



1st International Meeting on Respiratory Pathogens (IMRP) 2015
2 – 4 September 15
Furama RiverFront, Singapore

Report

The inaugural International Meeting on Respiratory Pathogens (IMRP) was held at the Furama RiverFront, Singapore on 2 – 4 September 2015. The conference attracted over 360 participants from more than 45 countries worldwide. Over 200 abstracts were received, of which 40 were selected for oral presentation, and nearly 100 posters on various themes were presented. More than 50 internationally renowned speakers delivered plenary talks and presentations across the three-day programme.

The conference was chaired by Associate Professor Vernon Lee and opened by Guest-of-Honour, Associate Professor Benjamin Ong, Director of Medical Services from Ministry of Health, Singapore. Dr Sylvie Briand, the Director of Pandemic and Epidemic Diseases, World Health Organisation, gave the Keynote Address on “Global Health Responses to Emerging Threats and the BRAVE Initiative”.

A total of ten Parallel Sessions addressed research gaps relating to respiratory pathogens across a broad range of areas including epidemiology, immunology, diagnostics, vaccines, therapeutics and clinical management. A two-part Special Track was devoted to policy-makers to provide updates on respiratory diseases and to allow for better research-policy interactions. In addition, three Lunch Symposia focusing on Ebola, MERS-CoV and Influenza were held to explore disease-specific issues and strategies. Finally, the Expert Dialogue on Infection Control provided a platform to discuss infection control measures and guideline development, while the Bioinformatics Workshop showcased two bioinformatics tools.

Financial support was received from 10 companies and institutions, as well as the Singapore Tourism Board. Fondation Mérieux awarded travel grants to 3 researchers from low-resource countries, and the Institut Pasteur sponsored the Young Investigator Award for best oral presentation.

The IMRP is a new series of biennial ISIRV meetings on this topic, and the 2015 edition has successfully brought together an international audience of clinicians, public health professionals, scientists, and policy-makers to share recent advances on respiratory pathogens. It is hoped that the IMRP will become the premier global meeting on respiratory viruses, bacteria, and other pathogens.

Programme

Day 1 (Wednesday, 2 September 15)

08:00 AM	Registration (Foyer) & Poster Setup (Jupiter Room)	
09:00 AM	Welcome Address by IMRP Chairperson A/Prof Vernon Lee	
	Opening Remarks by ISIRV Chairperson A/Prof Lance Jennings	
	Opening Remarks by Guest-of-Honour A/Prof Benjamin Ong <i>Director of Medical Services, Ministry Of Health, Singapore</i>	
09:30 AM	Keynote Address “Global Health Responses to Emerging Threats and the BRAVE Initiative” Dr Sylvie Briand (<i>World Health Organization</i>)	
10:15 AM	Teabreak	
10:45 AM	Plenary I “Emerging Respiratory Viruses of Concern” Prof Malik Peiris (<i>University of Hong Kong</i>) (<i>Hong Kong</i>)	
11:15 AM	Plenary II “Emerging Issues among Respiratory Bacteria” Prof David Murdoch (<i>University of Otago</i>) (<i>New Zealand</i>)	
11:45 AM	Mercury Room	
	Lunch Session on Ebola Chairperson: A/Prof Teo Yik Ying (<i>CIDER</i>) (<i>Singapore</i>)	
	▪ “Advances in Ebola Virus Vaccines” Prof Frederick Hayden (<i>University of Virginia</i>) (<i>US</i>)	
	▪ “Host jump of emerging viruses: Flu, MERS-CoV and Ebola” A/Prof Yi Shi (<i>Chinese Academy of Sciences</i>) (<i>China</i>)	
	▪ “Clinical care of patients with Ebola Virus Disease” A/Prof Robert Fowler (<i>University of Toronto</i>) (<i>Canada</i>)	
	▪ “Clinical Management of Ebola Virus Disease Patients in the U.S. and Europe” A/Prof Timothy Uyeki (<i>US Centers for Disease Control and Prevention</i>) (<i>US</i>)	
	▪ “Ebola: Lessons for S.E. Asia” Prof Richard Coker (<i>London School of Hygiene and Tropical Medicine & National University of Singapore</i>) (<i>Singapore</i>)	
1:30 PM	Venus I/II	Venus III
	Parallel Session 1 “Burden and Epidemiology of Acute Respiratory Infections”	Parallel Session 2 “Immunology of Respiratory Pathogens (including Disease Pathogenesis and Host Dynamics)”
	Chairperson: Dr Nikki Shindo (<i>World Health Organization</i>) (<i>Switzerland</i>)	Chairperson: Prof Menno de Jong (<i>University of Amsterdam</i>) (<i>Netherlands</i>)
	▪ “Epidemiology of Influenza in a household cohort study” [Invited Speaker] Prof Ben Cowling (<i>University of Hong Kong</i>) (<i>Hong Kong</i>)	▪ “Protective immunity in the human airway against respiratory viral infections” [Invited Speaker] Dr Chris Chiu (<i>Imperial College London</i>) (<i>UK</i>)
	▪ “Community-Acquired Pneumonia and Etiologies in the Hospitalized Setting” [Invited Speaker] Dr Seema Jain (<i>US Centers for Disease Control and Prevention</i>) (<i>US</i>)	▪ “Immunology of influenza and pneumococcal disease” [Invited Speaker] Prof Lau Yu Lung (<i>University of Hong Kong</i>) (<i>Hong Kong</i>)
	▪ “Clinical Presentations and Risk Factors for Mortality of Severe Influenza Infections in a Tertiary Care Hospital, Singapore, 2011–2014” [ASN024] Hanley Ho (<i>Tan Tock Seng Hospital</i>) (<i>Singapore</i>)	▪ “Influenza Virus and Respiratory Syncytial Virus Infections in Immunocompetent and Immunocompromised Patients and Ferrets” [ASN178] Koert Stittelaar (<i>Viroclinics Biosciences</i>) (<i>Netherlands</i>)
	▪ “Clusters of human infections with avian influenza A(H7N9) in China, March 2013 – November 2014” [ASN121] Bo Liu (<i>Chinese Center for Disease Prevention and Control</i>) (<i>China</i>)	▪ “Cell Cycle Independent Role of Cyclin D3 in Host Restriction of Influenza Virus Infection” [ASN068] Ying Fan (<i>University of Hong Kong Pasteur Research Pole</i>) (<i>Hong Kong</i>)

	<ul style="list-style-type: none"> "Epidemiological Evaluation of Infants and Young Children with Laboratory-Confirmed Respiratory Syncytial Virus Infection in England, 2010-2014" [ASN045] Rachel Reeves (<i>Farr Institute of Health Informatics Research</i>) (UK) 	<ul style="list-style-type: none"> "Multi-strain Antibody Response following Acute Influenza A: Implications for Seroepidemiology" [ASN105] Stacy Todd (<i>Liverpool School of Tropical Medicine</i>) (UK)
		<ul style="list-style-type: none"> "Mycobacterium tuberculosis Acetyltransferase reduces the oxidative stress response through expression of peroxisomal membrane transporter protein" [ASN012] Geetanjali Ganguli (<i>KIIT University</i>) (India)
3:45 PM	Teabreak	
4:00 PM	Venus I/II	Venus III
	Parallel Session 3 "Advances in Respiratory Pathogen Vaccines"	Parallel Session 4 "Evolution and Molecular Epidemiology of Respiratory Infections"
	<i>Chairperson: Dr Jean-Michel Heraud</i> (<i>Institut Pasteur</i>) (<i>Madagascar</i>)	<i>Chairperson: A/Prof Gavin Smith</i> (<i>Duke-NUS Medical School</i>) (<i>Singapore</i>)
	<ul style="list-style-type: none"> "Clinical Assessment of Simian Adenovirus ChAdOx1 Expressing Conserved Influenza A Antigens in a Prime:Boost Regimen with MVA" [ASN010] Lynda Coughlan (<i>University of Oxford</i>) (UK) 	<ul style="list-style-type: none"> "Bioinformatics of respiratory pathogens: From sequence to structure to molecular mechanisms" [Invited Speaker] Dr Sebastian Maurer-Stroh (<i>A*STAR Bioinformatics Institute</i>) (<i>Singapore</i>)
	<ul style="list-style-type: none"> "Cellular immune responses after live attenuated influenza vaccination in children, a clinical trial" [ASN189] Kristin Greve-Isdahl Mohn (<i>University of Bergen</i>) (<i>Norway</i>) 	<ul style="list-style-type: none"> "Selective Bottlenecks Shape Evolutionary Pathways Taken During Mammalian Adaptation Of A 1918-Like Avian Influenza Virus" [ASN037] Louise Moncla (<i>University of Wisconsin-Madison</i>) (US)
	<ul style="list-style-type: none"> "Development of a Universal Live-Attenuated Influenza H1N1 Vaccine Strain" [ASN011] Ke Xu (<i>Institut Pasteur of Shanghai</i>) (<i>China</i>) 	<ul style="list-style-type: none"> "Predicting The Antigenic Evolution Of Pandemic H1N1 Influenza Virus In Humans Using Diversifying Selection Analysis" [ASN087] Alexandra Lee (<i>J. Craig Venter Institute</i>) (US)
	<ul style="list-style-type: none"> "Quantifying Protection Against Influenza Virus Infection Measured By Hemagglutination-inhibition Assays In Vaccine Trials" [ASN098] Xiahong Zhao (<i>Saw Swee Hock School of Public Health</i>) (<i>Singapore</i>) 	<ul style="list-style-type: none"> "Genetic Drift of Hemagglutinin (HA) of Influenza A(H3N2) Viruses Circulating in Cameroon Between 2010 and 2013" [ASN086] Richard Njouom (<i>Centre Pasteur of Cameroon</i>) (<i>Cameroon</i>)
	<ul style="list-style-type: none"> "Molecular Epidemiology and Clinical Characterization of Influenza B among Pediatric Acute Respiratory Infection in Central Vietnam during 2007-2013 seasons" [ASN199] Keisuke Yoshihara (<i>Nagasaki University</i>) (<i>Japan</i>) 	<ul style="list-style-type: none"> "First description of arenaviruses endemic to Southeast Asia with evidence of human respiratory disease" [ASN073] Philippe Buchy (<i>GlaxoSmithKline Vaccines Asia Pacific</i>) (<i>Singapore</i>)
6:00 PM	Jupiter Room	Venus III
	Poster Session I with Authors (Networking Drinks)	Expert Dialogue on Infection Control "Evidence-based Measures for Personal Protective Equipment and Hygiene for Healthcare Workers and the Public against Respiratory Infections" (<i>Limited Slots Available</i>)
		<i>Chairperson: Dr Hsu Li Yang</i> (<i>Mount Elizabeth Novena Hospital</i>) (<i>Singapore</i>)
		<ul style="list-style-type: none"> Dr Nikki Shindo (<i>World Health Organization</i>) (<i>Switzerland</i>)
		<ul style="list-style-type: none"> A/Prof Timothy Uyeki (<i>US Centers for Disease Control and Prevention</i>) (US)
		<ul style="list-style-type: none"> A/Prof Brenda Ang (<i>Tan Tock Seng Hospital</i>) (<i>Singapore</i>)
7:30 PM	Appreciation Dinner (<i>Invited Speakers Only</i>)	
9:00 PM	End of Day 1	

Day 2 (Thursday, 3 September 15)

08:00 AM	Registration (Foyer) & Poster Setup (Jupiter Room)	
08:30 AM	Venus I/II	
	Plenary III “A Vaccine Surrogate for the Prevention of RSV Disease” <i>Dr JoAnn A. Suzich (MedImmune) (US)</i>	
09:00 AM	Plenary IV “New Anti-viral Therapies for RVIs” <i>Prof Frederick Hayden (University of Virginia) (US)</i>	
09:30 AM	Teabreak	
09:45 AM	Venus I/II	Venus III
	Parallel Session 5 “AVG Session – Treatment Options for Respiratory Infections”	Parallel Session 6 “New Advances in Diagnostics”
	Co-Chairpersons: <i>Prof Nelson Lee & A/Prof Aeron Hurt</i>	Chairperson: <i>A/Prof Lance Jennings (Canterbury Health Laboratories & University of Otago) (New Zealand)</i>
	<ul style="list-style-type: none"> ▪ “Treatment options for influenza virus infections” [Invited Speaker] <i>Prof Nelson Lee (Chinese University of Hong Kong) (Hong Kong)</i> ▪ “Influenza antivirals - resistance and new compounds” [Invited Speaker] <i>A/Prof Aeron Hurt (Peter Doherty Institute for Infection and Immunity) (Australia)</i> ▪ “Safety And Pharmacokinetics In Healthy Volunteers Of The Anti-RSV Antiviral AK0529” [ASN062] <i>Stephen Toovey (Ark Biosciences) (Switzerland)</i> ▪ "Development of an Iminosugar-Based Therapeutic as a Broad Spectrum Antiviral" [ASN164] <i>Aruna Sampath (Unither Virology LLC) (US)</i> ▪ “Therapeutic Antibodies Against Influenza A and Influenza B” [ASN204] <i>Man-Wah Tan (Genentech Inc) (US)</i> ▪ "Effectiveness of a Patient-Based Health Education Intervention in Reducing Antibiotic Use For Acute Upper Respiratory Tract Infections in the Private Sector Primary Care Setting in Singapore" [ASN048] <i>Magdalene Lee (Yong Loo Lin School of Medicine) (Singapore)</i> 	<ul style="list-style-type: none"> ▪ “GABRIEL study: case-control pneumonia multicenter pilot study” [Invited Speaker] <i>Dr Glauçia Paranhos Bacçalà (Fondation Merieux) (France)</i> ▪ “Aetiology of childhood pneumonia: experience from the PERCH study” [Invited Speaker] <i>Prof David Murdoch (University of Otago) (New Zealand)</i> ▪ “Influenza Virus RNA In Aerosols In Patient Rooms” [ASN111] <i>Nancy Hiu Lan Leung (The University of Hong Kong) (Hong Kong)</i> ▪ “Influenza Virus And RSV ViroSpot™ Assays For Direct Monitoring Of Phenotypic Resistance And Virus Neutralization” [ASN131] <i>Carel Van Baalen (Viroclinics Biosciences) (Netherlands)</i> ▪ “New Antiviral Inhibitors to Influenza Neuraminidase Revealed by Mass Spectrometry” [ASN208] <i>Kevin Downard (University of New South Wales) (Australia)</i>
11:45 AM	Mercury Room	
	Lunch Session on MERS-CoV Chairperson: <i>A/Prof Vernon Lee (National University of Singapore) (Singapore)</i>	
	<ul style="list-style-type: none"> ▪ “MERS: history and options for intervention” <i>Prof Ab Osterhaus (University of Veterinary Medicine Hannover, Foundation) (Germany)</i> ▪ “Epidemiology and Transmission of MERS” <i>Dr Maria Van Kerkhove (Institut Pasteur) (France)</i> ▪ “Unravelling the key drivers of MERS-CoV transmission” <i>A/Prof Simon Cauchemez (Institut Pasteur) (France)</i> ▪ "MERS CoV Outbreak in South Korea" <i>A/Prof Yeon-Sook Kim (Chungnam National University Hospital) (S. Korea)</i> ▪ "Results of povidone-iodine against Ebola, MERS, SARS and Influenza confirms new model virus, MVA virus, in EN14476 testing standard" <i>A/Prof Maren Eggers (Laboratory Enders & Partners Stuttgart) (Germany)</i> 	

1:45 PM	Venus I/II	Venus III
	Parallel Session 7	Parallel Session 8
	“Surveillance Systems and Public Health Prevention Strategies”	“AVG Session – Clinical Management of SARI / ALRIs including Critical Care”
	Chairperson: Dr Daniel Jernigan (<i>US Centers for Disease Control and Prevention</i>) (US)	Chairperson: Prof Lau Yu Lung (<i>University of Hong Kong</i>) (Hong Kong)
	<ul style="list-style-type: none"> ▪ “Surveillance and Vaccination Strategies of Respiratory Infectious Diseases in China: Success and Challenges” [Invited Speaker] Dr Luzhao Feng (<i>Chinese Center for Disease Control and Prevention</i>) (China) ▪ "Human, Environmental and Animal Surveillance of Influenza A(H5N1) Virus in Cambodian Live Poultry Markets" [ASN138] Srey Viseth Horm (<i>Institute Pasteur de Cambodia</i>) (Cambodia) ▪ "Human And Non-human Influenza Surveillance In Uganda From 2008 To 2014 - A One Health Approach" [ASN038] Derrick Mimbe (<i>Makerere University Walter Reed Project</i>) (Uganda) ▪ “Clinical Severity of Human Infections of Avian Influenza A(H7N9) Across Three Epidemics in Mainland China” [ASN220] Peng Wu (<i>University of Hong Kong</i>) (Hong Kong) ▪ “Haemophilus haemolyticus: differentiation from NTHi and role in the respiratory tract” [ASN225] Janessa Pickering (<i>University of Western Australia</i>) (Australia) 	<ul style="list-style-type: none"> ▪ “Clinical Management of SARI Immunomodulatory Therapies” [Invited Speaker] Prof David Hui (<i>Chinese University of Hong Kong</i>) (Hong Kong) ▪ “Advances in Critical Care in Severe Acute Respiratory Infections” [Invited Speaker] A/Prof William A. Fischer (<i>University of North Carolina Chapel Hill</i>) (US) ▪ "Enterovirus D68, cause of severe respiratory disease in children and association with acute flaccid paralysis cases, Norway 2014" [ASN059] Karoline Bragstad (<i>Norwegian Institute of Public Health</i>) (Norway) ▪ "Enterovirus D68 and Other Enterovirus Genotypes Identified in South African Patients Hospitalized with Severe Acute Respiratory Illness, 2009-2011" [ASN057] Orienka Hellferscee (<i>National Institute for Communicable Diseases</i>) (South Africa) ▪ "A novel nontoxic antiviral compound for late treatment of RSV and other respiratory infections" [ASN182] Andrej Egorov (<i>HSC Development</i>) (Russia)
	3:30 PM	Teabreak
3:45 PM	Venus I/II	
	Plenary V	
	“The science and practice of public health preparedness against directly transmissible respiratory pathogens”	
	Prof Gabriel Leung (<i>University of Hong Kong</i>) (Hong Kong)	
4:15 PM	ISIRV Annual General Meeting	
5:00 PM	Jupiter Room	Mercury Room
	Poster Session II with Authors (Networking Drinks)	Bioinformatics Workshop
		<ul style="list-style-type: none"> ▪ Live Demo on Virus Pathogen Resource and Influenza Research Database (<i>J. Craig Venter Institute</i>) (US) ▪ Live Demo on FluSurver in Global Initiative for Sharing All Influenza Data (GISAID) (<i>A*STAR Bioinformatics Institute</i>) (Singapore)
7:00 PM	End of Day 2	

Day 3 (Friday, 4 September 15)

08:30 AM	Venus I/II	
	Plenary VI “The World's Response to Ebola” <i>Dame Barbara Stocking (Murray Edwards College, Cambridge) (UK)</i>	
09:00 AM	Plenary VII “Disease modelling to inform outbreak control” <i>Prof Neil Ferguson (Imperial College London) (UK)</i>	
09:30 AM	Teabreak	
10:00 AM	Venus I/II	Venus III
	Special Track	Parallel Session 9
	“Updates on Respiratory Diseases for Policy Makers – Part 1”	“Modelling the Spread of Respiratory Pathogens”
	Chairperson: <i>Prof Peter Horby (University of Oxford) (UK)</i>	Chairperson: <i>A/Prof Simon Cauchemez (Institut Pasteur) (France)</i>
	<ul style="list-style-type: none"> ▪ “International collaborative networks for the study of emerging respiratory infections” <i>Prof Peter Horby (University of Oxford) (UK)</i> 	<ul style="list-style-type: none"> ▪ “Use of a Multi-Strain SIR Model May Allow Advance Forecasting of Seasonal Influenza Epidemics” [ASN014] <i>Mike Jackson (Group Health Cooperative) (US)</i>
	<ul style="list-style-type: none"> ▪ “Vaccine Preventable Respiratory Diseases” <i>Prof Leo Yee Sin (Tan Tock Seng Hospital) (Singapore)</i> 	<ul style="list-style-type: none"> ▪ "Using Simple Mathematical Models to Understand the Within-Host Dynamics of Influenza A Virus Infection: From Theory to Clinical Implications" [ASN106] <i>Christoforos Hadjichrysanthou (Imperial College London) (UK)</i>
	<ul style="list-style-type: none"> ▪ “Respiratory diseases surveillance and preparedness in Indonesia” <i>Prof Tjandra Yoga Aditama (Indonesian Ministry of Health) (Indonesia)</i> 	<ul style="list-style-type: none"> ▪ "Global Contact Matrices For The Socio-Demographic Spread Of Infectious Diseases" [ASN154] <i>Kiesha Prem (Saw Swee Hock School of Public Health) (Singapore)</i>
	<ul style="list-style-type: none"> ▪ “Tackling TB, Influenza and MERS in Singapore” <i>A/Prof Jeffrey Cutter (Singapore Ministry of Health) (Singapore)</i> 	<ul style="list-style-type: none"> ▪ "Assessing School Closure in Urban Singapore Using the GeoDEMOS Individual Based Modelling Platform" [ASN146] <i>Joel Koo (Saw Swee Hock School of Public Health) (Singapore)</i>
<ul style="list-style-type: none"> ▪ “Impact and cost-effectiveness of interventions” <i>A/Prof Vernon Lee (National University of Singapore) (Singapore)</i> 	<ul style="list-style-type: none"> ▪ "Individual and population trajectories of influenza antibody titers over multiple seasons in tropical Singapore" [ASN151] <i>Alex Cook (National University of Singapore) (Singapore)</i> 	
		<ul style="list-style-type: none"> ▪ "The Introduction Of The Childhood Influenza Immunisation Programme In The UK – Implications For The Future Structure Of The Programme: Are All Components Necessary?" [ASN134] <i>Marc Baguelin (Public Health England) (UK)</i>
12:00 NN	Mercury Room	
	Lunch Session on Vaccines Against Influenza Chairperson: <i>A/Prof Gavin Smith (Duke-NUS Medical School) (Singapore)</i>	
	<ul style="list-style-type: none"> ▪ "Seasonality of Influenza in Tropical and Subtropical Asia: Implications for Vaccination Timing" <i>Dr Siddhartha Saha (US Centers for Disease Control and Prevention, India Office) (India)</i> 	
	<ul style="list-style-type: none"> ▪ "Influenza B Virus Epidemiology and Burden in Asia Pacific: The Role of Quadrivalent Vaccines" <i>Prof Ben Cowling (University of Hong Kong) (Hong Kong)</i> 	
	<ul style="list-style-type: none"> ▪ "Seasonal influenza vaccine policy and implementation in Asia Pacific Countries: challenges and way forward" <i>Prof John Tam (Hong Kong Polytechnic University) (Hong Kong)</i> 	
1:45 PM	Venus I/II	Venus III
	Special Track	Parallel Session 10
	“Updates on Respiratory Diseases for Policy Makers – Part 2”	“Respiratory Pathogen Co-infections (Viral-bacterial and Viral-viral Interactions)”
	Chairperson: <i>Prof Peter Horby (University of Oxford) (UK)</i>	Co-Chairpersons: <i>Dr Jon McCullers & Prof Dennis Metzger</i>

	<ul style="list-style-type: none"> “Enterovirus D68 in 2014 – what happened in Europe” [Invited Speaker] Dr Pasi Penttinen (<i>European Centre for Disease Prevention and Control</i>) (Sweden) 	<ul style="list-style-type: none"> “Glycosylation of the influenza virus HA mediates severity of secondary bacterial pneumonia” [Invited Speaker] Dr Jon McCullers (<i>University of Tennessee Health Science Center & Le Bonheur Children’s Hospital</i>) (US)
	<ul style="list-style-type: none"> “Antimicrobial Resistance: Impact on Respiratory Tract Infections” Dr Hsu Li Yang (<i>Mount Elizabeth Novena Hospital</i>) (Singapore) 	<ul style="list-style-type: none"> “Synergy Between Influenza Virus and Pneumococcus” [Invited Speaker] Prof Dennis Metzger (<i>Albany Medical College</i>) (US)
	<ul style="list-style-type: none"> “One Health Preparedness and Interventions for Pandemic Influenza” Dr Ruben Donis (<i>US Centers for Disease Control and Prevention</i>) (US) 	<ul style="list-style-type: none"> "The Impact Of HIV On The Burden And Severity Of Influenza Illness In Malawian Adults: The BASH-FLU Study" [ASN133] Antonia Ho (<i>Malawi-Liverpool-Wellcome Trust Clinical Research Programme</i>) (Malawi)
	<ul style="list-style-type: none"> “Bat-borne Zoonotic Respiratory Pathogens: How Much Do We Know?” Prof Wang Linfa (<i>Duke-NUS Medical School</i>) (Singapore) 	<ul style="list-style-type: none"> "Household Transmission Of Influenza Virus From HIV-infected And HIV-uninfected Index Cases, South Africa, 2013-2014" [ASN166] Akhona Tshangela (<i>National Institute for Communicable Diseases</i>) (South Africa)
	<ul style="list-style-type: none"> “Public Health Emergencies: Security & Ethics” Dr Voo Teck Chuan (<i>National University of Singapore</i>) (Singapore) 	<ul style="list-style-type: none"> “Irregular Seasonality of Influenza-like Illness in a Tropical Urban Setting” [ASN212] Maciej Boni (<i>Oxford University Clinical Research Unit</i>) (Viet Nam)
3:45 PM	Teabreak	
4:00 PM	Venus I/II Plenary VIII “How do we detect and respond to the next emerging respiratory infection?” Prof David Heymann (<i>Public Health England</i>) (UK)	
4:30 PM	Awards Presentation & Closing Remarks	
4:45 PM	End of Day 3	

Collated Feedback Responses

1. CONFERENCE ORGANISATION

The IMRP 2015 as a whole:	Yes	No	Comments
Do you think this conference was beneficial?	67	0	
Were the topics relevant to you?	65	2	<ul style="list-style-type: none"> • Would have liked more on RSV • Anti-viral resistance, math modeling, flu analyses • A specific session on pathogenesis and/or basic biology would've been good
Were the venue and food satisfactory?	64	3	<ul style="list-style-type: none"> • A little small but good enough • Indoor temperature too low • Can be improved • Very satisfactory • Very good • Venue ok, more food in breaks please • Yes: Food, No: Venue • Food was very nice, especially lunches • Food was good but more continental dishes should be available especially for vegetarians • Need arrangement of some more vegetarian food • Food was generally tasteless and bland. Bento lunches would probably be easier to manage for lunch sessions • Layout of lunch sessions not conducive. Not easy to go from level 3 to level 5. Too many people, limited lifts • Should set aside time to eat and interact; followed by symposium • A bit more free networking time at lunch would have been good • Nice setting to have lunch with meetings
Do you think the Conference was well-organized?	64	3	<ul style="list-style-type: none"> • Too many speakers in lunchtime sessions • Too many talks over lunch • But, the agenda was too full • Lecture over lunch is bad idea • Lunch timing wasn't well planned • Schedule had too frequent time overruns • Would have liked sessions less compact time. Meetings general also did only one session • Probably consider a better venue to reflect a vibrant Singapore for our fellow international delegates • For a 1st meeting - yes but onsite... • Terrific • Very well done
Overall, were you satisfied with the conference?	66	1	<ul style="list-style-type: none"> • Absolutely • Too area centric, could be more international

2. SCIENTIFIC CONTENT

I found this session useful and would like to have a similar session in the next IMRP.

Session Title		Agree	Strongly Agree	Disagree	Strongly Disagree	Did Not Attend
Parallel Session	(1) Burden & Epidemiology of Acute Respiratory Infections	32	17	0	0	10
	(2) Immunology of Respiratory Pathogens (including Disease Pathogenesis & Host Dynamics)	27	17	0	0	12
	(3) Advances In Respiratory Pathogen Vaccines	31	19	0	0	15
	(4) Evolution & Molecular Epidemiology of Respiratory Infections	26	22	0	0	14
	(5) Treatment Options for Respiratory Infections	32	15	0	0	15
	(6) New Advances in Diagnostics	28	14	2	0	13
	(7) Surveillance System & Public Health Prevention Strategies	31	22	0	0	7
	(8) Clinical Management of SARI / ALRIs including Critical Care	27	8	2	0	17
	(9) Modelling the Spread of Respiratory Pathogens	32	15	0	0	11
	(10) Respiratory Pathogen Co-infections (Viral-bacterial & Viral-viral Interactions)	32	17	0	0	9
Policy Track	Updates on Respiratory Diseases for Policy Makers – Part 1	24	8	1	0	22
	Updates on Respiratory Diseases for Policy Makers – Part 2	21	7	2	0	21
Lunch Session	Lunch Session on Ebola	30	19	6	0	1
	Lunch Session on MERS-CoV	34	26	2	0	0
	Lunch Session on Vaccines Against Influenza	38	13	2	0	2
Other	Expert Dialogue on Infection Control	16	9	0	0	37
	Bioinformatics Workshop	14	6	1	0	32

3. SPEAKERS AND PRESENTATIONS

	Yes	No	Comments
The presentations were very interesting and informative.	64	2	<ul style="list-style-type: none"> • Variable quality • The talks within each session were very mixed
The Speakers were very professional and well-prepared for their presentations.	63	0	<ul style="list-style-type: none"> • Some presentations required expert knowledge (i.e. some medical talks) and could have given a more extensive introduction • Generally yes, some are not • Many speakers went overtime
The Speakers were clear and engaged with the audience.	64	2	<ul style="list-style-type: none"> • The clarity of many presentations could be improved • Generally yes, some are not
There was adequate time for the audience to ask questions.	55	10	<ul style="list-style-type: none"> • Some sessions were delayed
The Chairpersons chaired the sessions well.	61	4	<ul style="list-style-type: none"> • Most sessions went overtime? • Should have been more focus on discussions and provoking the audience to engage in discussion • Speakers went well over sometimes and Chairperson should've been better at keeping session time • Many sessions went over time • Chair should ask presenter questions and audience by name
Overall, the topics and presentations met my expectations.	64	3	

4. SPEAKERS' EVALUATION

Kindly complete this section for speakers you would like to see at our next IMRP Meeting.

Name of Speaker	Topic for the Conference	Reason(s) for Recommendation
Dr J.A Suzich	A vaccine for the prevention of RSV diseases	Good presenter
D.B. Stocking	The world's response to Ebola	
A/Prof Rob Fowler	Clinical Management of Ebola	Excellent speaker; Very interesting and well-spoken
Dr Maria Van Kerkhove	Epidemiology & transmission of MERS	Very good presentation - very interesting
Dr Jean-Michel Heraud	Advances in respiratory pathogen vaccine	Would learn about the recent advancement
Aruna Sampath	Imino-sugar based vaccine	Research interests me
Prof Malik Peiris	Emerging Respiratory Viruses of Concern	Informative and well-prepared
Prof David Murdoch	PERCH Study	Hopefully more updated results from PERCH
Dr Seema Jain	EPIC Study	Interested to see some VE results
A/Prof Simon Cauchemez	MERS	Data analysis interesting
Prof Tjandra Yoga Aditama	Surveillance in Indonesia	
Prof Yee Sin Leo	Vaccine preventable diseases	
Prof Gabriel Leung	Science practices	Very inspiring presentation
Prof Neil Ferguson	Disease modelling	

Dr Eric Harvill	Microbiota effects on disease host	Need to understand upper respiratory tract microbiota on disease risk as that is the place where respiratory pathogens first encounter before infecting hosts
Dr Jon McCullers	Co-infections	Interesting
Dr Bart Haagmans	MERS-COV	He performed highly relevant work on MERS-COV, such as the identification of the receptor and the animal reservoir. Also he made significant advances in MERS vaccine design
Prof Linfa Wang	BAT Virology	Excellence in his field; one of the few experts on BAT virology and immunology
Dr Chris Mok	Avian Influenza	Description of the first H5N6 case in humans and is super fun
Prof Ab Osterhaus	Emerging Viruses	Excellent researcher and speaker
Prof Frederick G. Hayden	Antiviral	
A/Prof Kim Yeon Sook	MERS-COV in Korea	Would be interesting to see the outcomes after investigation have concluded
Dr William Fischer	Intensive Care Management of SARI	

5. INTERESTS AND COMMENTS

Please indicate the topics you would like us to include in future conferences and any other suggestions for improvement.

- Essential virology for non-virologists. Aim: To provide policy makers, medical doctors, students with some basic need-to-knows, and the recent advances in the virology of influenza – RSV – other respiratory pathogens. Focus on aspects that may impact decisions. Keep “light” popular, scientifically sound information. Explain links between basic knowledge on viruses and subjects that doctors and policy makers are faced with
- Include a session on virology, pathogenesis. Do not schedule vaccines and evolution sessions at the same time. Many delegates would like to attend both – evolution affects vaccine efficiency!
- Some talks about diseases in animals (i.e. ducks, chickens) which are carriers of disease and which themselves are subject to research (i.e. chickenology)
- Meeting was dominated with influenza virus. Other pathogens especially bacterial should be discussed more
- Very little discussion was about diagnostics. More discussion should be beneficial especially clinical diagnosis and respiratory pathogens
- Human-animal interface. Basic biology. Pathogenesis/virus-host interactions (separate from immunology). Bioinformatics
- Would be interesting if next conference including research on respiratory microbiota
- Adenovirus epidemiology
- More about RSV
- One health – E.g. Duology
- Co-infections, emerging novel flu viruses
- Infectious disease modelling in surveillance
- TB, influenza pandemic risk assessment, communication, vaccine acceptance, anti-microbial resistance
- For me the conference would have been more fruitful and help develop more connection if more TB researchers were invited
- At least one full parallel session dedicated to TB immunology, vaccination and other ways of intervention
- Antiviral against influenza and other area in clinical development
- More of clinical side of the disease and less molecular (in the clinics and hospitals)
- Would like to include more sessions on immunology and molecular studies on respiratory viruses
- I would request you to include antibiotic resistance group in next conference, because it is an alarming situation of having emerging resistance, especially co-relates with epigenetics and whatever the possible way. Need to organise a well epidemiological team which can overcome the threatening situations like Ebola and all. It should be on ground level rather than limited to only Hollywood movie
- It was frustrating that there was a last minute change to the oral presentation time – only 1 week notice. I

didn't receive this email because I was travelling. Please notify earlier. Session did not stay to schedule so it was hard to switch session because you may miss talks you wanted to see. Maybe at the beginning of session inform speakers of timing/look at time cards. Some volunteers were a bit rude when directing/answering questions

- Poster session poorly attended because of parallel sessions. Should not have competing session
- The agenda was nice, but too full. It was hard to give attention during the lunch session to the speakers
- Maybe limit lunch session talks to 3
- Don't have presentations all the way through lunch – we need a break!
- More free time at lunch to network/eat, etc.
- Too packed. Lunch sessions max. 1 – 2 speakers
- Should just have two talks per lunch session so that there is more time to see posters
- Thank you for the wonderful conference, it would be useful to have the conference go for longer days giving delegates a chance to take lunch breaks from the talks
- I thought the topics were really interesting and the conference was well-run. I would not have a lunch session but possibly have another day of talks. That way, lunch can be shortened and it also gives people an opportunity to network and to talk about the talks over lunch
- Distinguish between advances in diagnostic methods/assays, and advances in use of diagnostic results
- Bioinformatics Workshop only attended 1/2 because it was unclear that general meeting was occupied
- In my opinion, it is not necessary to conduct such conferences at hotel. There are a number of cheaper, excellent public conference facilities available, such as here in Singapore, the Academia. This would reduce conference costs and participant fees. Conference breaks are important tools for networking. The breaks in this conference were too few and short to start with, which cut further into break time. It is unclear why the exhibit and posters were already removed on the third day. Many speakers really need to a greater effort to deliver clearer and more structured presentations
- Can you offer the slides (or ppt) of all speakers to our delegates on the web? Even on charge. Because the information of speakers were valuable for some participants to write their report for joining this conference. Like ASM annual meeting (US), they also offer their service for their participants, if they pay the fee
- Well done! I look forward to the next meeting! Congratulations!
- Good job! Well done!
- Very good line-up of plenary speakers
- I really enjoyed presentations with animal surveillance (Srey Viseth Horm, Cambodia; Derrick Mimbe; Uganda) there should be more presentations like these
- I also really enjoyed the surveillance portion (Day 2 afternoon) and found these presentations interesting. Srey Viseth Horm – “Human, environmental and animal surveillance of influenza H5N1”. Derrick Mimbe – Human and non-human influenza surveillance in Uganda
- Very well organised inaugural conference, preferably if a better conference venue can be chosen for such international conference to showcase the positive side of Singapore. Congrats on this successful meeting!

Photo Album









