



# Marie Neumann

**eMail address:**

marie.neumann@hhu.de

**Nationality:**

German

- Phd student at:** Institute of Medical Microbiology and Hospital Hygiene
- Main supervisor:** Prof. Dr. Alexander Dilthey
- Project title:** Functional fine-mapping of HLA- and KIR-mediate Hepatitis C immune control through long-read sequencing and single-cell transcriptomics
- Research focus:** The aim of this project is to better characterize the immune control of HCV and, conversely, the transcriptomic effect of chronic HCV infection on immune cell populations and on NK cells in particular. To achieve these aims, we will apply genetic and immune characterization approaches to a deeply characterized cohort of drug-injecting individuals, comprising individuals with diverse outcomes after HCV as well as individuals who remain seronegative despite certain HCV exposure. We want to contribute to an improved understanding of the interplay between genetic variation and immune cell function in the immune control of HCV, using methods such as long-read sequencing, single-cell transcriptomics, advanced algorithmics and bioinformatics.
- Personal interests & motto:** Sports, especially trampoline gymnastics and yoga. Enjoying nature while cycling or inline skating.  
Motto: It always seems impossible until its done - Nelson Mandela
- Advantages of being a MOI V fellow:** The participation in the MOI V graduate school offers a unified opportunity to follow my scientific goals in a structured environment and with the possibility to connect with national and international researchers. The different workshops, lectures, lab rotations or the international stay, will help improve my personal and scientific skills. The exchange with the other participants will enable diverse perspectives on different topics of the immunology and infectious biology.
- MOI V fellow since:** 09/2024

