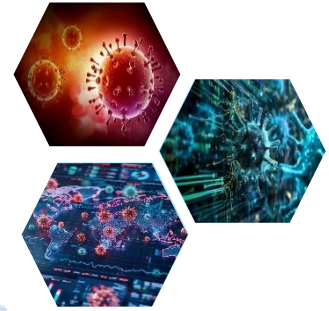




# Seminar on Application of Artificial Intelligence (AI) on Infectious Diseases and Infection Control on 13 November 2024



09:00

## Welcome address

**Dr Hong CHEN**

*Consultant-in-charge, Infectious Disease Control  
Training Centre, Hospital Authority/ Head, Infection  
Control Branch, Centre for Health Protection,  
Department of Health*



## Session 3

### Artificial intelligence in optimizing antibiotic use and discovering novel antibiotics

Moderator

**Dr Edmond MA**

*Consultant(AMR), Infectious Disease Control Training Centre,  
Hospital Authority / Infection Control Branch, Centre for  
Health Protection, Department of Health*

## Session 1

### Overview of Artificial Intelligence applications in healthcare

Moderator

**Dr Hong CHEN**

*Consultant-in-charge, Infectious Disease Control Training  
Centre, Hospital Authority/ Head, Infection Control Branch,  
Centre for Health Protection, Department of Health*

14:00

### Application of Artificial Intelligence and IT in Antibiotics Stewardship



**Dr May LEE**

*Consultant, Department of Microbiology, Princess  
Margaret Hospital*

09:05

### Responsible Use of Artificial Intelligence for Infectious Disease Surveillance

**Dr Calvin HO, JSD FRSPH**

*Associate Professor, Faculty of Law, Monash University,  
Melbourne*



14:45

### A deep learning approach to antibiotic discovery

**Dr James J. COLLINS, PhD**

*Termeer Professor of Medical Engineering & Science at  
The Collins Lab and Professor of Biological Engineering at  
MIT, USA/ Core Founding Faculty member of the Wyss  
Institute for Biologically Inspired Engineering at Harvard  
University, USA*



09:50

### Smart solution for Infectious Diseases Management

**Dr Anna TONG**

*Chief Manager (eHealth), Hospital Authority*



15:30

Discussion Session

15:45

Break

10:35

Discussion Session

10:50

Break

## Session 2

### Artificial intelligence in infection surveillance

Moderator

**Dr Owen TSANG**

*Consultant (Medicine & Geriatrics), Princess Margaret  
Hospital/ Medical Director, Infectious Disease Centre,  
Hospital Authority*

## Session 4

### Artificial intelligence in predicting emerging infections and advancing laboratory diagnostics

Moderator

**Dr Raymond LAI**

*Chief Infection Control Officer, Chief Infection Control  
Officer Office, Hospital Authority Head Office*

11:00

### Forecast epidemics more effectively with Artificial Intelligence

**Dr Zhanwei DU**

*Research Assistant Professor (Programme 3)/ Research  
Assistant Professor, Division of Epidemiology and  
Biostatistics, School of Public Health, The University of  
Hong Kong*



16:00

### Artificial Intelligence-metagenomic Platform to Identify Emerging Pathogens

**Professor Yi GUAN**

*Daniel CK Yu Professor in Virology/ Chair Professor of  
Emerging Viral Diseases/ Cluster Leader (Influenza and  
Infections of Public Health Significance) at Division of  
Public Health Laboratory Sciences, School of Public Health,  
LKS Faculty of Medicine, The University of Hong Kong*



11:45

### Can we use automated analyses of electronic health record data to improve surveillance for healthcare-associated infections?

**Prof Michael KLOMPAS, MD**

*Professor of Population Medicine, Harvard Medical School/  
Hospital Epidemiologist, Brigham and Women's Hospital,  
Boston, USA*



16:45

### Machine, machine on the wall, who's the most resistant of them all?

**Dr Alfred LEE**

*Associate Consultant, Department of Microbiology,  
Prince of Wales Hospital*



12:30

Discussion Session

12:45

Lunch

17:30

Discussion Session



醫院管理局  
HOSPITAL  
AUTHORITY

Infectious Disease Control  
Training Centre  
傳染病控制培訓中心

Co-organised by Infectious Disease Control Training Centre, Hospital Authority (HA IDCTC)/  
Infection Control Branch (ICB), Centre for Health Protection (CHP), Department of Health and  
Chief Infection Control Officer Office, Hospital Authority

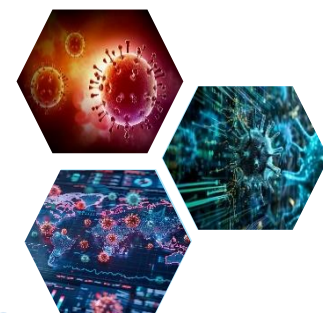


衛生防護中心  
Centre for Health Protection

Infection Control Branch  
感染控制處



# Seminar on Application of Artificial Intelligence (AI) on Infectious Diseases and Infection Control on 13 November 2024



<p><b>Objectives</b></p>	<p>The seminar aims at addressing potential application on the use of artificial intelligence (AI) in the field of infectious diseases and infection control, and would focus on the following aspects:</p> <ul style="list-style-type: none"> <li>• Overview of artificial intelligence applications in healthcare</li> <li>• AI in infection surveillance</li> <li>• AI in optimizing antibiotic use and discovery of novel antibiotics</li> <li>• AI in predicting emerging infections and advancing laboratory diagnostic</li> </ul>
<p><b>Target Audience</b></p>	<p>Healthcare professionals in Hospital Authority, Department of Health and private settings</p>
<p><b>Mode</b></p>	<p>Hybrid mode (Physical &amp; Webinar) Host Venue: Lecture Theatre, G/F, Centre for Health Protection, 147C Argyle Street, Kowloon</p>
<p><b>CME/ CNE/ CPD</b></p>	<p>CME/CNE/CPD points would only be granted to the pre-registered participants who access the forum by the unique webinar link provided upon successful enrolment</p>
<p><b>Composition of Organising Committee</b></p>	<p><b>Dr Joanna PANG</b> <i>Chief Medical Informatics Officer, Information Technology and Health Informatics, Hospital Authority Head Office</i></p> <p><b>Dr Owen TSANG</b> <i>Consultant (Medicine &amp; Geriatrics), Princess Margaret Hospital/ Medical Director, Infectious Disease Centre, Hospital Authority</i></p> <p><b>Dr Hong CHEN</b> <i>Consultant-in-charge, Infectious Disease Control Training Centre, Hospital Authority/ Head, Infection Control Branch, Centre for Health Protection, Department of Health</i></p> <p><b>Dr Leo LUI</b> <i>Associate Consultant, Infectious Disease Control Training Centre, Hospital Authority/ Infection Control Branch, Centre for Health Protection, Department of Health</i></p> <p><b>Ms Man Ying KONG</b> <i>Senior Nursing Officer, Chief Infection Control Officer Office, Hospital Authority</i></p> <p><b>Mr Anthony NG</b> <i>Senior Nursing Officer, Infectious Disease Control Training Centre, Hospital Authority/ Infection Control Branch, Centre for Health Protection, Department of Health</i></p>
<p><b>Enquiries</b></p>	<p>Miss Kristy WONG      2125 2916 Miss Queenie LAW      2125 2933</p>
<p><b>Application Channel</b></p>	<p>Enrollment via</p> <ul style="list-style-type: none"> <li>• Cluster Training Coordinator (for HA staff)</li> <li>• Service Coordinator (for DH staff)</li> <li>• ICO/ICN/HR staff (for Private Hospital staff)</li> </ul>