

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



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

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



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 Centrol Hospital Authority / Infectious Control Branch, Centre for Health Protection, Department of Health

Session 1

Moderator

Overview of Artificial Intelligence applications in healthcare

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

09.30

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 Brea

Session 4

Artificial intelligence in predicting emerging infections and advancing laboratory diagnostics

Session 2

Artificial intelligence in infection surveillance

Moderator Dr Owen TSAN

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

16:00

Dr Raymond LAI

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

Identify Emerging Pathogens

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



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 Faulty of Medicine, The University of Hong Kong

Artificial Intelligence-metagenomic Platform to

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



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 Session12:45 Lunch

17:30

Discussion Session



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Objectives

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:

- Overview of artificial intelligence applications in healthcare
- · AI in infection surveillance
- Al in optimizing antibiotic use and discovery of novel antibiotics
- Al in predicting emerging infections and advancing laboratory diagnostic

Target Audience

Healthcare professionals in Hospital Authority, Department of Health and private settings

Mode

Hybrid mode (Physical & Webinar)

Host Venue: Lecture Theatre, G/F, Centre for Health Protection, 147C Argyle Street, Kowloon

CME/ CNE/ CPD

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

Composition of Organising Committee

Dr Joanna PANG

Chief Medical Informatics Officer, Information Technology and Health Informatics, Hospital Authority Head Office

Dr Owen TSANG

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

Dr Hong CHEN

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

Dr Leo LUI

Associate Consultant, Infectious Disease Control Training Centre, Hospital Authority/Infection Control Branch, Centre for Health Protection, Department of Health

Ms Man Ying KONG

Senior Nursing Officer, Chief Infection Control Officer Office, Hospital Authority

Mr Anthony NG

Senior Nursing Officer, Infectious Disease Control Training Centre, Hospital Authority/ Infection Control Branch, Centre for Health Protection, Department of Health

Enquiries

Miss Kristy WONG 2125 2916 Miss Queenie LAW 2125 2933

Application Channel

Enrollment via

- Cluster Training Coordinator (for HA staff)
- Service Coordinator (for DH staff)
- ICO/ICN/HR staff (for Private Hospital staff)