The **Leibniz Institute for Food Systems Biology at the Technical University of Munich (Leibniz-LSB@TUM)**, a legal foundation under civil law in Freising, is a research institution of the Leibniz Association that combines methods of biomolecular basic research with analysis methods of bioinformatics and analytical high-performance technologies to investigate the complex interplay between the human organism and food ingredients.

The research group **Network Modeling & Machine Learning** at Leibniz-LSB@TUM is currently looking for a

# Doctoral student (m/f/d)

to start in January 2022. The position (65%, TV-L 13) is to be filled for a maximum period of 4 years.

### Research project

The straightforward identification of bitter taste peptides in food is largely hampered by the enormous complexity of food peptidome. The position is devoted to improve the prediction of food-derived bitter peptides. The applicant, in close collaboration with colleagues from food chemistry, molecular biology and in the area of bioinformatics, will investigate the molecular recognition of bitter peptides and develop predictive machine learning models making use of structural data from peptides and bitter taste receptors.

### Your area of responsibility includes

- Application of data science approaches in food science
- The development of machine learning algorithms to predict molecular structures
- Generation of molecular knowledge graphs

### Requirements

The ideal applicant has

- a master's degree in degree in computer science, mathematics, bioinformatics, or data science
- solid knowledge of data science and application of machine learning techniques
- an in-depth understanding of text mining techniques
- a track record for scientific writing
- a strong background for understanding and implementing machine learning algorithms
- readiness to collaborate in interdisciplinary projects
- ability to work independently and focused
- solid English communication skills
- organizational skills

### In addition to a varied workplace where your performance counts, we offer

- scientific development opportunities in an international and interdisciplinary research environment
- possibilities for further training and advanced qualifications within the Leibniz Association and the Technical University of Munich
- a motivated team that is looking forward to welcoming you
- flexible working times and therefore good compatibility of work and family
- company pension scheme

In the case of essentially reciprocal suitability, severely-disabled applicants as defined SGB IX will be preferred.

Please address any research related questions to Prof Olaf Wolkenhauer (o.wolkenhauer.leibniz-lsb@tum.de) and send your application with your comprehensive CV and transcripts as well as names of three potential references electronically as a PDF file to the following address, citing the reference number **2021-14-S3-OW**:

Anja Magalowski (Human Resources Department) recruiting.leibniz-lsb@tum.de.

**Take advantage of this opportunity and contact us!**

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