LECTURE SERIES 2023

INFECTION & IMMUNITY

LUXEMBOURG INSTITUTE OF HEALTH

20 July 2023
Thursday

LECTURE
11.00 - 12.15 pm

MEET & EAT *
Light lunch provided
12.30 - 2 pm

7 8 9 10 11 12 1 2

Regulatory T cells in the tissues

ABSTRACT

The tissues are the site of many of the most important immunological reactions, yet the biology of immunology in the tissues has remained relatively opaque. Recent studies have identified Foxp3+ regulatory T cells (Tregs) in several non-lymphoid tissues. These tissue-resident populations have been ascribed unique characteristics based on phenotypic differences from lymphoid Tregs, RNA-Seq profiles, and TCR usage. Using high-depth cell profiling, kinetic analysis and functional TCR testing, we instead observed that there is a single pool of pan-tissue Tregs with little or no homing preference for their tissue of origin. While tissue Tregs constitute a single pool of broadly self-reactive activated Tregs that patrols non-lymphoid tissues, the protective impact on particular organs can be amplified by changing the tissue Treg niche size. Using a gene delivery system, we demonstrate strong protection from neuroinflammation across multiple neurological injury and disease models when the tissue Treg niche size is expanded in the brain.

SPEAKER

Prof Adrian Liston

Professor of Pathology, University of Cambridge, Cambridge, UK

HOST:

Department of Infection and Immunity (LIH)

RESPONSIBLE SCIENTIST:

Dirk Brenner / (dirk.brenner@lih.lu)

* **Please note that registration is mandatory by sending an email to carole.weis@lih.lu or michelle.roderes@lih.lu**

Locations:

Lecture:
House of BioHealth
Conference Room
(ground floor 0)
29, rue Henri Koch, L-4354 Esch-sur-Alzette

Meet & eat:
House of BioHealth
Salle Françoise Barré Sinoussi
Registration mandatory

Supported by the Luxembourg National Research Fund

Fonds National de la Recherche Luxembourg

www.lih.lu