



**5<sup>th</sup> isirv-AVG Conference**  
**Prevention and Treatment of RVIs: Antivirals, Traditional Therapies and Host-Directed Interventions**

**14-16 June 2017**  
**Regal Shanghai East Asia Hotel, Shanghai, China**

**Programme**

<b>Wednesday 14 June</b>	
<b>08:00-08:20</b>	<b>Opening &amp; Welcome</b> HongZhou Lu, Fudan University & SPHCC, Shanghai, China (Chair Organising Committee) and Alan Hay, Francis Crick Institute, London, UK (Chair isirv-AVG)
<b>08:20-09:00</b>	<b>Session 1</b> <b>Chairs:</b> HongZhou Lu, Fudan University & SPHCC, Shanghai, China (Chair Organising Committee) and Alan Hay, Francis Crick Institute, London, UK (Chair isirv-AVG)  <b>Keynote Lecture</b> <b>Zoonotic Respiratory Viral Threats at the Animal-Human Interface</b> <i>Malik Peiris, University of Hong Kong, Hong Kong SAR, China</i>
<b>09:00-10:40</b>	<b>Session 2: Symposium on Novel Coronaviruses</b> <b>Chairs:</b> Malik Peiris, University of Hong Kong, Hong Kong SAR, China and Chen Wang, China-Japan Friendship Hospital, Beijing, China  Insights from Pre-clinical Models of MERS and SARS <i>Ralph Baric, University of North Carolina, Chapel Hill, North Carolina, USA</i>  Clinical Features and the Virologic Course of MERS <i>Myoung-don Oh, Seoul National University, Seoul, Korea</i>  Recovery from Middle East Respiratory Syndrome is associated with both Antibody and T cell responses <i>Jincun Zhao, State Key Lab of Respiratory Disease, Guangzhou, China</i>  Advances in Developing Vaccines and Therapeutics against MERS-CoV <i>Shibo Jiang, Fudan University, Shanghai, China</i>
<b>10:40 -10:55</b>	<b>Celebration of Designation of the SPHCC as a WHO Collaborating Centre</b>
<b>10:55 -11:25</b>	<b>Refreshments</b>
<b>11:25 -13:00</b>	<b>Session 3: Oral Abstract Session 1- Emerging Threats</b> <b>Chairs:</b> HongZhou Lu, Fudan University & SPHCC, Shanghai, China and Menno de Jong, University of Amsterdam, Amsterdam, Holland  <b>Introductory talk-</b> Lessons from Nosocomial Outbreaks of MERS <i>Sang Won Park, Seoul National University College of Medicine, Seoul, Korea</i>  Human Adenovirus Type 80: A Novel Adenovirus Causing ARDS and Disseminated Infection with Fatal Outcome <i>Barbara Rath, Vienna Vaccine Safety Initiative, Berlin, Germany</i>

	<p>Epidemiological and Clinical Characteristics of Enterovirus D68 (EV-D68) Infection Among Children Aged Less Than Five Years in the Philippines <i>Mariko Saito-Obata, Tohoku University Graduate School of Medicine, Sendai, Japan</i></p> <p>Detection of Influenza A(H1N1)pdm09 Viruses Exhibiting Enhanced Cross-Resistance to Oseltamivir and Peramivir in Japan <i>Emi Takashita, National Institute of Infectious Diseases, Tokyo, Japan</i></p> <p>Clinical and Virological Outcomes Upon Emergence of Oseltamivir-Resistant Influenza A Viruses in Treated Individuals: The IRIS Study <i>Rueshandra Roosenhoff, Erasmus MC, Rotterdam, Netherlands</i></p> <p>Update and Consolidation of WHO Standard Guideline for the Clinical Management of Severe Influenza Infections <i>Paula Lister, Great Ormond Street Hospital, London, UK</i></p>
<p><b>13:00 -14:00</b></p>	<p><b>Lunchtime Seminar: An Introduction to Influenza Treatment with Traditional Chinese Medicine - Sponsored by Anhui Jiren Pharmaceutical Co., LTD</b> <b>Chair: HongZhou Lu, Fudan University &amp; SPHCC, Shanghai, China</b></p> <p>Basic Research Status of Prevention and Treatment of Virus Infectious Diseases by Traditional Chinese Medicine (TCM) <i>Cui Xiao-lan, Institute of Chinese Materia Medica, China Academy of Chinese Medical Sciences, Beijing, China</i></p> <p>Study on the Effective Substance, Mechanism, Compatibility and Rationale of Shufeng Jiedu Capsule (SJC) <i>Zhang Tiejun, Tianjin Institute of Pharmaceutical Research, State Key Laboratory of Drug Delivery Technology and Pharmacokinetics &amp; Tianjin Engineering Laboratory of Quality Control Technology of Traditional Chinese Medicine, Tianjin, China</i></p> <p>Therapeutic Mechanism Studies of SFJDC in Acute Lung Injury Using Quantitative Proteomics Technology <i>Catherine CL Wong, National Center for Protein Science, Shanghai, China</i></p>
<p><b>14:00 -15:35</b></p>	<p><b>Session 4: Symposium on Avian A(H7N9) influenza</b> <b>Chairs: Yuelong Shu, China CDC, Beijing, China and David Hui, Chinese University of Hong Kong, Hong Kong SAR, China</b></p> <p>Infection Prevention and Control for Patients with Avian Influenza A (H7N9) Virus Infection <i>Yinzhong Shen, Shanghai Fudan University, China</i></p> <p>Epidemiology of Human Infections with A(H7N9) Virus and Control Measures in mainland China <i>Lei Zhou, China CDC, Beijing, China</i></p> <p>Virological Update <i>Yuelong Shu, China CDC, Beijing, China</i></p> <p>Antiviral Treatment and Resistance <i>Yunwen Hu, Shanghai Fudan University, China</i></p>
<p><b>15:35-16:00</b></p>	<p><b>Refreshments</b></p>
<p><b>16:00-18:05</b></p>	<p><b>Session 5: Oral Abstract Session 2- RVI Diagnosis and Treatment</b> <b>Chairs: Yi-Wei Tang, Memorial Sloan Kettering, New York, USA and Karoline Bragstad, NIC, Oslo, Norway</b></p> <p><b>Introductory Talk-</b> Advances in RVI Molecular Diagnostics <i>Yi-Wei Tang, Memorial Sloan Kettering, New York, USA</i></p> <p>Routine Molecular Point-of-Care Testing for Respiratory Viruses in Adults Presenting to Hospital with Acute Respiratory Illness: Results of a Large, Pragmatic, Randomised Controlled Trial <i>Tristan Clark, University of Southampton, Southampton, UK</i></p>

	<p>A Simple Tool-CLAP to Assess the Severity of Influenza A (H7N9) Viral Pneumonia <i>Yeming Wang, Xuan Wu Hospital Capital Medical University, Beijing, China</i></p> <p>Investigation of Antibody Dynamics in the Randomized Study with Japanese Pediatric Patients with Influenza A Virus Infection After Treatment of Four Neuraminidase Inhibitors (Part 2) <i>Nobuo Hirotsu, Hirotsu Clinic, Kawasaki, Japan</i></p> <p>A Randomized Controlled Trial on Adjunctive Macrolide Treatment in Adults Hospitalized with Influenza <i>Nelson Lee, The Chinese University of Hong Kong, Hong Kong SAR, China</i></p> <p>Broad Spectrum In Vitro and In Vivo Activity of RO-7, a Novel Inhibitor of the Influenza Virus PA Endonuclease <i>Jeremy Jones, St. Jude Children's Research Hospital, Memphis, TN, USA</i></p> <p>The Topaz Trial: A Phase 2B Study of Pimodivir (JNJ-63623872 or JNJ-872; formerly VX-787) as Monotherapy or in Combination With Oseltamivir in the Treatment of Acute Uncomplicated Seasonal Influenza <i>Lorant Leopold, Janssen, Titusville, New Jersey, USA</i></p> <p>IRC003: A Randomized Study of Combination Antivirals for the Treatment of Influenza <i>John Beigel, NIAID, Bethesda, MD, USA</i></p>
18:30-21:00	<b>Conference Networking Dinner - Sponsored by Anhui Jiren Pharmaceutical Co., LTD</b>

<b>Thursday 15 June</b>	
08:00-08:40	<p><b>Session 6:</b> <b>Chairs:</b> Bin Cao, China-Japan Friendship Hospital, Beijing, China and Yinzhong Shen Shanghai Fudan University, China</p> <p><b>Keynote Lecture</b> <b>Burden of Influenza and Other Respiratory Viruses in China</b> <i>Hongjie Yu, Chinese Centre for Disease Control, Beijing, China</i></p>
08:40-10:00	<p><b>Session 7: Oral Abstract Session 3 - RVI Impact and CAP</b> <b>Chairs:</b> Bin Cao, China-Japan Friendship Hospital, Beijing, China and Myoung-don Oh, Seoul National University, Seoul, Korea</p> <p><b>Introductory Talk:</b> Chinese guidelines for CAP 2016 <i>Jieming Qu, Shanghai Ruijin Hospital, Shanghai, China</i></p> <p>Comparison of Self-Reported Contact Patterns Between Hospital-Based Healthcare Workers and Working Adults From the General Population and its Implications for Infectious Disease Transmission <i>Lili Jiang, National University of Singapore, Singapore</i></p> <p>Difference in Clinical Presentation of Human Metapneumovirus Group-A Lineages Associated with Paediatric ARI Hospitalizations in Central Vietnam during 2007-2015 <i>Keisuke Yoshihara, Institute of Tropical Medicine, Nagasaki University, Nagasaki, Japan</i></p> <p>The Genomic and Epidemiological Dynamics of Respiratory Syncytial Virus in New South Wales, Australia Between 2010-2016 <i>John-Sebastian Eden, The University of Sydney, Sydney, NSW, Australia</i></p> <p>Etiology and Incidence of Severe Acute Respiratory Infection Among Hospitalized Patients in Antananarivo, Madagascar, 2014-2016 <i>Noroso Razanajatovo, Institut Pasteur de Madagascar, Antananarivo, Madagascar</i></p>
10:00 -10:30	<b>Refreshments</b>

<p><b>10:30-12:00</b></p>	<p><b>Session 8: Oral Abstract Session 4- Pathogenesis of SARI</b>  <b>Chairs:</b> Ralph Baric, University of North Carolina, Chapel Hill, NC, USA and Peter Openshaw Imperial College, London, United Kingdom</p> <p><b>Introductory Talk- What Part do Bacteria Play in Severe Influenza?</b>  <i>Peter Openshaw, Imperial College, London, United Kingdom</i></p> <p>Severity and Phase Linked Virus Specific CD4 and CD8T Cell Responses in Human pH1N1 Infection  <i>Hui Li, Capital Medical University, Beijing, China</i></p> <p>AIM2 Inflammasome is Critical for Influenza Induced Lung Injury and Mortality  <i>Jieru Wang, University of Pittsburgh, Pittsburgh, USA</i></p> <p>Identification of DDX19B as an Essential Host Factor for Uncoating Step During Influenza Virus Entry  <i>Jihye Lee, Institut Pasteur Korea, Republic of Korea</i></p> <p>Studies to Gain Insights into Drug Resistance of Influenza A(H7N9) Viruses  <i>Larisa Gubareva, Centers for Disease Control and Prevention, Atlanta, GA, USA</i></p>
<p><b>12:00 – 13:00</b></p>	<p><b>Lunchtime Seminar: The GISAID Initiative</b>  <b>Chair:</b> George Gao, Chinese Academy of Sciences, Beijing, China</p> <p>The Importance and Contribution of GISAID  <i>George Gao, Chinese Academy of Sciences, Beijing, China</i></p> <p>GISAID in Surveillance and Pandemic Preparedness  <i>Tian Bai, China CDC, Beijing, China</i></p> <p>The EpiFlu Database  <i>Naomi Komadina, WHO Influenza Collaborating Centre, Melbourne, Australia</i></p> <p>Analysis and Interpretation of Influenza Genetic Data  <i>Raphael Tze-Cheun Lee, Bioinformatics Institute, A*STAR, Singapore</i></p>
<p><b>13:00 -15:00</b></p>	<p><b>Session 9: Symposium on RVI Therapeutics</b>  <b>Chairs:</b> George Gao, Chinese Academy of Sciences, Beijing, China and Amy Krafft, NIAID, Bethesda, Maryland, USA,</p> <p>Understanding Antiviral Targets  <i>Yoshi Kawaoka, University of Wisconsin, Madison Wisconsin USA and University of Tokyo, Tokyo, Japan</i></p> <p>Prospects for Antivirals for RSV Disease  <i>Peter Openshaw, Imperial College, London, United Kingdom</i></p> <p>Novel RSV Inhibitor AK0529: Update on Clinical Development  <i>Stephen Toovey, Chief Medical Officer, Ark Biosciences</i></p> <p>Usefulness of Probiotics for RVI Mitigation  <i>Liisa Lehtoranta, DuPont Nutrition &amp; Health, Kantvik, Finland</i></p> <p>Which Traditional Chinese Medicines are Most Beneficial?  <i>Bin Cao, China-Japan Friendship Hospital, Beijing, China</i></p>
<p><b>15:00 – 15:30</b></p>	<p><b>Refreshments</b></p>
<p><b>15:30 – 17:45</b></p>	<p><b>Session 10: Oral Abstract Session 5 - Short Presentations on Developments of Influenza Antivirals</b></p> <p><b>Chairs:</b> Frederick Hayden, University of Virginia School of Medicine, Charlottesville, USA and Aeron Hurt, WHO Influenza Collaborating Centre, Melbourne, Australia</p> <p>Introductory Talk: Building The Pre-Clinical Pipeline for Influenza Therapeutics  <i>Amy Krafft, NIAID, Bethesda, Maryland, USA</i></p>

	<p><b>Invited Topics:</b>  Pimodivir (JNJ-63623872): a brief overview  <i>Lorant Leopold, Janssen, Titusville, New Jersey, USA</i></p> <p>Cap-dependent Endonuclease Inhibitor S-033188  <i>Takeki Uehara, Shionogi, Osaka, Japan</i></p> <p>MHAA4549A Monoclonal  <i>Man Wah Tan, Genentech, South San Francisco, California, USA</i></p> <p>VIS410 Monoclonal  <i>Jose Trevejo, Visterra, Cambridge, Massachusetts, USA</i></p> <p>Experience with Favipiravir in Phase 3 and Implications for Future Studies  <i>Carol Epstein, Fujifilm Pharmaceuticals USA, Boston, Massachusetts, USA</i></p> <p>Nitazoxanide: A First-in-Class Indirect-Acting Antiviral for Treatment of Respiratory Virus Infections  <i>Jean-Francois Rossignol, Romark, Morristown, New Jersey, USA</i></p> <p>IV Zanamivir  <i>Sumita Roy-Ghanta, GSK, Philadelphia, Pennsylvania, USA</i></p> <p>Umifenovir (Arbidol) – Antiviral Drug Against Influenza Viruses  <i>Irina Leneva, Mechnikov Research Institute of Vaccines and Sera, Moscow, Russia</i></p> <p>Oral Danirixin (GSK1325756)  <i>Sumita Roy-Ghanta, GSK, Philadelphia, Pennsylvania, USA</i></p> <p>Developing Therapeutic Human Antibodies from Transchromosomal (Tc) Bovine to Treating Influenza Infection  <i>Hua Wu, SAb Biotherapeutics, Sioux Falls, SD, USA</i></p>
17:45 – 19:30	Poster Session Reception – Sponsored by Gilead Sciences, Inc
<b>Friday 16 June</b>	
08:00 – 08:45	<p><b>Session 11:</b>  <b>Chairs:</b> Arnold Monto, University of Michigan School of Public Health, Ann Arbor, USA and Yinzhong Shen, Fudan University and SPHCC, Shanghai, China</p> <p><b>Keynote Lecture</b>  <b>Advances in Vaccines for Respiratory Viral Infections</b>  <i>Barney Graham, Vaccine Research Center, NIAID, Bethesda, Maryland, USA</i></p>
08:45-10:30	<p><b>Session 12: Oral Abstract Session 6- Vaccines and Preventive Strategies</b>  <b>Chairs:</b> Barney Graham, Vaccine Research Center, NIAID, Bethesda, Maryland, USA and Arnold Monto, University of Michigan School of Public Health, Ann Arbor, USA</p> <p><b>Introductory Talk-</b> Protective Immunity During Natural H7N9 Infection in Humans  <i>Jianqing Xu, Shanghai Public Health Clinical Center, Shanghai, China</i></p> <p>Natural H7N9 Infection in Humans Boosts Cross-Group Stalk-Specific Antibody Responses  <i>Lu Liu, Shanghai Public Health Clinical Center, Shanghai, China</i></p> <p>A Single IM Dose of a Plant-Made VLP Vaccine Bearing the H1 Hemagglutinin Elicits a Balanced Humoral and Cellular Response and Protects Young and Aged Mice from Influenza H1N1 Challenge  <i>Breanna Hodgins, McGill University, Montreal, Quebec, Canada</i></p>

	<p>An mRNA-Based Technology for the Next Generation of Prophylactic Influenza Vaccines <i>Susanne Rauch, CureVac AG, Tuebingen, Germany</i></p> <p>Development and Validation of a Non-Egg-Adapted Wild-Type Influenza A H3N2 Strain (A/Belgium/4217/2015 (H3N2)) As Challenge Agent for Human Volunteer Challenge Studies <i>Martin Schutten, Clinical Virology and Diagnostics, Noord-Holland, Netherlands</i></p> <p>A Treg Cell Based Novel RSV Vaccine <i>Bing Wang, Key Laboratory of Medical Molecular Virology of MOH and MOE, Fudan University, Shanghai, China</i></p> <p>Evaluation of the Effectiveness of Oseltamivir Against Influenza Variants with the H275Y Neuraminidase Mutation in Ferrets <i>Ding Oh, WHO Collaborating Centre for Reference and Research on Influenza, Melbourne, Australia</i></p>
<b>10:30 – 11:00</b>	<b>Refreshments</b>
<b>11:00-13:00</b>	<p><b>Session 13: Discussion on Clinical Research Issues</b> <b>Chairs:</b> <i>Kimberly Armstrong, BARDA, Washington, USA</i> and <i>Michael Ison, Northwestern University, Chicago, Illinois, USA</i></p> <p>Updating the WHO Influenza Research Agenda <i>Jacky Chan, WHO, Geneva, Switzerland</i></p> <p>What Endpoints Make Sense in Clinical Trials of Severe Influenza and Related Illnesses? <i>Menno de Jong, University of Amsterdam, Amsterdam, Holland</i></p> <p>Developing Influenza Therapeutics - A European Regulator's Perspective <i>Regine Lehnert, BfArM, Germany</i></p> <p>Feasible or Infeasible? Investigational Drug Monotherapy for Patients Hospitalised with Laboratory-Confirmed Influenza <i>Kimberley Armstrong, BARDA, Washington, DC, USA</i></p> <p><b>Roundtable Discussion</b></p>
<b>13:00 -14:00</b>	<b>Lunch</b>
<b>14:00 -16:00</b>	<p><b>Session 14: Symposium on Issues in Clinical Management</b> <b>Chairs:</b> <i>Guanghe Fei, First Affiliated Hospital of Anhui Medical University, Hefei, Anhui, China</i> and <i>Norio Sugaya, Keiyu Hospital, Yokahama, Japan</i></p> <p>Under-Recognized and Unusual Presentations of Influenza <i>William Fischer, University of North Carolina, Chapel Hill, North Carolina, USA</i></p> <p>Managing RVIs in Transplant Recipients <i>Michael Ison, Northwestern University, Chicago, Illinois, USA</i></p> <p>Corticosteroids, Statins, and Other Adjunctive Therapies in SARI <i>David Hui, Chinese University of Hong Kong, Hong Kong SAR, China</i></p> <p>Mutagenesis analysis to identify determinants for neuraminidase inhibitor resistance in influenza viruses of N8 and N9 subtypes <i>Hui-Ling Yen, University of Hong Kong, Hong Kong SAR, China</i></p> <p><b>Q &amp; A Panel</b></p>
<b>16:00-16:30</b>	<b>Closing Remarks</b>