

Agenda

Friday, 3 September

07.00 – 18.00

Registration
Ground Floor Level

09.00 – 09.40

Opening Ceremony
Convention Hall A/B/C

Welcome from Congress and isirv Chairs

Malik Peiris, Department of Microbiology, The University of Hong Kong, Scientific Director, HKU Pasteur Research Centre, Hong Kong SAR, China
Yi Guan, Department of Microbiology, The University of Hong Kong; Director, State Key Laboratory of Emerging Infectious Diseases, Hong Kong SAR, China
John Watson, International Society of Influenza and other Respiratory Virus Diseases (isirv), Health Protection Agency Centre for Infections, London, United Kingdom

Welcome from Hong Kong Food and Health Bureau Representative

York Chow, Secretary, Food and Health Bureau, Hong Kong SAR, China

Reflecting on the Origins of the Options Conference Series

Kennedy Shortridge, The University of Hong Kong, Department of Microbiology, Hong Kong SAR, China

09.40 – 11.00

Morning Plenary Session 1: Surveillance and Epidemiology
Convention Hall A/B/C

Chairs:

John Watson, International Society of Influenza and other Respiratory Virus Diseases (isirv), Health Protection Agency Centre for Infections, London, United Kingdom
Neil Ferguson, Imperial College, London, MRC Centre for Outbreak Analysis and Modelling, London, United Kingdom

The Public Health Response to the Pandemic

Sylvie Briand, Global Influenza Programme, World Health Organization, Switzerland

Surveillance in a Pandemic: Situational Awareness and Assessing Severity

Daniel Jernigan, Centers for Disease Control and Prevention, Georgia, United States

Role of Animal Surveillance

Robert Webster, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, Tennessee, United States

11.00 – 11.30

Morning Break
Convention Foyer

11.30 – 13.00

Mid-Day Plenary Session 1: Immunology and Pathogenesis
Convention Hall A/B/C

Chairs:

Anne Kelso, World Health Organization Collaborating Centre for Reference and Research on Influenza, Victoria, Australia
Malik Peiris, Department of Microbiology, The University of Hong Kong, Scientific Director, HKU Pasteur Research Centre, Hong Kong SAR, China

Pathogenesis in Humans: Revisited

Sherif Zaki, Infectious Disease Pathology Branch, Coordinating Center for Infectious Diseases, Centers for Disease Control and Prevention, Georgia, United States

Viral Bacterial Synergies

Jon McCullers, Department of Infectious Diseases, St. Jude Children's Research Hospital, Tennessee, United States

Adaptive Immunity: Understanding Cross-reactive Responses

Lorena Brown, Department of Microbiology, University of Melbourne, Victoria, Australia

13.00 – 14.00**Lunch**

Convention Foyer

14.00 – 15.30**Concurrent Afternoon Workshops****Workshop 1A: Pathogenesis and Systems Biology**

Theatre 1

Chairs:

Daniel Perez, Department of Veterinary Medicine, University of Maryland, Maryland, United States

Hiroshi Kido, Institute for Enzyme Research, The University of Tokushima, Tokushima, Japan

Oral Presentations:

- O-878 **The Role of Innate Sensing Receptors in H5N1 Associated Hyper-induction of Cytokines**
Kenrie Hui, The University of Hong Kong, Hong Kong SAR, China
- O-879 **A Network of Proteins Regulating H5N1 Highly Pathogenic Avian Influenza (HPAI) Viral Polymerase Function in Human Cells**
Eric Bortz, Mount Sinai School of Medicine, New York, United States
- O-880 **Evidence for Avian and Human Host Cell Factors That Affect the Activity of Influenza Polymerase**
Wendy Barclay, Imperial College London, London, United Kingdom
- O-881 **Does Pandemic A/H1N1 Virus Have the Potential to Become More Pathogenic?**
Mariette Ducatez, St. Jude Children's Research Hospital, Tennessee, United States
- O-882 **Ocular Tropism of Influenza A Viruses: Identification of H7 Subtype-Specific Host Responses in Human Respiratory and Ocular Cells**
Jessica Belser, Centers for Disease Control and Prevention, Georgia, United States
- O-883 **The Transient Nature of the NS1 Effector Domain Dimer**
Phillip Kerry, University of St Andrews, Scotland, United Kingdom

Workshop 1B: Mathematical Models: Informing Public Health Decisions

Theatre 2

Chairs:

Neil Ferguson, MRC Centre for Outbreak Analysis and Modelling, Imperial College London, London, United Kingdom

Marc Lipsitch, Department of Epidemiology, Department of Immunology and Infectious Diseases, Harvard University, Massachusetts, United States

Oral Presentations:

- O-860 **Prospective Estimation of the Effective Reproduction Number of Pandemic Influenza in Hong Kong**
Max Lau, The University of Hong Kong, Hong Kong SAR, China
- O-861 **The Global Transmission and Control of Influenza Decisions**
Ira Longini, The University of Washington; Fred Hutchinson Cancer Research Center, Washington, United States

- O-862 **Transmission Characteristics of the 2009 H1N1 Influenza Pandemic: Comparison of 8 Southern Hemisphere Countries**
Lulla Opatowski, MRC Centre for Outbreak Analysis and Modelling, Imperial College London, London, United Kingdom
- O-863 **Association Between Influenza A Viral Shedding and Infectivity in Households**
Alex Cook, National University of Singapore, Singapore
- O-864 **A MCMC Method for Rapid Evaluation of Incidence Data from Sequential Serology**
Marc Baguelin, Health Protection Agency, London, United Kingdom
- O-865 **A Robust Computational Method for Constructing Influenza Antigenic Cartography**
Hui-Feng (Henry) Wan, Mississippi State University, Department of Basic Science, College of Veterinary Medicine, Mississippi, United States

Workshop 1C: Funding Options for Research and Public Health

Convention Hall C

Chairs:

Linda Lambert, Respiratory Diseases Branch, Division of Microbiology and Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Department of Health and Human Services, Maryland, United States
John Tam, World Health Organization, Geneva, Switzerland

WHO Public Health Research Agenda for Influenza: Development and Implementation

John Tam, World Health Organization, Geneva, Switzerland

Influenza Research Support from DHHS (NIH, BARDA and CDC): Opportunities, Mechanisms and Evaluation Process

Fred Cassels, Division of Microbiology and Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Maryland, United States
Ann Moen, Influenza Branch, Centers for Disease Control and Prevention, Georgia, United States
Robert Huebner, Influenza Division of Biomedical Advanced Research and Development Authority (BARDA) at US Department of Health and Human Services, Washington DC, United States

Influenza Research Support from The Wellcome Trust: Funding Mechanism and Evaluation Process

Tom Sutherland, The Wellcome Trust, London, United Kingdom

Influenza Research Support from PATH: Opportunities and Resources

Rick Bright, Influenza Vaccine Project in the Vaccine Development Global Program, PATH, Washington, DC, United States

Influenza Research Support from the European Commission: Funding Opportunities and Application Mechanism

Anna LönnRoth Sjödén, Unit for Infectious Diseases in the Health Directorate of the Directorate-General for Research, European Commission, Brussels, Belgium

15.30-16.00

Afternoon Break

Convention Foyer

16.00-17:30

Concurrent Evening Workshops

Workshop 2A: Virology and Viral Receptors

Theatre 1

Chairs:

Mikhail Matrosovitch, Institute of Virology, Philipps University, Marburg, Germany
Sylvie van der Werf, Unité de Génétique Moléculaire des Virus Respiratoires, Institut Pasteur, Paris, France

Oral Presentations:

- O-908 **Macrophage and Dendritic Cell Receptors for Influenza A Viruses**
Patrick Reading, The University of Melbourne, Victoria, Australia
- O-909 **Host Factors Interacting with NS1 of Influenza A Virus**
Wenjun Song, The University of Hong Kong, Hong Kong SAR, China
- O-910 **Characterisation of Amino Acid Mutations in the HA Protein that Potentially Contribute to Successful Human-to-Human Transmission and Enhanced Pathogenicity of Pandemic 2009 H1N1 Influenza**
Neeltje van Doremalen, Imperial College of London and Health Protection Agency, United Kingdom
- O-911 **Replication of Avian and Seasonal Influenza Viruses in Human Bronchus and Lung**
Renee WY Chan, The University of Hong Kong, Hong Kong SAR, China
- O-912 **Inhibition of the Ubiquitin-Proteasome System Affects Influenza A Virus Infection at a Post-fusion Step**
Ivy Widjaja, Virology Division, Department of Infectious Diseases & Immunology, Faculty of Veterinary Medicine, Utrecht University, Utrecht, Netherlands
- O-913 **Influenza Virion Morphologies Explained by Cellular Origin and Genetic Back: Implications for Vaccine Design and Pathogenesis Studies**
Bruno Lina, National Influenza Centers, Lyon, France; UCBL CNRS FRE3011

Workshop 2B: Epidemiology, Disease Burden & Health Economics

Theatre 2

Chairs:

Kathy Neuzil, Influenza Vaccine Project, Vaccine Development Global Program, PATH, Washington, United States
Abdulsalam Nasidi, EchiTab Study Group, Nigeria/UK and Reach Care Foundation (RCF), Nigeria, Africa

Oral Presentations:

- O-836 **Evidence of Homosubtypic but not Heterosubtypic Immunity in Children Following Wild-Type Influenza Illness**
Christopher Ambrose, MedImmune, Maryland, United States
- O-837 **A Tale of Two Fevers: Exploring the Interaction Between Malaria and Influenza in Western Kenya**
Kathleen Morales, Centres for Disease Control and Prevention-Kenya; Kenya Medical Research Institute, Kenya, Africa
- O-838 **Estimating Influenza-Associated Excess Mortality in the United States During the 2009 H1N1 Pandemic Using Forecasted Cause-Specific Mortality Data**
Benjamin Ridenhour, Centers for Disease Control and Prevention, Georgia, United States
- O-839 **Incidence of Influenza Associated Deaths in Bangladesh During 2008–2009**
Nusrat Homaira, International Centre for Diarrhoeal Disease Research, Bangladesh
- O-840 **Incidence Rate of Symptomatic 2009A/H1N1 and Seasonal Influenza Infection in a Rural Indian Community**
Shobha Broor, All India Institute of Medical Sciences, New Delhi, India
- O-841 **Host Genetic Variants Associated with Influenza-Associated Mortality Among Children and Young Adults: A Hypothesis-Generating Pilot Study**
Jill Ferdinands, Centers for Disease Control and Prevention, Georgia, United States

Workshop 2C: Antiviral Drugs and Resistance

Convention Hall C

Chairs:

Maria Zambon, Enteric Respiratory Virus Laboratory, Public Health Laboratory Services, London, United Kingdom
Norio Sugaya, Keiyu Hospital, Yokohama, Japan

Oral Presentations:

- O-818 **Global Monitoring of Antiviral Susceptibility of Pandemic Influenza A (H1N1) 2009 Virus**
Charles Penn, World Health Organization, Geneva, Switzerland
- O-819 **Clinical Efficacy of a Long-Acting Neuraminidase Inhibitor, laninamivir Octanoate (CS-8958), Against Oseltamivir-Resistant Seasonal H1N1 Influenza**
Norio Sugaya, Keiyu Hospital, Yokohama, Japan
- O-820 **Competitive Fitness of Oseltamivir-Sensitive and -Resistant Highly Pathogenic H5N1 Influenza Viruses in a Ferret Model**
Elena Govorkova, St. Jude Children's Hospital, Tennessee, United States
- O-821 **Comprehensive Assessment of the Drug Susceptibility of 2009 H1N1 Influenza Viruses**
Larisa Gubareva, Centers for Disease Control and Prevention, Georgia, United States
- O-822 **Prophylactic Influenza Protection with Low Dose Interferon Alpha: Clinical Trial**
Alayne Bennett, University of Western Australia, Perth, Australia
- O-823 **Unique Characteristics of Long-Acting Neuraminidase Inhibitor Laninamivir Octanoate (CS-8958) That Explains its Long-Lasting Activity**
Makoto Yamashita, Biological Research Laboratories, Daichi Sankyo Co. Ltd. Tokyo, Japan

17.30 – 19.30

Welcome Reception

Convention Foyer

Traditional Chinese activities will be held including a lion dance. The lion dance has a very long history in Chinese culture. Before the show, the lion is said to be “sleeping”, and needs to be awakened. The lion is “awakened” by brushing vermilion on its eyes and tongue. This is referred to as the eye-dotting ceremony, and it implies giving the lion life. The lion then dances by following the beat of the drum, gong, and cymbals.



07.00 – 18.00

Registration
Ground Floor Level

07.00 – 09.00

Baxter Aktiengesellschaft Satellite Symposium: Quality of Antibodies & Correlates of Protection – Essential Tools for Evaluating Seasonal and Pandemic Influenza Vaccines
Room: S-421

09.00 – 09.40

Cross-Cutting Keynote
Convention Hall A/B/C

Chair: Robert Webster, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, Tennessee, United States

One World – One Health – One Flu

Ilaria Capua, Virology Department, OIE/FAO Reference Laboratory for Newcastle Disease and Avian Influenza, Istituto Zooprofilattico Sperimentale Delle Venezie, Padova, Italy

09.40 – 11.00

Morning Session 2: Mitigating the Impact of Influenza
Convention Hall A/B/C

Chairs: Kennedy Shortridge, The University of Hong Kong, Department of Microbiology, Hong Kong SAR, China
Akhilesh Chandra Mishra, National Institute of Virology, Indian Council of Medical Research, Pune, India

Antivirals: Challenges and Future Directions

Fredrick Hayden, Department of Medicine and Pathology, Department of Medicine, University of Virginia Health System, Virginia, United States

Non-pharmaceutical Interventions

Gabriel Leung, Under Secretary for Food and Health, Food and Health Bureau, Government of Hong Kong SAR, Hong Kong SAR, China

Strategies for Controlling Animal Flu and its Implications for Human Health

Les Sims, Asia Pacific Veterinary Information Services, Queensland, Australia

11.00-11.30

Morning Break
Convention Foyer

11:30 – 13.00

Mid-Day Plenary Session 2: Virology
Convention Hall A/B/C

Chairs: Hans Deiter Klenk, Institute Fur Virologie, Phillips University, Marburg, Germany
Sir John Skehel, Former Director of the National Institute for Medical Research, London, United Kingdom

Molecular Determinants of Transmission and Virulence

Yoshiro Kawaoka, School of Veterinary Medicine, University of Wisconsin - Madison, Wisconsin, United States

Virus Receptors and Inter-species Transmission

Mikhail Matrosovich, Institute Fur Virologie, Phillips University, Marburg, Germany

Virus Evolution

Gavin Smith, Department of Microbiology, State Key Laboratory of Emerging Infectious Diseases, The University of Hong Kong, Hong Kong SAR, China; Laboratory of Virus Evolution, Program in Emerging Infectious Diseases, Duke-NUS Graduate Medical School, Singapore

13.00 – 14.00

Lunch

Convention Foyer

14.00 – 15.30

Concurrent Afternoon Workshops

Workshop 3A: Innate & Adaptive Immunity

Theatre 1

Chairs:

Anne Kelso, Professor, World Health Organization Collaborating Centre for Reference and Research on Influenza, Victoria, Australia
Stephan Ludwig, Institute of Molecular Virology (IMV), Centre for Molecular Biology of Inflammation (ZMBE), Muenster, Germany

Oral Presentations:

- O-854 **Analysis of H5N1 Specific T Cell Responses in a High Risk Cohort in Vietnam Indicates Possible Asymptomatic Infection**
Timothy Powell, MRC Human Immunology Unit, London, United Kingdom; University of Oxford, Oxford, United Kingdom
- O-855 **Back to 1918: Cross-Reactive CD8+ T-cell Immunity and the A(H1N1)-2009 Influenza Pandemic**
Sophie Valkenburg, The University of Melbourne, Victoria, Australia
- O-856 **Influenza H5N1 and Pandemic H1N1 Infection of Toll-like Receptor (TLR)3 Knock-out Mice Have Different Phenotypes**
Connie Leung, The University of Hong Kong, Hong Kong SAR, China
- O-857 **Cross-Reactive CD8 T Cells Enable Early Clearance of 2009 Pandemic Influenza Virus From the Lower Respiratory Tract in Nonhuman Primates**
Thomas Friedrich, The University of Wisconsin School of Veterinary Medicine, Wisconsin, United States
- O-858 **Immune Influenza A H1N1v-Specific Responses and T Lymphocyte Homeostasis During Severe Influenza Pneumonia in Intensive Care Unit**
Amélie Guihot, Laboratoire d'immunologie UMR-S 945, Hôpital Pitié-Salpêtrière, Paris, France
- O-859 **MAP Kinase-Activated Protein Kinases 2 and 3 Are Activated Upon Influenza A Virus Infection and Suppress Innate Immune Responses via Inhibition of PKR**
Stephan Ludwig, Institute of Molecular Virology (IMV), Centre for Molecular Biology of Inflammation (ZMBE), Muenster, Germany

Workshop 3B: Viral Surveillance and Global Influenza Surveillance Network

Theatre 2

Chairs:

Alan Hay, World Health Organization Collaborating Centre, London, United Kingdom
Wenqing Zhang, Global Influenza Programme, Department of Epidemic and Pandemic Alert and Response, World Health Organization, Geneva, Switzerland

Global Perspective on Influenza Virological Surveillance

Wenqing Zhang, Global Influenza Programme, Department of Epidemic and Pandemic Alert and Response, World Health Organization, Geneva, Switzerland

Oral Presentation:

- O-849 **Twenty-Six Years (1984 – 2009) of Influenza Surveillance in South Africa**
Johanna McAerney, National Institute for Communicable Diseases, South Africa

Update of Characteristics of Influenza Viruses Circulating in Humans

Takato Odagiri, National Institute of Infectious Diseases, Tokyo, Japan

Update of Characteristics of Influenza Viruses Circulating in Animals and Sporadically Infecting Humans

Ruben Donis, Molecular Genetics Branch, Centers for Disease Control and Prevention, Georgia, United States

Oral Presentation:

O-848 **Use of Electro-Spray Ionization Mass Spectrometry (RT-PCR/ESI-MS) for Characterization of Influenza A Viruses**
Varough Deyde, Influenza Division, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention, Georgia, United States

Perspective from Vaccine Development on Influenza Virological Surveillance
Klaus Stohr, Novartis Vaccines and Diagnostics, Massachusetts, United States; International Society of Influenza and other Respiratory Virus Diseases (isirv), London, United Kingdom

Panel Discussion
All workshop presenters

Workshop 3C: Policy and Regulatory Issues
Convention Hall C

Chairs:

David Wood, Quality, Safety and Standards Team of the Department of Immunization Vaccines and Biologicals, World Health Organization, Geneva, Switzerland
Zhiping Ye, Laboratory of Respiratory Viral Disease, Center for Biologics Evaluation and Research Food and Drug Administration, Maryland, United States

Policy and Regulatory Issues Introduction
Zhiping Ye, Laboratory of Respiratory Viral Disease, Center for Biologics Evaluation and Research Food and Drug Administration, Maryland, United States

From a National Government's Perspective
Yuelong Shu, National Institute for Viral Disease Control and Prevention, Chinese National Influenza Center, Chinese Centers for Disease Control, Beijing, People's Republic of China

From a Manufacturer's Perspective
Tony Colegate, International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), Geneva, Switzerland

From the World Health Organization's Perspective
David Wood, Quality, Safety and Standards Team of the Department of Immunization Vaccines and Biologicals, World Health Organization, Geneva, Switzerland

Discussion
David Wood, Quality, Safety and Standards Team of the Department of Immunization Vaccines and Biologicals, World Health Organization, Geneva, Switzerland
Zhiping Ye, Laboratory of Respiratory Viral Disease, Center for Biologics Evaluation and Research Food and Drug Administration, Maryland, United States

15.30 – 16.00

Afternoon Break
Convention Foyer

16.00-17:30

Concurrent Evening Workshops

Workshop 4A: Animal Influenza
Theatre 1

Chairs:

Giovanni Cattoli, Laboratory of Molecular Biology - Research and Development Department, Istituto Zooprofilattico Sperimentale delle Venezie, Padova, Italy
Kristien van Reeth, Laboratory of Virology, Department of Virology, Parasitology and Immunology, Ghent University, Merelbeke, Belgium

Oral Presentations:

- O-806 **Recent Genomic Evolution of Highly Pathogenic Avian Influenza (H5N1) Viruses in Vietnam Suggests Continued Emergence of H5N1 Genotypes and Possible Re-introduction of Novel Virus Strains**
Pierre Rivaller, Centers for Disease Control and Prevention, Georgia, United States
- O-807 **Ecology and Evolution of Swine H1-Subtype Influenza Viruses in Southern China**
Malik Peiris, Department of Microbiology & HKU-Pasteur Research Centre, The University of Hong Kong, Hong Kong SAR, China
- O-808 **The Evolutionary Dynamics of Human-Origin A/H1N1 and A/H1N2 Influenza Viruses in North American Swine, 2003 – 2010**
Yi Tan, Fogarty International Center, National Institutes of Health, Maryland, United States
- O-809 **H5N1 Avian Influenza Seroprevalence in North Vietnam Under a Mass Vaccination Context**
Marisa Peyre, French Agricultural Research Center for International Development (CIRAD), Montpellier, France
- O-810 **Influenza Virus Transmission Rates in Vaccinated and Non-vaccinated Pig Populations**
Marie Gramer, University of Minnesota, Minnesota, United States
- O-811 **OFFLU Technical Activity on Vaccination: Developing H5 Poultry Vaccines to Address Antigenic Drift of H5N1 High Pathogenicity Avian Influenza Viruses for Improved Field Protection of Poultry**
David Swayne, Southeast Poultry Research Laboratory, USDA/Agricultural Research Service, Georgia, United States

Workshop 4B: Diagnostics

Theatre 2

Chairs: Lance Jennings, Canterbury Health Laboratories and Pathology Department, University of Otago, Dunedin, New Zealand
Yuelong Shu, Chinese Centers for Disease Control and Prevention, Beijing, People's Republic of China

Oral Presentations:

- O-830 **Rapid Detection of Reassortment of Pandemic H1N1/2009 Influenza**
Polly Mak, State Key Laboratory for Emerging Infectious Diseases, Department of Microbiology and the Research Centre of Infection and Immunology, The University of Hong Kong, Hong Kong, China
- O-831 **Kinetics of Neutralizing Antibodies in Patients Naturally Infected by H5N1 Virus**
Philippe Buchy, Institute Pasteur in Cambodia, Phnom Penh, Cambodia
- O-832 **Sensitivity and Specificity of Serologic Assays for the Detection of Human Infection with 2009 Pandemic H1N1 (pH1N1) in US Populations**
Vic Veguilla, Centers for Disease Control and Prevention, Georgia, United States
- O-833 **Small Target Reassortant Screen (STARS): a Quick, Reliable and Sensitive Way to Monitor Influenza A for Reassortment**
John Barnes, Centers for Disease Control and Prevention, Georgia, United States
- O-834 **Direct Metagenomics Analysis of Clinical Specimens During the 2009 H1N1 Pandemic**
Patrick Tang, Centers for Disease Control and Prevention, Vancouver, British Columbia
- O-835 **Specific Recognition of Influenza A/H1N1/2009 Antibodies in Human Serum: A Simple Virus-Free ELISA Method**
Mario Alvarez, Tecnologico de Monterrey, Nuevo León, Mexico

Workshop 4C: Vaccines I

Convention Hall A/B/C

Chairs: Rick Bright, Influenza Vaccine Project in the Vaccine Development Global Program, PATH, Washington DC, United States
Guus Rimmelzwaan, Department of Virology, Medical Center, Rotterdam, The Netherlands

Oral Presentations:

- O-890 **Accelerated Influenza Specific T Cell Responses After Influenza Virus Challenge in Individuals Vaccinated with NP and M1 Containing MVA Vaccine**
Timothy Powell, MRC Human Immunology Unit, London, United Kingdom; University of Oxford, Oxford, United Kingdom
- O-891 **Molecular Signature of High Yield (Growth) Influenza A Virus Reassortants Prepared as Candidate Vaccine 'Seeds'**
Ramanunnair Manojkumar, New York Medical College, New York, United States
- O-894 **Cross-clade Protective Vaccine Developed from Reconstructed Ancestral H5N1 Influenza Viruses**
Mariette Ducatez, St. Jude Children's Research Hospital, Tennessee, United States
- O-895 **Immunogenicity and Cross-clade Protective Efficacy in Ferrets of Live-Attenuated and Inactivated Vaccines Prepared from an H5N1 Live-Attenuated Reassortant Vaccine Candidate**
Kortney Gustin, Centers for Disease Control and Prevention, Georgia, United States
- O-896 **Universal M2e-Based Influenza A Vaccine: Protection Against Pandemic 2009 H1N1v Challenge and an Essential Role for Rc Receptors**
Xavier Saelens, Ghent University-VIB, Ghent, Belgium
- O-901 **An Influenza Vaccine Based on the Conserved Hemagglutinin Stalk Domain**
John Steel, Mount Sinai School of Medicine, New York, United States

17.30 – 21.00

Poster Reception - Group I

Convention Foyer and Ballroom A

Posters from the following categories will be displayed:

- Pathogenesis and Systems Biology
- Innate and Adaptive Immunity
- Mathematical Models
- Virology and Viral Receptors
- Animal Influenza
- Epidemiology, Disease Burden, and Health Economics (Posters# P-250 — P-302)
- Diagnostics
- Antiviral Drugs and Resistance
- Vaccines (Posters# P-536 — P-613)

18.00 – 20.00

GlaxoSmithKline Biologicals Satellite Symposium: Real-Life Experience with the H1N1 2009 Pandemic: New Data on Vaccines and Antivirals

Room: S-421

- 07.00 – 13.00** **Registration**
Ground Floor Level
- 07.00 – 09.00** **sanofi pasteur Satellite Symposium: Innovative Approaches to Improve Influenza Vaccination: Towards Tailor-Made Vaccines**
Room: S-421
- 09.00 – 11.00** **Feature Cornerstone Session: Pandemic Response**
Confronting the First Pandemic of the 21st Century: Lessons Learned, What Worked and What Did Not
Convention Hall A/B/C
- Chairs:** Nancy Cox, Influenza Division, WHO Collaborating Center for Surveillance Epidemiology and Control of Influenza, National Center for Immunization and Respiratory Diseases, Coordination Center for Infectious Diseases, Centers for Disease Control and Prevention, Georgia, United States
Tawee Chotpitayasunondh, Ministry of Public Health, Queen Sirikit National Institute of Child Health, Bangkok, Thailand
- Chairperson's Overview**
Tawee Chotpitayasunondh, Ministry of Public Health, Queen Sirikit National Institute of Child Health, Bangkok, Thailand
- Surveillance During the Pandemic: Lessons Learned**
Andrew Hayward, Centre for Infectious Disease Epidemiology, University College London, London, United Kingdom
- Public Health Interventions: Lessons Learned**
Mark Loeb, Clinical Pathology Division, McMaster University, Ontario, Canada
- Controversies in Clinical Care: What Worked and What Did Not**
David Hui, The University of Hong Kong, Hong Kong SAR, China
- History of Influenza Pandemics: Lessons for the Future**
Nancy Cox, Influenza Division, World Health Organization Collaborating Center for Surveillance Epidemiology and Control of Influenza, National Center for Immunization and Respiratory Diseases, Coordination Center for Infectious Diseases, Centers for Disease Control and Prevention, Georgia, United States
- Panel Discussion**
All presenters
- 11.00 – 11.30** **Scholarship Awards Ceremony**
Convention Hall A/B/C
- 11.30 – 12.00** **isirv Annual General Meeting**
Convention Hall A/B/C
- 13.30 – 19.00** **Cultural Event**
Buses will depart from Hong Kong Convention and Exhibition Centre lower level. Please be at the buses no later than 13.15 to allow time for loading. Boxed lunches will be provided on the buses.
- The tour to Po Lin Monastery and Big Buddha will be arranged on cable car, offering a visually spectacular journey with views of the South China Sea and the rolling grassland slopes of North Lantau Country Park.



Monday, 6 September

- 07.00 – 18.00** **Registration**
Ground Floor Level
- 07.00 – 09.00** **F. Hoffman-LaRoche Satellite Symposium: Antivirals: Pandemic Experiences, Seasonal Implications**
Room: S-421
- 09.00 – 09.40** **Cross-Cutting Keynote**
Convention Hall A/B/C
- Chair:** Adolfo García-Sastre, Department of Microbiology, Department of Medicine, Division of Infectious Diseases, Emerging Pathogens Institute, Mount Sinai School of Medicine, New York, United States
- Systems Biology in Our Time: Vision or Mirage**
Michael Katze, Washington National Primate Research Center, University of Washington, Washington, United States
- 09.40 – 11.00** **Morning Plenary Session 3: Pandemics: Dealing with the Unexpected**
Convention Hall A/B/C
- Chairs:** Arnold Monto, School of Public Health, University of Michigan, Michigan, United States
Ethel Palacios Zavala, Emergency Preparedness for International Health Emergencies, Ministry of Health, Mexico City, Mexico
- Research in a Pandemic Context**
Sir John Skehel, Former Director of the National Institute for Medical Research, London, United Kingdom
- Mathematical Modeling: Help or Hindrance**
Angus Nicoll, Influenza Coordination, European Centre for Disease Prevention and Control, Stockholm, Sweden
- Responding to Pandemics: Scientific Theory and Political Reality**
Jim Bishop, Government Department of Health & Ageing, Canberra, Australia
- 11.00 – 11.30** **Morning Break**
Convention Foyer

11.30 – 13.00

Mid-Day Plenary Session 3: Influenza Transmission

Convention Hall A/B/C

Chairs:

Jacqueline Katz, Immunology and Pathogenesis Branch, Influenza Division, National Center for Immunization and Respiratory Disease, Centers for Disease Control, Georgia, United States
Robert Couch, Department of Microbiology and Immunology, Baylor College of Medicine, Texas, United States

Transmissibility in Animal Models

Terry Tumpey, Centers for Disease Control and Prevention, Georgia, United States

Transmission in Humans

Raymond Tellier, Provincial Laboratory for Public Health, The University of Calgary, Alberta, Canada

Inter-species Transmission and the Animal Human Interface

*David Swayne, World Organisation for Animal Health, Paris, France;
Agricultural Research Service, Department of Agriculture, Georgia, United States*

13.00 – 14.00

Lunch

Convention Foyer

14.00 – 15.30

Concurrent Afternoon Workshops

Workshop 5A: Vaccines II

Theatre 1

Chairs:

Ian Barr, World Health Organization, Collaborating Centre for Reference and Research on Influenza, Victoria, Australia
Rick Bright, Influenza Vaccine Project in the Vaccine Development Global Program, PATH, Washington DC, United States

Oral Presentations:

- O-892 **Age-Specific Effectiveness and Immunogenicity of an Oil-in-Water Adjuvanted Pandemic (H1N1) 2009 Vaccine in High Risk Groups in England**
Chee-Fu Yung, Health Protection Agency, London, United Kingdom
- O-893 **Active Population-based Surveillance Among 45 Million People in the United States for Guillain-Barré Syndrome Following Introduction of Influenza A (H1N1) 2009 Monovalent Vaccination, October 2009 – March 2010**
Matthew Wise, Centers for Disease Control and Prevention, Georgia, United States
- O-897 **What are the Potential Benefits of a Quadrivalent Influenza Vaccine in Adults? Immunogenicity and Safety Results from a Phase I/II Trial**
Jiri Berann, Vaccination and Travel Medicine Centre, Hradec Kralove, Czech Republic
- O-898 **Estimates of Pandemic Influenza Vaccine Effectiveness in Europe, 2009-10: Results of I-MOVE Multicentre Case-Control Study**
Alain Moren, Epiconcept, Paris, France
- O-899 **The Effectiveness of Seasonal Influenza Vaccine in Preventing Pandemic and Seasonal Influenza Infection: A Randomized Controlled Trial**
Benjamin Cowling, The University of Hong Kong, Hong Kong SAR, China
- O-900 **Relationships Between Reactogenicity and Age, Dose Number and Immunogenicity in 937 Children Receiving 2 Doses of AS03B-Adjuvanted Split Virion or Whole Virus H1N1 Influenza A 2009 Pandemic Vaccines**
Woolf Walker, The University of Southampton; The Wellcome Trust Clinical Research Facility, Southampton, United Kingdom

Workshop 5B: Novel Therapeutic Strategies

Theatre 2

Chairs: Stephan Ludwig, Institute of Molecular Virology (IMV), Centre for Molecular Biology of Inflammation (ZMBE), Muenster, Germany
Irina Leneva, Department of Virology, Centre of Drug Chemistry, Russian Chemical and Pharmaceutical Institute, Moscow, Russia

Oral Presentations:

- O-866 **The Role of Human Monoclonal Antibodies in the Fight Against Influenza: Importance of Dosing and Strain Coverage**
Jaap Goudsmit, Crucell B.V. Leiden, The Netherlands
- O-867 **Impact of Influenza Virus Infection-Associated NADPH Oxidase-1 Expression on Virus-Induced Inflammation**
Shivaprakash Gangappa, Centers for Disease Control and Prevention, Georgia, United States
- O-868 **Antiviral Activity of Selective COX-2 Inhibitor on H5N1 Infection**
Suki Lee, The University of Hong Kong, Hong Kong SAR, China
- O-869 **Targeting Influenza A Viruses With a Novel Small Molecule Inhibitor That Induces Interferon**
Mila Ortigoza, Mount Sinai School of Medicine, New York, United States
- O-870 **Prophylactic and Therapeutic Efficacy of Avian Antibodies Against Influenza Virus H5N1 and H1N1**
Huan Nguyen, International Vaccine Institute, Seoul, Korea
- O-871 **CYSTUS052, a Polyphenol Rich Plant Extract, Exerts Potent Antiviral Activity Against Influenza- and Rhinoviruses by Preventing Viral Attachment to Host Cells**
Stephan Ludwig, Institute of Molecular Virology (IMV), Centre for Molecular Biology of Inflammation (ZMBE), Muenster, Germany

Workshop 5C: Impact of the Pandemic in Our Global “Just in Time” Economy

Convention Hall C

Chair: Michael Osterholm, Center for Infectious Disease Research and Policy, University of Minnesota, Minnesota, United States

Speakers TBA

15.30 – 16.00 **Afternoon Break**
Convention Foyer

16.00 – 17.30 **Concurrent Evening Workshops**

Workshop 6A: Viral Genomics and Evolution

Theatre 1

Chairs: Yi Guan, Department of Microbiology, The University of Hong Kong; Director, State Key Laboratory of Emerging Infectious Diseases, Hong Kong SAR, China
Rubin Donis, Molecular Genetics Branch, Centers for Disease Control and Prevention, Georgia, United States

Oral Presentations:

- O-902 **Phylogeographic Analysis of Avian Influenza Virus Reveals its Spatial Ecology Among Wild Birds in North America**
Tommy Tsan-Yuk Lam, The Pennsylvania State University, Pennsylvania, United States

- O-903 **The Influenza Virus Resource at NCBI Facilitates Genetic Evolution Studies and Data Sharing of Influenza Viruses**
Yiming Bao, National Center for Biotechnology Information, National Institutes of Health, Maryland, United States
- O-904 **Full Genome Sequencing of Highly Pathogenic Avian Influenza H5N1 Viruses in Egypt Reveals Lack of Reassortment or Reintroduction of New Viruses into the Region**
Charles Davis, Centers for Disease Control and Prevention, Georgia, United States
- O-905 **Antigenic Evolution of Influenza A (H3N2) Virus is Dictated by 7 Residues in the Hemagglutinin Protein**
Björn Koel, Erasmus Medical Center, Rotterdam, The Netherlands
- O-906 **Evolutionary Dynamics of Pandemic Influenza A (H1N1) 2009 Viruses Isolated During the First and Second Wave of Infections in the United Kingdom**
Monica Galiano, Centre for Infections, Health Protection Agency, London, United Kingdom
- O-907 **Interspecies Transmission and Lineage Replacement of H6 Subtype Influenza Viruses in Southern China**
Kai Huang, The University of Hong Kong, Hong Kong SAR, China

Workshop 6B: Transmission and Infection Control
Theatre 2

Chairs: Jonathan van Tam, Division of Epidemiology and Public Health, University of Nottingham, Nottingham, United Kingdom
Seto Wing Hong, Department of Microbiology, The University of Hong Kong, Hong Kong SAR, China

Oral Presentations:

- O-884 **Influenza Transmission – A Challenging Subject**
Ben Killingley, The University of Nottingham, Nottingham, United Kingdom
- O-885 **Social Networks and H1N1 Pandemic Influenza Transmission Inferred from a Community Outbreak in Pennsylvania**
Simon Cauchemez, Imperial College of London, London, United Kingdom
- O-886 **Patterns of Viral Shedding in Pandemic and Seasonal Influenza Virus Infections in a Community Setting**
Lincoln Lau, The University of Hong Kong, Hong Kong SAR, China
- O-887 **Survival of Influenza Virus on Human Fingers**
Yves Thomas, Central Laboratory of Virology, Geneva, Switzerland
- O-888 **Analysis of Cost-Effectiveness of School Closure Strategies for H1N1 2009 Influenza**
Lorenzo Pellis, Imperial College of London, London, United Kingdom
- O-889 **Influenza, Respiratory Hygiene and Hand Washing Frequency—Results from the Flu Watch Study**
Andrew Hayward, University College London, Department of Infectious Disease Epidemiology, London, United Kingdom

Workshop 6C: Animal Models for Influenza
Convention Hall C

Chairs: Thijs Kuiken, Department of Virology, Erasmus Medical Center, Rotterdam, The Netherlands
Elena Gorokova, St. Jude Children's Research Center, Tennessee, United States

Oral Presentations:

- O-812 **Oseltamivir-Resistant Pandemic H1N1/2009 Influenza Virus Possesses Lower Transmissibility and Fitness in Ferrets**
Susu Duan, St. Jude Children's Research Hospital, Tennessee, United States
- O-813 **Influenza Virus Aerosol Inoculation of Ferrets: An Assessment of Deposition, Infectivity, and Disease Progression**
Taronna Maines, Centers for Disease Control and Prevention, Georgia, United States

- O-814 **Transmissibility of Pandemic H1N1 and Genetically Related Swine Influenza Viruses in Ferrets**
Hui-Ling Yen, The University of Hong Kong, Hong Kong SAR, China
- O-815 **Multiple Infections with Seasonal Influenza A Viruses Induces Cross-Protective Immunity Against A (H1N1) Pandemic Influenza Virus in a Ferret Model**
Ian Barr, World Health Organization, Collaborating Centre for Reference and Research on Influenza, Victoria, Australia
- O-816 **Influenza-Bacterial Synergism in Otitis Media**
Kirsty Short, University of Melbourne, Victoria, Australia
- O-817 **Pathogenesis of Seasonal, Pandemic, and Avian Influenza Virus Infections in Ferrets: Implications for Testing of Intervention Strategies**
Koert Stittelaar, ViroClinics Biosciences BV, Rotterdam, The Netherlands

17.30 – 21.00

Poster Reception - Group II

Convention Foyer and Ballroom A

Posters from the following categories will be displayed:

- Novel Therapeutic Strategies
- Viral Genomics and Evolution
- Transmission and Infection Control
- Animal Models for Influenza
- Animal Human Interface and Zoonotic Influenza
- Controversies in Clinical Care
- Pandemic Mitigation
- Epidemiology, Disease Burden and Health Economics (Posters# P-303 — P-356)
- Viral Surveillance and GISN
- Vaccines (Posters# P-614 — P-687)

18.00 – 20.00

Novartis Vaccines Satellite Symposium: The Importance of Adjuvant Technology in the Battle Against Influenza

Room: S-421

Tuesday, 7 September

07.00 – 18.00

Registration

Ground Floor Level

07.00 – 09.00

AstraZeneca Satellite Symposium: Influenza – Eternal and Renewed

Room: S-421

09.00 – 09.40

Cross-Cutting Keynote

Convention Hall A/B/C

Chair:

Alan Hampson, *Influenza and Other Respiratory Viruses*, Interflu Pty Ltd. Victoria, Australia

The Art of Communicating Science

Susan MacKay, Strategic Communications, RECOFTC – The Centre for People and Forests, Bangkok, Thailand

09.40 – 11.00

Morning Plenary Session 4: Vaccines for Pandemic and Seasonal Influenza

Convention Hall A/B/C

Chairs:

Masato Tashiro, Center for Influenza Virus Research, National Institute of Infectious Diseases, Tokyo, Japan

Ian Barr, World Health Organization, Collaborating Centre for Reference and Research on Influenza, Victoria, Australia

Vaccines for Pandemic H1N1 2009: Lessons Learned and Ensuring Global Access

David Wood, Quality, Safety and Standards Team, Department of Immunization, Vaccines and Biologicals, World Health Organization, Geneva, Switzerland

Assessing Antigenic Drift for Vaccine Development

Derek Smith, Department of Zoology, The University of Cambridge, Cambridge, United Kingdom

Improving Vaccines for Flu

Albert Osterhaus, Department of Virology, Erasmus Medical Center, Rotterdam, The Netherlands

11.00 – 11.30

Morning Break

Convention Foyer

11.30 – 13.00

Concurrent Mid-Day Workshops

Workshop 7A: Animal Human Interface and Zoonotic Influenza

Theatre 1

Chairs:

Greg Gray, College of Public Health and Health Professions, University of Florida, Florida, United States

Wantanee Kalpravidh, Emergency Centre for the Control of Transboundary Animal Diseases Unit (ECTAD), Food and Agriculture Organization of the United Nations, Bangkok, Thailand

Oral Presentations:

- O-800 **The Merit Release Birds: Buddhist Ritual and Implications in the H5N1 Virus Contamination Cycle**
Philippe Buchy, Institute Pasteur in Cambodia, Phnom Penh, Cambodia
- O-801 **Environmental Contamination During Influenza A (H5N1) Outbreaks in Cambodia**
Philippe Buchy, Institute Pasteur in Cambodia, Phnom Penh, Cambodia
- O-802 **Tropism and Innate Host Response of the 2009 Pandemic H1N1 Influenza Virus Compared with Related Swine Influenza Viruses and Reassortants in Ex Vivo and In Vitro Cultures of the Human Respiratory Tract and Conjunctiva**
Michael CW Chan, Department of Microbiology, The University of Hong Kong, Hong Kong SAR, China
- O-803 **Network Analysis of the Kenyan Poultry Trade, 2008**
Margaret McCarron, Centers for Disease Control and Prevention, Georgia, United States
- O-804 **Antibodies to Influenza A (H5N1) Virus in PCR Confirmed and High Risk Persons in Vietnam, 2004–2008**
Hang Nguyen, National Influenza Center, National Institute of Hygiene and Epidemiology, Hanoi, Vietnam
- O-805 **Characterization of Avian-to-Human Adaptation and Transmission Markers of HPAI A (H7N7) Viruses**
Marcel Jonges, National Institute for Public Health and the Environment, Centre for Infectious Disease Control, Bilthoven, The Netherlands

Workshop 7B: Controversies in Clinical Care

Theatre 2

Chairs:

David Hui, The University of Hong Kong, Hong Kong SAR, China

Frederick Hayden, Department of Medicine, University of Virginia Health System, Virginia, United States

- O-824 **Early Treatment with Neuraminidase Inhibitors and Hospitalized Children with Pandemic A (H1N1) Influenza Infection in Japan**
Norio Sugaya, Keiyu Hospital, Yokohama, Japan
- O-825 **Influenza-Associated Pneumonia in Hospitalized Patients with 2009 Pandemic Influenza A (H1N1) Virus Infection—United States, 2009**
Seema Jain, Centers for Disease Control and Prevention, Georgia, United States

- O-826 **2009 Pandemic Influenza A (H1N1)-Associated Encephalopathy Among Japanese Children**
Yoshiharu Nagaoka, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan
- O-827 **Clinical Findings, Viral Loads, Response to Therapy, and Resistance Monitoring in the First 126 Patients with Pandemic A(H1N1) 2009 Influenza in The Netherlands**
Adam Meijer, National Institute for Public Health and the Environment, Bilthoven, The Netherlands
- O-828 **Slow Viral Clearance and Hyperactivated Inflammatory Responses in Adults Hospitalized for Severe Pandemic 2009 Influenza A(H1N1) Virus Pneumonia**
Nelson Lee, Prince of Wales Hospital, The University of Hong Kong, Hong Kong SAR, China
- O-829 **Diagnosis of Bacterial Complications of Seasonal and Pandemic Influenza in Hospitalized Adults: Can Serum Procalcitonin (ProCT) Help?**
Ann Falsey, The University of Rochester School of Medicine, New York, United States

Workshop 7C: Pandemic Mitigation: What Worked and What Did Not

Convention Hall C

Chairs: Tim Uyeki, Epidemiology and Prevention Branch, Influenza Division, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC), Georgia, United States
Hitoshi Oshitani, Graduate School of Medicine, Tohoku University, Sendai, Japan

Oral Presentations:

- O-872 **Community Psychological and Behavioral Responses Through the First Wave of 2009 Pandemic (H1N1) in Hong Kong**
Benjamin Cowling, The University of Hong Kong, Hong Kong SAR, China
- O-873 **School Closures and the 2009 Pandemic Influenza A (H1N1) Virus in Two Cities in Argentina: Household Economic Impact, Responses, and Attitudes**
Ricardo Basurto-Davila, Centers for Disease Control and Prevention, Georgia, United States
- O-874 **Screening for Influenza at the Border—Is It Worthwhile?**
Lance Jennings, Canterbury Health Laboratories, Canterbury, New Zealand
- O-875 **Compliance with Home Quarantine and Antiviral Prophylaxis Recommendations Associated With School and Classroom Closures During the Early Phase of the Influenza A (H1N1) 2009 Outbreak in Melbourne, Australia**
Jodie McVernon, Murdoch Childrens Research Institute; Melbourne School of Population Health, Victoria, Australia
- O-876 **Effectiveness of Public Health Measures in Mitigating Pandemic Influenza Spread: A Prospective Serological Cohort Study**
Vernon Lee, Ministry of Defence, Singapore
- O-877 **Impact of a School District Closure for Pandemic Influenza A (H1N1) on Respiratory Infections in the Community**
Daphne Copeland, Centers for Disease Control and Prevention, Georgia, United States

13.00 – 14.00 **Lunch**
Convention Foyer

14.00 – 15.30 **Concurrent Afternoon Workshops**

Workshop 8A: Epidemiology, Disease Burden and Health Economics
Theatre 1

Chairs: Thomas Tsang, Centre for Health Protection, Department of Health, Hong Kong, SAR, China
Hongjie Yu, Chinese Center for Disease Control and Prevention, Beijing, People's Republic of China

Oral Presentations:

- O-847 **Clinical Features of Pandemic H1N1 2009 Influenza Viral Infections in Children Compared to Those of Seasonal Influenza Infections at the Denver Children's Hospital**
Eric Simoes, University of Colorado, Colorado, United States
- O-842 **Validating Statistical Models for Estimating Disease Burden of Influenza and Other Respiratory Viruses Using Virologically Confirmed Data**
Lin Yang, The University of Hong Kong, Hong Kong SAR, China
- O-843 **Pandemic Influenza in Africa, Lessons Learned from 1968: A Systematic Review of the Literature**
Kathryn Lafond, Centers for Disease Control and Prevention, Georgia, United States
- O-844 **Pandemic and Seasonal Influenza in a Cohort of Nicaraguan Children**
Aubree Gordon, University of California, Berkley, California, United States
- O-845 **Community Incidence of Pandemic Influenza in Vietnam and the Effect of Social Contact Patterns on the Probability of Infection: A Prospective Cohort Study**
Peter Horby, Oxford University Clinical Research Unit, Hanoi, Vietnam
- O-846 **Flu Watch - National Community Cohort Study of Influenza Infection in England - 2006-2010**
Andrew Hayward, University College London, Department of Infectious Disease Epidemiology, London, United Kingdom

Workshop 8B: Databases and Their Optimal Use

Theatre 2

Chairs:

Maria Giovanni, National Institute of Allergy and Infectious Disease, National Institutes of Health; Department of Health and Human Services, Maryland, United States
Karen Nelson, J. Craig Venter Institute, Rockville Campus, Maryland, United States

NCBI Influenza Viral Database

Yiming Bao, National Center for Biotechnology Information, National Library of Medicine, National Institutes of Health, Maryland, United States

Global Initiative on Sharing Avian Influenza Data (GSAID)

Naomi Komadina, World Health Organization Collaborating Centre for Reference and Research on Influenza, North Melbourne, Victoria, Australia; CDC, Australia

FluNet

Wenqing Zhang, Global Influenza Programme, Department of Epidemic and Pandemic Alert and Response, World Health Organization, Geneva, Switzerland

NIAID Influenza Research Database

Richard Scheuermann, National Institute of Allergy and Infectious Diseases (NIAID), Maryland, United States

Avian Influenza Databases

Ron Fouchier, Erasmus Medical Center, Rotterdam, The Netherlands

Users of Influenza Databases: A Discussion

Gavin Smith, Department of Microbiology, State Key Laboratory of Emerging Infectious Diseases, The University of Hong Kong, Kong Kong, SAR, China
Cecilia Viboud, Fogarty International Center, National Institutes of Health; Department of Health and Human Services, Maryland, United States
Elodie Ghedin, Center for Vaccine Research, Department of Computational and Systems Biology, The University of Pittsburgh, Pennsylvania, United States
Martha Nelson, National Institutes of Health, Geneva, Switzerland
Carol Cardona, Department of Veterinary and Biomedical Sciences, University of Minnesota, Minnesota, United States
Daniel Perez, Department of Veterinary Medicine, University of Maryland, Maryland, United States

Workshop 8C: Surveillance, Epidemiology and Virology

Convention Hall C

Chairs: Alan Hay, World Health Organization Collaborating Center, London, United Kingdom
Wenqing Zhang, Global Influenza Programme, Department of Epidemic and Pandemic Alert and Response, World Health Organization, Geneva, Switzerland

Oral Presentations:

- O-850 **Evolutionary Pathway of Influenza B Viruses in the Past Decade and Challenges for Vaccine Strain Selection**
Xiyun Xu, Influenza Division, Centers for Disease Control and Prevention, Georgia, United States
- O-851 **Genetic and Antiviral Drug Susceptibility Profiles of Pandemic A (H1N1)v Influenza Virus Circulating in Portugal**
Luis Santos, National Institute of Health, Lisbon, Portugal
- O-852 **A (H1N1) 2009 Pandemic in France: Epidemiological Features Based on Virological Surveillance**
Bruno Lina, National Influenza Centers, Lyon, France; UCBL CNRS FRE3011
- O-853 **Cell Lines Used in Influenza Vaccine Manufacturing Offer Significant Advantages for the Isolation and Selection of Viruses to Update Vaccine Antigen Composition**
Ruben Donis, Centers for Disease Control and Prevention, Georgia, United States
- O-1001 **Attenuation of Respiratory Immune Responses by Antiviral Neuraminidase Inhibitor Treatment and Boost of Mucosal Immunoglobulin A Response by Coadministration of Immunomodulator Clarithromycin in Pediatric Influenza**
Hiroshi Kido, Institute for Enzyme Research, The University of Tokushima, Tokushima, Japan
- O-1002 **Household and Community Transmission Parameters for Pandemic Influenza A/H1N1 2009 in Vietnam**
Pham Quang Thai, National Institute of Hygiene and Epidemiology, Hanoi, Vietnam

15.30 – 16.00 **Afternoon Break**
Convention Foyer

16.00 – 17.30 **Closing Plenary Symposium: New Horizons - The Way Forward**
Convention Hall A/B/C

Chairs: Ron Fouchier, Department of Virology, Erasmus Medical Center, Rotterdam, The Netherlands
Peter Palese, Mount Sinai School of Medicine, New York, United States

Basic Research on the Influenza Virus for the Next Decade

Adolfo García-Sastre, Department of Microbiology, Department of Medicine, Division of Infectious Diseases, Emerging Pathogens Institute, Mount Sinai School of Medicine, New York, United States

Pursuing New Avenues in Anti-Influenza Therapy

Stephan Ludwig, Institute of Molecular Virology (IMV), Centre for Molecular Biology of Inflammation (ZMBE), Muenster, Germany

The Public Health Vision

Michael Osterholm, Center for Infectious Disease Research and Policy, University of Minnesota, Minnesota, United States

Adjournment: **Closing Remarks**

Malik Peiris, Department of Microbiology & HKU-Pasteur Research Centre, The University of Hong Kong, Hong Kong SAR, China