

## PhD student (m/f/x) / Research Associate

at the Institute for Drug Discovery, University Leipzig

**Salary:** According to German pay grade TV-L EG 13, 50% position

**Starting date:** asap

**Duration:** 36 month



UNIVERSITÄT  
LEIPZIG

Medizinische Fakultät

The Institute for Drug Discovery at Leipzig University offers a position for a PhD student (m/f/x) for a project on “Medicinal and Pharmaceutical Chemistry of Cyclic Peptides”.

The project aims at the development of macrocyclic peptides with chemically modified Phage Display and their medicinal-chemical optimization towards a therapeutic compound for targets of the innate immunity, for treatment of autoimmune disease and cancer. That includes optimization and advancement of chemically modified Phage Display technology, solid-phase peptide synthesis of macrocyclic peptides, their synthetic derivatization, purification, and compound analytic. Furthermore, *in vitro* characterization of binding affinity and iterative optimization of pharmacodynamic and pharmacokinetic parameter of the macrocyclic peptides are part of the project.

### Requirements:

- Excellent Master of Science or diploma in Pharmacy, Chemistry, Biochemistry, Molecular Biology, or related disciplines.
- Skills in synthesis, purification and analytics of small molecules and peptides.
- Experience in *in vitro* selection methods or cloning are a plus.
- Basic knowledge in drug discovery, immunology, biochemistry, and cell biology.
- Ability to act in an interdisciplinary team and international collaborations.
- Very good communication skills (verbal and written in English), and expectation to teach in German.

The Lamers group combines *in vitro* selections from large peptide phage display libraries with classical medicinal chemistry to develop innovative therapeutic peptides. The identified peptides will be generated using automated solid-phase peptide synthesis, tested for affinity and activity against disease-related targets of the innate immune system, and optimized as therapeutics. Areas of application are rare diseases, autoimmune diseases, and cancer.

The desire to work across disciplines is essential. If you are motivated by these challenges, please submit your excellent record of accomplishment with research interests, full CV, a detailed description of hands-on training in experimental and characterization methods via email to [Christina.Lamers@medizin.uni-leipzig.de](mailto:Christina.Lamers@medizin.uni-leipzig.de). Information on the application process can be also obtained from JProf. Dr. Christina Lamers via the above-mentioned email address.