

Provisional Conference Program (as of 28 September 2023)

Individual and population immunity to respiratory viruses

8-10 November 2023, Harbour Grand Hong Kong

Day 1 – Wednesday, 8 November 2023	
Time	Activity
08:00-09:00	Registration
<i>Moderator: Ben Cowling</i>	
09:00-09:10	Opening remarks – <i>Ben Cowling & Leo Poon</i>
09:10-09:40	1.1 (invited) From SARS to COVID-19: A Hong Kong Perspective – <i>Malik Peiris</i>
09:40-10:10	1.2 (invited) Reflections on COVID-19: Sustaining the gains made during COVID-19 to prevent future threats – <i>Maria Van Kerkhove</i>
10:10-10:40	1.3 (invited) Impact of immunity on infection and transmission for influenza and SARS-CoV-2 in South Africa – <i>Cheryl Cohen</i>
10:40-11:10	Refreshment break
<i>Moderators: Sarah Cobey & Malik Peiris</i>	
11:10-11:40	1.4 (invited) – Defining risk factors for life-threatening respiratory viral infections – <i>Katherine Kedzierska</i>
11:40-11:55	1.5 Omicron infection following vaccination enhances a broad spectrum of immune responses dependent on infection history – <i>Hailey Hornsby</i>
11:55-12:10	1.6 Mucosal and blood humoral immunity generated by repeated SARS-CoV-2 infection in populations with limited vaccine coverage: insights from a longitudinal study in The Gambia – <i>Natalie Barratt</i>
12:10-12:25	1.7 Patterns of spatial and individual variation in influenza incidence and immunity in a southern Chinese cohort – <i>James Hay</i>
12:25-12:40	1.8 Using a mathematical model to compare the effects of age and vaccination schedule on the dynamics of SARS-CoV-2 specific antibody levels – <i>Daniel Stocks</i>
12:40-14:00	Lunch
<i>Moderators: David Hui & Katherine Kedzierska</i>	
14:00-14:30	1.9 (invited) Determinants of mucosal antibody responses to respiratory viruses – <i>Ryan Thwaites</i>
14:30-14:45	1.10 Priming Conditions Shape Breadth of Neutralizing Antibody Responses to Sarbecoviruses – <i>Janice Zhirong Jia</i>
14:45-15:00	1.11 The Transfer of Maternal Antibodies and Dynamics of Maternal and Natural Infection-induced Antibodies against RSV in Children: A Longitudinal Cohort Study – <i>Wang Yan</i>
15:00-15:15	1.12 Antigenic characterization of SARS-CoV-2 variants using hamster and human serum sets – <i>Carol Weiss</i>
15:15-15:30	1.13 Characterization of the phenotype and specificity of human nasal epithelium-derived T cells – <i>Mark Power</i>
15:30-15:45	Refreshment break
<i>Moderators: Ryan Thwaites & Sophie Valkenburg</i>	
15:45-16:00	1.14 Immunogenicity of COVID-19 vaccines in Hong Kong – <i>David Hui</i>
16:00-16:15	1.15 Lack of protective effect of fourth dose vaccination on SARS-CoV-2 infection– <i>Nicole Ngai Yung Tsang</i>
16:15-16:30	1.16 Susceptibility to SARS-CoV-2 Omicron infection may be mediated by reduced ADCC activity – <i>Tomer Hertz</i>
16:30-16:45	1.17 Distinct COVID-19 vaccine combinations result in divergent immune responses – <i>Rory de Vries</i>
16:45-17:00	1.18 Intrinsic differences in SARS-CoV-2 humoral immunity between children and adults – <i>Carolyn Cohen</i>

Day 2 – Thursday, 9 November 2023	
Time	Activity
<i>Moderators: Tim Uyeki & Cheryl Cohen</i>	
09:00-09:30	2.1 (invited) Longitudinal community and household cohorts and their applications in New Zealand – <i>Sue Huang</i>
09:30-10:00	2.2 (invited) Experiences from four decades of annual serosurveys for influenza viruses in Norway, and its usefulness for other viruses – <i>Olav Hungnes</i>
10:00-10:15	2.3 Immunity to seasonal coronaviruses and cross-reactivity to SARS-CoV-2 prior to the COVID-19 pandemic in The Gambia – <i>Dawda Jobe</i>
10:15-10:30	2.4 Impact of age and vaccination on susceptibility to and infectiousness of influenza in United States households: Tennessee and Wisconsin, 2017 to 2020 – <i>Alexandra Mellis</i>
10:30-11:00	<i>Refreshment break</i>
<i>Moderators: Isabella Eckerle & Simon Cauchemez</i>	
11:00-11:30	2.5 (invited) Reconstructing dynamics of SARS-CoV-2 and influenza immunity following a complex history of antigen exposures – <i>Adam Kucharski</i>
11:30-11:45	2.6 Strain change effects on influenza vaccine immunogenicity – <i>Annette Fox</i>
11:45-12:00	2.7 Linking antigenic diversity to dengue disease risk – <i>Lin Wang</i>
12:00-12:15	2.8 A(H2N2) and A(H3N2) influenza pandemics elicited durable cross-reactive and protective antibodies against avian N2 neuraminidases – <i>Zaolan Liang</i>
12:15-12:30	2.9 Overweight reduces the humoral response to SARS-CoV-2 infection – <i>Kirsty Short</i>
12:30-12:45	2.10 Long-term waning patterns in influenza antibodies – <i>Sooksan Wong</i>
12:45-14:00	<i>Lunch</i>
<i>Moderators: Nancy Leung & Richard Webby</i>	
14:00-14:30	2.11 (invited) – Alternate immune targets to SARS-CoV-2 by infection and vaccination – <i>Sophie Valkenburg</i>
14:30-14:45	2.12 – Overview of humoral immune response to SARS-CoV-2 variants in COVID-19 patients and vaccinees following homologous and heterologous vaccinations – <i>Claudia Trombetta</i>
14:45-15:00	2.13 – Molecular dissection of the antibody response to next-generation COBRA influenza vaccines – <i>Giuseppe Sautto</i>
15:00-15:15	2.14 Comparing immunogenicity of standard-dose and enhanced influenza vaccines in generating anti-NA antibodies in the elderly: a randomised control trial – <i>Pavithra Daulagala</i>
15:15-15:35	<i>Refreshment break</i>
<i>Moderator: Malik Peiris</i>	
15:35-17:00	2.15 Special session to reflect and discuss the responses to the COVID-19 pandemic with contributions from around the world
18:00-21:00	<i>Poster session & cocktail reception</i>

Day 3 – Friday, 10 November 2023	
Time	Activity
<i>Moderators: Adam Kucharski & Olav Hungnes</i>	
09:00-09:30	3.1 (invited) Modelling serological data to learn about infection and immunity – <i>Simon Cauchemez</i>
09:30-10:00	3.2 (invited) Challenges reconciling immunity to influenza between individuals and populations – <i>Sarah Cobey</i>
10:00-10:15	3.3 Understanding drivers of differential immune responses to mRNA and adenovirus vectored COVID-19 vaccines: A data-driven dynamic modelling analysis – <i>David Hodgson</i>
10:15-10:30	3.4 Modeling antibody kinetics to influenza and other common respiratory viruses: can we use population-level serology to anticipate the impact of future epidemics? – <i>Cecile Viboud</i>
10:30-11:00	<i>Refreshment break</i>
<i>Moderators: Sooksan Wong & Sue Huang</i>	
11:00-11:15	3.5 Adaptation of mediation framework to the test-negative study design of influenza vaccine effectiveness – <i>Brendan Flannery</i>
11:15-11:30	3.6 Antibody correlates of protection against symptomatic SARS-CoV-2 infection for Alpha, Delta, Gamma and Zeta variants: analysis from two randomized controlled trials in the UK and Brazil – <i>Elaine Shuo Feng</i>
11:45-12:00	3.7 Identifying mediators of protection for CoronaVac, an inactivated SARS-CoV-2 vaccine – <i>Nancy Hiu Lan Leung</i>
12:00-12:15	3.8 SARS-CoV-2 antibody levels associated with COVID-19 protection in outpatients tested for SARS-CoV-2, US Flu VE Network, October 2021–June 2022 – <i>Kelsey Sumner</i>
12:15-12:30	3.9 SARS-CoV-2 correlates of protection conferred by natural immunity: comparative analysis of pre-exposure neutralizing antibody titers against Delta and Omicron variant infections – <i>Kaiyuan Sun</i>
12:30-12:45	3.10 TBC
12:45-14:00	<i>Lunch including Virology Podcast recording 13:15 to 14:00 with Vincent Racaniello and guest</i>
<i>Moderators: Hui-Ling Yen & Leo Poon</i>	
14:00-14:30	3.11 (invited) Antibodies at the frontline - studying mucosal immunity to SARS-CoV-2 and other respiratory viruses – <i>Isabella Eckerle</i>
14:30-14:45	3.12 Recovery from respiratory virus infections in hospitalised patients relies on a network of innate and adaptive immunity – <i>Thi Hoang Oanh Nguyen</i>
14:45-15:00	3.13 Comparing antibody breadth of influenza A between ferrets and humans: implications for susceptibility and reinfection intervals – <i>Bingyi Yang</i>
15:00-15:15	3.14 Maximum likelihood estimation of rate of influenza vaccine efficacy waning – <i>Kylie Ainslie</i>
15:15-15:30	3.15 Repeated influenza vaccination effects in a randomized placebo-controlled trial – <i>Ben Cowling</i>
15:30-15:45	3.16 Unpacking the attenuating effects of repeated influenza vaccination – <i>Ziheng Zhu</i>
15:45-16:00	Closing Remarks – <i>Ben Cowling and Leo Poon</i>
16:00-16:30	<i>Refreshments available</i>