , Ambroise Desfosses <sup>2</sup> , Grégory Effantin <sup>3</sup> , Wai Li Ling <sup>3</sup> , Rob W. Ruigrok <sup>1</sup> , Carsten Sachse <sup>2</sup> , Guy Schoehn <sup>1</sup><br><sup>1</sup> UVHCI, Grenoble, France, <sup>2</sup> EMBL, Heidelberg, Germany, <sup>3</sup> IBS, Grenoble, France.                                                                                   |

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| 17:30-17:50<br>20' | 45 | <b>LIMITING TYPE-1 INTERFERON AMPLIFICATION PHARMACOLOGICALLY DURING INFLUENZA VIRUS INFECTION BY GPCR-LIGAND INDUCED IFNAR1 TRAFFICKING AND TURNOVER</b><br><u>John Teijaro</u> <sup>*1</sup> , Department of Immunology and Microbial Science and Chemical Physiology, The Scripps Research Institute, United States                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 17:50-18:10<br>20' | 46 | <b>IMPACT OF AMINO ACID SUBSTITUTIONS IN THE P-BINDING DOMAIN OF THE MEV NUCLEOPROTEIN ON VIRAL RNA SYNTHESIS</b><br>Marion Dosnon <sup>1</sup> , Joanna Brunel <sup>2</sup> , Véronique Hamon <sup>3</sup> , Jenny Erales <sup>4</sup> , Antoine Gruet <sup>4</sup> , Christophe Bignon <sup>1</sup> , Philippe Roche <sup>3</sup> , Sonia Longhi <sup>1</sup> , <u>Denis Gerlier</u> <sup>*2</sup><br><sup>1</sup> AFMB, Aix-Marseille University, CNRS, Marseille, <sup>2</sup> Immunobiologie des Infections Virales, CIRI, INSERM U1111, CNRS UMR5308, Université Lyon 1, ENS de Lyon, Lyon, <sup>3</sup> Centre de Recherche en Cancérologie de Marseille, CNRS, UMR7258 ; INSERM U1068 ; Institut Paoli-Calmettes, and Aix-Marseille Université UM 105, <sup>4</sup> Architecture et Fonction des Macromolécules Biologiques CNRS , Aix-Marseille University, Marseille, France. |

**18:30**

**Free evening and guided tours**

**Tuesday June 16**

**Session III: RNA Synthesis**

Chairpersons: Amiya Banerjee and Danielle Blondel

09:00-09:10: Chairpersons's remarks

|                    |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| 09:10-09:30<br>20' | 68 | <p><b>STRUCTURE AND FUNCTION OF THE RNA SYNTHESIS MACHINERY OF VESICULAR STOMATITIS VIRUS</b></p> <p>Bo Liang<sup>1,3</sup>, Zongli Li<sup>2,4</sup>, Simon Jenni<sup>3</sup>, Amal A. Rahmeh<sup>1</sup>, Benjamin M. Morin<sup>1</sup>, Tim Grant<sup>5</sup>, Nikolaus Grigorieff<sup>5</sup>, Stephen C. Harrison<sup>3,4</sup>, <b>Sean P.J. Whelan</b><sup>1</sup></p> <p><sup>1</sup>Department of Microbiology and Immunobiology, <sup>2</sup>Department of Cell Biology, <sup>3</sup>Department of Biological Chemistry and Molecular Pharmacology, and <sup>4</sup>Howard Hughes Medical Institute, Harvard Medical School, Boston, MA 02115 <sup>5</sup>Howard Hughes Medical Institute, Janelia Research Campus, 19700 Helix Dr, Ashburn, VA 20147</p> |
| 09:30-09:50<br>20' | 69 | <p><b>DIVERGENT SEGMENTED NEGATIVE STRAND VIRAL POLYMERASES HAVE THE SAME ARCHITECTURE AND MODE OF REGULATION BY VIRAL RNA</b></p> <p><b>Juan Reguera</b><sup>*1</sup>, Piotr Gerlach<sup>1</sup>, Helene Malet<sup>1</sup>, Stephen Cusack<sup>1</sup></p> <p><sup>1</sup>Structural Biology - Grenoble Outstation, European Molecular Biology Laboratory, Grenoble, France.</p>                                                                                                                                                                                                                                                                                                                                                                                  |
| 09:50-10:00<br>10' | 70 | <p><b>X-RAY STRUCTURE AND ACTIVITIES OF AN ESSENTIAL MONONEGAVIRALES L-PROTEIN DOMAIN</b></p> <p><b>Axelle Collet</b><sup>*1</sup>, Guido C. Paesen<sup>2</sup>, Corinne Sallamand<sup>3</sup>, Françoise Debart<sup>3</sup>, Jean-Jacques Vasseur<sup>3</sup>, Bruno Canard<sup>1</sup>, Etienne Decroly<sup>1</sup>, Jonathan M. Grimes<sup>2</sup></p> <p><sup>1</sup>AFMB, UMR 7257, Marseille, France, <sup>2</sup>Division of Structural Biology, Wellcome Trust Centre for Human Genetics, Oxford, United Kingdom, <sup>3</sup>IBMM, UMR 5247, Montpellier, France.</p>                                                                                                                                                                                     |
| 10:00-10:10<br>10' | 71 | <p><b>STRUCTURE OF THE INFLUENZA C VIRUS RNA-DEPENDENT RNA POLYMERASE</b></p> <p><b>Narin Hengrung</b><sup>*1</sup>, Kamel El Omari<sup>1</sup>, Itziar Serna Martin<sup>1</sup>, Karl Harlos<sup>1</sup>, Frank Vreede<sup>2</sup>, Stephen Cusack<sup>3</sup>, Robert Rambo<sup>4</sup>, Clemens Vonrhein<sup>5</sup>, Gérard Bricogne<sup>5</sup>, David Stuart<sup>1</sup>, Jonathan Grimes<sup>1</sup>, Ervin Fodor<sup>2</sup></p> <p><sup>1</sup>Structural Biology, <sup>2</sup>Sir William Dunn School of Pathology, University of Oxford, Oxford, United Kingdom, <sup>3</sup>Grenoble Outstation, EMBL, Grenoble, France, <sup>4</sup>Diamond Light Source, Didcot, <sup>5</sup>Global Phasing, Cambridge, United Kingdom.</p>                          |
| 10:10-10:30<br>20' | 72 | <p><b>UNIQUE INTERACTIONS OF THE MUMPS VIRUS PHOSPHOPROTEIN WITH ITS NUCLEOCAPSID</b></p> <p><b>Ming Luo</b><sup>*1</sup>, Robert Cox<sup>2</sup>, Richard Plemper<sup>2</sup>, Adrian Pickar<sup>3</sup>, James Zengel<sup>3</sup>, Biao He<sup>3</sup></p> <p><sup>1</sup>Chemistry, <sup>2</sup>Institute of Biomedical Sciences, Georgia State University, Atlanta, <sup>3</sup>Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, Athens, United States.</p>                                                                                                                                                                                                                                                           |

**10:30-11:30                      Coffee break**  
**Posters Session I-IV**

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| 11:30-11:50<br>20' | 73 | <p><b>FUNCTIONAL AND STRUCTURAL ANALYSIS OF THE INTERACTION BETWEEN INFLUENZA VIRUS POLYMERASE AND THE SPLICEOSOMAL RED-SMU1 COMPLEX</b></p> <p>Guillaume Fournier<sup>1</sup>, Laura Tengo<sup>2</sup>, Julie Magnus<sup>1</sup>, Chiayn Chiang<sup>1</sup>, Sandie Munier<sup>1</sup>, Andru Tomoiu<sup>1</sup>, Caroline Demeret<sup>1</sup>, Pierre-Olivier Vidalain<sup>3</sup>, Yves Jacob<sup>1</sup>, Rob W Ruigrok<sup>2</sup>, Thibaut Crépin<sup>2</sup>, <b>Nadia Naffakh</b><sup>*1</sup></p> <p><sup>1</sup>Unité de Génétique Moléculaire des Virus à ARN, Institut Pasteur, CNRS UMR 3569, Université Paris Diderot, Paris, <sup>2</sup>Unit of Virus-Host Cell Interactions, UMI 3265 UJF-EMBL-CNRS, Grenoble, <sup>3</sup>Laboratoire de Chimie et Biochimie Toxicologiques et Pharmacologiques, Université Paris-Descartes, CNRS UMR 8601, Paris, France.</p> |
| 11:50-12:10<br>20' | 74 | <p><b>INFLUENZA VIRUS EXPLOITS HOST KINASES TO REGULATE NP OLIGOMERIZATION AND ASSEMBLY OF THE VIRAL REPLICATION MACHINERY</b></p> <p>Arindam Mondal<sup>1</sup>, Anthony R. Dawson<sup>1</sup>, Gregory K. Potts<sup>2</sup>, Joshua J. Coon<sup>3</sup>, <b>Andrew Mehle</b><sup>*1</sup></p> <p><sup>1</sup>Medical Microbiology and Immunology, <sup>2</sup>Chemistry, <sup>3</sup>Chemistry, Biomolecular Chemistry, University of Wisconsin Madison, Madison, United States.</p>                                                                                                                                                                                                                                                                                                                                                                                           |
| 12:10-12:30<br>20' | 75 | <p><b>A PREDICTED DYNEIN LIGHT CHAIN 1 BINDING MOTIF IN RABIES VIRUS L PROTEIN IS INVOLVED IN MICROTUBULE REORGANIZATION AND PRIMARY TRANSCRIPTION</b></p> <p>Anja Bauer<sup>1</sup>, Tobias Nolden<sup>1</sup>, Sabine Nemitz<sup>1</sup>, Eran Perlson<sup>2</sup>, <b>Stefan Finke</b><sup>*1</sup></p> <p><sup>1</sup>Institute of Molecular Virology and Cell Biology, Friedrich-Loeffler-Institut, Greifswald - Insel Riems, Germany, <sup>2</sup>Dept. of Physiology and Pharmacology, Tel Aviv University, Tel Aviv, Israel.</p>                                                                                                                                                                                                                                                                                                                                         |
| 12:30-12:40<br>10' | 76 | <p><b>RNA-BINDING OF EBOLA VIRUS VP30 IS ESSENTIAL FOR ACTIVATING VIRAL TRANSCRIPTION</b></p> <p><b>Nadine Biedenkopf</b><sup>*1</sup>, Julia Schlereth<sup>2</sup>, Arnold Grünweller<sup>2</sup>, Roland K. Hartmann<sup>2</sup>, Stephan Becker<sup>1</sup></p> <p><sup>1</sup>Institute of Virology, <sup>2</sup>Institute for Pharmaceutical Chemistry, Philipps University Marburg, Marburg, Germany.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 12:40-12:50<br>10' | 77 | <p><b>IDENTIFICATION OF A NOVEL VIRAL PROTEIN EXPRESSED FROM THE PB2 SEGMENT OF INFLUENZA A VIRUS</b></p> <p><b>Seiya Yamayoshi</b><sup>*1</sup>, Mariko Watanabe<sup>1</sup>, Hideo Goto<sup>1</sup>, Masato Hatta<sup>2</sup>, Yoshihiro Kawaoka<sup>1,2</sup></p> <p><sup>1</sup>Division of Virology, Institute of Medical Science, University of Tokyo, Tokyo, Japan, <sup>2</sup>Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, Madison, United States.</p>                                                                                                                                                                                                                                                                                                                                                       |

Tuesday, June 16  
Session III

**12:50-14:20                      Lunch**  
**Poster session I-IV**

**Session IV:                      Antiviral Response**

Chairpersons: Adolfo Garcia-Sastre

14:20-14:30: Chairpersons's remarks

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| 14:30-14:50<br>20' | 103 | <b>IDENTIFICATION OF CONSERVED PARAMYXOVIRUS T CELL EPITOPES: DOES MEASLES VACCINATION PROTECT AGAINST ZONOTIC HENIPAVIRUS INFECTIONS?</b><br>Rory D. De Vries <sup>1</sup> , Alwin De Jong <sup>1</sup> , R. J. Verburgh <sup>1</sup> , Robert S. Van Binnendijk <sup>2</sup> , Albert D. Osterhaus <sup>1</sup> , Marion P. Koopmans <sup>1</sup> , <b>Rik L. De Swart<sup>*1</sup></b><br><sup>1</sup> Department of Viroscience, Erasmus MC, Rotterdam, <sup>2</sup> Centre for Infectious Disease Control, National Institute for Public Health and the Environment, Bilthoven, Netherlands.                                                                                                                                                                                                                                                                                                                                                                            |
| 14:50-15:10<br>20' | 104 | <b>LYMPHOCYTIC CHORIOMENINGITIS VIRUS DIFFERENTIALLY AFFECTS VIRUS-INDUCED TYPE I IFN RESPONSE AND MITOCHONDRIAL APOPTOSIS MEDIATED BY RIG-I/MAVS</b><br>Christelle Pythoud <sup>1</sup> , Sylvia Rothenberger <sup>1</sup> , <b>Stefan Kunz<sup>*1</sup></b> , Luis Martinez-Sobrido <sup>2</sup> , Juan Carlos de la Torre <sup>3</sup><br><sup>1</sup> Microbiology, Lausanne University Hospital, Lausanne, Switzerland, <sup>2</sup> Microbiology and Immunology, University of Rochester, Rochester, <sup>3</sup> Immunology and Microbial Sciences, Scripps Research Institute, La Jolla, United States.                                                                                                                                                                                                                                                                                                                                                              |
| 15:10-15:30<br>20' | 105 | <b>UNDERSTANDING THE ANTIVIRAL ACTION OF HUMAN MXA, STRUCTURAL AND FUNCTIONAL ANALYSIS OF TWO CRUCIAL MODULES.</b><br><b>Georg Kochs<sup>*1</sup></b> , Laura Graf <sup>1</sup> , Corinna Patzina <sup>1</sup><br><sup>1</sup> University Medical Center, Institute of Virology, Freiburg, Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 15:30-15:40<br>10' | 106 | <b>TARGETING IMPORTIN-A7 AS A THERAPEUTIC APPROACH AGAINST PANDEMIC INFLUENZA VIRUSES.</b><br><b>Patricia Resa-Infante<sup>*1</sup></b> , Duncan Paterson <sup>2</sup> , Jaume Bonet <sup>3</sup> , Anna Otte <sup>1</sup> , Baldo Oliva <sup>3</sup> , Ervin Fodor <sup>2</sup> , Gülsah Gabriel <sup>1</sup><br><sup>1</sup> Heinrich Pette Institute, Leibniz Institute for Experimental Virology, Hamburg, Germany, <sup>2</sup> Sir William Dunn School of Pathology, University of Oxford, Oxford, United Kingdom, <sup>3</sup> Structural Bioinformatics Lab (GRIB), Universitat Pompeu Fabra, Barcelona Research Park of Biomedicine (PRBB), Barcelona, Spain.                                                                                                                                                                                                                                                                                                       |
| 15:40-15:50<br>10' | 107 | <b>MECHANISM OF CELL-INTRINSIC INNATE IMMUNE ANTAGONISM BY EBOLA VIRUS VP24</b><br><b>Megan Edwards<sup>*1</sup></b> , Wei Xu <sup>2</sup> , Dominika Borek <sup>3</sup> , Alicia Feagins <sup>1</sup> , Anuradha Mittal <sup>4</sup> , Joshua Alinger <sup>2</sup> , Benjamin Yen <sup>1</sup> , Jennifer Hamilton <sup>1</sup> , Audrey Diederichs <sup>1</sup> , Juanli Pan <sup>2</sup> , Toni Schwarz <sup>1</sup> , Rohit Pappu <sup>4</sup> , Daisy Leung <sup>2</sup> , Christopher Basler <sup>1</sup> , Gaya Amarasinghe <sup>2</sup><br><sup>1</sup> Microbiology, Icahn School of Medicine at Mount Sinai, New York, <sup>2</sup> Pathology and Immunology, Washington University School of Medicine, St Louis, <sup>3</sup> Biophysics and Biochemistry, University of Texas Southwestern Medical Center at Dallas, Dallas, <sup>4</sup> Biomedical Engineering and Center for Biological Systems Engineering,, Washington University, St Louis, United States. |

**15:50-16:50                      Coffee break**  
**Poster Session I-IV**

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| 16:50-17:10<br>20' | 108 | <b>HOST DEFENCE AND VIRAL COUNTER DEFENCE BY THE PLANT-INFECTING BUNYAVIRUS TSWV</b><br>Dryas de Ronde <sup>1</sup> , Marcio Hedil <sup>1</sup> , Patrick Butterbach <sup>1</sup> , <b>Richard Kormelink<sup>*1</sup></b><br><sup>1</sup> Laboratory of Virology, Wageningen University, Wageningen, Netherlands. |
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| 17:10-17:30<br>20' | 109 | <b>ATTENUATION OF LYSSAVIRUSES: BIOTYPE II AND III PHOSPHOPROTEINS CANNOT INHIBIT IRF3 ACTIVATION AND INTERFERON INDUCTION IN HUMAN CELLS</b><br>Marco Wachowius <sup>1</sup> , Martina Rieder <sup>1</sup> , Daniel Aberle <sup>1</sup> , <b>Karl-Klaus Conzelmann</b> <sup>*1</sup><br><sup>1</sup> Max von Pettenkofer-Institute & Gene Center, Ludwig-Maximilians-University Munich, Muenchen, Germany.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 17:30-17:40<br>10' | 110 | <b>C-TERMINAL REGION OF TOSCANA VIRUS NSS PROTEIN IS CRITICAL FOR INTERFERON-B ANTAGONISM AND PROTEIN STABILITY.</b><br><b>Gianni Gori Savellini</b> <sup>*1</sup> , Claudia Gandolfo <sup>1</sup> , Maria Grazia Cusi <sup>1</sup><br><sup>1</sup> Medical Biotechnologies, University of Siena, Siena, Italy.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 17:40-17:50<br>10' | 111 | <b>EVIDENCE FOR A NOVEL MECHANISM OF INFLUENZA VIRUS-INDUCED TYPE I INTERFERON EXPRESSION BY A DEFECTIVE RNA-ENCODED PROTEIN</b><br><b>Yvonne Börgeling</b> <sup>*1</sup> , Timofey Rozhdestvensky <sup>2</sup> , Mirco Schmolke <sup>3</sup> , Patricia Resa Infante <sup>4</sup> , Thomas Robeck <sup>2</sup> , Gerrit Randau <sup>2</sup> , Thorsten Wolff <sup>5</sup> , Gülsah Gabriel <sup>4</sup> , Jürgen Brosius <sup>2</sup> , Stephan Ludwig <sup>1</sup><br><sup>1</sup> Institute of Molecular Virology, <sup>2</sup> Institute of Experimental Pathology, University of Muenster, Münster, Germany, <sup>3</sup> Department of Microbiology and Molecular Medicine, University of Geneva, Geneva, Switzerland, <sup>4</sup> Heinrich Pette Institute, University of Hamburg, Hamburg, <sup>5</sup> Robert Koch Institute, Berlin, Germany. |
| 17:50-18:10<br>20' | 115 | <b>B-INTERFERON INDUCTION IN VSV-INFECTED CELLS: WHAT IS THE VIRAL RNA INDUCER?</b><br><b>Jacques Perrault</b> <sup>*1</sup> , Chun-Teng Huang <sup>1,1</sup><br><sup>1</sup> Biology, San Diego State University, San Diego, United States                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**19:00 Get together party :**

*Chiostro di San Francesco, Piazza San Francesco, 6*

## Wednesday June 17

08:00-09:00 Put up posters for sessions V-VIII

### Session V: Host cell interaction

Chairpersons: Christina Spiropoulou and Mirco Schmolke

09:00-09:10: Chair persons's remarks

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| 09:10-09:30<br>20' | 125 | <b>FUNCTIONS OF HUMAN PARAINFLUENZA VIRUS 3 HEMAGGLUTININ-NEURAMINIDASE RECEPTOR BINDING SITES IN FUSION ACTIVATION</b> Matteo Porotto <sup>1</sup> , Laura M. Palermo <sup>1</sup> , <u>Anne Moscona</u> <sup>*1</sup><br><sup>1</sup> Microbiology & Immunology, Pediatrics, Weill Cornell Medical College, New York, United States.                                                                                                                                                                                                       |
| 09:30-09:50<br>20' | 126 | <b>REVERSE GENETIC ANALYSIS OF BAT INFLUENZA VIRUS HARBORING THE ENTRY MACHINERY OF AN INFLUENZA A VIRUS</b> <u>Martin Schwemmle</u> <sup>*1</sup> , Mindaugas Juozapaitis <sup>1</sup> , Étori Aguiar Moreira <sup>1</sup> , Ignacio Mena <sup>2</sup> , Martin Beer <sup>3</sup> , Adolfo García-Sastre <sup>2</sup><br><sup>1</sup> Institute of Virology, Freiburg, Germany, <sup>2</sup> Icahn School of Medicine at Mount Sinai, New York, United States, <sup>3</sup> Friedrich-Loeffler-Institut, Insel Riems - Greifswald, Germany. |
| 09:50-10:10<br>20' | 127 | <b>EBOLA VIRUS ENTRY INTO MACROPHAGES</b> Florian Wrensch <sup>1</sup> , Franziska Dahlmann <sup>1</sup> , Heike Hofmann-Winkler <sup>1</sup> , Michael Winkler <sup>1</sup> , Nadine Biedenkopf <sup>2</sup> , Stephan Becker <sup>2</sup> , <u>Stefan Pöhlmann</u> <sup>*1</sup><br><sup>1</sup> German Primate Center, Göttingen, <sup>2</sup> Institute for Virology, Marburg, Germany.                                                                                                                                                  |
| 10:10-10:20<br>10' | 128 | <b>BISBENZYLISOQUINOLINES ARE POTENT ANTI-EBOLA VIRUS COMPOUNDS TARGETING HOST CELL ENTRY</b> <u>Yasuteru Sakurai</u> <sup>*1</sup> , William E. Bauta <sup>2</sup> , Mathew Mahindaratne <sup>2</sup> , Ricardo Carrion Jr <sup>1</sup> , Robert A. Davey <sup>1</sup><br><sup>1</sup> Virology & Immunology, Texas Biomedical Research Institute, <sup>2</sup> Medicinal and Process Chemistry, Southwest Research Institute, San Antonio, United States.                                                                                  |
| 10:20-10:30<br>10' | 129 | <b>HOST CELL FACTORS INVOLVED IN MARBURG VIRUS NUCLEOCAPSID TRANSPORT</b> <u>Olga Dolnik</u> <sup>*1</sup> , Larissa Kolesnikova <sup>1</sup> , Thomas Strecker <sup>1</sup> , Gordian Schudt <sup>1</sup> , Stephan Becker <sup>1</sup><br><sup>1</sup> Institut für Virologie, Philipps-University Marburg, Marburg, Germany.                                                                                                                                                                                                              |

### 10:30-11:30 Coffee break

#### Posters Session V-VIII

|                    |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| 11:30-11:50<br>20' | 130 | <b>HOW DO PARAMYXOVIRUSES ESTABLISH PROLONGED/PERSISTENT INFECTIONS? LESSONS FROM STUDIES ON PARAINFLUENZA VIRUS TYPE 5.</b> Dan F. Young <sup>1</sup> , Elizabeth Wignall-Fleming <sup>1,2</sup> , Daniel Eldeman <sup>3</sup> , Elizabeth Randall <sup>1</sup> , Andrew Davison <sup>2</sup> , Steve Goodbourn <sup>4</sup> , <u>Richard Randall</u> <sup>*1</sup><br><sup>1</sup> University of St Andrews, St Andrews, <sup>2</sup> University of Glasgow, Glasgow, United Kingdom, <sup>3</sup> Ruprecht-Karls-Universität, Heidelberg, Germany, <sup>4</sup> St. George's, University of London, London, United Kingdom. |
| 11:50-12:10<br>20' | 131 | <b>IDENTIFICATION OF EBOLA VIRUS AND SUDAN VIRUS DEFECTIVE VIRAL GENOMES IN SERUM OF EXPERIMENTALLY INFECTED NONHUMAN PRIMATES</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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|                    |     | Kendra Alfson <sup>1</sup> , Heather M Menzie <sup>1</sup> , Jean Patterson <sup>1</sup> , Ricardo Carrion <sup>1</sup> , <b>Anthony Griffiths</b> * <sup>1</sup><br><sup>1</sup> Virology and Immunology, Texas Biomedical Research Institute, San Antonio, United States.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 12:10-12:30<br>20' | 132 | <b>DIFFERENTIAL INHIBITION OF MACROPHAGES AND DENDRITIC CELLS BY PATHOGENIC AND NONPATHOGENIC ARENAVIRUSES</b><br><b>Yuying Liang</b> * <sup>1</sup> , Junji Xing <sup>1</sup> , Hinh Ly <sup>1</sup> <sup>1</sup><br>University of Minnesota, St Paul, United States.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 12:30-12:40<br>10' | 133 | <b>ACUTE LUNG INJURY RESULTS FROM INNATE SENSING OF VIRUSES BY AN ER STRESS PATHWAY</b><br><b>Eike R. Hrincius</b> * <sup>1</sup> , Swantje Liedmann <sup>2</sup> , David Finkelstein <sup>3</sup> , Peter Vogel <sup>4</sup> , Shane Gansebom <sup>1</sup> , Amali E. Samarasinghe <sup>5</sup> , Dahui You <sup>5</sup> , Stephania A. Cormier <sup>5</sup> , Jonathan A. McCullers <sup>1,5</sup><br><sup>1</sup> Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, United States, <sup>2</sup> Institute of Molecular Virology (IMV), University of Muenster, Muenster, Germany, <sup>3</sup> Department of Computational Biology, <sup>4</sup> Department of Veterinary Pathology, St. Jude Children's Research Hospital, <sup>5</sup> Department of Pediatrics, University of Tennessee Health Science Center, Memphis, United States. |
| 12:40-12:50<br>10' | 134 | <b>CELLULAR RNA EDITING ENZYME ADAR1 INTERACTS WITH INFLUENZA A VIRUS PROTEINS DURING INFECTION AND ENHANCES VIRUS REPLICATION THROUGH INHIBITION OF IRF3</b><br><b>Nikki Smith</b> * <sup>1</sup> , Artur A. Arikainen <sup>2</sup> , Tali Pechenick-Jowers <sup>1</sup> , Helen Wise <sup>1</sup> , Julian A. Hiscox <sup>3</sup> , Paul Digard <sup>1</sup><br><sup>1</sup> Roslin Institute, The University of Edinburgh, Edinburgh, <sup>2</sup> University of Cambridge, Cambridge, <sup>3</sup> Institute of Infection and Global Health, University of Liverpool, Liverpool, United Kingdom.                                                                                                                                                                                                                                                                          |

**12:50-14:20                      Lunch**  
**Poster session V-VIII**

**Session V:                      Host cell interaction**

Chairpersons:    Jean Patterson and Otto Haller

14:20-14:30:       Chairperson's remarks

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| 14:30-14:50<br>20' | 135 | <b>MECHANISMS OF PARAINFLUENZA VIRUS DISSEMINATION, PATHOGENESIS, AND TRANSMISSION IN A MOUSE MODEL</b><br>John N. Mason <sup>1</sup> , Heba H. Mostafa <sup>1</sup> , Crystal W. Burke <sup>1</sup> , Peter Vogel <sup>2</sup> , Julia L. Hurwitz <sup>1</sup> , Ashok Srinivasan <sup>3</sup> , <b>Charles J. Russell</b> * <sup>1</sup><br><sup>1</sup> Infectious Diseases, <sup>2</sup> Pathology, <sup>3</sup> BMTCT, St. Jude Children's Research Hospital, Memphis, United States. |
| 14:50-15:10<br>20' | 136 | <b>INTERFERON-LAMBDA CONTROLS THE SPREAD OF INFLUENZA VIRUSES FROM THE UPPER RESPIRATORY TRACT TO THE LUNGS AND RESTRICTS VIRUS TRANSMISSION IN MICE</b><br>Jonas Klinkhammer <sup>1</sup> , Daniel Schnepf <sup>1</sup> , Marilena Schwaderlapp <sup>1</sup> , Tanel Mahlaköiv <sup>1</sup> , <b>Peter Staeheli</b> * <sup>1</sup><br><sup>1</sup> Virology, University of Freiburg, Freiburg, Germany                                                                                    |
| 15:10-15:30        | 137 | <b>AN EPITHELIAL INTEGRIN REGULATES THE AMPLITUDE OF PROTECTIVE</b>                                                                                                                                                                                                                                                                                                                                                                                                                        |

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| 20'                |     | <b>LUNG INTERFERON RESPONSES TO INFLUENZA AND SENDAI VIRUS INFECTIONS</b><br><u>Stacey Schultz-Cherry</u> <sup>*1</sup> , Victoria A. Meliopoulos <sup>1</sup> , Lee Ann Van de Velde <sup>2</sup> , Peter J. Murray <sup>2</sup><br><sup>1</sup> Infectious Diseases, <sup>2</sup> Infectious Diseases and Immunology, St Jude Children's Research Hospital, Memphis, United States.                                                                                                                                                            |
| 15:30-15:40<br>10' | 138 | <b>THE INFLUENZA A VIRUS PROTEIN NS1 INHIBITS NLRP3 INFLAMMASOME-MEDIATED INTERLEUKIN-1BETA SECRETION</b><br><u>Miyu Moriyama</u> <sup>*1,2,3</sup> , I-Yin Chen <sup>1</sup> , Haruko Takeyama <sup>3</sup> , Hideki Hasegawa <sup>2</sup> , Takeshi Ichinohe <sup>1</sup><br><sup>1</sup> Department of Virology, University of Tokyo, <sup>2</sup> Department of Pathology, National Institute of Infectious Diseases, <sup>3</sup> Faculty of Science and Engineering, Waseda University, Tokyo, Japan.                                      |
| 15:40-15:50<br>10' | 139 | <b>MAPPING OF A REGION IMPORTANT FOR SHUT-OFF ACTIVITY IN THE PA-X PROTEIN OF INFLUENZA A VIRUS</b><br><u>Kohei Oishi</u> <sup>*1</sup> , Seiya Yamayoshi <sup>1</sup> , Yoshihiro Kawaoka <sup>1,2,3</sup><br><sup>1</sup> Division of Virology, University of Tokyo, <sup>2</sup> Special Pathogens, International Research Center for Infectious Diseases, Medical Science, University of Tokyo, Tokyo, Japan, <sup>3</sup> Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, Madison, United States. |

**15:50-16:50                      Coffee break**  
**Posters Session V-VIII**

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| 16:50-17:10<br>20' | 140 | <b>THE FOCAL ADHESION KINASE IS INVOLVED IN RABIES VIRUS INFECTION THROUGH ITS INTERACTION WITH THE VIRAL PHOSPHOPROTEIN P</b><br>Baptiste FOUQUET <sup>1</sup> , Jovan NIKOLIC <sup>1</sup> , Florence LARROUS <sup>2</sup> , Hervé BOURHY <sup>2</sup> , Christoph WIRBLICH <sup>3</sup> , <u>Cecile LAGAUDRIERE-GESBERT</u> <sup>*1</sup> , Danielle BLONDEL <sup>1</sup><br><sup>1</sup> Department of Virology, Institute for Integrative Biology of the Cell, CNRS UMR9198, GIF SUR YVETTE, <sup>2</sup> Unit Lyssavirus Dynamics and Host Adaption, Institut Pasteur, Paris, France, <sup>3</sup> Department of Microbiology and Immunology, Thomas Jefferson University, Philadelphia, United States. |
| 17:10-17:30<br>20' | 141 | <b>NUCLEAR FUNCTION OF THE RESPIRATORY SYNCYTIAL VIRUS MATRIX PROTEIN</b><br><u>Reena Ghildyal</u> <sup>*1</sup> , David Jans <sup>2</sup> , Michael Teng <sup>3</sup> , John Mills <sup>2</sup><br><sup>1</sup> Centre for Research in Therapeutic Solutions, University of Canberra, Bruce, <sup>2</sup> Monash University, Melbourne, Australia, <sup>3</sup> University of South Florida, Tampa, United States.                                                                                                                                                                                                                                                                                           |
| 17:30-17:50<br>20' | 142 | <b>INFLUENZA A VIRUS PROTEIN PB1-F2 TRANSLOCATES INTO MITOCHONDRIA VIA TOM40 CHANNELS AND IMPAIRS INNATE IMMUNITY.</b><br><u>Takeshi Ichinohe</u> <sup>*1</sup> , Takuma Yoshizumi <sup>2</sup> , Takumi Koshiba <sup>2</sup><br><sup>1</sup> Department of Virology, University of Tokyo, Tokyo, <sup>2</sup> Department of Biology, Kyushu University, Kyushu, Japan.                                                                                                                                                                                                                                                                                                                                       |
| 17:50-18:00<br>10' | 143 | <b>A NOVEL HOST FACTOR PROMOTES THE NUCLEAR EXPORT OF INFLUENZA VIRAL RIBONUCLEOPROTEIN COMPLEXES</b><br><u>Tomomi Ando</u> <sup>*1</sup> , Seiya Yamayoshi <sup>1</sup> , Shinji Watanabe <sup>1,2</sup> , Tokiko Watanabe <sup>1</sup> , Yoshihiro Kawaoka <sup>1,3</sup><br><sup>1</sup> Division of Virology, Institute of Medical Science, University of Tokyo, <sup>2</sup> Influenza Virus Research Center, National Institute of Infectious Diseases, Tokyo, Japan, <sup>3</sup> Department of Pathobiological Sciences, School of Veterinary Medicine, University of Wisconsin-Madison, Madison, United States.                                                                                      |
| 18:00-18:10        | 144 | <b>UNRAVEL MOLECULAR MECHANISMS OF INFLUENZA NS1 PROTEIN AND HOST CELL PKR INTERACTION BY USING LIVE CELL MULTICOLOR FLIM-FRET</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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| 10' |  | <b>AND ANISOTROPY</b><br><b>Fabian Jolmes</b> <sup>*1</sup> , Kristina Schierhorn <sup>2</sup> , Claus Seidel <sup>3</sup> , Thorsten Wolff <sup>2</sup> , Andreas Herrmann <sup>1</sup><br><sup>1</sup> Molecular Biophysics, Humboldt Universität zu Berlin, <sup>2</sup> Division of Influenza and Other Respiratory Viruses, Robert Koch-Institut, Berlin, <sup>3</sup> Molecular Physical Chemistry, Heinrich Heine University, Bochum, Germany. |
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**Thursday June 18**

**Session VI: Pathogenesis**

Chairpersons: Veronica von Messling and Yoshihira Kawaoka

09:00-09:10 Chairpersons's remarks

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| 09:10-09:30<br>20' | 198 | <b>PROLONGED MULTIPHASIC B AND T CELL RESPONSES DURING MEASLES VIRUS INFECTION AND RNA CLEARANCE</b><br><b>Diane E. Griffin</b> <sup>*1</sup> , Nicole Putnam <sup>1,1</sup> , Ashley Nelson <sup>1</sup> , Debra Hauer <sup>1</sup> , Victoria Baxter <sup>1</sup> , Robert Adams <sup>2</sup><br><sup>1</sup> Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, <sup>2</sup> Molecular and Comparative Pathobiology, Johns Hopkins School of Medicine, Baltimore, United States.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 09:30-09:50<br>20' | 199 | <b>IMMUNE BIOMARKERS OF EBOLA VIRUS DISEASE IN HUMANS</b><br>Anja Luedtke <sup>1</sup> , Lisa Oestereich <sup>2</sup> , Paula Ruibal <sup>2</sup> , Romy Kerber <sup>2</sup> , Martin Gabriel <sup>2</sup> , Babak Afrough <sup>3</sup> , Johanna Repits <sup>4</sup> , Beate Becker-Ziaja <sup>2</sup> , Sophie Duraffour <sup>2</sup> , Miles Carroll <sup>3</sup> , Pierre Formenty <sup>5</sup> , N'faly Magassouba <sup>6</sup> , Stephan Guenther <sup>2</sup> , <b>Cesar Munoz-Fontela</b> <sup>*1</sup><br><sup>1</sup> Heinrich-Pette-Institut, Leibniz Institute For Experimental Virology, <sup>2</sup> Bernhard Nocht Institute for Tropical Medicine, Hamburg, Germany, <sup>3</sup> Public Health England at Porton Down, Porton Down, United Kingdom, <sup>4</sup> Janssen, Pharmaceutical Companies of Johnson and Johnson, Hamburg, Germany, <sup>5</sup> World Health Organization, Geneva, Switzerland, <sup>6</sup> Laboratoire des Fièvres Hémorragiques en Guinée, Conakry, Guinea.                                                                                                                                                |
| 09:50-10:10<br>20' | 200 | <b>DISSECTING THE DYNAMICS OF INFLUENZA VIRUS TRANSMISSION.</b><br>Ruth A. Elderfield <sup>1</sup> , Rebecca Cocking <sup>1</sup> , Kim L. Roberts <sup>2</sup> , Holly Shelton <sup>3</sup> , Konrad Bradley <sup>1</sup> , Neeltje van Doremalen <sup>4</sup> , Mirian Fernandez Alonso <sup>5</sup> , Shahjahan Miah <sup>6</sup> , Peter Stilwell <sup>7</sup> , Jonathan Ashcroft <sup>1</sup> , Angie Lackenby <sup>6</sup> , <b>Wendy S. Barclay</b> <sup>*1</sup><br><sup>1</sup> Virology, Imperial College London, LONDON, United Kingdom, <sup>2</sup> Department of Microbiology, Moyne Institute of Preventive Medicine, Trinity College, Dublin, Ireland, <sup>3</sup> Avian Infectious Diseases, The Pirbright Institute, Compton Laboratory, Newbury, United Kingdom, <sup>4</sup> Laboratory of Virology, National Institute of Allergy and Infectious Disease, Hamilton MT, United States, <sup>5</sup> Microbiology, Universidad de Navarra, Pamplona, Spain, <sup>6</sup> Centre for Infections, Public Health England, London, <sup>7</sup> Environment and Sustainability Institute, University of Exeter, Penryn, United Kingdom. |

Thursday, June 18  
Session VI

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| 10:10-10:20<br>10' | 201 | <b>SHED GP OF EBOLA VIRUS RENDERS MONOCYTES PERMISSIVE TO INFECTION</b><br><b>Beatriz Escudero Pérez<sup>*1</sup></b> , Olga Dolnik <sup>2</sup> , Thierry Walzer <sup>1</sup> , Olivier Reynard <sup>1</sup> , Philip Lawrence <sup>1</sup> , Viktor Volchkov <sup>1</sup><br><sup>1</sup> Molecular Basis of Viral Pathogenicity, CIRI - INSERM U1111 - CNRS UMR5308, Lyon, France, <sup>2</sup> Institute of Virology, Philipps University Marburg, Marburg, Germany.                                                                                                                                                                                                                                                                                                                                                                                                       |
| 10:20-10:30<br>10' | 202 | <b>HOST AND VIRAL DETERMINANTS OF PROTEOLYTIC ACTIVATION OF INFLUENZA VIRUSES</b><br><b>Kouji Sakai<sup>*1</sup></b> , Yasushi Ami <sup>1</sup> , Minori Kitazawa <sup>1,2</sup> , Katsuhiro Nakajima <sup>1,2</sup> , Tsuyoshi Sekizuka <sup>1</sup> , Noriko Nakajima <sup>1</sup> , Masaki Anraku <sup>1</sup> , Maino Tahara <sup>1</sup> , Toru Kubota <sup>1</sup> , Katsuhiro Komase <sup>1</sup> , Kazuaki Takehara <sup>2</sup> , Takato Odagiri <sup>1</sup> , Makoto Kuroda <sup>1</sup> , Hideki Hasegawa <sup>1</sup> , Yoshihiro Kawaoka <sup>3,4</sup> , Masato Tashiro <sup>1</sup> , Makoto Takeda <sup>1</sup><br><sup>1</sup> National Institute of Infectious Diseases, <sup>2</sup> Tokyo University of Agriculture and Technology, <sup>3</sup> The University of Tokyo, Tokyo, Japan, <sup>4</sup> University of Wisconsin, Madison, WI, United States. |

**10:30-11:30                      Coffee-break**  
**Posters Session V-VIII**

**Session VII:            Vaccines and antivirals and therapeutics**

Chairpersons:    Martin Billeter, Thomas Pietschmann and Kanta Subbarao

11:30-11:40:    Chairpersons's remarks

|                    |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| 11:40-12:00<br>20' | 225 | <b>ENGINEERED ONCOLYTIC NEWCASTLE DISEASE VIRUS SHOWS GREAT PROMISES FOR VIROTHERAPY</b><br>Xing Cheng <sup>1</sup> , Weijia Wang <sup>1</sup> , Qi Xu <sup>1</sup> , James Harper <sup>2</sup> , Danielle Carroll <sup>2</sup> , <b>Hong Jin<sup>*1</sup></b><br><sup>1</sup> Research, Medimmune, Mountain View, United States, <sup>2</sup> Research, Medimmune, Cambridge, United Kingdom.                                                                                                                                                    |
| 12:00-12:20<br>20' | 226 | <b>PAN-RESISTANCE MECHANISM OF RESPIRATORY SYNCYTIAL VIRUS AGAINST DIVERSE SMALL-MOLECULE ENTRY INHIBITORS</b><br><b>Richard K. Plemper<sup>*1</sup></b> , Dan Yan <sup>1</sup> , Marco Weisshaar <sup>1</sup> , Martin L. Moore <sup>2</sup><br><sup>1</sup> Institute for Biomedical Sciences, Georgia State University, <sup>2</sup> Pediatrics, Emory University, Atlanta, United States.                                                                                                                                                     |
| 12:20-12:40<br>20' | 227 | <b>INHIBITION OF THE ANDES HANTAVIRUS FUSION PROCESS</b><br>Gonzalo P. Barriga <sup>1</sup> , Fernando Villalon <sup>1</sup> , Simon Vidal <sup>1</sup> , Chantal Marquez <sup>1</sup> , Gonzalo Mardones <sup>2</sup> , <b>Nicole Tischler<sup>*1,3</sup></b><br><sup>1</sup> Molecular Virology Laboratory, Fundacion Ciencia & Vida, Santiago, <sup>2</sup> Departamento de Fisiologia, Facultad de Medicina, Universidad Austral de Chile, Valdivia, <sup>3</sup> Facultad de Ciencias Biologicas, Universidad Andres Bello, Santiago, Chile. |

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| 12:40-12:50<br>10' | 228 | <b>INHIBITORS OF CELLULAR KINASES WITH BROAD-SPECTRUM ANTIVIRAL ACTIVITY FOR HEMORRHAGIC FEVER VIRUSES</b><br><b>Mike Flint</b> <sup>*1</sup> , Emma L. Mohr <sup>1,2</sup> , Laura K. McMullan <sup>1</sup> , Michael Lo <sup>1</sup> , Jessica Spengler <sup>1</sup> , Eric Bergeron <sup>1</sup> , Cesar Albarino <sup>1</sup> , Punya Shrivastava-Ranjan <sup>1</sup> , Chiang Cheng-Feng <sup>1</sup> , Stuart Nichol <sup>1</sup> , Christina Spiropoulou <sup>1</sup><br><sup>1</sup> Viral Special Pathogens Branch, Centers for Disease Control and Prevention, <sup>2</sup> Department of Pediatrics, Emory University, Atlanta, United States. |
| 12:50-13:00<br>10' | 229 | <b>AN IN VITRO RNA SYNTHESIS ASSAY FOR MEASLES VIRUS DEMONSTRATES THAT NON-NUCLEOSIDE ANALOGS BLOCK POLYMERASE INITIATION</b><br><b>Benjamin Morin</b> <sup>*1</sup> , Linda J. Rennick <sup>2</sup> , W. Paul Duprex <sup>2</sup> , Sean P. J. Whelan <sup>1</sup><br><sup>1</sup> Microbiology and Immunobiology, Harvard Medical School, <sup>2</sup> Microbiology, Boston University School of Medicine, Boston, United States.                                                                                                                                                                                                                       |

**13:00-14:30                      Lunch**  
**Posters VI-VIII**

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| 14:30-14:50<br>20' | 230 | <b>DELETION OF THE RESPIRATORY SYNCYTIAL VIRUS M2-2 ORF YIELDS A HIGHLY ATTENUATED LIVE VACCINE CANDIDATE WITH INCREASED IMMUNOGENICITY IN YOUNG CHILDREN</b><br>Ruth R. Karron <sup>1</sup> , Cindy Luongo <sup>2</sup> , Bhagvanji Thumar <sup>1</sup> , Janet Englund <sup>3</sup> , Peter L. Collins <sup>2</sup> , <b>Ursula J. Buchholz</b> <sup>*2</sup><br><sup>1</sup> Center for Immunization Research, Department of International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, <sup>2</sup> RNA Viruses Section, NIAID, NIH, Bethesda, <sup>3</sup> Seattle Children's Research Institute, University of Washington, Seattle, United States.                                                                                                                                                                                                                                                                                                                                                            |
| 14:50-15:10<br>20' | 231 | <b>THE STRUCTURALLY RELATED FUSION PROTEINS OF HUMAN RESPIRATORY SYNCYTIAL VIRUS AND METAPNEUMOVIRUS ARE ANTIGENICALLY AND IMMUNOGENICALLY DISSIMILAR</b><br><b>José A. Melero</b> <sup>*1</sup> , Vicente Mas <sup>1</sup> , Concepción Palomo <sup>1</sup> , Laura Rodriguez <sup>1</sup> , Eduardo Olmedillas <sup>1</sup> , Alfonsina Trento <sup>1</sup> , Monica Vazquez <sup>1</sup> , Olga Cano <sup>1</sup> , Barney Graham <sup>2</sup> , Bernadette van den Hoogen <sup>3</sup> , Jason McLellan <sup>4</sup> , Michelle Tom <sup>5</sup> , Geraldine Taylor <sup>5</sup><br><sup>1</sup> Centro Nacional de Microbiología and CIBER de Enfermedades Respiratorias, Instituto de Salud Carlos III, Madrid, Spain, <sup>2</sup> Vaccine Research Center, NIH, Bethesda, United States, <sup>3</sup> Erasmus Medical Center, Erasmus University, Rotterdam, Netherlands, <sup>4</sup> Biochemistry, Gesel School of Medicine, Dartmouth, United States, <sup>5</sup> Virology, The Pirbright Institute, Pirbright, United Kingdom |
| 15:10-15:30<br>20' | 232 | <b>HUMAN MONOCLONAL ANTIBODY DEVELOPMENT FROM FILOVIRUS SURVIVORS IN UGANDA</b><br><b>John M. Dye</b> <sup>*1</sup> , Leslie Lobel <sup>2</sup> , Julius J. Lutwama <sup>3</sup><br><sup>1</sup> Virology, USAMRIID, Fort Detrick, United States, <sup>2</sup> Virology, Ben-Gurion University, Beer Sheva, Israel, <sup>3</sup> Arbovirology, Uganda Virus Research Institute, Entebbe, Uganda.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 15:30-15:40<br>10' | 233 | <b>A RECOMBINANT NOVIRHABDOVIRUS EXPRESSING PORTIONS OF DENGUE VIRUS (DENV) E GLYCOPROTEINS AS VACCINE AGAINST DENV IN A MICE MODEL</b><br><b>Ronan N. Rouxel</b> <sup>*1</sup> , Emilie Mérour <sup>1</sup> , Julie Bernard <sup>1</sup> , Sophie Chat <sup>2</sup> , Michel Brémont <sup>1</sup><br><sup>1</sup> VIM, <sup>2</sup> GPL, INRA, Jouy-en-Josas, France.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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| 15:40-15:50<br>10' | 234 | <b>BRAIN ORGANOTYPIC CULTURE MODEL AS A USEFUL TOOL FOR DRUGS DISCOVERY AND SCREENING AGAINST NEUROTROPIC VIRUSES</b><br><u>Jeremy C. Welsch</u> <sup>*1</sup> , Louis-Marie Bloyet <sup>1</sup> , Anne Moscona <sup>2</sup> , Matteo Porotto <sup>2</sup> , Branka Horvat <sup>1</sup> , Denis Gerlier <sup>1</sup> , Cyrille Mathieu <sup>1</sup><br><sup>1</sup> CIRI-Lyon, INSERM, Lyon, France, <sup>2</sup> Pediatrics, Microbiology, Immunology, Weill Medical College of Cornell University, New York, United States |
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**15:50-16:50                      Coffee break**  
**Posters V-VIII**

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| 16:50-17:10<br>20' | 235 | <b>NONSPREADING RIFT VALLEY FEVER VIRUS INFECTION OF HUMAN DENDRITIC CELLS RESULTS IN DOWNREGULATION OF CD83 AND FULL MATURATION OF BYSTANDER CELLS</b><br>Nadia Oreshkova <sup>1</sup> , <u>Paul J. Wichgers Schreur</u> <sup>*1</sup> , Lotte Spel <sup>2</sup> , Rianka P. M. Vloet <sup>1</sup> , Rob J. M. Moormann <sup>1</sup> , Marianne Boes <sup>2</sup> , Jeroen Kortekaas <sup>1</sup><br><sup>1</sup> Virology, Central Veterinary Institute, Lelystad, <sup>2</sup> Department of Pediatric Immunology and Laboratory of Translational Immunology, University Medical Centre Utrecht/Wilhelmina Children's Hospital, Utrecht, Netherlands.                                                                                                 |
| 17:10-17:20<br>10' | 236 | <b>IMPROVING THE THERAPEUTIC TREATMENT OF ACUTE RESPIRATORY VIRUS INFECTION VIA INTRAVENOUS LIPOSOMAL DELIVERY OF SIRNA TO THE LUNG.</b><br><u>Daniel Clarke</u> <sup>*1</sup> , Jana McCaskill <sup>2</sup> , Adriana Pliego-Zamora <sup>1</sup> , Keith Chappell <sup>3</sup> , Paul Young <sup>3</sup> , Nigel McMillan <sup>1</sup><br><sup>1</sup> Menzies Health Institute Queensland, Griffith University, Gold Coast, <sup>2</sup> Diamantina Institute, University of Queensland, <sup>3</sup> Australian Infectious Diseases Research Centre, University of Queensland, Brisbane, Australia.                                                                                                                                                   |
| 17:20-17:30<br>10' | 237 | <b>A NOVEL RNA VIRUS VECTOR SYSTEM FOR RNAI THERAPIES BASED ON BORNA DISEASE VIRUS</b><br><u>Tomoyuki Honda</u> <sup>*1</sup> , Yusuke Yamamoto <sup>1</sup> , Yusuke Matsumoto <sup>2</sup> , Akiko Makino <sup>1</sup> , Keizo Tomonaga <sup>1</sup><br><sup>1</sup> Institute for Virus Research, Kyoto University, Kyoto, <sup>2</sup> Wakayama Medical University, Wakayama, Japan.                                                                                                                                                                                                                                                                                                                                                                 |
| 17:30-17:50<br>20' | 238 | <b>POST EXPOSURE PROTECTION AGAINST ZAIRE AND SUDAN EBOLAVIRUS IN LETHAL MOUSE MODELS BY HUMAN IMMUNOGLOBULINS PRODUCED IN TRANSGENOMIC CATTLE</b><br><u>Callie Bounds</u> <sup>*1</sup> , Steven Kwilas <sup>1</sup> , Jennifer Brannan <sup>1</sup> , Russell Bakken <sup>1</sup> , Barry Ellefsen <sup>2</sup> , Drew Hannaman <sup>2</sup> , Eddie Sullivan <sup>3</sup> , Connie Schmaljohn <sup>4</sup><br><sup>1</sup> Virology, United States Army Medical Research Institute of Infectious Disease, Fort Detrick, <sup>2</sup> Ichor Medical Systems, Inc, San Diego, <sup>3</sup> SAB Biotherapeutics, Inc, Sioux Falls, <sup>4</sup> S & T, United States Army Medical Research Institute of Infectious Disease, Fort Detrick, United States. |

**19:30                      Bus to Gala dinner:**

*Certosa di Pontignano, Residenza d'Epoca, Pontignano, 5  
53019 Pontignano SI*

19:30      Buses depart at Piazza Gramsci

**Friday June 19**

**Session VIII: Natural and unnatural virus evolution**

Chairpersons: Jens Kuhn

09:30-09:40: Chair persons's remarks

|                    |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| 09:40-10:00<br>20' | 278 | <b>NUCLEOTIDE SEQUENCE CONSERVATION IN PARAMYXOVIRUSES; THE CONCEPT OF CODON CONSTELLATION.</b><br><b>Bertus Rima</b> <sup>*1</sup><br><sup>1</sup> Centre for Infection and Immunity, Queen's University, Belfast, Belfast, United Kingdom                                                                                                                                                                                                                                                                                                   |
| 10:00-10:10<br>10' | 284 | <b>DIVIDE AND CONQUER: CREATION OF A FOUR-SEGMENTED RIFT VALLEY FEVER VACCINE VIRUS</b><br><b>Paul Wichgers Schreur</b> <sup>*1</sup> , Jet Kant <sup>1</sup> , Nadia Oreshkova <sup>1,2</sup> , Lucien van Keulen <sup>1</sup> , Rob Moormann <sup>1,2</sup> , Jeroen Kortekaas <sup>1</sup><br><sup>1</sup> Virology, Central Veterinary Institute, part of Wageningen University and Research Centre, Lelystad, <sup>2</sup> Infectious Diseases and Immunology, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands. |
| 10:10-10:20<br>10' | 280 | <b>A RAPID CELL-FREE STRATEGY TO DETERMINE THE LIKELY IMPACT OF VIRAL EVOLUTION ON ANTIGEN DETECTION SYSTEMS</b><br><b>Divya Nandamudi</b> <sup>*1,2</sup> , Laura Sherwood <sup>1</sup> , John Garza <sup>1</sup> , Alex Taylor <sup>3</sup> , John Hart <sup>3</sup> , Andrew Hayhurst <sup>1,2</sup><br><sup>1</sup> Virology, Texas Biomedical Research Institute, <sup>2</sup> Microbiology & Immunology, <sup>3</sup> Biochemistry, University of Texas Health Science Center at San Antonio, San Antonio, United States.               |
| 10:20-10:30<br>10' | 281 | <b>EFFICIENT CLONING OF COMPLETE NNSV FULL-LENGTH GENOMES BY REC-E / REC-T MEDIATED RECOMBINATION TO CREATE GENETICALLY MODIFIED FIELD ISOLATES.</b><br><b>Tobias Nolden</b> <sup>*1</sup> , Stefan Finke <sup>1</sup><br><sup>1</sup> Institute of Molecular Virology and Cell Biology, Friedrich-Loeffler-Institute, Greifswald Isle of Riems, Germany.                                                                                                                                                                                     |

**10:30-11:30 Coffee break-**  
**Poster session VI-VIII**

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| 11:30-11:50<br>20' | 282 | <b>IDENTIFICATION OF A NOVEL SWINE H1N2 INFLUENZA A VIRUS IN CHILE</b><br>Marco Saavedra <sup>1</sup> , Karla Tapia <sup>1</sup> , Victor M. Neira <sup>2</sup> , <b>Rafael A. Medina</b> <sup>*1,3,4</sup><br><sup>1</sup> Pediatric Infectious Diseases and Immunology, Pontificia Universidad Catolica de Chile, <sup>2</sup> Ciencias Veterinarias y Pecuarias, FAVET, Universidad de Chile, <sup>3</sup> Instituto Milenio en Inmunologia e Inmunoterapia, Pontificia Universidad Catolica de Chile, Santiago, Chile, <sup>4</sup> Department of Microbiology, Icahn School of Medicine at Mount Sinai, New York, United States. |
| 11:50-12:00<br>10' | 283 | <b>THE EFFECT OF RIFT VALLEY FEVER VIRUS P78 PROTEIN ON VIRUS REPLICATION, SPREAD AND DISSEMINATION IN THE MOSQUITO VECTOR</b><br><b>Felix Kreher</b> <sup>*1</sup> , Carole Tamietti <sup>2</sup> , Anna-Bella Failloux <sup>3</sup> , Michèle Bouloy <sup>4</sup> , Marie Flamand <sup>2</sup> , Richard M. Elliott <sup>1</sup><br><sup>1</sup> MRC-University of Glasgow Centre for Virus Research, Glasgow, United Kingdom, <sup>2</sup> Structural Virology, <sup>3</sup> Arboviruses and Insect Vectors, <sup>4</sup> Molecular                                                                                                |

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|                    |     | Genetics of Bunyaviruses, Institut Pasteur, Paris, France.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 12:00-12:10<br>10' | 279 | <b>IN VITRO EVOLUTION OF PERSISTENT RABIES VIRUS.</b><br><b><u>Alexander Ghanem</u></b> <sup>*1</sup> , Maximilian F. Eizinger <sup>1</sup> , Karl K. Conzelmann <sup>1</sup><br><sup>1</sup> Max v Pettenkofer-Institute and Gene Center, LMU Munich, Muenchen, Germany.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 12:10-12:30<br>20' | 285 | <b>IMPACT OF EBOLA VIRUS GENOMIC DRIFT ON THE EFFICACY OF SEQUENCE-BASED CANDIDATE THERAPEUTICS</b><br><b><u>Gustavo Palacios</u></b> <sup>*1</sup><br><sup>1</sup> Center for Genome Sciences, USAMRIID, Frederick, United States.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 12:30-12:50<br>20' | 286 | <b>MODELING THE EVOLUTIONARY TRAJECTORIES OF AN EXPANDING MORBILLIVIRUS GENUS</b><br>Sham Nambulli <sup>1</sup> , Andrew S. Acciaro <sup>1</sup> , Linda J. Rennick <sup>1</sup> , Mehraj Awal <sup>1</sup> , Andrey Tovchigrechko <sup>2</sup> , Reed S. Shabman <sup>2</sup> , Timothy B. Stockwell <sup>2</sup> , David E. Wentworth <sup>2</sup> , Andrea Rasche <sup>3</sup> , J F. Drexler <sup>4</sup> , Bertus K. Rima <sup>5</sup> , Claire R. Sharp <sup>6</sup> , <b><u>W Paul Duprex</u></b> <sup>*1</sup><br><sup>1</sup> Microbiology , Boston University, Boston, <sup>2</sup> J. Craig Venter Institute, Rockville, United States, <sup>3</sup> School of Medicine, Bonn University, <sup>4</sup> School of Medicine, Bonn Univeristy, Bonn, Germany, <sup>5</sup> School of Medicine, Dentistry and Biomedical Sciences, The Queen's University of Belfast, Belfast, United Kingdom, <sup>6</sup> Cummings School of Veterinary Medicine, Tufts University, Grafton, United States. |

**12:20**

**Lunch and beer session / End of meeting**

# Posters

## Session I: In out and moving about

### Poster 11

#### **EXPLORING MARBURGVIRUS NUCLEOPROTEIN INTERACTION WITH MATRIX PROTEIN VP40**

**Tamarand Darling**<sup>\*1,2</sup>, Laura Sherwood<sup>2</sup>, Andrew Hayhurst<sup>1,2</sup>

<sup>1</sup>Microbiology and Immunology, University of Texas Health Science Center at San Antonio, <sup>2</sup>Virology and Immunology, Texas Biomedical Research Institute, San Antonio, United States

### Poster 12

#### **THE ARENAVIRUS MATRIX PROTEIN PPXY LATE DOMAIN DRIVES THE PRODUCTION OF DEFECTIVE INTERFERING PARTICLES**

**Chris Ziegler**<sup>\*1</sup>

<sup>1</sup>Medicine, University of Vermont, Burlington, United States

### Poster 13

#### **CRIMEAN-CONGO HEMORRHAGIC FEVER VIRUS ENTRY INTO HOST CELLS OCCURS THROUGH THE MULTIVESICULAR BODY AND REQUIRES ESCRT REGULATORS**

**Olena Shtanko**<sup>\*1</sup>, Raisa A. Nikitina<sup>2</sup>, Cengiz Z. Altuntas<sup>3</sup>, Alexander A. Chepur<sup>2</sup>, Robert A. Davey<sup>4</sup>

<sup>1</sup>Virology and Immunology, Texas Biomedical Research Institute, San Antonio, United States, <sup>2</sup>Laboratory of Regulation of Immunopoiesis, Institute for Clinical Immunology, Novosibirsk, Russian Federation, <sup>3</sup>Texas Institute of Biotechnology Education and Research, North American University, Houston, <sup>4</sup>Texas Biomedical Research Institute, San Antonio, United States

### Poster 15

#### **EBOLA VIRUS INTERNALIZATION INTO CELLS BY MACROPINOCYTOSIS IS DEPENDENT ON AUTOPHAGY-MEDIATING PROTEINS**

**Olena Shtanko**<sup>\*1</sup>, Ann N. Reyes<sup>1</sup>, Robert A. Davey<sup>1</sup>

<sup>1</sup>Virology and Immunology, TEXAS BIOMEDICAL RESEARCH INSTITUTE, San Antonio, United States

### Poster 16

#### **UNDIAGNOSED ACUTE VIRAL FEBRILE ILLNESSES IN SIERRA LEONE**

**Randal J. Schoepp**<sup>\*1</sup>

<sup>1</sup>Diagnostic Systems Division, USAMRIID, Fort Detrick, United States

### Poster 17

#### **DECIPHERING THE ASSEMBLY OF MULTI-SEGMENT GENOME COMPLEXES IN INFLUENZA A VIRUS (IAV)**

**Simon Prisner**<sup>\*1</sup>, Ivan Haralampiev<sup>1</sup>, Matthias Schade<sup>1</sup>, Jasmine Chamiolo<sup>2</sup>, Andreas Herrmann<sup>1</sup>

<sup>1</sup>AG Molecular Biophysics, <sup>2</sup>AG Bioorganic Synthesis, Humboldt-Universität zu Berlin, Berlin, Germany

### Poster 18

#### **THE STEM REGION OF TYPE II TRANSMEMBRANE SERINE PROTEASES IS DETERMINANT OF INFLUENZA VIRUS ACTIVATION AND A TARGET FOR ANTIVIRAL INHIBITION**

**Pawel Zmora**<sup>\*1</sup>, Anna-Sophie Moldenhauer<sup>1</sup>, Stefan Pöhlmann<sup>1</sup>

<sup>1</sup>Infection Biology Unit, German Primate Center, Goettingen, Germany

### Poster 19

#### **MEASLES VIRUS IS ENDOCYTOSED AND INDUCES MACROPINOCYTOSIS IN SLAM-POSITIVE CELLS**

**Daniel Goncalves Carneiro**<sup>\*1</sup>, Dalan Bailey<sup>1</sup>

<sup>1</sup>School of Immunity and Infection, University of Birmingham, Birmingham, United Kingdom

### Poster 20

#### **IDENTIFICATION OF A NEURONAL RECEPTOR FOR WILD TYPE MEASLES VIRUS**

Hannah Abdullah<sup>1</sup>, John P. Earle<sup>1</sup>, Adam Jeffers<sup>1</sup>, Misako Yoneda<sup>2</sup>, Chieko Kai<sup>2</sup>, Sara Louise Cosby<sup>\*1</sup> Centre for Infection and Immunity, School of Medicine, Dentistry and Biomedical Sciences, Queen's University Belfast, Belfast, United Kingdom, <sup>2</sup>Laboratory Animal Research Center, Institute of Medical Science, University of Tokyo, Tokyo, Japan

#### Poster 21

##### INFLUENZA VIRUS REPLICATION DECREASES SIALIC ACID ON THE CELL

Yukari Miyake<sup>1</sup>, Maiko OBANA<sup>2</sup>, Jaebun CHO<sup>2</sup>, Madoka TAKAI<sup>2</sup>, Ayae HONDA<sup>\*1</sup>

<sup>1</sup>Frontier Bioscience, Hosei university, Koganei, <sup>2</sup>Graduate school of Bioengineering, University of Tokyo, Bunkyo, Japan

#### Poster 22

##### ANALYSIS OF THE ASSEMBLY AND BUDDING OF LUJO VIRUS

Shuzo Urata<sup>\*1</sup>, Yukiko Miyazaki<sup>1</sup>, Jiro Yasuda<sup>1</sup>

<sup>1</sup>Department of Emerging Infectious Diseases, Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan

#### Poster 23

##### IGF2 IS INVOLVED IN THE REGULATION OF BORNA DISEASE VIRUS PRODUCTION

Akiko Makino<sup>\*1</sup>, Tomoyuki Honda<sup>1</sup>, Keizo Tomonaga<sup>1</sup>

<sup>1</sup>Institute for Virus Research, Kyoto University, Kyoto, Japan

#### Poster 24

##### TETHERIN MEDIATED INHIBITION OF MEASLES VIRUS

Joe Alderman<sup>1</sup>, Daniel Goncalves Carneiro<sup>1</sup>, Dalan Bailey<sup>\*1</sup>

<sup>1</sup>Medical School, University of Birmingham, Birmingham, United Kingdom

#### Poster 25

##### THE HEPTAD REPEAT C DOMAIN IN THE RESPIRATORY SYNCYTIAL VIRUS F PROTEIN PLAYS A KEY ROLE IN VIRUS MEDIATED MEMBRANE FUSION

Imogen M. Bermingham<sup>\*1</sup>, Daniel Watterson<sup>1,2</sup>, Keith J. Chappell<sup>1,3</sup>, Paul R. Young<sup>1,3</sup>

<sup>1</sup>School of Chemistry and Molecular Biosciences, <sup>2</sup>Institute of Molecular Biosciences, <sup>3</sup>Australian Infectious Disease Research Centre, The University of Queensland, Brisbane, Australia

#### Poster 26

##### LOW PH IS SUFFICIENT TO TRIGGER ANDES HANTAVIRUS FUSION ACTIVATION

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#### Poster 27

##### RNA-POLYMERASE OF INFLUENZA VIRUS: A SERIES OF TEMPERATURE-SENSITIVE MUTANTS REVEALS A ROLE OF THE PA LINKER IN NUCLEAR TARGETING OF THE PB1-PA DIMER

Bruno Da Costa<sup>1</sup>, Léa Meyer<sup>1</sup>, Alix Sausset<sup>1</sup>, Sandie Munier<sup>2</sup>, Nadia Naffakh<sup>2</sup>, Ronan Le Goffic<sup>1</sup>, Bernard Delmas<sup>\*1</sup>

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#### Poster 28

##### MEASLES VIRUS APPROPRIATES THE ADHESIVE INTERFACE OF NECTIN-4 TO ENTER THE RESPIRATORY EPITHELIUM

Mathieu Mateo<sup>\*1,2</sup>, Chanakha K. Navaratnarajah<sup>2</sup>, Robin C. Willenbring<sup>2</sup>, Justin W. Maroun<sup>2</sup>, Ianko Iankov<sup>2</sup>, Marc Lopez<sup>3</sup>, Patrick L. Sinn<sup>4</sup>, Roberto Cattaneo<sup>2</sup>

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#### Poster 29

## **ROLE OF RNA/RNA INTERACTIONS IN THE PACKAGING AND REASSORTMENT OF THE INFLUENZA A VIRUS GENOME**

Catherine Isel<sup>1</sup>, Vincent Moules<sup>2</sup>, Cyrille Gavazzi<sup>3</sup>, Matthieu Yver<sup>2</sup>, Marie Gerber<sup>3</sup>, Manuel Rosa-Calatrava<sup>2</sup>, Bruno Lina<sup>2</sup>, **Roland Marquet**<sup>\*1</sup>

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### **Poster 30**

#### **A HEAD-STALK CONNECTING LINKER OF DEFINED LENGTH FAVORS ACCURATE MEASLES VIRUS HEMAGGLUTININ TETRAMERIZATION AND EFFICIENT MEMBRANE FUSION TRIGGERING**

Chanakha K. Navaratnarajah<sup>1</sup>, Quincy Rosemarie<sup>1</sup>, **Roberto Cattaneo**<sup>\*1</sup>

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### **Poster 31**

#### **FORWARD GENETIC SCREENING TO IDENTIFY HOST FACTORS REQUIRED FOR BUNYAVIRUS ENTRY**

**Amber Riblett**<sup>\*1</sup>, Jason Wojcechowskyj<sup>2,3</sup>, Vincent Blomen<sup>4</sup>, Lucas Jae<sup>4</sup>, Louis Altamura<sup>5</sup>, Mary J. Drake<sup>1</sup>, Paul Bates<sup>1</sup>, Thijn Brummelkamp<sup>4,6</sup>, Robert Doms<sup>7</sup>

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### **Poster 32**

#### **MOLECULAR CHARACTERIZATION OF THE INTERACTION BETWEEN THE CELLULAR MOTOR PROTEIN KIF13A AND THE LASSA VIRUS MATRIX PROTEIN Z**

**Sarah K. Fehling**<sup>\*1</sup>, Annika Meyer<sup>1</sup>, Lisa Wendt<sup>1</sup>, Vanessa Heinecke<sup>1</sup>, Thomas Strecker<sup>1</sup>

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#### **LENTIVIRUS-BASED RSV PSEUDOTYPES (RSVPP) AS MODEL TO STUDY RSV CELL ENTRY AND FOR SCREENING OF ENTRY INHIBITORS**

**Sibylle Haid**<sup>\*1,2</sup>, Christina Grethe<sup>1</sup>, Dorothea Bankwitz<sup>1</sup>, Thomas Grunwald<sup>2</sup>, Thomas Pietschmann<sup>1</sup>

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### **Poster 34**

#### **OSELTAMIVIR EXPANDS QUASISPECIES OF INFLUENZA VIRUS THROUGH CELL-TO-CELL TRANSMISSION**

**Kotaro Mori**<sup>\*1,2</sup>, Kensaku Murano<sup>1</sup>, Ryosuke Ohniwa<sup>3</sup>, Atsushi Kawaguchi<sup>1</sup>, Kyosuke Nagata<sup>4</sup>

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### **Poster 35**

#### **ANALYSES OF CELL ENTRY AND FUSION MECHANISMS OF SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME VIRUS**

**Hideki Tani**<sup>\*1</sup>, Masayuki Shimojima<sup>1</sup>, Shuetsu Fukushi<sup>1</sup>, Tomoki Yoshikawa<sup>1</sup>, Satoshi Taniguchi<sup>1</sup>, Aiko Fukuma<sup>1</sup>, Shigeru Morikawa<sup>2</sup>, Masayuki Saijo<sup>1</sup>

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### **Poster 36**

#### **CANINE DISTEMPOR VIRUS MEMBRANE FUSION ACTIVATION: ROLE OF CRITICAL RESIDUES OF CD150/SLAM**

**Mojtaba Khosravi**<sup>\*1</sup>, Fanny Bringolf<sup>1</sup>, Maria Bieringer<sup>2</sup>, Jürgen Schneider-Schaulies<sup>2</sup>, Andreas Zurbriggen<sup>1</sup>, Philippe Plattet<sup>1</sup>

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#### Poster 37

##### **SEQUENTIAL CONFORMATIONAL CHANGES IN THE MORBILLIVIRUS ATTACHMENT PROTEIN INITIATE THE MEMBRANE FUSION PROCESS**

Nadine Ebert<sup>1</sup>, Mojtaba Khosravi<sup>1</sup>, **Michael Herren**<sup>\*1</sup>, Mislay Avila<sup>2</sup>, Lisa Alves<sup>1</sup>, Fanny Bringolf<sup>1</sup>, Claes Örvell<sup>3</sup>, Hans Langedijk<sup>4</sup>, Richard K. Plemper<sup>5,6</sup>, Andreas Zurbriggen<sup>1</sup>, Philippe Plattet<sup>1</sup>

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## **Session II: Structure and Function**

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##### **STRUCTURE OF THE L-PROTEIN OF VESICULAR STOMATITIS VIRUS FROM ELECTRON CRYOMICROSCOPY**

**Bo Liang**<sup>\*1,2</sup>, Zongli Li<sup>3</sup>, Simon Jenni<sup>2</sup>, Nikolaus Grigorieff<sup>4</sup>, Stephen Harrison<sup>5</sup>, Sean Whelan<sup>1</sup>

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#### Poster 48

##### **PHOSPHORYLATION OF MARBURG VIRUS NP INFLUENCES REPLICATION AND ASSEMBLY**

**Anne Kelterbaum**<sup>\*1</sup>, Stephan Becker<sup>1</sup>

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#### Poster 49

##### **THE MOLECULAR MECHANISM OF INFLUENZA VIRUS MEMBRANE SCISSION**

**Agnieszka Martyna**<sup>\*1</sup>, Mark Howard<sup>1</sup>, Jeremy S. Rossman<sup>1</sup>

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#### Poster 50

##### **ULTRA-STRUCTURE AND PH DEPENDENT CONFORMATIONAL CHANGES OF THE LASSA VIRUS GLYCOPROTEIN**

**Sai Li**<sup>\*1</sup>, Sarah Fehling<sup>2</sup>, Thomas A. Bowden<sup>1</sup>, Thomas Strecker<sup>2</sup>, Juha Huiskonen<sup>1</sup>

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#### Poster 51

##### **BIOINFORMATICS TOOLS TO PREDICT PROTEIN-PROTEIN INTERACTIONS IN INFLUENZA VIRUS**

Ramil Mintaev<sup>1</sup>, Andrei Alexeevski<sup>1</sup>, Stanislav Markushin<sup>2</sup>, **Larisa Kordyukova**<sup>\*1</sup>

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#### Poster 53

##### **INVESTIGATING THE ROLE OF THE DIMERISATION OF VESICULAR STOMATITIS VIRUS PHOSPHOPROTEIN P**

**Francine C. Gerard**<sup>\*1</sup>, Jean-Marie Bourhis<sup>1</sup>, Aurélien Thouin<sup>1</sup>, Rob W. Ruigrok<sup>1</sup>, Danielle Blondel<sup>2</sup>, Marc Jamin<sup>1</sup>

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#### Poster 54

**DECIPHERING THE FORMATION OF SOLUBLE AND FUNCTIONAL POLYMERASE COMPLEXES OF MONONEGAVIRALES**

**Louis-Marie Bloyet**<sup>\*1</sup>, Jérémy Welsch<sup>1</sup>, François Enchéry<sup>1</sup>, Cyrille Mathieu<sup>1</sup>, Sylvain De Breyne<sup>1</sup>, Branka Horvat<sup>1</sup>, Boyan Grigorov<sup>1</sup>, Denis Gerlier<sup>1</sup>

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**Poster 55**

**STRUCTURAL AND FUNCTIONAL ANALYSES OF THE MUMPS VIRUS PHOSPHOPROTEIN DOMAINS**

**Adrian Pickar**<sup>\*1</sup>, Andrew Elson<sup>1</sup>, Pei Xu<sup>1</sup>, Robert Cox<sup>2</sup>, Ming Luo<sup>2</sup>, Biao He<sup>1</sup>

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**Poster 56**

**IDENTIFICATION OF RESIDUES IN THE C-TERMINUS OF LASSA VIRUS L PROTEIN BEING IMPORTANT FOR TRANSCRIPTION BUT NOT REPLICATION**

**Maria Lehmann**<sup>\*1</sup>, Meike Pahlmann<sup>1</sup>, Hanna Jérôme<sup>1</sup>, Carola Busch<sup>1</sup>, Michaela Lelke<sup>1</sup>, Stephan Guenther<sup>1</sup>

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**Poster 57**

**INFLUENCE OF CHANGES IN DIFFERENT DOMAINS OF AN AFRICAN BAT HENIPAVIRUS FUSION PROTEIN ON SURFACE EXPRESSION AND BIOLOGICAL ACTIVITY**

**Michael Weis**<sup>\*1</sup>, Andrea Maisner<sup>1</sup>

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**Poster 58**

**FUNCTIONAL AND STRUCTURAL STUDIES OF THE INFLUENZA C VIRUS RNA-DEPENDENT RNA POLYMERASE**

**Itziar Serna Martin**<sup>\*1</sup>, Narin Hengrung<sup>1</sup>, Juha Huiskonen<sup>2</sup>, Ervin Fodor<sup>1</sup>

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**Poster 59**

**REGULATION OF INFLUENZA VIRUS RNP COMPLEX FORMATION**

**Lauren Turrell**<sup>\*1</sup>, Edward Hutchinson<sup>1</sup>, Frank Vreede<sup>1</sup>, Ervin Fodor<sup>1</sup>

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**Poster 60**

**ANTIGENIC PROPERTIES OF HANTAVIRUS NUCLEOCAPSID (N) PROTEIN AND ITS APPLICATION TO ANTIGEN FOR IMMUNOCHROMATOGRAPHIC (ICG) TEST.**

Kumiko Yoshimatsu<sup>1</sup>, Kenta Shimizu<sup>1</sup>, Yoshimi Tsuda<sup>1</sup>, **Jiro Arikawa**<sup>\*1</sup>

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**Poster 61**

**INVOLVEMENT OF GRAF1/ARHGAP26 AND RHO FAMILY GTPASES IN THE GROWTH OF HUMAN PARAINFLUENZA VIRUS TYPE 2**

**Keisuke Ohta**<sup>\*1</sup>, Hideo Goto<sup>1</sup>, Yusuke Matsumoto<sup>1</sup>, Natsuko Yumine<sup>1</sup>, Masato Tsurudome<sup>2</sup>, Machiko Nishio<sup>1</sup>

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**Poster 62**

**STRUCTURE OF SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME VIRUS NUCLEOPROTEIN IN COMPLEX WITH SURAMIN REVEALS THERAPEUTIC POTENTIALS**

Mifang Liang<sup>1</sup>, Songying Ouyang<sup>2</sup>, Wei Wu<sup>1</sup>, Shuo Zhang<sup>1</sup>, Jing Qu<sup>1</sup>, **Dexin Li**<sup>\*1</sup>

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**Poster 63**

**NEW INSIGHTS INTO THE RESPIRATORY SYNCYTIAL VIRUS N0-P COMPLEX**

**Marie Galloux**<sup>\*1</sup>, Camille Esneau<sup>1</sup>, Charles-Adrien Richard<sup>1</sup>, Jean-François Eléouët<sup>1</sup>

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**Poster 64**

**CRYO-ELECTRON MICROSCOPY STRUCTURES OF LA CROSSE ORTHOBUNYAVIRUS POLYMERASE IN PRESENCE AND ABSENCE OF VIRAL RNA**

Helene Malet<sup>\*1</sup>, Piotr Gerlach<sup>1</sup>, Juan Reguera<sup>1</sup>, Stephen Cusack<sup>1</sup>

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**Poster 65**

**PB1-F2 INFLUENZA A VIRUS PROTEIN BETA-AGGREGATED SECONDARY STRUCTURE: SYNCHROTRON INFRARED AND FLUORESCENT MICROSCOPY IN INFECTED-CELLS**

Christophe Chevalier<sup>\*1</sup>, Ronan Le Goffic<sup>1</sup>, Frédéric Jamme<sup>2</sup>, Olivier Leymarie<sup>1</sup>, Matthieu Réfrégiers<sup>2</sup>, Bernard Delmas<sup>1</sup>

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**Poster 66**

**FINE MAPPING AND CHARACTERIZATION OF THE BINDING DOMAIN OF THE HRSV PHOSPHOPROTEIN WITH THE M2-1 PROTEIN**

Charles-Adrien Richard<sup>\*1</sup>, Anne-Laure Gaillard<sup>1</sup>, Camille Esneau<sup>1</sup>, Christina Sizun<sup>2</sup>, Jean-François Eléouët<sup>1</sup>

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**Poster 67**

**NMR STUDY OF THE STRUCTURE AND INTERACTIONS OF THE HUMAN RESPIRATORY SYNCYTIAL VIRUS PHOSPHOPROTEIN**

Lassoued Safa<sup>\*1</sup>, Nelson Pereira<sup>1</sup>, François Bontems<sup>1</sup>, Christina SIZUN<sup>1</sup>, Jean-François Eleouet<sup>2</sup>, Marie Galloux<sup>2</sup>

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## **Session III: RNA synthesis**

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**CHARACTERIZATION OF THE ENDONUCLEASE DOMAIN OF HANTAAVIRUS L POLYMERASE**

Sylvia Rothenberger<sup>\*1</sup>, Giulia Torriani<sup>1</sup>, Maria U. Johansson<sup>2</sup>, Olivier Engler<sup>3</sup>

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**PARAINFLUENZA VIRUS TYPE 2 AND 5 “CHIMERIC” MINIREPLICONS REVEAL REGULATORY SIGNALS FOR VIRAL GENE EXPRESSION IN THE LEADER SEQUENCE**

Yusuke Matsumoto<sup>\*1</sup>, Keisuke Ohta<sup>1</sup>, Natsuko Yumine<sup>1</sup>, Hideo Goto<sup>1</sup>, Machiko Nishio<sup>1</sup>

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**Poster 80**

**NEW INSIGHTS INTO THE NONCONSERVED NONCODING REGION OF THE SUBTYPE-DETERMINANT HEMAGGLUTININ AND NEURAMINIDASE SEGMENTS OF INFLUENZA A VIRUSES**

Tao Deng<sup>\*1</sup>, Lili Zhao<sup>1</sup>, Yousong Peng<sup>2</sup>, Kai Zhou<sup>1</sup>

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**Poster 81**

**VIRUS-LIKE PARTICLE SYSTEM IDENTIFIES THE ENDONUCLEASE DOMAIN OF CRIMEAN-CONGO HEMORRHAGIC FEVER VIRUS**

Stéphanie Devignot<sup>\*1</sup>, Eric Bergeron<sup>2</sup>, Stuart Nichol<sup>2</sup>, Ali Mirazimi<sup>3,4</sup>, Friedemann Weber<sup>1,5</sup>

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##### **SINGLE-CELL ANALYSIS AND STOCHASTIC MODELING REVEAL LARGE CELL-TO-CELL VARIABILITY IN INFLUENZA A VIRUS INFECTION**

**Timo Frensing**<sup>\*1,2</sup>, Frank S. Heldt<sup>1</sup>, Sascha Y. Kupke<sup>1</sup>, Udo Reichl<sup>1,3</sup>

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#### Poster 84

##### **MEASLES VIRUS DEFECTIVE-INTERFERING RNAs: ORIGIN AND MULTIPLICATION**

**Christian K. Pfaller**<sup>\*1</sup>, George M. Mastorakos<sup>1,2</sup>, William E. Matchett<sup>1,2</sup>, Xiao Ma<sup>1,2</sup>, Inna Blyakhman<sup>3</sup>, Charles E. Samuel<sup>3</sup>, Roberto Cattaneo<sup>1,2</sup>

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#### Poster 85

##### **A SINGLE RNA SEQUENCE SWITCHING THE GENESIS OF INFLUENZA RNA POOLS - FISHING FOR SVRNA AND MORE**

**Ivan Haralampiev**<sup>\*1</sup>, Matthias Schade<sup>1</sup>, Jasmine Chamilo<sup>2</sup>, Simon Prisner<sup>1</sup>, Jonas Steffen<sup>2</sup>, Fabian Jolmes<sup>1</sup>, Oliver Seitz<sup>2</sup>, Andreas Herrmann<sup>1</sup>

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#### Poster 86

##### **UNCONVENTIONAL MRNA CAPPING ENZYME, GDP POLYRIBONUCLEOTIDYLTRANSFERASE, OF VESICULAR STOMATITIS VIRUS**

Julie Neubauer<sup>1</sup>, Minako Ogino<sup>1</sup>, **Tomoaki Ogino**<sup>\*1</sup>

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#### Poster 87

##### **INFLUENZA NUCLEOPROTEIN RESIDUES REQUIRED FOR VIRAL GENE EXPRESSION EXPOSE ANTIVIRAL TARGET**

Alicia M. Davis<sup>1</sup>, Jose Ramirez<sup>1</sup>, Alan R. Santana<sup>1</sup>, **Laura L. Newcomb**<sup>\*1</sup>

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#### Poster 88

##### **FUNCTIONAL INTERROGATION OF PARAMYXOVIRINAE GENOMES WITH EFFICIENT REVERSE GENETICS**

**Shannon M. Beaty**<sup>\*1</sup>, Arnold Park<sup>1</sup>, Benjamin O. Fulton<sup>1</sup>, Sohui T. Won<sup>1</sup>, David Sachs<sup>2</sup>, Mike Lyons<sup>3</sup>, Frederic Vigant<sup>1</sup>, Tatyana Yun<sup>4</sup>, Patricia A. Thibault<sup>1</sup>, Patrick Hong<sup>1</sup>, Paramyxovirus Providers<sup>5, 6, 7, 8</sup>, Alexander N. Freiberg<sup>4</sup>, Peter Palese<sup>1</sup>, Nicholas S. Heaton<sup>1</sup>, Benhur Lee<sup>1</sup>

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#### Poster 89

##### **RAPID LONG RANGE SLIDING OF RNA DEPENDENT RNA POLYMERASES ON VIRAL GENOME TEMPLATES VISUALIZED BY PHOTOACTIVATABLE LOCALIZATION MICROSCOPY**

Xiaolin Tang<sup>1</sup>, Mourad Bendjennat<sup>1</sup>, **Saveez Saffarian**<sup>\*1</sup>

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#### Poster 90

##### **THE ROLES OF PHOSPHORYLATION OF THE NUCLEOCAPSID PROTEIN OF MUMPS VIRUS IN REGULATING VIRAL RNA TRANSCRIPTION AND REPLICATION**

**James Zengel**<sup>\*1</sup>, Adrian Pickar<sup>1</sup>, Pei Xu<sup>1,2</sup>, Alita Lin<sup>1,3</sup>, Biao He<sup>1</sup>

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**Poster 91**

**THE ABERRANT GENE-END TRANSCRIPTION SIGNAL OF THE M GENE OF HPIV3 DOWN-REGULATES F PROTEIN EXPRESSION AND THE F-SPECIFIC ANTIBODY RESPONSE IN VIVO**

Matthias Lingemann<sup>\*1</sup>, Sonja Surman<sup>1</sup>, Emérito Amaro-Carambot<sup>1</sup>, Anne Schaap-Nutt<sup>1</sup>, Peter L. Collins<sup>1</sup>, Shirin Munir<sup>1</sup>

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**Poster 93**

**CHARACTERIZATION OF AVIAN METAPNEUMOVIRUS ATTACHMENT GLYCOPROTEIN IN A CELL LINE DEFICIENT IN O- GLYCOSYLATION**

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**Poster 94**

**VISUALISING THE SITES OF INFLUENZA VIRUS RNA SYNTHESIS.**

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**PARTICIPATION OF INTERNAL SEQUENCES WITHIN THE 5' AND 3' NON CODING REGIONS IN ARENAVIRUS RNA TRANSCRIPTION AND REPLICATION**

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**HENDRA L IS NOT FUNCTIONALLY COMPATIBLE IN CHIMERIC RNPS**

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**QUANTIFICATION AND KINETICS OF INDIVIDUAL RNA SEGMENTS IN HANTAVIRUS INFECTED CELLS.**

Jonas Näslund<sup>\*1</sup>, Fredrik Trulsson<sup>1</sup>, Jonas Klingström<sup>2</sup>, Magnus Evander<sup>3</sup>, Clas Ahlm<sup>4</sup>, Göran Bucht<sup>1</sup>

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**Poster 98**

**POLYCISTRONIC EXPRESSION OF THE INFLUENZA A VIRUS RNA-DEPENDENT RNA POLYMERASE BY USING A 2A SELF-PROCESSING SEQUENCE**

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**Poster 99**

**IDENTIFICATION OF AMINO ACIDS CRITICAL FOR POLYMERASE ACTIVITY IN THE N-TERMINAL REGION OF THE PB2 SUBUNIT OF INFLUENZA VIRUS RNA POLYMERASE**

Koyu Hara<sup>\*1</sup>, Takahito Kashiwagi<sup>1</sup>, Nobuyuki Hamada<sup>1</sup>, Hiroshi Watanabe<sup>1</sup>

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**Poster 100**

**THE USE OF A HYBRIDIZATION-BASED PATHOGEN ENRICHMENT STRATEGY TO ENHANCE THE DETECTION AND IDENTIFICATION OF HENIPAVIRUSES.**

Danielle E. Anderson<sup>\*1</sup>, K. Uma Sangumathi<sup>1</sup>, Glenn A. Marsh<sup>2</sup>, October M. Sessions<sup>1</sup>, Lin-Fa Wang<sup>1, 2</sup>

<sup>1</sup>Emerging Infectious Disease, DUKE-NUS GRADUATE MEDICAL SCHOOL, Singapore, Singapore, <sup>2</sup>Australian Animal Health Laboratory, CSIRO, Geelong, Australia

**Poster 101**

**THE N-TERMINAL FRAGMENTS OF THE PB2 AND PA SUBUNITS SEVERELY INHIBIT RIBONUCLEOPROTEIN (RNP) ACTIVITY OF INFLUENZA A VIRUS**

Yusaku Uemura<sup>\*1</sup>, Takahito Kashiwagi<sup>1</sup>, Koyu Hara<sup>1</sup>, Yoko Nakazono<sup>1</sup>, Nobuyuki Hamada<sup>1</sup>, Hiroshi Watanabe<sup>1</sup>

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**Poster 102**

**HOST CELL TYPE AFFECTS FORMATION OF DEFECTIVE INTERFERING PARTICLES IN WILD-TYPE AND VACCINE STRAINS OF MEASLES VIRUS**

Melissa M. Coughlin<sup>\*1</sup>, William J. Bellini<sup>1</sup>, Paul A. Rota<sup>1</sup>

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## **Session IV: Antiviral Response**

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**SWINE IFITM PROTEINS PROTECT AGAINST INFLUENZA A VIRUS INFECTION IN VITRO**

Caroline Lanz<sup>\*1</sup>, Emilio Yáñez<sup>1</sup>, Eva E. Müller<sup>1</sup>, Silke Stertz<sup>1</sup>

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**Poster 114**

**MASS-SPECTROMETRY BASED PROFILING OF PKR-INTERACTION PARTNERS IN THE COURSE OF INFLUENZA A VIRUS INFECTIONS**

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**Poster 115**

**THE SMALL HYDROPHOBIC PROTEIN OF MUMPS VIRUS INFLUENCES NF-KB AND MAPK ERK SIGNALLING PATHWAYS**

Annette Mankertz<sup>\*1</sup>, Henriette Geyer<sup>1</sup>, Enrico Richter<sup>1</sup>, Paul Rennert<sup>1</sup>, Stephanie Franz<sup>1</sup>, Nicole Friedrich<sup>1</sup>

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**Poster 116**

**RIG-I RECOGNITION OF CRIMEAN-CONGO HEMORRHAGIC FEVER VIRUS 5'-MONOPHOSPHORYLATED GENOMIC RNA**

Jessica R. Spengler<sup>1</sup>, Jenish R. Patel<sup>2,3</sup>, Ayan K. Chakrabarti<sup>1</sup>, Marko Zivcec<sup>1</sup>, Adolfo García-Sastre<sup>2,3,4</sup>, Christina F. Spiropoulou<sup>1</sup>, Éric Bergeron<sup>\*1</sup>

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**Poster 117**

**RESPIRATORY SYNCYTIAL VIRUS SERUM NEUTRALIZING ANTIBODIES IN INFANTS TARGET THE PREFUSION FORM OF THE F PROTEIN MORE STRONGLY THAN THE G PROTEIN**

Cristina Capella Gonzalez<sup>\*1</sup>, Erin Gorell<sup>1</sup>, Supranee Chaiwatpongakorn<sup>1</sup>, Zachery Risch<sup>1</sup>, Fang Ye<sup>1</sup>, Sara Johnson<sup>1</sup>, Octavio Ramilo<sup>1,2</sup>, Asuncion Mejias<sup>1,2</sup>, Mark Peeples<sup>1,2</sup>

<sup>1</sup>Center for Vaccines and Immunity, Nationwide Children's Hospital, <sup>2</sup>Department of Pediatrics, The Ohio

**Poster 118**

**MISMATCHES IN RNA DUPLEXES PREVENT RIG-I ACTIVATION**

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#### Poster 119

##### THE NUCLEOPROTEIN OF NEWLY EMERGED H7N9 INFLUENZA A VIRUS HARBORS A UNIQUE MOTIF CONFERRING RESISTANCE TO ANTIVIRAL HUMAN MXA.

David Riegger<sup>1</sup>, Rong Hai<sup>2</sup>, Dominik Dornfeld<sup>1</sup>, Victor Leyva-Grado<sup>2</sup>, Martin Schwemmle<sup>1</sup>, Adolfo Garcia-Sastre<sup>2</sup>, Georg Kochs<sup>1</sup>, Mirco Schmolke<sup>\*3</sup>

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#### Poster 120

##### NSS PROTEIN OF SFTS VIRUS SUPPRESSES INTERFERON PRODUCTION THROUGH DIFFERENT WAYS FROM RIFT VALLEY FEVER VIRUS

Mifang Liang<sup>1</sup>, Shuo Zhang<sup>1</sup>, Aqian Li<sup>1</sup>, Chuan Li<sup>1</sup>, Jing Qu<sup>1</sup>, Shiwen Wang<sup>1</sup>, Dexin Li<sup>\*1</sup>

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#### Poster 121

##### GENERATION OF RECOMBINANT SCHMALLENBERG VIRUS NUCLEOCAPSID PROTEIN AND ITS APPLICATION IN SEROLOGICAL TESTS

Justas Lazutka<sup>1</sup>, Aurelija Zvirbliene<sup>1</sup>, Indre Dalgediene<sup>1</sup>, Rasa Petraityte - Burneikiene<sup>1</sup>, Kestutis Sasnauskas<sup>\*1</sup>

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#### Poster 122

##### LLOV VP24 AND VP35 PROTEINS FUNCTION AS INNATE IMMUNE ANTAGONISTS IN BAT AND HUMAN CELLS

Alicia R. Feagins<sup>\*1</sup>, Christopher F. Basler<sup>1</sup>

<sup>1</sup>Microbiology, Icahn School of Medicine at Mt. Sinai, New York, United States

#### Poster 123

##### DISTINCT REGIONS OF THE NIV C PROTEIN ARE INVOLVED IN SUPPRESSING VIRAL REPLICATION AND THE HOST IFN- $\beta$ RESPONSE

Michael K. Lo<sup>\*1</sup>, David G. Karlin<sup>2,3</sup>, Stuart T. Nichol<sup>1</sup>, Christina F. Spiropoulou<sup>1</sup>

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#### Poster 124

##### IDENTIFICATION OF CELLULAR FACTORS INFLUENCING INFLUENZA A VIRUS REPLICATION IN PRIMARY HUMAN RESPIRATORY CELLS

Miriam Dutra<sup>\*1</sup>, Ariel Rodriguez-Frandsen<sup>1</sup>, Jessica von Recum-Knepper<sup>1</sup>, Paul DeJesus<sup>1</sup>, Randy Albrecht<sup>2,3</sup>, Adolfo Garcia-Sastre<sup>2,4,5</sup>, Sumit Chanda<sup>1</sup>

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<sup>4</sup>Medicine, <sup>5</sup>Microbiology, Icahn School of Medicine at Mount Sinai, New York, United States

## Session V: Host Cell Interactions

#### Poster 145

##### VIRO-INDUCED-COMPARTMENTALIZATION : THE CASE OF NEGRI BODIES FORMED IN RABIES VIRUS INFECTED CELLS

Jovan Nikolic<sup>\*1</sup>, Cécile Lagaudrière<sup>1</sup>, Yves Gaudin<sup>1</sup>, Danielle Blondel<sup>1</sup>

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#### Poster 146

##### DISSECTING CANINE DISTEMPER VIRUS PATHOLOGY AND PATHOGENESIS AT THE LIGHT OF NATURALLY-OCCURRING HEMAGGLUTININ FUNCTIONAL CHANGES

Francesco Origgi<sup>\*1</sup>, Philippe Plattet<sup>2</sup>

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**Poster 147**

**UBR BOX N-RECOGNIN-4 (UBR4) IS A HUMAN HOST FACTOR REQUIRED BY MAMMALIAN INFLUENZA A VIRUSES DURING LATE STAGES OF THE VIRAL LIFE CYCLE.**

Marie-Theres Pohl<sup>\*1</sup>, Shashank Tripathi<sup>2</sup>, Renate König<sup>3</sup>, Yingyao Zhou<sup>4</sup>, Paul DeJesus<sup>5</sup>, Megan Shaw<sup>2</sup>, Dario Andenmatten<sup>1</sup>, David Stein<sup>6</sup>, Hong Moulton<sup>6</sup>, Nevan Krogan<sup>7</sup>, Adolfo Garcia-Sastre<sup>2</sup>, Sumit Chanda<sup>5</sup>, Silke Stertz<sup>1</sup>

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**Poster 148**

**RANDOM MUTAGENESIS OF INFLUENZA A PB2 RESIDUES 701 AND 702 EXHIBIT HETEROGENEOUS TEMPERATURE SENSITIVITY AND VIRAL GROWTH IN DIFFERENT HOST SYSTEMS**

Keng Chon Leong<sup>\*1</sup>, Leo L. M. Poon<sup>1</sup>

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**Poster 149**

**CHARACTERIZATION OF THE HEMAGGLUTININ OF BAT-DERIVED INFLUENZA VIRUSES**

Junki Maruyama<sup>\*1</sup>, Nao Naganori<sup>1</sup>, Hiroko Miyamoto<sup>1</sup>, Ken Maeda<sup>2</sup>, Hirohito Ogawa<sup>3</sup>, Reiko Yoshida<sup>1</sup>, Ayato Takada<sup>1</sup>

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**Poster 150**

**HOST SIGNALING PATHWAYS INVOLVED IN ANTIBODY-DEPENDENT ENHANCEMENT OF EBOLA VIRUS INFECTION**

Wakako Furuyama<sup>\*1</sup>, Junki Maruyama<sup>1</sup>, Makoto Kuroda<sup>1</sup>, Hiroko Miyamoto<sup>1</sup>, Reiko Yoshida<sup>1</sup>, Ayato Takada<sup>1</sup>

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**Poster 151**

**COLOR-FLU: MULTI-SPECTRAL FLUORESCENT REPORTER INFLUENZA VIRUSES AS POWERFUL TOOLS FOR IN VIVO IMAGING ANALYSIS**

Satoshi Fukuyama<sup>\*1</sup>, Hiroaki Katsura<sup>1</sup>, Dongming Zhao<sup>1</sup>, Tomomi Ando<sup>1</sup>, Yoshihiro Kawaoka<sup>1,2,3</sup>

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**Poster 152**

**IDENTIFICATION OF HOST FACTORS INVOLVED IN INFLUENZA VIRUS REPLICATION**

Tokiko Watanabe<sup>\*1</sup>, Eiryo Kawakami<sup>1</sup>, Jason E. Shoemaker<sup>1</sup>, Tiago J. Lopes<sup>2</sup>, Yukiko Matsuoka<sup>3</sup>, Yuriko Tomita<sup>1</sup>, Hiroko Kozuka-Hata<sup>4</sup>, Shinji Watanabe<sup>1</sup>, Masaaki Oyama<sup>4</sup>, Hiroaki Kitano<sup>3</sup>, Yoshihiro Kawaoka<sup>1</sup>

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**Poster 153**

**OPENING THE CAGE ON INFLUENZA REPLICATION IN HUMAN MACROPHAGES**

**Sara Clohisey<sup>\*1</sup>**, Andru Tomoiu<sup>1</sup>, David Hume<sup>1</sup>, Paul Digard<sup>1</sup>, Kenneth Baillie<sup>1</sup>

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**Poster 154**

**BST-2/TETHERIN IS A DETERMINANT OF ORTHOBUNYAVIRUS HOST RANGE**

**Mariana Varela<sup>\*1</sup>**, Ilaria M. Piras<sup>1</sup>, Xiaohong Shi<sup>1</sup>, Natasha L. Tilston-Lunel<sup>1</sup>, Catrina Mullan<sup>1</sup>, Stephen R. Welch<sup>1</sup>, Stuart J. Neil<sup>2</sup>, Richard M. Elliott<sup>1</sup>, Massimo Palmarini<sup>1</sup>

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**Poster 155**

**EXPLOITING THE REVERSE GENETIC SYSTEM FOR SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME VIRUS TO STUDY NSS FUNCTION**

**Benjamin Brennan<sup>\*1</sup>**, Ping Li<sup>1</sup>, Richard M. Elliott<sup>1</sup>

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**Poster 156**

**COMPARATIVE RESPIRATORY SYNCYTIAL VIRUS INFECTION OF HUMAN UPPER AND LOWER RESPIRATORY TRACT AIRWAY EPITHELIUM**

Hong Guo-Parke<sup>1</sup>, Paul Canning<sup>1</sup>, Isobel Douglas<sup>2</sup>, Remi Villenave<sup>1</sup>, Liam G. Heaney<sup>3</sup>, Peter V. Coyle<sup>4</sup>, Jeremy Lyons<sup>2</sup>, Michael D. Shields<sup>5</sup>, **Ultan F. Power<sup>\*1</sup>**

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**Poster 157**

**INFECTION OF EPITHELIAL CELLS IS REQUIRED FOR EFFICIENT MORBILLIVIRUS TRANSMISSION**

**Bevan Sawatsky<sup>\*1</sup>**, Roberto Cattaneo<sup>2</sup>, Veronika von Messling<sup>1</sup>

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**Poster 158**

**ANTIBODY-INDUCED INTERNALIZATION OF RSV F PROTEIN EXPRESSED ON THE SURFACE OF INFECTED CELLS AND CELLS EXPRESSING A RECOMBINANT PROTEIN**

Annelies Leemans<sup>1</sup>, Marjorie De Schryver<sup>1</sup>, Annick Heykers<sup>1</sup>, Louis Maes<sup>1</sup>, Paul Cos<sup>1</sup>, **Peter Delputte<sup>\*1</sup>**

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**Poster 159**

**ANTIBODIES DIRECTED TOWARDS NEURAMINIDASE CONTROL DISEASE IN A MOUSE-MODEL OF INFLUENZA**

**Emma Job<sup>\*1</sup>**, Itati Ibanez<sup>2</sup>, Michael Schotsaert<sup>3</sup>, Anouk Smet<sup>1</sup>, Tine Ysenbaert<sup>1</sup>, Ilse Hysman<sup>1</sup>, Xavier Saelens<sup>1</sup>

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**Poster 160**

**QUANTITATIVE PROTEOMIC ANALYSIS OF PROTEIN SIGNATURES RELATED TO PERMISSIVE VS. NON-PERMISSIVE INFLUENZA A VIRUS INFECTIONS IN HUMAN HOST CELLS**

**Anne Sadewasser<sup>\*1</sup>**, Katharina Paki<sup>1</sup>, Katrin Eichelbaum<sup>2</sup>, Boris Bogdanow<sup>2</sup>, Matthias Selbach<sup>2</sup>, Thorsten Wolff<sup>1</sup>

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**Poster 162**

**MUTATION OF SERPINE1 IN MICE INCREASED SUSCEPTIBILITY TO INFLUENZA A VIRUS INFECTION DUE TO INCREASED VASCULAR LEAKAGE AND VIRUS DISSEMINATION**

**Dai-Lun Shin<sup>\*1,2</sup>**, Bastian Hatesuer<sup>1,2</sup>, Ruth L. Stricker<sup>2</sup>, Klaus Schughart<sup>1,2,3</sup>

<sup>1</sup>University of Veterinary Medicine Hannover, Hannover, <sup>2</sup>Infection Genetics, Helmholtz Centre for Infection Research, Braunschweig, Germany, <sup>3</sup>University of Tennessee Health Science Center, Tennessee, United States

**Poster 163**

**STREPTOCOCCUS SUI AFFECTS THE REPLICATION OF SWINE INFLUENZA VIRUS IN PORCINE TRACHEAL CELLS**

**Nai-Huei Wu<sup>\*1</sup>**, Fandan Meng<sup>1</sup>, Maren Seitz<sup>2</sup>, Peter Valentin-Weigand<sup>2</sup>, Georg Herrler<sup>1</sup>

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**Poster 164**

**THE EFFECT OF STREPTOCOCCUS SUI CO-INFECTION ON THE INFECTION OF WELL-DIFFERENTIATED PORCINE RESPIRATORY EPITHELIAL CELLS BY SWINE INFLUENZA VIRUSES**

**Fandan Meng<sup>\*1</sup>**, Nai-Huei Wu<sup>1</sup>, Maren Seitz<sup>2</sup>, Peter Valentin-Weigand<sup>2</sup>, Georg Herrler<sup>1</sup>

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**Poster 165**

**ADVERSE OUTCOMES OF SEASONAL INFLUENZA A VIRUS INFECTION IN PREGNANT MOUSE MODEL**

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**Poster 166**

**DEFECTIVE VIRAL GENOMES AS CRITICAL DANGER SIGNALS DURING RESPIRATORY SYNCYTIAL VIRUS INFECTION**

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**Poster 167**

**ENTRY-DEPENDENT INNATE SIGNALING OF INFLUENZA H1N1 VIRUSES IN HUMAN MACROPHAGES**

**Colleen B. Jonsson<sup>\*1</sup>**, Rachael Gerlach<sup>2, 2</sup>, Jeremy Camp<sup>2</sup>, Mawadda Alnaeelia<sup>2</sup>, Amar D. Parvatec<sup>3</sup>, Jason Lanman<sup>3</sup>, Jill Suttles<sup>2</sup>

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**Poster 168**

**MEASLES FUSION MACHINERY IS DYSREGULATED IN NEUROPATHOGENIC VARIANTS**

Eric Jurgens<sup>1</sup>, Cyrille Mathieu<sup>2, 3, 4, 5, 6, 7</sup>, Laura M. Palermo<sup>1</sup>, Diana Hardie<sup>8</sup>, Branka Horvat<sup>2, 3, 4, 5, 7</sup>, Anne Moscona<sup>1</sup>, **Matteo Porotto<sup>\*1</sup>**

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**Poster 169**

**CHD1 CHROMATIN REMODELER IS A POSITIVE MODULATOR OF INFLUENZA VIRUS REPLICATION THAT PARALLELS RNAP II DEGRADATION IN THE INFECTED CELLS**

Laura Marcos-Villar<sup>1, 2</sup>, Alejandra Pazo<sup>1, 2</sup>, **Amelia Nieto<sup>\*1, 2</sup>**

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**Poster 170**

**RESPIRATORY SYNCYTIAL VIRUS NS2 INDUCES MONO-UBIQUITINATION OF HOST PROTEINS**

**Michael Teng<sup>\*1</sup>**, Jillian Whelan<sup>1</sup>, Kim Tran<sup>1</sup>

<sup>1</sup>University of South Florida, Tampa, United States

**Poster 171**

**CELL-TYPE SPECIFIC REGULATION OF ADHERENS JUNCTION PATHWAYS IN RESPONSE TO FILOVIRUS INFECTION**

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**Poster 172**

**MAPPING THE IMMUNOSTIMULATORY ACTIVITY OF A SENDAI VIRUS DEFECTIVE VIRAL GENOME**

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Benjamin King<sup>\*1</sup>, Philip Eisenhauer<sup>1</sup>, Dylan Hershkowitz<sup>1</sup>, Christopher Ziegler<sup>1</sup>, Marion Weir<sup>1</sup>, Bryan Ballif<sup>1</sup>, Jason Botten<sup>1</sup>

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David Stein<sup>\*1</sup>, Janine Koepke<sup>2</sup>, Hong Moulton<sup>1</sup>, Wolfgang Garten<sup>3</sup>, Hans-Dieter Klenk<sup>3</sup>, Eva Böttcher-Friebertshäuser<sup>3</sup>

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Emily V. Nelson<sup>\*1,2</sup>, Kristina Schmidt<sup>1,2</sup>, Laure Deflube<sup>1,2</sup>, Logan Banadyga<sup>3</sup>, Hideki Ebihara<sup>3</sup>, Elke Muhlberger<sup>1,2</sup>

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Enrico Barrozo<sup>\*1</sup>, Shannon Phan<sup>1</sup>, Sandra Fuentes<sup>1</sup>, Stephanie Foster<sup>1</sup>, Kim Tran<sup>2</sup>, Michael Teng<sup>2</sup>, Biao He<sup>1</sup>

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Olivier Leymarie<sup>1</sup>, Christophe Chevalier<sup>2</sup>, Bruno Da Costa<sup>2</sup>, Bernard Delmas<sup>2</sup>, Ronan Le Goffic<sup>\*2</sup>

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François Enchéry<sup>\*1</sup>, Kevin Dhondt<sup>1</sup>, Louis-Marie Bloyet<sup>1</sup>, Denis Gerlier<sup>1</sup>, Branka Horvat<sup>1</sup>

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Antonella Pasquato<sup>\*1</sup>, Joel Oppliger<sup>1</sup>, Joel Ramos da Palma<sup>1</sup>, Dominique Burri<sup>1</sup>, Nabil Seidah<sup>2</sup>, Christina F. Spiropoulou<sup>3</sup>, Stefan Kunz<sup>1</sup>

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Kenji Sugiyama<sup>\*1</sup>, Atsushi Kawaguchi<sup>1</sup>, Mitsuru Okuwaki<sup>1</sup>, Kyosuke Nagata<sup>1</sup>

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Shotaro Uchida<sup>\*1</sup>, Ryo Horie<sup>1</sup>, Chieko Kai<sup>1</sup>, Misako Yoneda<sup>1</sup>

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Hiroki Sato<sup>\*1</sup>, Misako Yoneda<sup>1</sup>, Toshiyuki Nakamura<sup>1</sup>, Fusako Ikeda<sup>1</sup>, Akihiro Sugai<sup>1</sup>, Jun Kawai<sup>2</sup>, Yoshihide Hayashizaki<sup>2</sup>, Chieko Kai<sup>1</sup>

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Ryo Horie<sup>\*1</sup>, Chieko kai<sup>1</sup>, Misako Yoneda<sup>1</sup>

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Denise A. Marston<sup>\*1</sup>, Richard J. Ellis<sup>2</sup>, Nicholas Johnson<sup>1</sup>, Lorraine M. McElhinney<sup>1, 3</sup>, Hikmet Un<sup>4</sup>, Thomas Mueller<sup>5</sup>, Xavier de Lamballerie<sup>6</sup>, Anthony R. Fooks<sup>1, 3</sup>

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Joshua Long<sup>\*1</sup>, Ervin Fodor<sup>1</sup>

<sup>1</sup>Sir William Dunn School of Pathology, University of Oxford, Oxford, United Kingdom

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Annick Heykers<sup>1</sup>, Annelies Leemans<sup>1</sup>, Marjorie De Schryver<sup>1</sup>, Louis Maes<sup>1</sup>, Paul Cos<sup>1</sup>, Peter Delputte<sup>\*1</sup>

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Linda Brunotte<sup>\*1,2</sup>, Philipp Hubel<sup>3</sup>, Hardin Bolte<sup>2</sup>, Andreas Pichlmair<sup>3</sup>, Martin Schwemmler<sup>2</sup>

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Wei Yang<sup>\*1</sup>, Fandan Meng<sup>1</sup>, Darsaniya Punyadarsaniya<sup>2</sup>, Markus Hoffmann<sup>1</sup>, Juergen Stech<sup>3</sup>, Dirk Hoepfer<sup>3</sup>, Christel Schwegmann-Wessels<sup>1</sup>, Georg Herrler<sup>1</sup>

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Marilou Tetard<sup>1</sup>, Psylvia Leger<sup>\*2</sup>, Ronan Rouxel<sup>1</sup>, Robert Tesh<sup>3</sup>, Pierre-Yves Lozach<sup>2</sup>

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Helena Müller<sup>\*1</sup>, Sarah K. Fehling<sup>1</sup>, Sumiho Nakatsu<sup>2</sup>, Takeshi Noda<sup>2</sup>, Thomas Strecker<sup>1</sup>

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##### **DC-SIGN ENHANCES TICK CELL-DERIVED UUKUNIEMI VIRUS INFECTION**

Magalie Mazelier<sup>\*1</sup>, Ronan Rouxel<sup>2</sup>, Michael Zumstein<sup>3</sup>, Roberta Mancini<sup>3</sup>, Lesley Bell-Sakyi<sup>4</sup>, Pierre-Yves Lozach<sup>1,2,3</sup>

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##### **USE OF INTERFERON-STIMULATED GENES CDNA OVEREXPRESSION TO SCREEN INFLUENZA VIRUS-HOST INTERACTIONS IN PRIMARY HUMAN RESPIRATORY EPITHELIAL CELLS**

Ariel Rodriguez-Frandsen<sup>\*1</sup>, Miriam Dutra<sup>1</sup>, Jessica von Recum-Knepper<sup>1</sup>, Manuel Ruidiaz<sup>2</sup>, Numana Bhat<sup>1</sup>, Paul De Jesus<sup>1</sup>, Randy Albrecht<sup>3</sup>, Susanne Heynen-Genel<sup>2</sup>, Adolfo Garcia-Sastre<sup>3</sup>, Sumit K. Chanda<sup>1</sup>

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Jessica von Recum-Knepper<sup>\*1</sup>, Ariel Rodriguez-Frandsen<sup>1</sup>, Miriam Dutra<sup>1</sup>, Thorsten Wolff<sup>2</sup>, Hong Moulton<sup>3</sup>, David A. Stein<sup>3</sup>, Randy Albrecht<sup>4,5</sup>, Adolfo Garcia-Sastre<sup>4,5,6</sup>, Sumit Chanda<sup>1</sup>

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Oscar Negrete<sup>\*1</sup>, Brooke Harmon<sup>1</sup>, Benjamin Schudel<sup>1</sup>, Anson Hatch<sup>1</sup>

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David Stein<sup>\*1</sup>, Ricardo Rajsbaum<sup>2</sup>, Shashank Tripathi<sup>3</sup>, Randy Albrecht<sup>3</sup>, Hong Moulton<sup>1</sup>, Adolfo Garcia-Sastre<sup>3</sup>

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**Benjamin A. Satterfield**<sup>\*1</sup>, Robert W. Cross<sup>1</sup>, Karla A. Fenton<sup>1</sup>, Viktoriya Borisevich<sup>1</sup>, Krystle N. Agans<sup>1</sup>, Christopher F. Basler<sup>2</sup>, Thomas W. Geisbert<sup>1</sup>, Chad E. Mire<sup>1</sup>

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**Kathleen Cashman**<sup>\*1</sup>, Eric Wilkinson<sup>1</sup>, Todd Bell<sup>2</sup>, Paul Facemire<sup>3</sup>, Carl Shaia<sup>4</sup>, Connie Schmaljohn<sup>5</sup>

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#### **COMPARATIVE PATHOGENESIS OF MARBURG VIRUS STRAINS IN SYRIAN GOLDEN HAMSTERS**

**Robert Cross**<sup>\*1</sup>, Karla Fenton<sup>1</sup>, Joan Geisbert<sup>1</sup>, Chad Mire<sup>1</sup>, Thomas Geisbert<sup>1</sup>

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**Christopher Hammerbeck**<sup>\*1</sup>, Rebecca Brocato<sup>1</sup>, Laurie Queen<sup>1</sup>, Jay Hooper<sup>1</sup>

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**Rebecca Brocato**<sup>\*1</sup>, Victoria Wahl-Jensen<sup>2</sup>, Christopher Hammerbeck<sup>1</sup>, Matthew Josleyn<sup>1</sup>, Anita McElroy<sup>3</sup>, Jeffrey Smith<sup>1</sup>, Jay Hooper<sup>1</sup>

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**Seema Lakdawala**<sup>\*1</sup>, Akila Jayaraman<sup>2</sup>, Rebecca A. Halpin<sup>3</sup>, Elaine Lamirande<sup>1</sup>, Timothy Stockwell<sup>3</sup>, Xudong Lin<sup>3</sup>, Ari Simenauer<sup>3</sup>, Leatrice Vogel<sup>1</sup>, Ian Moore<sup>1</sup>, Marlene Orandle<sup>1</sup>, Suman Das<sup>3</sup>, David Wentworth<sup>3</sup>, Ram Sasisekharan<sup>2</sup>, Kanta Subbarao<sup>1</sup>

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**Jasmina Vasilijevic**<sup>\*1,2</sup>, Amelia Nieto<sup>1,2</sup>, Ana Falcon<sup>1,2</sup>

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**Alexander Koehler\***<sup>1</sup>, Ulla Welzel<sup>1</sup>, Gordian Schudt<sup>1</sup>, Astrid Herwig<sup>1</sup>, Stephan Becker<sup>1</sup>, Larissa Kolesnikova<sup>1</sup>

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**THE ROLE OF NATURAL KILLER CELLS IN HANTAVIRUS-INFECTION**

**Shawon Gupta\***<sup>1</sup>, Monika Braun<sup>2</sup>, Nicole Tischler<sup>3</sup>, Karin Sundström<sup>1</sup>, Niklas Björkström<sup>2</sup>, Clas Ahlm<sup>4</sup>, Hans-Gustaf Ljunggren<sup>2</sup>, Jonas Klingström<sup>2</sup>

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**INCREASED RISK FOR CANCER FOLLOWING HEMORRHAGIC FEVER WITH RENAL SYNDROME**

Shawon Gupta<sup>1</sup>, Carles Sola Riera<sup>1</sup>, Fredrik Granath<sup>1</sup>, Anders Ekblom<sup>1</sup>, Niklas K. Björkström<sup>1</sup>, Hans-Gustaf Ljunggren<sup>1</sup>, **Jonas Klingström\***<sup>1</sup>

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**GAME BIRDS AS A POTENTIAL RESERVOIR FOR THE SPREAD OF NEWCASTLE DISEASE VIRUS**

**Brandon Londt\***<sup>1</sup>, David Sutton<sup>1</sup>, Chad Fuller<sup>1, 2</sup>, Alejandro Núñez<sup>3</sup>, Daniel Hicks<sup>3</sup>, Elizabeth Aldous<sup>1, 4</sup>, Ian Brown<sup>1</sup>

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**MUTATIONS IN THE M SEGMENT OF AN ORTHOBUNYAVIRUS COMPENSATE DEFECTIVE S-SEGMENT ATTENUATED MUTANTS IN VIVO.**

**Mariana Varela\***<sup>1</sup>, Rute dos Santos Pinto<sup>1</sup>, Marco Caporale<sup>2</sup>, Ilaria M. Piras<sup>1</sup>, Richard M. Elliott<sup>1</sup>, Massimo Palmarini<sup>1</sup>

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**SEQUENCE PLASTICITY OF PB2-627 POSITION OF INFLUENZA A VIRUS DEMONSTRATES DISTINCT REPLICATION PROPERTIES IN VITRO AND IN VIVO**

**Wing Hong Alex Chin\***<sup>1</sup>, Leo L. M. Poon<sup>1</sup>

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**INTERCHANGING GENE ORDER OF INFECTIOUS HEMATOPOIETIC NECROSIS VIRUS (IHNV) TO GENERATE LIVE ATTENUATED VIRUSES**

Ronan N. Rouxel<sup>1</sup>, Carolina Tafalla<sup>2</sup>, Emilie Mérour<sup>1</sup>, **Stephane Biacchesi\***<sup>1</sup>, Michel Brémont<sup>1</sup>

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**HEPARIN-MEDIATED INHIBITION OF HENIPAVIRUS INFECTION**

Cyrille Mathieu<sup>1</sup>, Kevin Dhondt<sup>1</sup>, Denis Gerlier<sup>1</sup>, Romain Vives<sup>2</sup>, **Branka Horvat\***<sup>1</sup>

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**SWAPPING OF NP BETWEEN LASSA AND MOPEIA VIRUSES SHED LIGHT ON THE CONSERVATION OF EXONUCLEASIC FUNCTION BETWEEN THOSE TWO VIRUSES.**

**Audrey Page\***<sup>1</sup>, Xavier Carnec<sup>1</sup>, Stéphanie Reynard<sup>1</sup>, Alexandra Fizet<sup>1</sup>, Elsie Yekwa<sup>2</sup>, Mathieu Matéo<sup>1</sup>, François Ferron<sup>2</sup>, Sylvain Baize<sup>1</sup>

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**CHARACTERIZATION OF THE CELLULAR IMMUNE RESPONSE TO NIPAH VIRUS INFECTION**

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**PRELIMINARY RESULTS FROM MASTOMYS NATALENSIS EXPERIMENTALLY INFECTED WITH OLD WORLD ARENAVIRUSES**

**Toni Rieger\***<sup>1</sup>, Elisa Pallasch<sup>1</sup>, Lisa Oestereich<sup>1</sup>, Stephan Guenther<sup>1</sup>

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**VIRULENCE OF RECOMBINANT PIGEON PARAMYXOVIRUS ALTERED AFTER A CHICKEN BRAIN PASSAGE**

**Angela Römer-Oberdörfer\***<sup>1</sup>, Sandra Heiden<sup>1</sup>, Christian Grund<sup>1</sup>, Dirk Höper<sup>1</sup>, Thomas C. Mettenleiter<sup>1</sup>

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**ENGINEERING IMMUNOCOMPETENT MOUSE MODELS FOR EBOLA VIRUS DISEASE THROUGH BONE MARROW TRANSPLANTATION**

Anja Luedtke<sup>1</sup>, Lisa Oestereich<sup>2</sup>, **Paula Ruibal\***<sup>3</sup>, Stephan Guenther<sup>2</sup>, Cesar Munoz-Fontela<sup>1</sup>

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**KEY SET UP OF BRAIN ORGANOTYPIC CULTURES FOR EFFICIENT STUDIES OF NEUROTROPIC VIRUSES TARGETING THE CENTRAL NERVOUS SYSTEM**

Jeremy C. Welsch<sup>1</sup>, Christophe Terzian<sup>2</sup>, Branka Horvat<sup>1</sup>, Denis Gerlier<sup>1</sup>, **Cyrille Mathieu\***<sup>1</sup>

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**CHIMERIC MICE WITH COMPETENT HEMATOPOIETIC IMMUNITY REPRODUCE KEY FEATURES OF SEVERE LASSA FEVER**

**Lisa Oestereich\***<sup>1</sup>, Anja Luedtke<sup>2</sup>, Toni Rieger<sup>1</sup>, Stephanie Wurr<sup>1</sup>, Elisa Pallasch<sup>1</sup>, Sabrina Bockholt<sup>1</sup>, Stephan Guenther<sup>1</sup>, Cesar Munoz-Fontela<sup>2</sup>

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**RSV REPORTER VIRUSES FOR IN VITRO AND IN VIVO NON-INVASIVE IMAGING**

**Marie-Anne Rameix-Welti\***<sup>1</sup>, Ronan Le Goffic<sup>2</sup>, Pierre-Louis Hervé<sup>3</sup>, Delphyne Descamps<sup>3</sup>, Dania Zhivakhi<sup>4</sup>, Richard Lo-Man<sup>4</sup>, Elyanne Gault<sup>1</sup>, Jean-François Eléouët<sup>3</sup>

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Marie Galloux<sup>1</sup>, Vanessa Gaillard<sup>2</sup>, Ronan Le Goffic<sup>1</sup>, Christina Sizun<sup>3</sup>, Thilbault Larcher<sup>4</sup>, Jean-François Eléouët<sup>1</sup>, Origène Nyanguile<sup>\*2</sup>

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Yosuke Amagai<sup>1</sup>, Tomoko Fujiyuki<sup>\*1</sup>, Misako Yoneda<sup>1</sup>, Koichiro Shoji<sup>1</sup>, Yoichi Furukawa<sup>2</sup>, Hiroki Sato<sup>1</sup>, Chieko Kai<sup>1</sup>

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Lok Yan Fan<sup>\*1</sup>, King Sau C. Wong<sup>1</sup>, Sophie Valkenburg<sup>1</sup>, John Nicholls<sup>2</sup>, Malik Peiris<sup>1</sup>, Lit Man L. Poon<sup>1</sup>

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Chieko Kai<sup>\*1, 2</sup>, Tomoko Fujiyuki<sup>2</sup>, Yosuke Amagai<sup>2</sup>, Mutsumi Awano<sup>2</sup>, Koichiro Shoji<sup>2</sup>, Hiroki Sato<sup>2</sup>, Misako Yoneda<sup>2</sup>

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Jennifer S. Evans<sup>1, 2</sup>, David Selden<sup>1</sup>, Edward Wright<sup>3</sup>, Andrew J. Easton<sup>2</sup>, Anthony R. Fooks<sup>1</sup>, Ashley C. Banyard<sup>\*1</sup>

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Roger Hewson<sup>\*1</sup>, Karen R. Buttigeig<sup>1</sup>, Stuart D. Dowall<sup>1</sup>, Stephen Findlay-Wilson<sup>1, 1</sup>, Aleksandra Miloszezewska<sup>1</sup>, Emma Rayner<sup>2</sup>, Miles W. Carroll<sup>2</sup>

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Roland Zahn<sup>\*1</sup>, Benoit Callendret<sup>1</sup>, Ramon Roozendaal<sup>2</sup>, Kerstin Wunderlich<sup>1</sup>, Robin Steigerwald<sup>3</sup>, Ulrike Dirmeier<sup>3</sup>, Ariane Volkmann<sup>3</sup>, Cedric Cheminay<sup>3</sup>, Jerome Custers<sup>1</sup>, Ariane Rodriguez<sup>1</sup>, Jutta Hartkorn-Pasma<sup>1</sup>, Ricardo Carrion<sup>4</sup>, Luis Giavedoni<sup>4</sup>, Jean L. Patterson<sup>4</sup>, Thomas W. Geisbert<sup>5</sup>, Trevor Brasel<sup>5</sup>, Jort Vellinga<sup>1</sup>, Mo Weijtens<sup>1</sup>, Maria Grazia Pau<sup>1</sup>, Hanneke Schuitemaker<sup>2</sup>

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**Andrew Herbert\***<sup>1</sup>, Ramon Ortiz<sup>1</sup>, Ana Kuehne<sup>1</sup>, William Pratt<sup>1</sup>, Samantha Zak<sup>1</sup>, Laura Prugar<sup>1</sup>, Jennifer Brannan<sup>1</sup>, Spencer Stonier<sup>1</sup>, John Dye<sup>1</sup>

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**Kanta Subbarao\***<sup>1</sup>, C Luke<sup>1</sup>, Y Matsuoka<sup>1</sup>, K Coelingh<sup>2</sup>, H Jin<sup>2</sup>, K Talaat<sup>3</sup>, J Treanor<sup>4</sup>

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**Joseph W. Golden\***<sup>1</sup>, John Ballantyne<sup>2</sup>, David Bradley<sup>3</sup>, Jay W. Hooper<sup>1</sup>

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Olga Yuzhakov<sup>1</sup>, Adam Shapiro<sup>1</sup>, Xiahui Zhu<sup>2</sup>, Peter Doig<sup>2</sup>, **Qin Yu\***<sup>1</sup>

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**Connie Schmaljohn\***<sup>1</sup>, Jay W. Hooper<sup>1,1</sup>, Drew Hannaman<sup>2</sup>

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**Stefan Hamm\***<sup>1</sup>, Rebecca Nowak<sup>1</sup>, Farooq Nasar<sup>2</sup>, Demetrius Matassov<sup>1</sup>, Ayuko Ota-Setlik<sup>1</sup>, Rong Xu<sup>1</sup>, Michael Egan<sup>1</sup>, Rodion Gorchakov<sup>2</sup>, Robert Seymour<sup>2</sup>, John Eldridge<sup>1</sup>, Robert Tesh<sup>2</sup>, Scott Weaver<sup>2</sup>, David Clarke<sup>1</sup>

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**Manu Anantpadma\***<sup>1</sup>, Aaron Lindstrom<sup>2</sup>, Douglas J. LaCount<sup>2</sup>, Robert A. Davey<sup>1</sup>

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**Shannon I. Phan**<sup>\*1</sup>, Carolyn M. Adam<sup>1</sup>, Zhenhai Chen<sup>1</sup>, Michael Citron<sup>2</sup>, Xiaoping Liang<sup>2</sup>, Amy S. Espeseth<sup>2</sup>, Dai Wang<sup>2</sup>, Biao He<sup>1</sup>

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**Emilie Mérour**<sup>\*1</sup>, Stéphane Biacchesi<sup>1</sup>, Sophie Chat<sup>1</sup>, Michel Bremont<sup>1</sup>

<sup>1</sup>Animal Health, INRA, Jouy en Josas, France

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Mifang Liang<sup>1</sup>, Wei Wu<sup>1</sup>, Aqian Li<sup>1</sup>, Shuo Zhang<sup>1</sup>, Chuan Li<sup>1</sup>, Shiwen Wang<sup>1</sup>, **Dexin Li**<sup>\*1</sup>

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**Giulia Torriani**<sup>\*1</sup>, Sylvia Rothenberger<sup>1</sup>, Stefan Kunz<sup>1</sup>, Olivier Engler<sup>2</sup>

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**DEVELOPMENT OF A NOVEL VACCINE AGAINST LASSA VIRUS**

**Clara Galan**<sup>\*1</sup>, Erica Ollman Saphire<sup>2</sup>, Thomas Bowden<sup>3</sup>, Melody Swartz<sup>1</sup>, Stefan Kunz<sup>4</sup>

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**Mutsumi Awano**<sup>\*1</sup>, Tomoko Fujiyuki<sup>1</sup>, Yosuke Amagai<sup>1</sup>, Koichiro Shoji<sup>1</sup>, Yoshinori Murakami<sup>2</sup>, Yoichi Furukawa<sup>3</sup>, Hiroki Sato<sup>1</sup>, Misako Yoneda<sup>1</sup>, Chieko Kai<sup>1</sup>

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**MEASLES VIRUS HAS THE ABILITY TO INFECT CHICKEN EMBRYONIC FIBROBLASTS THROUGH CHICKEN NECTIN-4**

**Fumio Seki**<sup>\*1</sup>, Kenji Someya<sup>1</sup>, Maino Tahara<sup>1</sup>, Yuichiro Nakatsu<sup>1</sup>, Katsuhiro Komase<sup>1</sup>, Makoto Takeda<sup>1</sup>

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**A MOUSE MODEL FOR SEVERE FEVER WITH THROMBOCYTOPENIA SYNDROME**

**Saori Sakabe**<sup>\*1</sup>, Jiro Yasuda<sup>1</sup>

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**Koushikul Islam**<sup>\*1</sup>, Maria Baudin<sup>1</sup>, Jonas Eriksson<sup>2</sup>, Christopher Öberg<sup>2</sup>, Matthias Habjan<sup>3</sup>, Friedemann Weber<sup>4</sup>, Anna K. Överby<sup>1</sup>, Clas Ahlm<sup>1</sup>, Magnus Evander<sup>1</sup>

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**Hitoshi Takahashi**<sup>\*1</sup>, Mina Nakauchi<sup>1</sup>, Shiho Nagata<sup>1</sup>, Takato Odagiri<sup>1</sup>, Tsutomu Kageyama<sup>1</sup>

<sup>1</sup>Center for Influenza Virus Research, National Institute of Infectious Diseases, Tokyo, Japan

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**Aiko Fukuma**<sup>\*1</sup>, Shuetsu Fukushi<sup>1</sup>, Satoshi Taniguchi<sup>1</sup>, Hideki Tani<sup>1</sup>, Tomoki Yoshikawa<sup>1</sup>, Tadaki Suzuki<sup>2</sup>, Hideki Hasegawa<sup>2</sup>, Shigeru Morikawa<sup>3</sup>, Masayuki Shimojima<sup>1</sup>, Masayuki Saijo<sup>1</sup>

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**THERAPEUTIC EFFECT OF FAVIPIRAVIR AGAINST LASSA FEVER IN IMMUNOCOMPETENT CHIMERIC MICE**

**Lisa Oestereich**<sup>\*1</sup>, Anja Luedtke<sup>2</sup>, Toni Rieger<sup>1</sup>, Paula Ruibal<sup>1</sup>, Stephanie Wurr<sup>1</sup>, Elisa Pallasch<sup>1</sup>, Sabrina Bockholt<sup>1</sup>, Cesar Munoz-Fontela<sup>2</sup>, Stephan Guenther<sup>1</sup>

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**Annelies Stevaert**<sup>\*1</sup>, Dominga Rogolino<sup>2</sup>, Mauro Carcelli<sup>2</sup>, Roberto Dallochio<sup>3</sup>, Alessandro Dessì<sup>3</sup>, Nicolino Pala<sup>4</sup>, Mario Sechi<sup>4</sup>, Lieve Naesens<sup>1</sup>

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**Constanze Steglich**<sup>\*1</sup>, Christian Grund<sup>1</sup>, Thomas C. Mettenleiter<sup>1</sup>, Angela Römer-Oberdörfer<sup>1</sup>

<sup>1</sup>Friedrich-Loeffler-Institut, Greifswald - Insel Riems, Germany

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**GENERATION OF A RECOMBINANT TRI-SEGMENTED MOPEIA VIRUS FOR ANTIVIRAL SCREENING**

**Romy Kerber**<sup>\*1</sup>, Lisa Oestereich<sup>1</sup>, Stephanie Wurr<sup>1</sup>, Sabrina Bockholt<sup>1</sup>, Beate Becker-Ziaja<sup>1</sup>, Meike Pahlmann<sup>1</sup>, Beate M. Kuemmerer<sup>2</sup>, Stephan Guenther<sup>1</sup>

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Viviana Giannino<sup>\*1</sup>, Yuk-Ying S. Pang<sup>2</sup>, Gaurav Gupta<sup>3</sup>, Martin A. Billeter<sup>4</sup>, John T. Schiller<sup>2</sup>, Reinhard Glueck<sup>3</sup>

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**STABILITY CHARACTERIZATION OF A FUSION GLYCOPROTEIN VACCINE FOR RESPIRATORY SYNCYTIAL VIRUS**

Lan Zhang<sup>\*1</sup>, Jennifer Galli<sup>1</sup>, Cheryl Callahan<sup>1</sup>, Scott Cosmi<sup>1</sup>, Ryan Swoyer<sup>1</sup>, Pedro Cejas<sup>1</sup>, Jessica Flynn<sup>1</sup>, Irene Pak<sup>1</sup>, Arthur Fridman<sup>1</sup>, Bradley Feuston<sup>1</sup>, Melanie Horton<sup>1</sup>, Amy Espeseth<sup>1</sup>, Danilo Casimiro<sup>1</sup>, Andrew Bett<sup>1</sup>

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**IMPROVING VIROLOGIC SURVEILLANCE FOR MEASLES**

Raydel D. Anderson<sup>\*1</sup>, Carolyn Sein<sup>1</sup>, Elisabeth P. Simbu<sup>2</sup>, Bettina Bankamp<sup>1</sup>, Diane Waku<sup>1</sup>, James L. Goodson<sup>1</sup>, Paul A. Rota<sup>1</sup>

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**MMR VACCINATION IN HUMANS ELICITS A CROSS-NEUTRALIZING RESPONSE AGAINST A NOVEL MUMPS-LIKE VIRUS SEQUENCED FROM AFRICAN BATS**

Shannon M. Beaty<sup>\*1</sup>, Kristopher D. Azarm<sup>1</sup>, W. P. Duprex<sup>2</sup>, Raffael Nachbagauer<sup>1</sup>, Florian Krammer<sup>1</sup>, Benhur Lee<sup>1</sup>

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**COMMUNITY-WIDE SEQUENCE ANNOTATION STANDARDS TO IMPROVE USABILITY OF GENOMIC SEQUENCES OBTAINED DURING THE 2013-2015 EBOLA VIRUS DISEASE OUTBREAK**

Jens H. Kuhn<sup>\*1</sup>, Sergey A. Zhdanov<sup>2</sup>, Yiming Bao<sup>2</sup>, Olga Blinkova<sup>2</sup>, Yuri Ostapchuk<sup>2</sup>, Daniel J. Park<sup>3</sup>, Pardis Sabeti<sup>3</sup>, Susmita Shrivastava<sup>4</sup>, Reed S. Shabman<sup>4</sup>, Philippe Lemercier<sup>5</sup>, Gustavo Palacios<sup>6</sup>, Peter B. Jahrling<sup>1</sup>, J. Rodney Brister<sup>2</sup>

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**DOES HOST EVOLUTION LIMIT THE DISTRIBUTION OF CENTRAL EUROPEAN PUUMALA VIRUS?**

Stephan Drewes<sup>1</sup>, Hanan Sheikh Ali<sup>1</sup>, Ulrike M. Rosenfeld<sup>1</sup>, Fabian Cuypers<sup>1</sup>, Vanessa Weber de Melo<sup>2</sup>, Gerald Heckel<sup>2</sup>, Rainer G. Ulrich<sup>\*1</sup>

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**ANTIGENIC AND GENETIC VARIATION OF H5 HIGHLY PATHOGENIC AVIAN INFLUENZA VIRUSES IN DOMESTIC DUCKS IN VIETNAM**

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##### UTILITY OF ILLUMINA MISEQ WHOLE GENOME SEQUENCING FOR THE MOLECULAR EPIDEMIOLOGY OF MEASLES VIRUS

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##### MOLECULAR EPIDEMIOLOGY OF MEASLES AND MUMPS VIRUSES DETECTED IN THE US DURING 2014

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##### RAPID AND SENSITIVE DETECTION OF BAT INFLUENZA VIRUSES BY REAL TIME RT-PCR ASSAYS

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##### WITHIN HOST EVOLUTION AND CROSS-SPECIES TRANSMISSION OF EQUINE INFLUENZA VIRUS NON-STRUCTURAL PROTEIN NS1

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##### MOLECULAR EPIDEMIOLOGY AND GENETIC VARIABILITY OF HUMAN RESPIRATORY SYNCYTIAL VIRUS (HRSV) IN CROATIA, 2011-2014

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##### EVOLUTIONAL ANALYSIS OF A RECOMBINANT SENDAI VIRUS EXPRESSING THE HUMAN MAVS PROTEIN

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##### MOLECULAR EPIDEMIOLOGY OF INFLUENZA VIRUSES IN SHOREBIRD IN CHILE.

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##### MOLECULAR CHARACTERIZATION OF EBOLA ZÁÏRE ADAPTATION TO THE SYRIAN GOLDEN HAMSTER

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**Poster 298**

**DIVERSITY OF SINGLE NUCLEOTIDE VARIANTS AND RNA EDITING OF PLUS AND MINUS RNA STRANDS FROM MEASLES VIRUS.**

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