

**Two master thesis positions are available in the research group of Dr. Bhupesh Prusty** at the University of Würzburg, Institute for Virology and Immunobiology.

The master thesis project will deal with the disease Post-infectious Chronic Fatigue Syndrome/Myalgic Encephalomyelitis (ME/CFS), which is a complex and disabling disease with no approved treatment yet. Following an acute infection patients with ME/CFS suffer from severe central and muscle fatigue, chronic pain, cognitive impairment as well as immune and autonomic dysfunction. There is now increasing evidence that SARS-CoV-2 triggers ME/CFS in a subset of mostly younger patients without preexisting comorbidities.

Previous studies suggest that anti-HHV-6 and EBV-dUTPase antibodies are frequently detectable in ME/CFS patients and can be useful as potential biomarkers for ME/CFS. Therefore, we want to study different viral dUTPases functions in detail. This project will focus on: 1) viral-host interactions of HSV-1, HHV6A, HHV6B and EBV dUTPase; 2) analysis of clinical prevalence of dUTPase antibodies in ME/CFS and Long-COVID patients.

Techniques you will be using:

- cell culture methods
- Western Blot and Dot plot
- ELISA (development)
- Recombinant protein expression
- Immunoprecipitation (IP)
- Confocal microscopy
- cloning

Qualifications:

- Bachelor degree (or receive the degree in a timely manner) in biology, biomedicine, biochemistry, virology, or a related discipline
- Extensive wet lab experience is welcome, especially biomolecular work. Experience in virology is beneficial but not required
- Strong team and communication skills
- Advantageous would be experience in ELISA development and microscopy experience

We offer

- Exciting research questions in the new field of ME/CFS research
- International, interdisciplinary team
- Good network, part of IMMME (Immune Mechanisms of ME) network which offers the student a good collaborative environment and opportunities to take part in meetings and conferences

Supervisors: Dr. Bhupesh Prusty and Dr. Claudia Hollmann.

Please send your application in English and include a description of research experience (including applied methodologies) and your CV to: [Claudia.hollmann@uni-wuerzburg.de](mailto:Claudia.hollmann@uni-wuerzburg.de).

Deadline: 30.10.2023