

Call: 7th Call - 2018 Network Call on Surveillance

Title: Intensive Care Airway and Lung Microbiome Network

Acronym: ICALM

Network composition

Type	Name	Institute	Country
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Abstract

Hospital acquired pneumonia (HAP) is the most frequent infection acquired in the Intensive Care Unit (ICU). ICU-related respiratory infections arise as a consequence of the processes of ICU care. Mechanical ventilation (MV) is potentially lifesaving, but also carries microorganisms into the lower airways, changing the native flora, and increasing the risk of Ventilator-Associated Tracheobronchitis (VAT) and Ventilator-Associated Pneumonia (VAP). Data concerning the characteristics of respiratory microbiota and its alterations in illness are largely limited to the respiratory microbial flora of patients with cystic fibrosis, and little is known about airway microbiota alterations in critical illness. We published the most comprehensive study on this topic, and found that mechanical ventilation, but not antibiotic administration, was associated with changes in the respiratory microbiome. With funding from JPIAMR, we will empower a multinational team to develop common surveillance methods and monitoring approaches to build a global study of the lung microbiome in critical illness, and its associations with modifiable environmental colonisation and pneumonia in the individual patient.