

8th European Meeting on Viral Zoonoses

22-25 October, 2017

Saint-Raphaël, France

Sunday, October 22, 2017

16.00 – 18.15	Registration – PALAIS DES CONGRES
18.15 – 19.15	Welcome/Introduction – PALAIS DES CONGRES RICHARD ELLIOTT MEMORIAL LECTURE Amadou SALL, Dakar, Sénégal <i>Emerging zoonoses in Africa (O1)</i>
19.30 – 21.30	Welcome Reception Buffet Dinner : Restaurant La Bulle d'Or

Monday, October 23, 2017

SESSION 1 : Ecology, Epidemiology and Evolution (1)

CHAIRS : Åke LUNDKVIST and Luiz Tadeu MORAES FIGUEIREDO

09.00 – 09.40

KEYNOTE TALK : Olli VAPALAHTI, Helsinki, Finland

Zika virus and its variation from mother to fetal brain (O2)

Time	Speaker	Title
09.40 – 10.00	Vaclav Honig Brno, Czech Republic (O3)	Changes in behaviour of <i>Ixodes ricinus</i> ticks upon infection by tick-borne encephalitis virus
10.00 – 10.20	Teemu Smura Helsinki, Finland (O4)	Fatal tick-borne encephalitis virus infections caused by Siberian and European subtypes emerging in Kuutsalo Island, Kotka archipelago, Finland
10.20 – 10.40	Tove Hoffman Uppsala, Sweden (O5)	Evaluating the role of northward migratory birds in intercontinental transmission of tick-borne pathogens
10.40 – 11.10	Coffee and Posters	
11.10 – 11.30	Olivia Wesula Lwande Umeå, Sweden (O6)	Vertical transmission – a possible explanation for the prevalence of mosquito-borne Inkoo- and Sindbis virus in northern Sweden
11.30 – 11.50	Magnus Evander Umeå, Sweden (O7)	Association of Rift Valley fever virus infection with miscarriage in Sudanese women
11.50 – 12.10	Estela Escribano-Romero Ciudad Real, Spain (O8)	Magpies (<i>Pica pica</i>) susceptibility to experimental West Nile virus infection
12.10 – 12.30	Marta Trevisan Padova, Italy (O9)	Virus and antibody dynamics in travelers with acute Zika virus infection
12.30 – 14.15	Lunch break	

Monday, October 23, 2017

SESSION 2 : Ecology, Epidemiology and Evolution (2)

CHAIRS : Xavier de LAMBALLERIE and Olli VAPALAHTI

14.15 – 14.55

KEYNOTE TALK : Xavier de LAMBALLERIE, Marseille, France

Zika virus seroepidemiological studies (O10)

Time	Speaker	Title
14.55 – 15.15	Meriadeg Le Gouil Paris, France (O11)	Macro & micro-evolution of coronaviruses in bats and emergence potentialities of a <i>betacoronavirus</i> in the western palearctic
15.15 – 15.35	Lorraine M McElhinney Weybridge, UK (O12)	Outbreak of haemorrhagic fever with renal syndrome in the United Kingdom
15.35 – 15.55	Jussi Hepojoki Helsinki, Finland (O13)	Characterization of HISV-1, the putative type species of a novel genus <i>Hartmanivirus</i> in the family <i>Arenaviridae</i>
15.55 – 16.30	Tea and Posters	
16.30 – 16.50	Tatiana Kuznetsova Tallinn, Estonia (O14)	Hepatitis E virus infection in different groups of estonian patients and people who inject drugs
16.50 – 17.10	Per Eriksson Uppsala, Sweden (O15)	The Pig as a "Mixing Vessel" for IAVs revisited; new data from virus attachment studies
17.10 – 17.30	Mahmoud Naguib Riems, Germany (O16)	Reassortants between potentially zoonotic avian influenza viruses H5N1 and H9N2 from Egypt display different pathogenesis in chicken and ferret animal models
17.30 – 17.50	Jonas Blomberg Uppsala, Sweden (O17)	Computerized multiplex antibody analysis diminishes problems with cross-reactivity for serological diagnosis of zoonotic virus infections
17.50 – 19.45	POSTER and WINE session	

Tuesday, October 24, 2017

SESSION 3 : Virus / Host Interactions (1)

CHAIRS : Friedemann WEBER and Connie SCHMALJOHN

09.00 – 09.40

KEYNOTE TALK : Alain KOHL, Glasgow, UK

Zika virus - tropism and antiviral responses (O18)

Time	Speaker	Title
09.40 – 10.00	Branka Horvat Lyon, France (O19)	Immunopathogenesis of Nipah virus infection
10.00 – 10.20	Jan Hellert Paris, France (O20)	Structural basis for orthobunyavirus neutralization
10.20 – 10.40	Vincent Legros Paris, France (O21)	Chikungunya virus induces apoptosis in infected chondrocytes and promotes cartilage damages
10.40 – 11.10	Coffee and Posters	
11.10 – 11.30	Marina García Buenos Aires, Argentina (O22)	Human B cells: newly described targets for hantavirus infection
11.30 – 11.50	Pierre-Yves Lozach Heidelberg, Germany (O23)	The non-structural protein NSs of rift valley fever virus: a novel model to study prion-like proteins?
11.50 – 12.10	Essia Belarbi Paris, France (O24)	Bioluminescent Ross River virus allows <i>in vivo</i> visualisation of acute and persistent alphaviral infection
12.10 – 12.30	Maria Günther Insel Riems, Germany (O25)	Interaction of matrix proteins with nuclear anp32b is conserved among Henipa-, Avula- and Respiroviruses
12.30 – 14.15	Lunch break	

Tuesday, October 24, 2017

SESSION 4 : Virus-Host Interactions (2)

CHAIRS : Alain KOHL and Alexander PLYUSNIN

14.15 – 14.55

KEYNOTE TALK : Friedemann WEBER, (Germany)

Induction and suppression of the interferon response by RNA viruses (O26)

Time	Speaker	Title
14.55 – 15.15	Clément Jouselin Paris, France (O27)	Interaction of rabies virus polymerase with cellular factors and exploration of the functional consequences
15.15 – 15.35	Stéphanie Devignot Giessen, Germany (O28)	Complex interplay between CCHFV ovarian tumor (OTU) domain and the innate immune response
15.35 – 15.55	Stefan Pöhlmann Göttingen, Germany (O29)	A GXXXA motif in the transmembrane domain of the Ebola virus glycoprotein is required for Tetherin antagonism
15.55 – 16.30	Tea and Posters	
16.30 – 16.50	Markus Hoffmann Göttingen, Germany (O30)	Fruit bat Tetherin (BST-2, CD317) is a potent innate immune factor that inhibits spread of highly pathogenic viruses in bat cells
16.50 – 17.10	Justine Basset Paris, France (O31)	Ciliobrevin D, a cytoplasmic dynein antagonist, to investigate the role of dynein in Flavivirus infectious cycle
17.10 – 17.30	Pablo Guardado-Calvo Paris, France (O32)	The structure of RVFV fusion protein reveals a lipid binding pocket conserved in class-II fusion proteins
17.30 – 17.50	Ilona Rissanen Helsinki, Finland (O33)	The conserved and metastable architecture of the hantaviral glycoprotein envelope
17.50 – 18.10	Simone Lau Giessen, Germany (O34)	Rift Valley fever virus NSS virulence factor disrupts the nuclear pore complex
19.00	Bus departure for Gala Dinner	
19.45 – 23.00	Gala Dinner	

Wednesday, October 25, 2017

SESSION 5 : "Prevention and Control"

CHAIRS : Christina SPIROPOULOU and Noël TORDO

8.45 – 09.25

KEYNOTE TALK : Connie SCHMALJOHN, USA

DNA Vaccines for Hemorrhagic Fever with Renal Syndrome (O35)

Time	Speaker	Title
09.25 – 9.45	Luiz.T.M. Figueiredo Ribeirao Preto, Brazil (O36)	Yellow fever in Brazil 2016-2017: epizootics in primates and human cases
09.45 – 10.05	Ana-Belén Blázquez Madrid, Spain (O37)	Zika virus infection confers protection against West Nile virus challenge in mice
10.05 – 10.25	Mathieu Matéo Lyon, France (O38)	A potential vaccine platform against arenaviruses based on a recombinant hyper-attenuated Mopeia virus expressing heterologous glycoproteins
10.25 – 10.45	Adeline Kerviel London, UK (O39)	Protective efficacy of Bluetongue Virus and African Horse Sickness Virus replication-deficient vaccine strains against virulent virus challenges in animal hosts
10.45 – 11.15	Coffee and Posters	
11.15 – 11.35	Dawid Nidzworski Gdańsk, Poland (O40)	Mucosal vaccination against influenza virus infection with recombinant spores of <i>Bacillus subtilis</i>
11.35 – 11.55	Verena te Kamp Insel Riems, Germany (O41)	Tropism of attenuated GFP-expressing RABV vaccine after oral administration in different reservoir species
11.55 – 12.15	Christina F.Spiropoulou Atlanta, USA (O42)	From basic science to promising antivirals for hemorrhagic fever viruses
12.15 – 12.35	Nicole Pavio Maisons Alfort, France (O43)	Effect of a ribavirin analogue on the replication of hepatitis E virus in vitro

End of the Meeting

POSTERS BY SESSIONS

Ecology, Epidemiology and Evolution

N°	AUTHORS	TITLE
P1	Mikaty, Guillain ¹ ; Gaayeb, Lobna ² ; Pérez-Ramírez, Elisa ³ ; Picard, Marie ⁴ ; Fernández Pinero, Jovita ³ ; Dente, Maria Grazia ⁵ ; Declich, Silvia ⁵ ; Robert, Vincent ⁴ ; Jiménez-Clavero, Miguel Ángel ³ ; Victoir,	MediLabSecure: A virology and entomology laboratories network for a One Health approach of vector-borne and emerging viruses in the Mediterranean and Black Sea regions
P2	Ceylan Polat ¹ , Mustafa Sozen ² , Ferhat Matur ³ , Ortac Cetintas ² , Muhsin Cogal ² , Faruk Colak ² , Mehmet Ali Oktem ¹	Investigation of Hantavirus Existence in Mediterranean and Central Anatolia Regions of Turkey
P3	Miriam A. Sas ¹ , Ariel Vina-Rodriguez ¹ , Marc Mertens ¹ , Samuel Abah ² , Martin Eiden ¹ , Abdoukadir Souley ² , Martin H. Groschup ¹	A one-step multiplex RT-qPCR for the universal detection of all CCHFV genotypes
P4	Hussein Alburkat ¹ , Teemu Smura ¹ , Barakat AM ³ , Hasony HJ ³ , Haider Al-Hello ² , Olli Vapalahti ¹	The Presence and Seroprevalence of Lymphocytic choriomeningitis virus in Nasiriyah Governorate, Southern Iraq
P5	Essia Belarbi ¹ , Grit Schubert ¹ , Chantal Akoua-Koffi ² , Emmanuel Couacy-Hymann ³ , Nicolas Meda ⁴ , Jean-Jacques Muyembe-Tamfum ⁵ , Jean-Marie Kayembe ⁶ , Karen Keddy ⁷ , Marietjie Venter ⁸ , Tim Eckmanns ¹ , Matthias Borchert ¹ & Fabian Leendertz ¹	The ANDEMIA project: African Network for Improved Diagnostics, Epidemiology and Management of Common Infectious Agents
P6	Jenny C. Hesson ^{a,b} , Jan O. Lundströma, ^c Atalay Toka, Örjan Östmand, Åke Lundkvista, ^e	Temporal variation of antibodies against Sindbis virus in Swedish birds
P7	J Lindahl ^{1,2,3} , B Bett ¹ , Å Lundkvist ² , U Magnusson ³ and D Grace ⁴	Two examples of anthropogenic drivers of vector-borne diseases: Irrigation and urbanization
P8	Jenny C. Hesson ^{a,b} , Marcus Blagrovea, Kenneth Sherlocka, Matthew Baylisa	Vector competence of northern European mosquitoes for West Nile and Usutu virus
P9	Ilkka Kivistö ¹ , Thomas Lilley ² , Eeva-Maria Kyheröinen ³ , Anita Huovilainen ⁴ , Olli Vapalahti ^{1,5} & Tarja Sironen ¹ ,	Coronaviruses in Finnish bats
P10	Kerstin Fischer ¹ , Cécile Troupin ² , Juliet Jabaty ³ , Alimou Camara ² , Sandra Diederich ¹ , Thomas Hoenen ⁴ , Anne Balkema-Buschmann ¹ , Andreas Müller ⁴ , Roland Suluku ⁵ , Kristina M. Schmidt ¹ , Bashiru Koroma ⁵ , Felixina Jonsyn-Ellis ³ , Noël Tordo ² , Thomas C. Mettenleiter ⁴ , Martin H. Groschup ¹	Ebola Foresight: The Role of Livestock and Wildlife Species in the Biology of Filoviruses
P11	Mehmet Ali Oktem ¹ , Ceylan Polat ¹ , Ferhat Matur ² , Sercan Irmak ³ , Ortac Cetintas ⁴ , Muhsin Cogal ⁴ , Mustafa Sozen ⁴	New Hantavirus Positivity in Different Microtus and Crocidura Species From Turkey
P12	Anne J Jääskeläinen , Hannimari Kallio-Kokko, Olli Vapalahti	Diagnosis of chikungunyavirus infections during years 2009-2017
P13	Jiaxin Ling , Tanja Strand, Åke Lundkvist, Alexander Plyusnin, Tarja Sironen	Complete genome and phylogeny of Seoul hantavirus from brown rats (<i>Rattus norvegicus</i>) in the Netherlands
P14	Kairi Värvi ^{1, 2, 3} , Jaanus Remm ⁴ , Julia Geller ¹ , Maria Vikentjeva ¹ , Åke Lundkvist ³ , Irina Golovljova	Characterization of TBEV natural foci in Estonia
P15	Jiří Černý (1, 2, 3); Jana Elsterová (1, 2, 3); Jana Müllerová (1, 2); Johanka Hrnková (4); Libor Grubhoffer (1, 2); and Daniel Růžek (1, 3)	Cool viruses from cold climate areas – surveillance for animal viruses in polar areas
P16	Lev Levanov , Anu Jääskeläinen, Olli Vapalahti	Test based on subtype-specific μ -capture igm immunoassay can distinguish between infections of european and siberian subtypes of tick-borne encephalitis virus
P17	Sarah Lumley ^{1,2,3} , Maria Del Mar Fernández de Marco ¹ , Luis, M. Hernández-Triana ¹ , Daniel . L. Horton ² , Roger Hewson ³ , Jolyon M. Medlock ^{3,4} , Anthony R. Fooks ^{1,4} and Nicholas Johnson ¹	Ability of British Aedes detritus mosquitoes to transmit Rift Valley fever virus
P18	Valentina Tagliapietra , Niccolò Alfano, Daniele Arnoldi, Roberto Rosà, Chiara Rossi, Fausta Rosso, Heidi C. Hauffe & Annapaola Rizzoli	Emerging rodent-borne viral diseases in Italy: distribution and observed trends in the Province of Trento, Italy.
P19	Aliona Špakovaa , Indrė Kučinskaitė-Kodzėa, Rasa Petraitytė-Burėnikienėa, Aurelija Žvirblienėa, Sabrina Schmidtb, Mathias Schlegelb, ¹ Erik Lattweinc , Bernd Koellnerd, Rainer G. Ulrichb	Establishment of monoclonal antibody-based competitive ELISA for the diagnostics of human hantavirus infections
P20	Lauri Kareinen ¹ , Jussi Hepojoki ¹ , Satu Hepojoki ¹ , Jonas Schmidt-Chanasit ² , Klaus Hedman ^{1,3} and Olli Vapalahti	Rapid serodiagnostic tool for Zika virus infection with low cross-reactivity

P21	B. Albinsson 1, 2, Å. Lundkvist 1, 2, S. Vene 4, J. Blomberg 2, 3, B. Rönnerberg 1, 2	Serological profile of TBE-infected patients in a vaccinated community – can you tell the difference?
P22	Marietjie Venter 1§, Liz Botha1, Jumari Steyn1, Milenah Guarido1; Todd Johnson1, Isabel Fourie1; Thopisang Motlou1; Mpho Rakgantho1, Voula Stivaktas1, Paulo Almeida1,2; Leo Braack3, June Williams4	One Health Epidemiology and ecology of zoonotic arboviruses associated with neurological disease in South Africa (2008-2017).

Virus-Host and Interactions

P23	Anne Gleize, Patrick Masson, Edouard De Castro, Ioannis Xenarios & Philippe Le Mercier	Clinical metagenomics; On the importance of databases.
P24	Claire Dumont* , François Enchéry*, Quentin Bardin, Denis Gerlier and Branka Horvat	Nucleocytoplasmic trafficking of NiV W and its ability to regulate the NF-κB pathway
P25	Yegor Korzyukov 1, Rommel Iheozor-Ejiofor1, Anja Kipar2, Udo Hetzel2, Olli Vapalahti1, Luis Martinez-Sobrido3, Juan Carlos de la Torre4, Jussi Hepojoki1,2	Generation of replication-defective, GFP-expressing, recombinant vesicular stomatitis virus pseudotypes expressing reptarenavirus glycoproteins
P26	Jennifer Deborah Wuerth 1, Matthias Habjan2, Andreas Pichlmair2, Giulio Superti-Furga3 & Friedemann Weber1	Sandfly fever Sicilian virus NSs Inhibits type I Interferon Induction.
P27	Julien Fouret (1, 2) , Noémie Aurine (2), François Enchéry (2), Marie Guinier (1), Magali Roche (1), Marc Bailly-Bechet (3), Branka Horvat (2), Catherine Legras-Lachuer (1, 4)	Towards understanding of anti-viral response in bats: comparative positive selection analysis combined with functional network
P28	François Enchéry , Claire Dumont, Noémie Aurine, Quentin Bardin, Louis-Marie Bloyet, Cyrille Mathieu, Denis Gerlier, Chloé Journé and Branka Horvat	Modulation of the NF-κB signaling pathway by Nipah virus W nonstructural protein
P29	Marie Moroso 1, Pauline Verlhac2, Olivier Ferraris3, Christophe N. Peyrefitte3, Hubert P. Endtz1, Mathias Faure2, Juliet E. Bryant1, Glauca Paranhos-Baccalà1.	Induction of an autophagy response in human hepatocytes infected by Crimean-Congo hemorrhagic fever virus
P30	M. Alejandra Tortorici 1,2, Alexandra C. Walls3, Xiaoli Xiong3, Brandon Frenz3, Joost Snijder3, Wentao Li4, Craig Yoshioka5, Andrew T. McGuire6, Peter Rottier4, Frank DiMaio3, Berend-Jan Bosch4, David Veasley3 & Félix A. Rey1,2	Structural studies of coronavirus spike proteins.
P31	Janne Tynell & Jonas Klingström	Functional characterization of the hantavirus S segment untranslated region
P32	Debbie Ferguson , Jo Hall, Claire Ham, Adrian Jenkins, Elaine Giles, Sarah Kempster, Neil Berry, Neil Almond	Long Term Tissue Presence of Zika Virus in Old World and New World Non Human Primates.
P33	Kirill Nemirov 1, Alexander Plyusnin2, Åke Lundkvist3 and Noël Tordo1.	Development of minireplicon systems for dobrava and tula hantaviruses
P34	Ilona Rissanen, Antra Zeltina, Asim Ahmed, Kristopher Azarm, Patrick Hong, Shannon Beaty, Sham Nambulli, W. Paul Duprex, Benhur Lee, and Thomas A. Bowden	Structural determinants for the glycoprotein-mediated spillover of emerging henipaviruses
P35	Patrick Masson, Chantal Hulo, Edouard De Castro, Lydie Bougueleret, Ioannis Xenarios & Philippe Le Mercier	ViralZone: recent updates to the virus knowledge resource
P36	A. Schoen , F. Weber	Toward a characterization of the type I interferon system of bat cells

Prevention and Control

P37	Sabrina Kali 1, Corinne Jallet1, Yu Wu2, Valérie Pons3, Jean-Christophe Cintrat3, Julien Barbier2, Daniel Gillet2, Noël Tordo1,4.	Innovative antiviral strategies targeting different steps of rabies virus infection
P38	Suvi Kuivanen 1, Maxim M. Bepalov2, Jatin Nandania3, Aleksandr Ianevski3, Vidya Velagapudi3, Jef K. De Brabander4, Denis E. Kainov3, Olli Vapalahti1,5,6	Obatoclox, saliphenylhalamide and gemcitabine inhibit Zika virus infection in vitro and differentially affect cellular signaling, transcription and metabolism
P39	Paul Wighers Schreur 1, Sandra van de Water1, Michiel Harmsen1, Marga van Setten1, Erick Bermúdez Méndez1, Dubravka Drabek2, Jeroen Kortekaas1	Development of Rift Valley fever virus neutralizing nanobody complexes using bacterial superglues.
P40	Hadas Cohen-Dvashi1, Ron Amon2, Vered Padler-Karavani2, and Ron Diskin 1	Targeting zoonotic Tfr1-tropic arenaviruses at their Achilles heel: structure-based rational design of universal immunotherapy

P41	Guy Mong Ky Tran & Adrien Caprani	Highly pathogenic Influenza virus A H5N1 Indonesia & Vietnam Hemagglutinin (HA1) contains an urokinase-plasminogen activator explaining the fibrinolysis.
P42	Guy Mong Ky Tran & Adrien Caprani	Avian Influenza virus A H5N1 polymerases PA, PB1 and hemagglutinin contain a platelet integrin ITGB3 inducing auto-immune anti-platelet antibodies and thrombocytopenia.
P43	Guy Mong Ky Tran & Adrien Caprani	Highly pathogenic Influenza virus A H5N1 (Vietnam, Hong Kong) polymerase PB2 contains a snake disintegrin homologous to platelet integrin ITGA2b (gpIIb), which blocks the formation of platelet clot.
P44	Dario akaberi ^{1,2} , Åke Lundkvist ^{1,2} , Navaneethan Palanisamy ³ and Johan Lennerstrand ^{1,2}	In-silico identification of potential Zika Virus NS2B-NS3 protease inhibitors