

The Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP) belongs to the „Forschungsverbund Berlin e. V. (FVB)“. The FVB is an institution of seven natural sciences research institutes in Berlin funded by the Federal Republic of Germany and the association of its federal states. The research institutes are members of the Leibniz association.

The Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP) is a non-university academic research organisation dedicated to basic biomedical research and is located at the Research Campus Berlin-Buch in close vicinity to the Max Delbrück Center for Molecular Medicine and the Charité Experimental and Clinical Research Center.

The research groups **Cellular Imaging, Structural Chemistry & Computational Biophysics and Screening Unit** are looking for a joint

Postdoctoral Researcher or PhD student (f/m/d)

(Ref. 12/2021)

working 39 hours/week initially temporary limited to 2 years for the postdoctoral researcher and 3 years for the PhD student with the potential of extension and starting **as soon as possible**.

Project description:

The Screening Unit at the FMP has established a Cell Painting assay using toxic reference compounds in different cell types. In order to exploit and mine the wealth of data generated by this approach we now want to utilize advanced machine learning and data science approaches. This includes (i) matching morphological profiles against reference compounds to predict targets and mechanisms as well as (ii) identification of clusters of compounds based on similar profiles.

Our interdisciplinary teams offer:

Support by & access to Screening Unit (<https://www.leibniz-fmp.de/screeningunit>)

Access to a microscopy core facility (<https://www.leibniz-fmp.de/cellular-imaging>)

Access to high-performance GPU and CPU clusters (<https://www.leibniz-fmp.de/sun>)

Requirements

We are looking for a highly motivated (i) bioimage analyst who wants to apply automated image and data analysis to high throughput microscopy data, or (ii) a biologist or chemist with strong coding skills and hands on experience in machine learning and data science, or (iii) a bioinformatician or computer scientists who wants to apply machine learning to large amounts of microscopy data.

Your skills:

- working / communicating in an interdisciplinary team
- coding skills: R, Python or Matlab
- experience with Version Control
- broad knowledge of statistics and data science methods
- basic understanding of cell biology
- ideally 1-2 years demonstrated hands on experience in machine learning
- as a plus we consider experience in any of the mentioned fields: high content and throughput microscopy, high throughput image data analysis, cell culture, biological image analysis platforms (ImageJ/Fiji, KNIME, Cell profiler or comparable).

Are you interested?

For more information please contact:

Dr. Jens Peter von Kries: E-mail: kries@fmp-berlin.de

Dr. Christopher Schmied: E-mail: schmied@fmp-berlin.de

Dr. Han Sun: E-mail: hsun@fmp-berlin.de

Homepage FMP: <http://www.fmp-berlin.de>

Salaries will be based on TVöD. In 2013 the institute was awarded the certificate of the audit Beruf und Familie as a family-friendly employer. We offer equal opportunities regardless of gender and welcome applications of disabled candidates. They will be preferred in case of equal qualification.

How to apply: On the FMP homepage please go to **“Stellenangebote/Jobs“** and click on this advertisement and then on the button **“Online bewerben“**. Please combine all application documents (motivation letter, CV, bachelor & master / PhD degree, statement of research experience and interests and the contact details of two to three references) into one pdf document and submit them as soon as possible but not later than the latest by **May 31, 2021**.

We are looking forward to your application!