The “Viral Immune and Neuromodulation Laboratory” at the Institute of Virology of Hannover Medical School is looking for a talented, motivated and dedicated graduate student to investigate the role of epigenetic modifications in the establishment of varicella zoster virus (VZV) latency. The successful candidate will employ an array of molecular, cell biology and next generation sequencing techniques to reach the objectives of the project. VZV is a highly prevalent human pathogen that establishes latency in human neurons. VZV normally causes varicella during primary infection and zoster upon reactivation. However, VZV infection also causes post-herpetic neuralgia, meningitis, encephalitis and vasculopathy. Understanding the mechanisms that lead to VZV latency will provide novel therapeutic strategies.

This project is part of the recently established Research Unit “DEEP-DV” Disrupt – Evade – Exploit: Gene expression and host response programming in DNA virus infection. Within this Research Unit 12 principal investigators aim to decipher the initial steps of infection mediated by DNA viruses. In this project we will work in close collaboration with the laboratory of Adam Grundhoff (HPI, Hamburg, Germany) who is investigating the role of epigenetic modifications in the infection of Kaposi’s sarcoma-associated herpesvirus. The student will also join the structured PhD Program “Infection Biology" (ZIB). Students of the ZIB Program benefit from a structured qualification and mentoring program.

The “Viral Immune and Neuromodulation Laboratory” is formed by an international and interdisciplinary team of scientists. To know more about our lab, please visit https://www.mhh.de/en/mhh-institutes/virology/research/viejo-borbolla-lab.

The integration of the lab in the CRC900 and the Excellence Cluster RESIST fosters the collaboration with many scientists with different backgrounds. The Institute of Virology hosts nine research groups working in a variety of topics involving herpesviruses, SARS-CoV-2, adenoviruses and retroviruses. English is the working language at the Institute of Virology.

The candidate must hold a Master degree in a relevant discipline, must be innovative, enthusiastic, able to work independently and as part of the team, and have excellent communication skills. The preferred starting time is September 2021. The position is funded by the “Deutsche Forschungsgemeinschaft” during four years. Salary will be in accordance with the German TV-L. After successful completion of the program the following degrees can be awarded: Dr. rer. nat. and PhD.

Please, send your application documents containing a cover letter, a CV, degree certificates and contact information for at least two referees to Prof. Abel Viejo-Borbolla (Viejo-borbolla.abel@mh-hannover.de) by July 25th 2021.