The University of Hong Kong Department of Pathology

Master of Molecular and Diagnostic Pathology Diagnostic Pathology, Course 3

MMDP7008 Molecular Microbiology

Course Coordinators: Prof. US Khoo & Dr Siddharth Sridhar

5-6 October 2024

Venue: Room 035, 6/F., Block T, Queen Mary Hospital

Saturday, 5 October	2024		
	Topics	Lecturers	
9.00 am - 9.15 am	Opening remarks	Prof. US Khoo	
	I. Clinical application in bacteriology		
9.15 am -11:15 am	a) Bacterial pathogens: typical and atypical, mycobacterium species	Dr. Jonathan Chen	
	b) Molecular and MALDI-TOF MS approaches for the diagnosis of sepsis, infections of gastrointestinal tract and central nervous system	Dr. Jonathan Chen	
Tea break (5-mins)			
11.20 am - 11.30 am	Staff-Student Consultative Meeting of MMDP7009 & MMDP7019	Prof CW Lam & Prof US Khoo	
	II. Clinical application in mycology and parasitology		
11.30 am -12:30 am	a) Fungal pathogens	Dr Franklin Chow	
	b) Parasite and tick-borne pathogens	Dr Rosana Poon	
	Lunch break		
	III. Clinical application in molecular surveillance and outbreak management		
1:30 pm - 3:25 pm	a) Application of Next Generation Sequencing in clinical diagnosis and hospital infection control	Dr. Jonathan Chen	
	b) Principles of molecular phylogenetic analysis and molecular typing method	Dr. Jonathan Chen	
	Tea break (5-mins)		
3:30 pm - 5:30 pm	c) Limitations, future perspectives	Dr. Jonathan Chen	
	d) Clinical case application and discussion	Dr. Jonathan Chen	

Sunday, 6 October 2024		
	Topics	Lecturers
	IV. Clinical applications in viral epidemiological surveillance and outbreak management	
9.00 am - 10.00 am	a) Molecular approaches for viral pathogens	Dr Franklin Chow
10.00 am - 11.00 am	b) Laboratory and epidemiological considerations for data interpretation	Dr Sridhar Siddharth
	Tea break (15-mins)	
11.15 am - 12.15 pm	c) Limitations and future perspectives	Dr Franklin Chow
12.15 pm - 1.15 pm	d) Clinical case application with discussion	Dr Sridhar Siddharth

Saturday, 9 November, 2024	
10:00 am - 10:00 pm Quiz	