

ID LABS SEMINAR SERIES



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Join zoom meeting <u>here</u> Meeting ID: 944 7260 6981 Passcode: 405189

Monday, 24th January 2022 5pm to 6pm (SGT)



Webinar is open to all No registration required

Understanding the unculturable: Lung "Microbiomics" for clinical application in respiratory disease

The use of next generation sequencing has revolutionised our detection and understanding of the airway microbiome in chronic respiratory disease including Chronic Obstructive Pulmonary Disease (COPD) and bronchiectasis, a permanent irreversible dilatation of the airway. Targeted amplicon sequencing reveals important associations between the respiratory microbiome and disease outcome while metagenomics can elucidate functionality. How best to apply this information into patient care, monitoring and potentially treatment however remains challenging, and this talk summarizes how host and environmental microbiomes may be leveraged for clinical application in the era of precision medicine.

Associate Professor Chotirmall is Provost's Chair in Molecular Medicine and Assistant Dean (Faculty Affairs) at the Lee Kong Chian School of Medicine at NTU Singapore. He remains in clinical practice as a Consultant Respiratory Physician at Tan Tock Seng Hospital. A/Prof Chotirmall graduated from the Royal College of Surgeons in Ireland (RCSI) and trained as a clinician-scientist in Respiratory and Critical Care Medicine through a 'Molecular Medicine Ireland Clinician Scientist Fellowship' (MMI-CSF) before establishing a translational respiratory research group at the Lee Kong Chian School of Medicine at NTU Singapore. To date, he has performed key work on endo-phenotyping pulmonary infection, including use of next generation sequencing approaches, in the context of chronic inflammatory respiratory diseases that have led to numerous publications including those in Nature Medicine, the New England Journal of Medicine (NEJM), the Lancet Respiratory Medicine and the American Journal of Respiratory and Critical Care Medicine (AJRCCM).