EMC Provisional programme 2018, Lady Margaret Hall

Monday 19th March 2018

18.00-19.30 Drinks reception
19.30 Dinner in hall

Tuesday 20th March 2018

07.30-09.00 Breakfast

09.00 – 10.30 Session 1: Opening and plenary talks

09.00 Susanna Dunachie (MORU, Thailand and Oxford University, UK) and Brian Angus (Oxford University, UK) - Welcome
09.10 Chris Conlon (Head of Nuffield Department of Medicine, Oxford University, UK) – Opening Speech
09.20 Samantha Vermaak (VALIDATE Network Manager, University of Oxford, UK) - The VALIDATE Network - Vaccine development for complex intracellular neglected pathogens
09.30 Paul Keim (University of North Arizona, USA) – Select Agent Research and the Impact of an Intense Regulatory Environment
10.00 Eric Bertherat (WHO, Switzerland) – Melioidosis: neglected or forgotten disease

10.30-11.00 Break

11.00-12.30 Session 2: Clinical and Veterinary Aspects
Chairs: Bart Currie (Menzies, Australia) & Heinrich Neubauer (Friedrich-Loeffler-Institut, Germany)

11.00 Bart Currie (Menzies, Darwin) – Overview of Clinical Melioidosis
11.25 Heinrich Neubauer (Friedrich-Loeffler-Institut, Germany) – Glanders and Melioidosis in animals
11.45 Rachel Ximenes Ribeiro Lima (Fortaleza University, Brazil) - Melioidosis in a patriarch of a Brazilian family helped to save a Great-Granddaughter member: Two cases report
12.00 Enoka Corea (Colombo University, Sri Lanka) – Melioidosis in Sri Lanka
12.15 Manophab Luangraj (LOMWRU, Laos) - Melioidosis in Lao PDR: a 17-year prospective hospital based study

12.30-13.30 Lunch

13.30–15.00 Session 3: Epidemiology & Environmental
Chairs: David Dance (LOMWRU, Lao) & Direk Limmathurotsakul (MORU, Thailand and Oxford University, UK)

13.30 Harjeet Virk (Academic Medical Center, Netherlands) – Global burden of Melioidosis estimated in terms of disability adjusted life years: A systematic review and data synthesis
13.45 Rosalie Zimmermann (LOMWRU, Laos) - Rivers as transport vehicles and potential sentinels for B. pseudomallei in the environment: a pilot study in Lao PDR
14.00 Andrew Morozov (Leicester University, UK) - Temperature-responsive virus lifecycle choices may explain seasonal dynamics of Burkholderia pseudomallei

14.15 Viriya Hantrakun (MORU, Thailand) - Limitation and rectification of national notifiable disease-surveillance data in a resource limit setting: an example of melioidosis in Thailand

14.30 Ana Karoline da Costa Ribeiro (Fortaleza University, Brazil) - Student-centred awareness of Melioidosis

14.45 Rapid poster ads (2 mins each):
- Robert Cory Bernhards (DTRA, USA) - Highly Rapid Molecular Detection of Burkholderia pseudomallei in Soil
- Sujintana Janesomboon (Mahidol University, Thailand) - Development of a multiplex PCR-based method for detection of Burkholderia pseudomallei and Burkholderia thailandensis DNA from soil samples
- Dionne Bezerra Rolim (Fortaleza University, Brazil) - Health community agents: a public health strategy against Melioidosis
- Viriya Hantrakun (MORU, Thailand) - Presence of B. thailandensis and B. thailandensis expressing B. pseudomallei-like capsular polysaccharide in Thailand, and their associations with serological response to B. pseudomallei
- Narisara Chantratita (Mahidol University, Thailand) - Effect of temperature on growth, proteomic changes, motility and resistance to stress environments of Burkholderia pseudomallei

15.00-15.30 Break

15.30-17.00 Session 4: Diagnosis and Treatment
Chairs: Ivo Steinmetz (University of Graz, Austria) & Tim Atkins (DSTL, UK)

15.30 Gabriel Wagner-Lichtenegger (University of Graz, Austria) - Identification and purification of new Burkholderia pseudomallei antigens and their potential use as serodiagnostic markers

15.45 Maria Chiara Rizzi (LOMWRU, Laos) - Testing the potential Point of Care role of a Rapid Diagnostic Test in the early diagnosis of melioidosis: a pilot comparison with culture in Laos

16.00 Adam Taylor (DSTL, UK) - Targeting intracellular Burkholderia by antibody based combination therapies

16.15 Richard Sullivan (Royal Darwin Hospital, Australia) - Intravenous Therapy Duration and Outcomes in Melioidosis: Is the new paradigm working?

16.30 Jua Iwasaki (UWA, Australia) - Targeting Immunophilins to Develop Antimicrobials against Burkholderia pseudomallei

16.45 Rapid poster ads (2 mins each):
- Heather McLaughlin (CDC, USA) - Rapid Automated Antimicrobial Susceptibility Testing of Burkholderia Species by Optical Screening
- Haley DeMers (University of Nevada, USA) - Detection and quantification of capsular polysaccharide of Burkholderia pseudomallei in melioidosis patient urine samples
- Kay Barnes (DSTL, UK) - Treatment with finafloxacin is effective in a murine model of Melioidosis

5-6pm Posters with refreshments

7.30pm Gala dinner
Wednesday 21st March 2018

07.30-09.00  Breakfast

9.00-10.15  Session 5: Genomics
Chairs: Paul Keim (University of North Arizona, USA) and Claire Chewapreecha (KMUTT, Thailand & Cambridge University)

09.00 Paul Keim (University of North Arizona, USA) – The Degradative Evolution of a Pathogen in a 15-year Chronic Melioidosis Patient
09.20 Claire Chewapreecha (KMUTT, Thailand & Cambridge University) - Genetic variation in Burkholderia pseudomallei associated with disease potential and interactions with diabetes mellitus status in human Melioidosis
09.40 Chiranjay Mukhopadhyay (Manipal University, India) - Genetic diversity and variable virulence factors of Burkholderia pseudomallei from India

10.00 Rapid poster ads (2 mins each)
  * Taksaon Duangurai (Mahidol University, Thailand) - Alteration of Burkholderia pseudomallei proteome after serial passages in Luria-Bertani medium
  * Marine Schnetterle (Institute TBC) - Whole genome sequencing and transcriptomic analysis to investigate morphotype and antibiotic resistance divergence between B. pseudomallei clinical isolates from a chronically infected patient.
  * Mindy Glass Elrod (CDC, USA) - Investigation into non-motile Burkholderia pseudomallei isolates - Motility as a Virulence Factor?

10.15-10.45  Break

10.45 – 12.30  Session 6: Pathogenesis & Immunology
Chairs: Rosemary Boyton (Imperial College, London, UK) & Eoin West (University of Washington, USA)

10.45: Suzanne Kalb (CDC, USA) - Characterization of the Enzymatic Activity of Burkholderia Lethal Factor
11.00: Panjaporn Chaichana (MORU, Thailand) - Increased serum level of IgG2 subclass was associated with survival in human Melioidosis
11.15: Emma Birnie (Academic Medical Center, Netherlands) - Platelets play a protective role in the host defence against Burkholderia pseudomallei (Melioidosis)
11.30: Fazle Chowdhury (Oxford University, UK) - Reduced activation and function of Mucosal-associated invariant T (MAIT) cells by *Burkholderia pseudomallei* in acute and recovered Melioidosis patients
11.45: Patpong Rongkard (MORU, Thailand) - The cross-reactivity of human humoral and cellular immune responses to B. pseudomallei and avirulent Burkholderia species
11.53: Sabine Wagner-Lichtenegger (University of Graz, Austria) - Establishment of a standardized primary human macrophage-based infection model for B. pseudomallei
12.01: Lynda Jane Partridge (Sheffield University, UK) - A role for host tetraspanin proteins in giant cell formation induced by Burkholderia thailandensis
12.09: Débora Castelo Branco de Souza Collares Maia (Ceara University, Brazil) - Biofilm, protease and siderophore production by clinical and environmental isolates of Burkholderia pseudomallei from Brazil
12.17: Christopher Jenkins (DSTL, UK) - Investigating KdsD, an enzyme involved in the synthesis of the core region of the lipopolysaccharide.

12.30-13.30 Lunch

13.30-15.00 Session 7: Vaccines & Prevention
Chairs: Rick Titball (Exeter University, UK) & Vicki Krause (Department of Health for the Northern Territories, Australia)

13.30 Vicki Krause (Department of Health for the Northern Territories, Australia) – Melioidosis, aspects of prevention

13.48 Louise Gourlay (University of Milan, Italy) - Structural Vaccinology for a Melioidosis Vaccine: An Overview

14.06 Paul Brett (University of Nevada, USA) - Subunit Vaccines Provide Robust Protection Against Acute Inhalational Melioidosis

14.24 Alfredo Torres (University of Texas, USA) - Development of Gold-Nanoparticle Glycoconjugate Vaccines Against Burkholderia

14.42 Pornpan Suntornsut (MORU, Thailand) - Feasibility and initial outcomes of a prevention programme of melioidosis in diabetics in Thailand: a pilot study

15.00-15.30 Break

15.30-16.00 Session 8 – Closing session

15.30 Susanna Dunachie (MORU, Thailand and Oxford University, UK) and Brian Angus (Oxford University, UK) – Closing Speech and announcement of prizes (Best Oral presentation by an Early Career Scientist and Best Poster)

15.40 Direk Limmathurotsakul (MORU, Thailand and Oxford University, UK) - Announcement of EMC 2021

15.50 Trinh Thanh Trung (Vietnam National University, Hanoi, Host of World Melioid Congress 2019)