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 & Prof Siddharth Sridhar

5-6 September 2026

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

Saturday, 5 September 2026			
	Topics	Lecturers	
9.00 am - 9.15 am	Opening remarks	Prof. US Khoo	
9.15 am -11:15 am	I. Clinical application in bacteriology		
	a) Bacterial pathogens: typical and atypical, mycobacterium species	Prof Gilman Siu	
	b) Molecular and MALDI-TOF MS approaches for the diagnosis of sepsis, infections of gastrointestinal tract and central nervous system	Prof Gilman Siu	
	Tea break (5-mins)		
11.20 am -12:20 am	II. Clinical application in mycology and parasitology		
	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 Franklin Chow	
	b) Principles of molecular phylogenetic analysis and molecular typing method	Dr Franklin Chow	
	Tea break (5-mins)		
3:30 pm - 5:30 pm	c) Limitations, future perspectives	TBC TBC	
	d) Clinical case application and discussion	ТВС	

Sunday, 6 September 2026			
	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) Clinical case application with discussion	Prof 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) Laboratory and epidemiological considerations for data interpretation	Prof Sridhar Siddharth	

Saturday, 10 October 2026	
10:00 am - 10:00 pm	Quiz