

Bioinformatics Course on Microbial Genomics and Applied Artificial Intelligence

生物信息學：微生物基因組學與應用人工智能

Department of Microbiology, Faculty of Medicine,
The Chinese University of Hong Kong
Monday, 17 March – Wednesday, 19 March, 2025

Course Rundown

Monday 17 March 2025			
Time	Event	Teachers	Venue
09:00 - 09:30	Registration	Administrator	Room 38069
09:30 – 09:45	Welcome event and Orientation	Prof. Margaret IP	Room 38069
09:45 – 11:15	Course 1: Principle of Next Generation Sequencing and Bioinformatics in Microbiome Study	Dr. Zigui CHEN	Room 38069
11:15 – 11:30	Coffee break		
11:30 – 13:00	Course 2: Human Microbiome Shotgun Metagenomics	Dr. Zigui CHEN	Room 38069
13:00 – 14:00	Lunch break		
14:00 – 15:30	Course 3: Principle of Applied Artificial Intelligence (AI) in Biomedicine	Dr. Dominik HEIDER	Room 33017
15:30 – 15:45	Coffee break		
15:45 – 17:15	Course 4: AI in Antimicrobial Resistance and Infectious Disease Control	Dr. Dominik HEIDER	Room 33017
Tuesday 18 March 2025			
09:30 – 11:00	Computer Practice 1: AI Modelling	Dr. Dominik HEIDER	Laboratory 1-6
11:15 – 12:45			
11:00 – 11:15	Coffee break		
12:45 – 14:00	Lunch break		
14:00 – 15:30	Course 5: Basics in Microbial Phylogeny	Dr. Sishuo WANG	Laboratory 1-6
15:30 – 15:45	Coffee break		
15:45 – 17:15	Course 6: Introductory Unsupervised Learning in Microbiome Research	Dr. Sishuo WANG	Laboratory 1-6
Wednesday 19 March 2025			
09:30 – 11:00	Course 7: Human Microbiota 16S Amplicon Sequencing and Statistical Learning	Dr. Zigui CHEN	Laboratory 1-6
11:00 – 11:15	Coffee break		
11:15 – 12:45	Course 8: Human Virome Transcriptome in Infectious Diseases	Dr. Zigui CHEN	Laboratory 1-6
12:45 – 14:00	Lunch break		
14:00 – 15:30	Computer Practice 2: Microbial	Dr. Zigui CHEN	Laboratory 1-3

15:45 – 17:15	Metagenomics and Bioinformatics		
14:00 – 15:30 15:45 – 17:15	Computer Practice 3: Molecular Evolution and Phylogeny	Dr. Sishuo WANG	Laboratory 4-6
15:30 – 15:45	Coffee break		
17:15 – 17:45	Certificate and workshop close	Prof. Margaret IP	Laboratory 1-6

Course Venue

Room 38069:

Pathology Conference Room 38069, 1/F, Lui Che Woo Clinical Sciences Building, PWH

Room 33017:

Pathology Conference Room 33017, 1/F, Day Treatment Block and Children Wards, PWH

Laboratory:

Pathology Teaching Laboratory, 1/F, Lui Che Woo Clinical Sciences Building, PWH