

The LIT - Leibniz Institute for Immunotherapy (foundation under civil law) (<https://lit.eu/>) – is a biomedical research centre focusing on translational immunology in the fields of cancer immunotherapy, transplant rejection and autoimmunity. The objective of the LIT is to develop efficient immune therapeutic strategies in these areas. Close networking between University and University Hospital thus offers high research efficiency and an excellent research environment.

The LIT is looking for a highly motivated postdoctoral researcher to take on a dual role in **technical operation of the state-of-the-art imaging & spatial biology facility** and the **computational data integration** at the Leibniz Institute for Immunotherapy (LIT).

Postdoctoral researcher (m/f/d) – PB-2026-1

part-time (20.05 hours per week/ 50 %), initially limited to two years with possibility of continued employment.

The successful candidate will be involved in **operating, maintaining, and optimizing high-end imaging and spatial omics platforms** (e.g., fluorescence microscopy, mass spectrometry imaging (MSI), Raman systems) and will develop computational and statistical data analysis methods to improve **data quality, information extraction, and multi-omics integration workflows**.

This position is ideal for someone who enjoys working **at the interface of technology, instrumentation, and computational modelling**, contributing both to **data generation** and **advanced analytics** to drive spatial systems biology research.

Your tasks include but are not limited to:

- Organize and support technical running, optimisation and quality assurance of advanced imaging and spatial omics instruments.
- Work closely with users to understand image/data acquisition pipelines and inform computational processing accordingly.
- Support users in experimental design considerations from a data analysis and instrument optimisation perspective.
- Teach users how to operate imaging devices
- Understand image formation processes to design methods for optimal information retrieval from experimental data.
- Develop computational frameworks for integrating spatial and bulk multi-omics datasets.
- Create and apply statistical and machine learning models for feature extraction, data harmonisation, and biomarker discovery.
- Develop open-source tools for multi-modal data processing and integration.
- Collaborate closely with biologists, clinicians, and imaging specialists to interpret high-dimensional datasets.
- Disseminate research through high-impact publications and conference presentations.

Requirements:

- PhD (or near completion) in Imaging Science, Computational Biology, Bioinformatics, Machine Learning, Data Science, or a related field.
- Demonstrated experience in image or signal processing, instrumentation data pipelines, or similar.
- Strong programming skills in Python, R, or MATLAB.
- Experience with statistical modelling, machine learning, or data fusion for high-dimensional datasets.
- Familiarity with multi-omics or imaging modalities (e.g., MSI, Raman, fluorescence microscopy).
- Proven publication record and ability to work in an interdisciplinary environment.

Desirable Skills:

- Experience working with or supporting a scientific facility/instrument platform.
- Knowledge of graph-based methods, manifold learning, or probabilistic modelling.
- Familiarity with HPC or cloud-based analysis workflows.
- Experience with immunological datasets or spatial tissue profiling is a plus.

We offer:

- An international cutting-edge research environment that offers exciting and diverse opportunities
- Flexible working hours
- Flat hierarchies and short decision-making processes
- A highly motivated and cooperative team
- Job ticket
- Excellent funding situation and state-of-the-art equipment

The remuneration is based on TV-L.

The Leibniz Institute for Immunotherapy targets to increase the share of women in the workforce. Therefore, qualified female candidates are explicitly encouraged to submit their applications. Moreover, the LIT advocates for the compatibility of family and career.

Disabled applicants (m/f/d) with equal qualifications will receive preferential treatment within the recruitment procedure. Please refer to your disability status already in your application.

Please note that expenses that may arise in the context of an eventual job interview cannot be reimbursed.

For more information, please contact Prof. Dr. Philipp Beckhove (philipp.beckhove@lit.eu). We are looking forward to receiving your detailed application. Please apply via our [Online - Application Portal](#) the reference **PB-2026-1**.

Application **deadline** is **May 03rd, 2026**.

