



LECTURE SERIES & WORKSHOPS

# INFECTION & IMMUNITY

# 14

MARCH 2019

Thursday

## LECTURE

Lycée Guillaume Kroll  
d'Esch/Alzette

Salle de Projection \*

**11.00 am - 12.00 pm**

## MEET & EAT \*

**light lunch provided**

House of BioHealth,

Room Françoise

Barré-Sinoussi

**12.30 - 2.00 pm**



\*Please register sending a mail to [florence.henry@lih.lu](mailto:florence.henry@lih.lu)



### SPEAKER

## Prof. Burkhard BECHER

Professor in chair, University of Zurich,  
Institute of Experimental Immunology,  
Zurich, Switzerland

### HOSTS:

Department of Infection  
and Immunity (LIH)

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## THE T CELL - PHAGOCYTE INTERFACE IN TISSUE

### ABSTRACT

Whereas T cells are generally thought of as mediators of tissue damage in chronic tissue inflammation, the cellular infiltrate is always dominated by myeloid cells. The granulocyte-macrophage colony-stimulating factor (GM-CSF) was initially classified as a hematopoietic growth factor. However, unlike its close relatives macrophage CSF (M-CSF) and granulocyte CSF (G-CSF), the majority of myeloid cells do not require GM-CSF for steady-state myelopoiesis. Instead, in inflammation, GM-CSF serves as a communication conduit between tissue-invading lymphocytes and myeloid cells. Even though lymphocytes are in all

likelihood the instigators of chronic inflammatory disease, GM-CSF-activated phagocytes are well equipped to cause tissue damage. The pivotal role of GM-CSF at the T cell: myeloid cell interface might shift our attention toward studying the function of the myeloid compartment in immunopathology and targeting specifically the crosstalk between T cells and myeloid cells through GM-CSF holds promise for the development of therapeutics to combat chronic tissue inflammation. I will discuss how GM-CSF licenses phagocytes to initiate tissue damage in chronic inflammatory diseases.

\* Opposite Luxembourg Institute of Health, House of BioHealth,  
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