

# Programme



## The 5th International Symposium on Neglected Influenza Viruses

8 - 10 April 2024    Lexington | Kentucky | USA

### Day 1    Monday 8 April

07:30-08:25

Breakfast

07:30-10:00

Registration

08:00 – 08:20 Poster set-up

08:30-08:45

Welcome and Opening Remarks

Thomas Chambers |

University of Kentucky, US

S. Mark Tompkins |

University of Georgia, US

08:45-09:30

Opening Keynote

Global Epizootic H5NI in Wildlife: Challenges and Opportunities

Nicola Lewis | Francis Crick Institute, UK

**Session I**

**Influenza in Wildlife**

**Chairs:** Janet Daly | University of Nottingham, UK

Yuan Liang | University of Copenhagen, Denmark

09:30-10:00

Understanding Highly Pathogenic Avian Influenza Viruses in North American Wild Birds Against a Backdrop of Immunity

Rebecca Poulson | University of Georgia, US

<b>10:00-10:15</b>	<b>Mortality among wild red foxes and harbor seals in Denmark were caused by mammalian-adapted clade 2.3.4.4b H5N1 high pathogenicity avian influenza viruses (AN50030)</b> Yuan Liang   University of Copenhagen, Denmark
<b>10:15-10:30</b>	<b>Expansion of Wild Bird Avian Influenza Risk Assessments in North America (AN50062)</b> Mohammad Jawad Jahid   The Ohio State College of Veterinary Medicine, US
<b>10:30-11:00</b>	<b>BREAK</b>
<b>11:00 -11:20</b>	<b>Highly pathogenic avian influenza A (H5N1) in South American sea lions (AN50017)</b> Martha Nelson   NIH/NLM/NCBI, US
<b>11:20 -11:40</b>	<b>Genetic characterisation and pseudotyping strategies applied to a novel candidate haemagglutinin subtype of influenza A viruses (AN50024)</b> Simon Scott   University of Kent, UK
<b>11:40 -12:00</b>	<b>Genomic epidemiology and surveillance of avian influenza viruses in the Southwest United States (AN50044)</b> Temitope Faleye   Arizona State University, US
<b>12:00 – 13:00</b>	<b>LUNCH</b>
<b>Session II</b>	<b>Field Research [Surveillance &amp; Disease Investigation]</b> <b>Chairs:</b> Erik Stemmy   NIH NIAID, US Luke Terry   The Ohio State University, US
<b>13:00-13:30</b>	<b>Longitudinal Detection of Diverse Influenza A virus in North Atlantic Grey Seals: a Look at How Marine Mammals May Serve as a Mammalian Reservoir</b> <b>Wendy Puryear   Tufts University, US</b>
<b>13:30-13:45</b>	<b>Tracking Equine Influenza Virus Occurrence in the United States from 2017-2023 Based Upon a Voluntary Biosurveillance Program (AN50003)</b> Duane Chappell   Merck Animal Health, US

13:45-14:00	<b>Antiviral susceptibility of swine-origin influenza A variant viruses isolated from humans in the United States, 2007-2023</b> (AN50007) Rongyuan Gao   Centers for Disease Control and Prevention, Georgia, US
14:00-14:15	<b>Genetic identification and replicative fitness of reassortant influenza A viruses recovered from individual pigs in farm conditions</b> (AN50010) Chong Li   University of Minnesota, US
14:15-14:30	<b>Surveillance of Influenza A Viruses in Danish Pigs: Uncovering a Diverse Range of Swine and Human-Origin Viruses, with Shifting Subtypes and Genotypes</b> (AN50029) Charlotte Hjulsgaard   Statens Serum Institut, Denmark
14:30-14:45	<b>Detection of multiple subtypes of influenza A virus at the individual pig level</b> (AN50016) Joaquin Alvarez-Norambuena   University of Minnesota, US
14:45-15:30	<b>BREAK ( plus solar eclipse viewing )</b>
15:30-15:45	<b>Evolution of 1990.4 lineage swine influenza A(H3N2) viruses since 2011 has led to antigenic drift among circulating strains</b> (AN50043) Han Di   Centers for Disease Control and Prevention, Georgia, US
15:45-16:00	<b>Nationwide Surveillance of Influenza D Virus Infection in China</b> (AN50051) Jieshi Yu   Agro-biological Gene Research Center, Guangdong Academy of Agricultural Sciences, China
16:00-16:15	<b>Phylogeography Highlights an Influenza Virus A Epizootic Spread in Swine and Multiple Species Barrier Crossing in France</b> (AN50052) Gautier Richard   ANSES Ploufragan Plouzane Niort Laboratory Swine Virology Immunology Unit, France
16:15-16:30	<b>Epidemiological Assessment of Influenza A Viruses in Exhibition Swine and Associated Human Health Risks: A Comprehensive Study from the Summer of 2023</b> (AN50061) Luke Terry   The Ohio State University, US
16:30-16:45	<b>Epidemiological surveillance of Equine Influenza in Argentina during 2019-2023</b> (AN50074) Maria Aldana Vissani   INTA, Buenos Aires
16:45-17:00	<b>Comfort break</b>
17:00 -19:00	<b>POSTER RECEPTION</b>
17:00 -18:00	<b>Live Webinar: Dogs, Pigs, Horses &amp; Influenza: What You Need to Know</b>

## Day 2 Tuesday 9 April

07:15 – 08:05	Breakfast
08:10-08:55	<b>Bats Reveal the True Power of Influenza A Virus Adaptability</b> Martin Schwemmler   University of Freiburg, Germany
<b>Session III</b>	<b>Virus Transmission and Control</b> Chairs: Vivien Dugan   Centers for Disease Control and Prevention, US Valerie Le Sage   University of Pittsburgh, US
09:00-09:30	<b>Control of highly pathogenic avian influenza through vaccination</b> Hualan Chen   Harbin Veterinary Research Institute (HVRI), China
09:30-09:45	<b>Transmission, size distribution, viral load and viability of influenza A virus-laden particles emitted from pigs over the course of infection</b> (AN50020) Lan Wang   University of Minnesota, US
09:45-10:00	<b>Assessing pandemic risk of swine influenza viruses</b> (AN50073) Valerie Le Sage   University of Pittsburgh, US
10:00-10:15	<b>Differential Cross-Protective Immunity is Elicited by Infection with Contemporary Influenza B Lineage Viruses</b> Caroline Page   University of Georgia, US
10:15-10:45	<b>BREAK</b>
10:45-11:00	<b>Assessment of monovalent alpha vectored, Alpha3 H1N2 virus vaccine against heterologous challenge for regional influenza vaccine development</b> (AN50041) Susan Detmer   University of Saskatchewan, Canada
11:00-11:15	<b>The roles of ANP32 proteins in viral replication and interspecies transmission of influenza virus</b> (AN50048) Xiaojun Wang   Harbin Veterinary Research Institute, CAAS, China
11:15-11:30	<b>Rapid development of pre-pandemic candidate vaccine viruses from digital sequence</b> (AN50054) Jaber Hossain   Centers for Disease Control and Prevention, Georgia, US

<p><b>Rapid Talks</b></p> <p><b>11:30-11:37</b></p> <p><b>11:37-11:44</b></p> <p><b>11:44-11:51</b></p> <p><b>11:51-11:58</b></p>	<p><b>Comparison of antibody titers between infected and vaccinated horse antisera against equine influenza virus by neutralization assay</b> (AN50006) Manabu Nemoto   Equine Research Institute, Japan Racing Association, Japan</p> <p><b>Hand hygiene practices and detection of influenza on hands contaminated with secretions of swine-origin</b> (AN50015) Joaquin Alvarez-Norambuena   University of Minnesota, US</p> <p><b>Evaluation of an electrostatic precipitator on mitigating airborne transmission of influenza A virus in pigs under experimental conditions</b> (AN50021) Lan Wang   University of Minnesota, US</p> <p><b>Recreating field conditions to assess trivalent killed virus vaccine against double challenge with heterologous Alpha3 H1N2 and pdmH1N1 strains</b> (AN50039) Susan Detmer   University of Saskatchewan, Canada</p>
<p><b>12:00-13:30</b></p>	<p><b>LUNCH</b></p>
<p><b>Session IV</b></p>	<p><b>Clinical and Experimental Virology</b> <b>Chairs:</b> Lauren Byrd-Leotis   NIH NIAID, US Hope Leverett   University of Nottingham, UK</p>
<p><b>13:30-14:00</b></p>	<p><b>H3Nx Emergence and Evolution in Companion Canines</b> <b>Brian R. Wasik</b>   Cornell University, US</p>
<p><b>14:00-14:15</b></p> <p><b>14:15-14:30</b></p> <p><b>14:30-14:45</b></p> <p><b>14:45-15:00</b></p>	<p><b>The porcine nasal mucosa is a potential site for the generation of new influenza A viruses</b> (AN50023) Charlotte Kristensen   University of Copenhagen, Denmark</p> <p><b>Susceptibility of camelids (alpacas) to experimental infection with influenza C and D virus</b> (AN50025) Helen Everett   APHA, Surrey, UK</p> <p><b>Identifying equine genes with anti-Influenza A activity</b> (AN50035) Verena Schultz   MRC-University of Glasgow Centre for Virus Research, UK</p> <p><b>New Generation Equine Influenza Bivalent VLP Vaccine: Vaccination and Challenge</b> (AN50036) Stephanie Reedy   University of Kentucky, US</p>

**15:00-15:30**

**BREAK**

**15:30-15:45**

**Bovine turbinate cells as an in vitro model for the study of influenza D virus** (AN50056)

Meshach Maina | University of Nottingham, UK

**15:45-16:00**

**Functional Roles of the Hemagglutinin-Esterase Fusion Glycoprotein in Replication Fitness, Tissue Tropism, and Transmission of Influenza D Virus** (AN50064)

Ahsan Naveed | University of Kentucky, US

**16:00-16:15**

**Antigenic characterization of the H15 influenza virus hemagglutinin** (AN50008)

Disha Bhavsar | Icahn School of Medicine at Mount Sinai, New York, US

**16:15-16:30**

**The generation of VHH antibodies to differentiate between Florida clades of equine influenza virus** (AN50013)

Hope Leverett | University of Nottingham, UK

**16:30-16:45**

**Investigation of influenza B virus replication potential in swine primary respiratory epithelial cells** (AN50057)

Shalini Soni | University of Kentucky, US

**18:00 →**

**Social evening at [Spindletop Hall](#)**

# DAY 3 Wednesday 10 April

07:15-08:05	Breakfast
08:10-08:55	<b>So Many Interfaces, So Little Time!</b> <b>Andrew Bowman</b>   Ohio State University, US
<b>Session V</b>	<b>Emerging Issues / New Developments</b> <b>Chairs:</b> Todd Davis   Centers for Disease Control and Prevention, US Gagandeep Singh   Icahn School of Medicine at Mount Sinai, US
09:00-09:30	<b>Zoonotic Potential of Avian-like Bat Influenza Viruses</b> <b>Ghazi Kayali</b>   Human Link   Dubai
09:30-09:45	<b>Bat influenza vectored NS1-truncated live vaccine protects pigs against heterologous virus challenge</b> (AN50004) Wenjun Ma   University of Missouri, Columbia, US
09:45-10:00	<b>Characterizing functionality of the surface glycoproteins of novel influenza B-like viruses</b> (AN50009) Gagandeep Singh   Icahn School of Medicine at Mount Sinai, New York, US
10:00-10:15	<b>Emergence of an extinct human influenza C virus lineage in U.S. bovine herds</b> (AN50063) Jiyeshi Yu   Agro-biological Gene Research Center, Guangdong Academy of Agricultural Sciences, China
10:15-10:45	<b>BREAK</b>
10:45-10:55	<b>Presentation: Centers of Excellence for Influenza Research and Response (CEIRR)</b> <b>John Baggett</b>   Gryphon Scientific, US

<b>Closing Keynote</b> <b>10:55-11:00</b>	<b>Chairs: Maria Zambon   UKHSA, UK</b> <b>Christine Oshansky   Biomedical Advanced Research and Development Authority (BARDA), US</b>
<b>11:00-11:45</b>	<b>The Future of Emerging (Influenza) Virus Detection: Novel Technology at High-Risk Interfaces</b> <b>Erik Karlsson   Institut Pasteur du Cambodge, Cambodia</b>
<b>11:45-12:00</b>	<b>End of Meeting _Closing remarks</b> <b>Feng Li   University of Kentucky, US</b>
<b>12:00 --&gt;</b>	<b>OPTIONAL EXCURSION – A ‘Day at the Races’ – Keeneland</b>