

Caroline Meyer

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Nationality: German

Phd student at: Institute of Virology; UKD Dr. Lisa Müller Main supervisor: **Project title:** Comparative studies of the information content of regulatory sequences for RNA processing in HIV-1 and Influenza A Virus. **Research focus:** The investigation of RNA processing mechanisms is crucial for understanding viral pathogenesis. RNA viruses such as HIV-1 and Influenza A have a limited genome size which is efficiently used through alternative RNA splicing by removing of intronic regions from the viral pre-mRNA using the host cell machinery. This process is dynamically regulated by sequence regulatory elements and their corresponding protein binding partners, which can have different roles in RNA processing, in particular splicing and nuclear export regulation of viral mRNA. The aim of this doctoral project is to bioinformatically and molecularly map regulatory RNA sequence motifs in the Influenza A genome and comparatively analyze regulatory RNA sequence motifs with known regulatory sequences in the HIV-1 genome. **Personal interests** Sports, reading, nature, & motto: You are never too old to set another goal or to dream a new dream. – C.S. Lewis Advantages of being Being a member of the MOI V graduate school opens the opportunity to a MOI V fellow: access an international community network of scientists working in similar fields that allows a scientific exchange between young researches.

access an international community network of scientists working in similar fields that allows a scientific exchange between young researches. Additionally, the lab rotations and workshops, which are part of the MOI-Curriculum are valuable to improve personal skills and experimental techniques and the ability to develop own ideas. The well-structured curriculum and organized program will deepen the general knowledge of infections that will accompany us during our PhDs.

MOI V fellow since: 04/2024

