

SlgN Immunology Seminar



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Modelling human macrophage activation

There is increasing evidence from murine studies that macrophages compute input signals from their tissue environment to generate rather specific functional programs both during homeostasis and inflammation. To translate these concepts to human macrophage biology, we have developed reductionistic models to study global reprogramming of human macrophages on epigenomic and transcriptional level. Based on our recent spectrum model of human macrophage activation (Xue et al., Immunity, 2014), I will address three issues: 1) What are the factors that guide human monocytes towards macrophage differentiation in inflammatory conditions and not towards dendritic cells? 2) How is the epigenomic landscape changed during human macrophage activation? And 3) can we utilize network approaches to identify general concepts of plasticity in macrophage biology? I will give an outlook on how we might be able to translate these concepts to human in vivo macrophage biology.

Host
Dr Florent
Ginhoux/Dr
Andreas
Schlitzer
Singapore
Immunology
Network, A*Star

Date
Monday
23 February
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Time
11am – 12pm

Venue
SlgN Seminar
Room
Immunos
Building
Level 4
Biopolis