

## Seminar Announcement

### Intestinal dendritic cells and their role in controlling anti-microbial peptide response in epithelial cells

Date: 06 May 2016 Friday

Time: 4pm

Venue: Classroom 1, SBS

**Speaker: Assoc/Prof. Christiane Ruedl**  
School of Biological Sciences, NTU



## Abstract

A proper functioning of the intestinal mucosal barrier is essential in maintaining the mutual “understanding” between myriads of commensals and the immune system. Failure in this communication can have dramatic consequences in the form of inflammatory bowel diseases and even more insidiously, intestinal malignancies.

Gut dendritic cells, effective regulators of mucosal adaptive immune responses, contribute to homeostasis of the gut barrier function. To study the crosstalk between dendritic cells and colonic epithelia we have exploited different Diphtheria Toxin Receptor (DTR) transgenic mouse strains, which enable us to ablate specifically distinct dendritic cell subsets in the gut. These transgenic mouse models allow us to investigate the in vivo function of dendritic cells at steady state and during colonic epithelial cell damage. In my presentation I will present recent data on how intestinal anti-microbial epithelial responses are modulated by dendritic cells.