PhD Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

Open PhD Position at Freie Universität Berlin, offered only to Chinese CSC scholarship candidates 2020

Please Note: this PhD position is only offered to Chinese PhD candidates for the application in the framework of the FUB-CSC PhD Program.

Department/Institute: Veterinary Medicine / Institute of Immunology
Subject area: Infection Immunology
Name of Supervisor: Dr. Sebastian Rausch
Number of open PhD positions: 1
Type of the PhD Study: Fulltime
Project title: Regulation of immunity to Giardia infections by the microbiota-Treg axis

PhD Project description:

Infections with Giardia are among the most common causes of food and water-borne diarrheal disease worldwide. However, Giardiasis commonly causes few signs of intestinal inflammation and not all patients develop clinical manifestations. While infections with intestinal helminths support anti-inflammatory responses mediated by regulatory T cells, in part by interacting with the composition of the gut microbiota (1), surprisingly little is known on the basis for the broad spectrum of susceptibility and morbidity seen in Giardia-infected human patients and experimental Giardia infections.

Investigating infections with G. muris in genetically distinct mouse lines we found that high susceptibility is associated with poor Th17 and ILC3 activity and overt Treg activation. Furthermore, structural changes of the gut microbiota resulting from the parasite infection differed considerably in mice displaying a resistant versus susceptible phenotype (2).

The proposed project will hence focus on the role of Treg and the intestinal microbiota in the regulation of innate and adaptive anti-Giardia immune responses in mice and men.


(2) Yordanova I., ..., Rausch, S. In revision.
**Language requirements:**
IELTS: 6.5 or TOEFL: 95 ibt

**Academic requirements:**
Academic requirement: Master of Science.
Experiences in: Immunology and Parasitology.

**Information of the professor or research group leader (website, awards etc.):**

Webpage of the Institute of Immunology:

**Please Note:** In a first step, the complete application should be submitted to [csc@international.fu-berlin.de](mailto:csc@international.fu-berlin.de) for evaluation by January 4th, 2020. Please do not contact the professor before. He/she will get in contact with you after having received the complete application via the International Office of Freie Universität Berlin in January.