## **SEMINAR**

## **ENGINEERING INNATE AND ADAPTIVE IMMUNITY** WITH CHEMICAL COMPOUNDS

## Prof. Dr. Aaron Esser-Kahn

Institute for Molecular Engineering – University of Chicago, USA



Developing novel adjuvant responses require unique immune activation. We are designing novel adjuvant system which activate multiple TLRs, the inflammasome, and modulate NFkB responses. I will present work on new adjuvant systems which can boost antigen presentation, modulate inflammation and activated antigen specific CD4 and CD8 T-cells. Each relies on manipulating a unique aspect of the cellular processing of "danger" signals. By controlling chemical manipulation of the cellular processes, we show how you can send unique signals to cells which result in new immune responses. We will show examples where these adjuvants can be used to improve current and experimental vaccines.

Date: 12AM (noon), December 4<sup>th</sup> (Tuesday) 2018

**Location:** Faculty of Pharmaceutical Sciences – Seminar Room 1 Ottergemsesteenweg 460 9000 Ghent

**Info:** Prof.Dr. Bruno De Geest (<u>br.degeest@ugent.be</u>)