

## PhD Student (m/f/d)

The Leibniz Institute for Food Systems Biology at the Technical University of Munich (Leibniz-LSB@TUM), a legal foundation under civil law based in Freising, is a prominent member of the Leibniz Association. Our institute integrates cutting-edge biomolecular research, bioinformatics, and high-performance analytical technologies to explore the complex interactions between the human organism and food components.

To strengthen our research group, **Integrative Food Systems Analysis / Section III**, we are currently looking for a committed PhD Student to start on 01/05/2026. The position is part-time (TV-L 13, 65%) and initially limited to 3 years.

### Research project

With the increasing availability of food-related multi-omics data, it is possible to extensively characterize food items on a molecular level. To yield new insights into food-effector systems, sophisticated and tailored computational methods are needed. This project aims at combining probabilistic machine learning methods with prior knowledge in the form of graphs to analyze and predict food-effector systems.

### Key Responsibilities

- Develop Probabilistic Machine Learning Models to integrate graphs and food-related omics data
- Multi-omics integration using graph-structured prior knowledge
- Analyze food-related (multi-)omics data

### Your Profile

The ideal applicant has a strong background in bioinformatics and/or probabilistic machine learning, as well as experience in omics data analysis, and possesses solid English-language skills. Experience with programming, preferably Python and R, is required. Experience with deep learning frameworks, such as JAX or PyTorch, is a plus. In addition to above-average interest in the topic, we consider self-motivation and the ability to face new professional challenges as self-evident prerequisites. The ability to work independently, outstanding team skills, and organizational aptitude round out the ideal profile.

### We offer you

- a thorough induction into your area of responsibility
- a diverse range of training and development opportunities for professional and personal development
- Opportunities for health promotion and work-life balance
- an appreciative, collegial working atmosphere with flat hierarchies and short decision-making paths
- an interesting and responsible field of work in the context of non-university cutting-edge research
- flexible working hours with the option of mobile working (home office)
- Company pension scheme (VBL) and annual bonus payment
- a motivated team that is looking forward to welcoming you!

## Equal Opportunities and Diversity

Leibniz-LSB@TUM is committed to equal opportunities, diversity, and a respectful working environment. We welcome applications regardless of gender, nationality, ethnic or social origin, religion or belief, disability, age, or sexual orientation and identity.

Applicants with severe disabilities or those with equivalent status will be given preferential consideration in cases of essentially equal qualification (§ 2 SGB IX).

## Contact and Application

More information on the working group can be found here:

<https://www.leibniz-lsb.de/en/research/research-sections/section-iii>.

Please send your application, including a comprehensive CV and transcripts as well as names of three potential references, as a PDF file and stating the reference number **2026-01-S3-NK** via email to:

**Anja Albrecht** (Administration) [recruiting.leibniz-lsb@tum.de](mailto:recruiting.leibniz-lsb@tum.de).

**We look forward to receiving your application!**

## Data Protection Notice:

As part of your application for a position at Leibniz-LSB@TUM, you will transmit personal data. Please refer to [our data protection information](#) in accordance with Article 13 of the General Data Protection Regulation (GDPR) regarding the collection and processing of personal data in the context of your application. By submitting your application, you confirm that you have taken note of the Leibniz-LSB@TUM data protection information.