SIgN Immunology Seminar



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Using Listeria monocytogenes as a tool to decipher macrophage biology

Host
Dr Florent Ginhoux
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Date
Tuesday 6 September 2016

Time
11am – 12pm

Venue
SIgN Seminar Room
Immunos Building
Level 4
Biopolis

Macrophages are innate immune cells which act as sentinels by sensing their environment. Several microbial pathogens including viruses and bacteria target, survive and replicate within macrophages. Listeria monocytogenes, the causative agent of listeriosis, is one of these intracellular bacteria and is a well-established model microorganism to study pathophysiology and immunology. Listeria monocytogenes and macrophages have coevolved and established a complex network of interactions. By using specific mouse models developed in our lab, we decipher the crosstalk between Listeria monocytogenes and macrophages in different organs such as the gut, liver and brain which are all targeted by Listeria monocytogenes during infection, with the objective to better characterize the mechanisms underlying the transition between homeostasis, inflammation and tolerance. This should lead to a better understanding of infection mechanisms and basic principles in cell biology and immunology.