# XVII International Symposium on Respiratory Viral Infections

March 6 – 8, 2015  
Pinnacle Vancouver Harbourfront Hotel  
Vancouver, British Columbia, Canada

## Final Program

### Chairs:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tr>
<td>W. Abdullah Brooks</td>
<td>Head Infectious Disease Unit, Centre for Vaccine Sciences (ICDDR, B), Johns Hopkins Bloomberg School of Public Health, Dhaka, Bangladesh and Baltimore, Maryland, United States</td>
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<tr>
<td>Arnold Monto</td>
<td>Thomas Francis Jr Professor of Epidemiology, University of Michigan, Ann Arbor, Michigan, United States</td>
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### Scientific Advisory Board:

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<tr>
<th>Name</th>
<th>Position</th>
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<tr>
<td>Rick Bright</td>
<td>Director of the Influenza Division, Biomedical Advanced Research and Development Authority (BARDA), Washington, District of Columbia, United States</td>
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<tr>
<td>Nancy Cox</td>
<td>Retired Director, Influenza Division, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia, United States</td>
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<tr>
<td>Menno de Jong</td>
<td>Professor of Clinical Virology, Head of the Department of Medical Microbiology, Academic Medical Center, University of Amsterdam, The Netherlands</td>
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<td>Janet Englund</td>
<td>Professor of Pediatric Infectious Diseases, University of Washington, Seattle, Washington, United States</td>
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<td>Sebastian Johnston</td>
<td>Professor of Respiratory Medicine &amp; Allergy, National Heart &amp; Lung Institute, Imperial College, London, United Kingdom</td>
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<tr>
<td>Yoshihiro Kawaoka</td>
<td>Professor of Virology, University of Tokyo, Tokyo, Japan; University of Wisconsin, Madison Wisconsin, United States</td>
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<tr>
<td>Paul Kellam</td>
<td>Virus Genomics Team Leader, Wellcome Trust Sanger Institute, Wellcome Trust Genome Campus, Hinxton, Cambridge, United Kingdom</td>
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<td>Kathy Neuzil</td>
<td>Program Leader, Vaccine Access and Delivery, Program for Appropriate Technology in Health (PATH), Seattle, Washington United States</td>
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<td>Albert Osterhaus</td>
<td>Professor of Virology, Erasmus MC, Rotterdam The Netherlands; Utrecht University, The Netherlands; and University of Hanover, Germany</td>
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<td>Malik Peiris</td>
<td>Professor of Virology, School of Public Health, The University of Hong Kong SAR, People's Republic of China</td>
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<td>Vadim Tsvetnitsky</td>
<td>Director, Vaccine Development, International Aids Vaccine Initiative (IAVI), New York, New York United States</td>
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Thursday, March 5, 2015

15.00 – 18.00  
*Symposium Registration Desk Opens - Pinnacle Harbourfront Ballroom Foyer, 2nd Floor*

Friday, March 6, 2015 - Day One

All Sessions in the Pinnacle Harbourfront Ballroom, 2nd Floor

07.30  
*Registration Desk Opens – Pinnacle Harbourfront Ballroom Foyer, 2nd Floor*

08.30 – 08.35  
**Welcome and Introduction to Keynote**

08.35 – 09.05  
**Keynote Address**  
Intervention Strategies for Respiratory Viral Disease: Past, Present and Future - Albert D.M.E. Osterhaus, Professor of Virology, Erasmus MC, Rotterdam, The Netherlands; Utrecht University, The Netherlands; and University of Hanover, Germany

Session I  
**Influenza** – Albert D.M.E. Osterhaus, Professor of Virology, Erasmus MC, Rotterdam, The Netherlands; Utrecht University, The Netherlands; and University of Hanover, Germany

09.05 – 10.05  
Burden of Disease in the Developing World  
09.05  
Prospects for Disease Control – Kathy Neuzil, Program Leader, Vaccine Access and Delivery, Program for Appropriate Technology in Health (PATH), Seattle, Washington, United States  
09.20  
Senegal – John C. Victor, Advisor for Clinical Trials & Epidemiologic Science, Program for Appropriate Technology in Health (PATH), Seattle, Washington, United States  
09.35  
Bangladesh – Kathy Sturm-Ramirez, CDC Senior Technical Lead for Influenza and Respiratory Diseases Center for Communicable Diseases, ICDDR,B International Centre for Diarrhoeal Disease Research, Bangladesh  
09.50  
Questions and Discussion

10.05 – 10.30  
Influenza – Where are we Now? – Albert D.M.E. Osterhaus, Professor of Virology, Erasmus MC, Rotterdam, The Netherlands; Utrecht University, The Netherlands; and University of Hanover, Germany

10.30 – 11.00  
**Coffee Break - Pinnacle Harbourfront Ballroom**

11.00 – 11.25  
Update on H7N9 – Malik Peiris, Professor of Virology, School of Public Health, The University of Hong Kong SAR, People’s Republic of China

11.25 – 11.50  
Does Oseltamivir Really Work – The Report from the MUGAS Study – Arnold Monto, Thomas Francis Jr Professor of Epidemiology, University of Michigan, Ann Arbor, Michigan, United States
11.50 – 12.10  **Oral Presentation**
Recovery of Influenza Virus and Rhinovirus RNA from Air Emitted by Patients with Laboratory-confirmed Infection – Samira Mubareka, University of Toronto, Toronto, Ontario, Canada

12.10 – 13.40  **Lunch Break - On Your Own**

13.40 – 14.00  **Oral Presentation**
MEDI8852: A Novel Monoclonal Antibody for Treatment of Severe Influenza A Infection – Nicole Kallewaard, MedImmune, LLC, Gaithersburg, Maryland, United States

14.00 – 14.20  **Oral Presentation**
Influenza A(H7N9) Viruses with Drug Resistance-Conferring Mutations: Effectiveness of Oseltamivir in A Ferret Model – Henju Marjuki, Influenza Division, Centers for Disease Control and Prevention, Atlanta, Georgia, United States

**Session II**
**Clinical Intervention – Menno de Jong, Professor of Clinical Virology, Head of the Department of Medical Microbiology, Academic Medical Center, University of Amsterdam, The Netherlands**

14.20 – 14.45  Overview of Needs and Targets for Treatment - Menno de Jong, Professor of Clinical Virology, Head of the Department of Medical Microbiology, Academic Medical Center, University of Amsterdam, The Netherlands

14.45 – 15.10  Observational Data on Hospitalized Flu – Jonathan Van Tam, Professor of Health Protection, Faculty of Medicine & Health Sciences, Health Protection Agency, London, United Kingdom

15.10 – 15.40  **Coffee Break - Pinnacle Harbourfront Ballroom**

15.40 – 16.05  Situation Update of MERS-Coronavirus – Chantal B.E.M. Reusken, Erasmus MC, Rotterdam, The Netherlands

16.05 – 16.30  Clinical Utility of Broadly Reacting Highly Neutralizing Antibodies against RSV and Influenza Virus – Tim Beaumont, Aimm Therapeutics, Amsterdam, The Netherlands

16.30 – 16.55  Favipiravir (T705) Development – Carol Epstein – Medivector Inc., Boston, Massachusetts, United States

16.55 – 17.20  Development of Anti-Influenza Polyclonal Fully-Human IgG Immunoglobulin from Transchromosomic Bovines – Thomas Luke, Naval Medical Research Center, Henry Jackson Foundation, Silver Spring, Maryland, United States

17.20 – 17.40  **Oral Presentation**
Effect of Oseltamivir Treatment on the Severity of Symptoms in Children with Influenza – Terho Heikkinen, University of Turku, Turku, Finland
17.40 – 18.00 Oral Presentation
Respiratory Failure and Virus Burden in Adults Hospitalized for Respiratory Syncytial Virus (RSV) Infections – Nelson Lee, The Chinese University of Hong Kong, Shatin, Hong Kong SAR, People's Republic of China

18.00 – 19.30 Welcome Reception – VISTAS, Pinnacle Vancouver Harbourfront Hotel, 19th Floor

Saturday March 7, 2015 – Day 2

All Sessions in the Pinnacle Harbourfront Ballroom, 2nd Floor

08.35 – 08.40 Introduction of Keynote Address – Arnold Monto, Thomas Francis Jr Professor of Epidemiology, University of Michigan, Ann Arbor, Michigan, United States

08.40 – 09.10 Keynote Address: Our Ebola Vaccine Candidate and My Visit to Sierra Leone Yoshihiro Kawaoka, Professor of Virology, University of Tokyo, Tokyo, Japan; University of Wisconsin, Madison Wisconsin, United States

Session II Clinical Intervention (continued)

09.10 – 09.30 Oral Presentation
Influenza Virus and Respiratory Syncytial Virus Infections in Immunocompetent and Immunocompromised Patients and Ferrets – Koert J. Stittelaar, Viroclinics Biosciences BV, Rotterdam, The Netherlands

09.30 – 09.50 Oral Presentation
Influenza Virus and RSV ViroSpot™ Assays for High-throughput Virology Testing – Carel A. van Baalen, Department Assay Development Services, Viroclinics Biosciences B.V., Rotterdam, The Netherlands

09.50 – 10.10 Oral Presentation
Nitazoxanide, an Investigational New Antiviral Drug for Treatment of Influenza Matthew Bardin, The Romark Institute for Medical Research, Tampa, Florida, United States

Session III Respiratory Viral Exacerbation of Airway Disease – Sebastian Johnston, Professor of Respiratory Medicine & Allergy, National Heart & Lung Institute, Imperial College, London, United Kingdom (accepted) and Ross P. Walton, National Heart & Lung Institute, Imperial College, London, United Kingdom (accepted)

10.10 – 10.35 Characterisation of Cellular Responses in the Airways during Rhinovirus Induced Asthma Exacerbations – Ross P. Walton, National Heart & Lung Institute, Imperial College, London, United Kingdom

10.35 – 11.05 Coffee Break - Pinnacle Harbourfront Ballroom
11.05 – 11.30  Wheezing Related Interventions – James Gern, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, United States

11.30 – 11.50  Oral Presentation – Young Investigator Award Recipient Sponsored by The Macrae Foundation
RSV Infection in Pregnancy and Postpartum – Helen Y. Chu, University of Washington, Seattle, Washington, United States

11.50 – 12.10  Oral Presentation
Preclinical Characterization of AL-036, a Potent Nucleoside Analog Polymerase Inhibitor for the Treatment of Rhinovirus-Triggered Exacerbations of Airway Disease – Andreas Jekle, Alios Biopharma, Inc., South San Francisco, California, United States

12.10 – 12.30  Boxed Lunch

12.30 – 12.55  Welcome, Introduction and Objectives – Rafik Bekkat-Berkani, Global Medical Affairs Leader Influenza, GSK

12.55 – 13.10  Burden of Disease: Influenza Evidence Updated – Bruce Innis, Head Clinical Research & Development Influenza, MMR, Varicella, GSK


13.25 – 13.40  Health Economic Value of Quadrivalent Inactivated Influenza Vaccines – Geneviève Meier, Director Health Economics, GSK

13.40 – 13.55  Evidence-based Recommendations for Seasonal Influenza Vaccination - Rafik Bekkat-Berkani, Global Medical Affairs Leader Influenza, GSK

13.55 – 14.15  Concluding Remarks, Quiz and Q&A - All

Satellite Symposium: Quadrivalent Influenza Vaccines: Closing the Gap
Sponsored by GlaxoSmithKline (GSK) With Boxed Lunch

14.30 – 14.50  Oral Presentation – Young Investigator Award Recipient Sponsored by The Macrae Foundation
Human Bocavirus-1 Primary Infection and Shedding in Infants – Emily T. Martin, University of Michigan School of Public Health, Ann Arbor, Michigan, United States

14.50 – 15.10  Oral Presentation – Young Investigator Award Recipient Sponsored by The Macrae Foundation
Viral Load as a Correlate for Symptom Severity in Hematopoietic Cell Transplant Recipients Infected with Human Rhinovirus – Alpana Waghmare, University of Washington/Seattle Children’s Hospital, Seattle, Washington, United States

15.10 – 15.40  Coffee Break - Pinnacle Harbourfront Ballroom
15.40 – 16.00 **Oral Presentation**  
(In)validating Experimentally-acquired Knowledge about Influenza A Defective Interfering Particles – Catherine A. A. Beauchemin, Ryerson University, Toronto, Ontario, Canada

16.00 – 16.20 **Oral Presentation**  
Rhinovirus Infection Induces Microvesicle Release from Cells – Gary R. McLean, Cellular and Molecular Immunology Research Centre, London Metropolitan University, London, United Kingdom

16.20 – 16.50 Poster Review - Albert D.M.E. Osterhaus, Professor of Virology, Erasmus MC, Rotterdam, The Netherlands; Utrecht University, The Netherlands; and University of Hanover, Germany

16.50 – 17.50 **Poster Session Wine/Cheese Reception – Pinnacle Harbourfront Ballroom**

**Sunday, March 8, 2015 – Day Three – DAYLIGHT SAVINGS TIME BEGINS**

*All Sessions in the Pinnacle Harbourfront Ballroom, 2nd Floor*

**Session V**  
Vaccination – Arnold Monto, Thomas Francis Jr Professor of Epidemiology, University of Michigan, and Ann Arbor, Michigan, United States and Janet Englund, Professor of Pediatric Infectious Diseases, University of Washington, Seattle, Washington, United States

09.00 – 09.25 Progress of Maternal Vaccination – Janet Englund, Professor of Pediatric Infectious Diseases, University of Washington, Seattle, Washington, United States

09.25 – 09.50 Universal Vaccines – Rick Bright, Director of the Influenza Division, Biomedical Advanced Research and Development Authority (BARDA), Washington, District of Columbia, United States

09.50 – 10.15 Priorities for Developing and Developed Countries – Abdullah Brooks, Head Infectious Disease Unit, Centre for Vaccine Sciences (ICDDR, B), Johns Hopkins Bloomberg School of Public Health, Dhaka, Bangladesh and Baltimore, Maryland, United States

10.15 – 10.45 **Coffee Break - Pinnacle Harbourfront Ballroom**

10.45 – 11.10 RSV Disease in Infants: Preventable by Vaccination? – James Nokes, KEMRI/Wellcome Trust, Kilifi, Kenya

11.10 – 11.35 Disease Burden in Neonates and Interventions – Allison August, Novavax, Inc., Gaithersburg, Maryland, United States
11.35 – 11.55  
**Oral Presentation**  
Immunogenicity and Viral Shedding of a Seasonal Trivalent Live Attenuated Influenza Virus Vaccine among Children in Bangladesh – Kristen Lewis, Program for Appropriate Technology in Health (PATH), Seattle, Washington, United States

11.55 – 12.15  
**Oral Presentation**  
Immunogenicity and Safety of MF59™-adjuvanted Inactivated Influenza Vaccine and Full-dose Unadjuvanted Inactivated Influenza Vaccine among Children aged 6 through 71 Months in Senegal - John C. Victor, Program for Appropriate Technology in Health (PATH), Seattle, Washington United States

12.15 - 14.15  
*Lunch Break - On Your Own*

14.15 – 14.35  
**Oral Presentation**  
A Phase I Study of MEDI7510, an Adjuvanted RSV Vaccine, in Subjects 60 Years of Age and Older – Judith Falloon, MedImmune, Gaithersburg, Maryland, United States

14.35 – 14.55  
**Oral Presentation**  
One or Two Doses of a Live Attenuated H7N9 Vaccine Followed by a Dose of an Inactivated H7N9 Vaccine are well Tolerated by Healthy Adults Aged 18-49 Years – Kawsar R. Talaat, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States

14.55 – 15.15  
**Oral Presentation**  
Effects of Influenza Immunological History on Responses to Influenza Vaccination – Tomer Hertz, Vaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle, Washington, United States and Department of Microbiology, Immunology and Genetics, Ben-Gurion University of the Negev, Beer-Sheva, Israel

15.15 – 15.35  
**Oral Presentation**  
Efficacy of a Single Dose of Trivalent LAIV in Prevention of Laboratory-confirmed Influenza Illness in Bangladeshi Children – Abdullah Brooks, Head Infectious Disease Unit, Centre for Vaccine Sciences (ICDDR, B), Johns Hopkins Bloomberg School of Public Health, Dhaka, Bangladesh and Baltimore, Maryland, United States

15.35 – 15.55  
**Oral Presentation**  
Efficacy and Safety of A/Leningrad/17 and B/USSR/60-based Trivalent Live Attenuated Influenza Vaccine among Children in Senegal: a Randomized Trial – John C. Victor, Program for Appropriate Technology in Health (PATH), Seattle, Washington United States

15.55 – 16.15  
**Oral Presentation**  
Cost-effectiveness of a Switch from Trivalent to Quadrivalent Influenza Vaccine in the United Kingdom: A Dynamic Transmission Model Analysis – Edward W. Thommes, Health Outcomes, GSK Vaccines, Mississauga, Ontario, Canada

16.15 – 16.30  
Meeting Conclusion