

Masterclass: Updates on Vaccine Science

Date: October 11th-13th, 2023

Location: Amphitheatre, Level -2, Duke-NUS Medical School, Singapore

Program

Day 1: 11th October, 2023 (Wednesday)

Sessions		Speakers
Session 1 – Immunology		
08:30-09:00	<i>Registration</i>	
09:00-09:20	Introduction and orientation to the Masterclass	Prof. Eng Eong Ooi
09:20-10:20	Immunology in a nutshell	Dr Philippe Buchy
10:20-10:45	<i>Coffee break</i>	
10:45-11:30	New knowledge in humoral immunity	Dr Chee Wah Tan
11:30-12:15	Innate immune response and trained immunity	Dr Wy Ching Ng, Dr Christine Tham
12:30-13:30	<i>Lunch</i>	
Session 2 – Immune responses and immunological correlates of protection		
13:30-14:00	Cellular immunity	Prof. Antonio Bertoletti
14:00-14:30	Measuring T cells/ Mucosal Immunity	Dr Anthony.T.Tan
14:30-15:00	Applying T-cell analysis in vaccination and viral infections	Dr Nina Le Bert
15:00-15:20	<i>Coffee break</i>	
15:20-16:00	Vaccine prevention in patients with chronic diseases (GSK)	Ms Chanelle Owen
16:00-17:00	Case study on immune response and immunity -Dengue	Prof Eng Eong Ooi, Dr Shirin Kalimuddin

Day 2: 12th October 2023 (Thursday)

Session 3 – *The science of vaccines*

09:00- 09:30	Different types of vaccines and the immune responses they elicit.	Dr Justin Ooi
09.30-10:30	RNA biology and RNA vaccines	Dr Esteban Finol
10:30-10:45	<i>Coffee break</i>	
10:45-11:30	Delivery of mRNA vaccines	Dr Danny Tng Jian Hang
11:30 -12:15	Side effects of mRNA vaccination	Dr Ayesa Syenina
12:15-13:00	Role of Adjuvant technology in older adults (GSK)	Dr Jerusha Naidoo
13:00-14:00	<i>Lunch</i>	

Session 4 – *Vaccine Ethics and Challenges*

14:00-15:30	Vaccine communication-acceptance or hesitancy?	Ms Sheila Pakir
15:30-16:00	<i>Coffee break</i>	
16:00-17:00	Future pandemics – from whence they come	Prof LinFa Wang

Day 3: 13th October 2023 (Friday)

Session 5 – New approaches for assessing new vaccines

09:00-9:30	Advances in clinical trial designs	Dr Jenny Low
09:30-10:00	Regulatory considerations for innovative products	Dr Wai Yeen James Leong
10:00-10:40	Precision molecular tools	Dr Eugenia Ong
10:40 -11:00	<i>Coffee break</i>	
11:00-12:30	The role of systems vaccinology and big data in clinical trials	Dr Kuan Rong Chan
12:30-13:30	<i>Lunch</i>	

Session 6 – Vaccine reactogenicity and immunogenicity

13:30-15:00	Molecular fingerprints for vaccine efficacy: Learning from successful vaccines (Case study: Yellow Fever vaccine) System vaccinology frameworks for early phase clinical trials (Case study: mRNA vaccines)	Dr Kuan Rong Chan
15:00-15:20	<i>Coffee break</i>	
16:00-17:00	Improving vaccination outcomes in the elderly (Case study: Shingles vaccine)	Dr Candice Chan, Dr Justin Ooi
17:00 -17:20	Closing remarks	Dr Jenny Low
18:00	Closing event with Dinner	