



At the Institute of Microbiology, Infectious Diseases and Immunology (Charité - CBF),
the group of Prof Andreas Diefenbach

is currently advertising the

Master thesis project

“Transcriptional control of ILC differentiation and effector functions”

Our lab

The Diefenbach lab has recently contributed to the discovery of innate lymphoid cells (ILC), a group of tissue-resident innate lymphocytes located at the border surfaces of the body, such as the mucosal lining of the intestinal tract. Due to their positioning at barrier surfaces, ILC critically contribute to the rapid response to pathogens but also to tissue homeostasis and repair. One focus of our lab is to study the transcriptional programs controlling lineage specification, commitment and function of ILC.

https://imh.charite.de/en/research/research_groups/diefenbach_lab/

The project

The project investigates the signals and molecular mechanisms controlling ILC differentiation and effector functions. This involves:

- working with mouse strains with (genetic) ablation of particular signaling pathways, sampling and preparation of mouse tissues
- *ex vivo* analysis of intestinal ILC by multicolor flow cytometry and real-time PCR
- establishing reporter assays to study transcriptional activity, molecular cloning and *in vitro* cell culture

Your profile

We are looking for a highly motivated student with background in biology/immunology/ biomedicine or related field. Experience with molecular biology and any above-mentioned techniques is appreciated, but not required. You should be flexible, engaged, self-organized and have the ability to work independently. Good command of written and spoken English is required. Starting date is the next possible date upon agreement between the lab and the student.

Complete applications in English should include a CV, a brief motivation letter, your certificates and transcripts (BSc), and contact information of at least one referee. The documents should be sent as one .pdf file.

Apply by 21th of June 2019

Please direct your application and all enquiries to
Dr. Christian Neumann – [c.neumann\[at\]charite.de](mailto:c.neumann@charite.de)