Programme Brief

<u>Workshop on Application of Molecular Diagnostics on</u> <u>Clinical Microbiology in Hong Kong</u>

Organised by Infectious Disease Control Training Centre, Hospital Authority/ Infection Control Branch, Centre for Health Protection; Chief Infection Control Officer's Office, Hospital Authority

Date:20 Mar 2018 (whole day) and 21 Mar 2018 amVenue:Lecture Theatre, G/F, Centre for Health Protection, 147C Argyle Street, Kowloon

Objectives:

The workshop would focus on the following aspects:

- 1. Advances in current and emerging technologies, including next-generation sequencing, and discuss the challenges in integrating these technologies in clinical labs.
- 2. Address the latest in rapid diagnostics for point-of-care testing, as well as challenges in diagnosing sepsis and epidemics like Zika.
- 3. Discussion on antimicrobial resistance with focus on susceptibility testing, including emerging technologies for this use.
- 4. Novel approaches for infectious disease diagnostics, as well as key outcome studies.

Target participants:

- 1. Medical staff of related specialties including Infectious Disease, Clinical Microbiology, Intensive Care Unit, Pathology, Paediatrics, Medicine, A&E, Public Health, Community Medicine and Family Medicine and other physicians who are interested in the subjects
- 2. Infection control nurses and other healthcare professionals who are involved in infection control
- 3. Laboratory related professionals who may be involved in the adoption of these latest developments

Programme outline:

1.5-day didactic lectures

International Faculties :

Dr David PERSING

Chief Medical and Technology Officer, Cepheid Chief Scientific Officer (CSO) for the Danaher Diagnostics Platform Consulting Professor of Pathology at Stanford University School of Medicine

Dr Robert LUO

Adjunct Pathology Faculty, Stanford University Diagnostic Advisor and Board-certified pathologist

Local Faculties:

Prof Margaret IP Dept of Microbiology The Chinese University of Hong Kong/ Honorary Consultant Dept of Microbiology Prince of Wales Hospital

Dr Y K YEOH Research Assistant Professor Dept of Microbiology The Chinese University of Hong Kong

Dr W C YAM Visiting Associate Professor Dept of Microbiology Queen Mary Hospital Compound The University of Hong Kong

Dr Gilman SIU Assistant Professor Department of Health Technology and Informatics The Hong Kong Polytechnic University

Moderators :

Dr Andrew TY Wong Head, Infection Control Branch, Centre for Health Protection & Consultant in-charge, Infectious Disease Control Training Centre, Hospital Authority

Dr Dominic NC Tsang Chief Infection Control Officer, Hospital Authority

Dr Christopher LAI Associate Consultant, Department of Pathology, Queen Elizabeth Hospital

Programme Rundown

| (Day One – 20 Mar 2018) | | | |
|------------------------------|---|----------------------------------|--|
| Time | Торіс | Speaker | |
| 8:45 - 09:00 | Registration | | |
| 09:00 - 09:15 | Welcome address and souvenir presentation (Group photo taking) | | |
| Session I | Fundamentals and Recent Developments in Molecu | lar Microbiology | |
| 09:15 - 10:00 | (Moderator: Dr Andrew TY WONG) Novel & Emerging Technologies in Molecular Microbiology – diagnostic principles and practice | Dr David PERSING | |
| 10:00 - 10:45 | Molecular microbiology & public health | Dr Robert LUO | |
| 10:45 - 11:00 | Discussion Session | | |
| 11:00 - 11:15 | Break | | |
| 11:15 – 12:00 | Molecular Diagnosis of Drug Resistant Tuberculosis: Challenges and Opportunities | Dr W C YAM | |
| 12:00 - 12:30 | Discussion Session | | |
| 12:30-14:00 | Lunch | | |
| 14:00 - 14:15 | Registration | | |
| Session II | Application of Molecular Microbiology (Moderator: Dr Christopher LAI) | | |
| 14:15 - 15:00 | Recent Developments in Diagnosis of Mycobacterium Tuberculosis and non-tuberculosis mycobacterium | Dr David PERSING | |
| 15:00 - 15:45 | Recent Developments in Diagnosis of Hepatitis B and C Virus | Dr Robert LUO | |
| 15:45 - 16:00 | Discussion Session | | |
| 16:00 - 16:15 | Break | | |
| 16:15 - 17:00 17:00-17:30 | Basic Principles and Use of Bioinformatics for Analyses in Microbiology/Public Health Discussion Session | Prof Margaret IP/ Dr Y K YEOH | |
| End of of Day 1 | | | |
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(Day Two - 21 Mar 2018)

| Time | Торіс | Speaker | |
|---------------|---|---|--|
| 9:00 - 9:15 | Registration | | |
| Session I | The Way Forward for Hong Kong (Dr Dominic N C TSANG) | | |
| 09:15 - 10:00 | Molecular Detection and Characterization and Point-of-care testing in HIV | Dr Robert LUO | |
| 10:00 - 10:35 | Molecular diagnosis of drug resistant tuberculosis : The role of next generation sequencing | Dr Gilman SIU | |
| 10:35 - 10:45 | Discussion Session | | |
| 10:45 - 11:00 | Break | | |
| 11:00 - 11:45 | Cloud-based data monitoring | Dr David PERSING | |
| 11:45 – 12:30 | Round-Table Discussion on Application of Molecular Diagnostics on Clinical Microbiology in Hong Kong | <u>Convenor</u> : Dr Dominic TSANG Dr TY WONG | |
| End of Day 2 | | | |

Remarks:

All international and local faculties will be invited to participate and give expert advice/ views during all discussion sessions with interactive dialogue with the participants