

## Master thesis/MD thesis

### Optimizing engineered AAV vectors for gene therapy in lymphocytes

**Duration: 10-12 months**

**Remuneration (HiWi job)**

#### Project overview:

The BMBF research group [Genomics of Retroviral Infection](#) (headed by Dr. Ulrike Lange) invites applications from highly motivated Masters students to join our team at the Leibniz Institute of Virology (LIV) in Hamburg. The research group focuses on the biology of human endogenous and exogenous retroviruses and on development of approaches to control retroviral infections. In this context we have recently generated **advanced AAV gene therapy vectors for primary HIV-1 target cells using a nanobody engineering** approach (Hamann et al., 2021, PLoS ONE). The project will focus on expanding this work and optimizing engineered AAV-based vectors for in vivo gene therapy. It will involve experimental techniques such as molecular cloning, AAV-production, cell culture and transduction of different cell lines and primary human lymphocytes, flow cytometry and quantitative PCR amongst other.

#### We offer:

- an exciting research project with a **broad range of experimental techniques**
- a **world-class research environment** with excellent technical facilities at LIV
- close practical and intellectual **supervision of the project**
- a **remuneration** (HiWi job)

#### We are looking for:

- a **highly motivated** and **team-oriented Master student (m/f/d)** in Molecular Life Sciences, Molecular Biology or related fields
- **full-time commitment** to the project
- very good **English language** skills (oral and written)
- **previous laboratory experience** in molecular biology and cell culture techniques is a plus

For questions, please do not hesitate to contact Dr. Martin Hamann ([martin.hamann@leibniz-liv.de](mailto:martin.hamann@leibniz-liv.de)).

LIV promotes professional equality between all genders. Handicapped applicants with equal qualifications will be given preferential treatment.

Applications should include a cover letter, indicating motivation and earliest possible starting date, a CV, a short description of previous experiences and technical skills, and two references. Please submit your application as **single pdf** to [personalabteilung@leibniz-liv.de](mailto:personalabteilung@leibniz-liv.de). The position is to be filled asap.