

RTG 2344 - EXPLORATION OF SPATIO-TEMPORAL DYNAMICS OF GENE REGULATION USING HIGH-THROUGHPUT AND HIGH-RESOLUTION METHODS



Postdoctoral position to explore multidimensional integration of high throughput sequencing data

The German Research Foundation (DFG) funded RTG "MeInBio – BioInMe: Exploration of spatio-temporal dynamics of gene regulation using high-throughput and high-resolution methods" (www.meinbio.uni-freiburg.de) successfully bridges bioinformatics and wet laboratory methods to analyse high-throughput sequencing data at single cell level, or in small cell numbers. The RTG provides interdisciplinary education in modern bioinformatics methods and the underlying biological research questions to PhD researchers in 13 research groups of the University of Freiburg and the Max Planck Institute of Immunobiology and Epigenetics Freiburg, Germany.

From March 2022, Me*ln*Bio offers 1 Postdoc position

Your tasks:

- You will develop and test software for multi-scale integrative analysis of various high-throughput data sources (e.g. ChIP-seq, ATAC-seq, single-cell RNA-seq, iCLIP, metabolomics) as needed in selected research projects of the RTG. This includes e.g. the establishment and extension of standardized Galaxy workflows for single-cell analyses, defining and codifying best practices based on established software packages, using supervised and unsupervised methods for parallel dimensional reduction of heterogeneous data, implementation of published methods and project-specific optimization of workflows.
- You will be involved in training, e.g. in Galaxy courses, for the members of the RTG and will ensure transferability, scalability and documentation of data and analysis workflows.
- You will advise RTG PhD researchers in the process of research data management according to the guidelines of the University of Freiburg.

You are convincing through:

- an excellent PhD in informatics/bioinformatics
- documented experience in high-throughput data analysis
- a strong interest to acquire biological knowledge and work together with life scientists
- very good communication skills in English
- a strong motivation and enthusiasm for multiple facets of the life sciences
- the ability to work synergistically in a team of different project leaders and PhD researchers

We offer:

- exciting research projects in integrative data analysis and close collaboration with several life science groups with excellent publication and further career prospects
- time for own algorithmic and software development
- participation in RTG courses and gatherings of all research training group members for scientific exchange
- an international work atmosphere
- participation in the RTGs equal opportunities actions for female researchers and parents
- an individual career development plan and participation in the universities' services for postdocs

Employment will be on a fixed term basis for the duration of 4,5 years starting March 2022.

Please send applications including the usual documentation (CV, degrees, 2 references, short letter of motivation, list of publications) via email until December 31, 2021:

GRK2344, Dr. Christine Hacker, christine.hacker@anat.uni-freiburg.de