FriSBi

How E. coli trick our immune system during UTIs

Kathrin Tomasek (Guet Group)

Host: Daniel Boocock

Urinary tract infections (UTI), although clearly not first place on the lethal diseases hit list, are one of the most common and reoccurring bacterial infections worldwide. Patients often suffer for several years due to failure of antibiotic treatment to clear the bacterial infection fully. Reasons for this are intensively studied and it is well established that some of the invading bacteria can hide inside cells of the urinary tract, thus simply escaping the action of treatment and driving the recurrent nature of UTI. However, one main questions stays: why is our immune system capable of immediate, but non-specialized (innate) and slow, but very specialized (adaptive) responses to infections not able to handle the recurrent infection? I am especially interested why there is no activation of the adaptive immune response in patients suffering from UTI, meaning no infection-specific antibodies are produced. In my talk I will show how uropathogenic E. coli, causing the vast majority of UTI, manipulate one of the main players in our immune system bridging the gap between innate and adaptive immune system, dendritic cells, and how this manipulation can potentially prevent the activation of the adaptive immune response.

Friday, May 10, 2019 03:00pm - 04:00pm
IST Austria Campus Mondi Seminar Room 3, Central Building

This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: http://ist.ac.at/fileadmin/user_upload/pdfs/IST_shuttle_bus.pdf The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.