LECTURE SERIES 2022

INFECTION & IMMUNITY

LUXEMBOURG INSTITUTE OF HEALTH

05 MAY 2022

Thursday

LECTURE*

11.00 - 12.15 pm

MEET & EAT*

Light lunch provided

12.30 - 2 pm

8 9 10 11 12 1 2 3

Role of Microbes & Metabolites in Protecting Against Infection and Allergy

ABSTRACT

The immune system is integrated into the circuitry of every organ of the body, where it not only protects from infection, but helps to repair damaged tissue, removes cancer cells, helps to regulate metabolism, and serves as a conduit for communicating information throughout the body into all parts of our physiology. However, the immune system also has enormous capacity to wreak havoc on host tissues and organ function, if inappropriate or misdirected immune responses occur. Many of the maladies affecting humans today have an underlying immune component resulting from incorrect immune targeting associated with insufficient immune regulation. These include autoimmune diseases, allergies and infection-associated inflammatory damage (e.g. cytokine storm).

Nearly 90% of all immune cells in the body are associated with the gastrointestinal tract and these immune cells are continuously exposed to a wide range of microbes and microbial-derived compounds. Potent tolerance mechanisms ensure that these immune cells do not over-react, but instead they respond to infectious challenges in an robust, effective and well controlled manner. Recent changes in dietary habits and microbiota composition, especially evident in obese individuals, have resulted in reduced levels of immune regulatory metabolites that are expected and evolutionarily hardwired into our immune cell decision making processes. The lack of immune regulatory molecules results in a hypersensitive immune system that does not respond effectively to infection but is associated with a chronic state of inflammation that culminates in organ damage and disease for an increasing number of people

SPEAKER

Prof. Liam O'Mahony

Dept. of Medicine, School of Microbiology, APC Microbiome Ireland, University College Cork

HOST:

Department of Infection and Immunity (LIH)

RESPONSIBLE SCIENTIST:

Markus Ollert / (markus.ollert@lih.lu)

***Please note that registration is mandatory by sending an email to florence.henry@lih.lu**

Locations:

Lecture:
Lycée Guillaume Kroll
d'Esch/Alzette
Room: Salle de Projection*
Registration mandatory

Meet & eat:
House of BioHealth
Salle Françoise Barré Sinoussi
29, rue Henri Koch,
L-4354 Esch-sur-Alzette
Registration mandatory

**Opposite Luxembourg Institute of Health, House of BioHealth, 29, rue Henri Koch, L-4354 Esch-sur-Alzette*

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