

Major biotechnological breakthroughs in the past two decades have made it possible to collect extremely large amounts of data at a multitude of different levels. Data integration across various biomolecular entities ("omics") such as the genome, epigenome, transcriptome, proteome, and metabolome, opens up new perspectives on our understanding of pathophysiological mechanisms and thus on the development of disease.

The Multi-Omics Data Science (MODS) initiative, funded by the Ministry of Culture and Science (MKW) of the State of North Rhine-Westphalia, investigates metabolic disorders and the resulting diabetological, hepatological, cardiovascular and neurological clinical manifestations. The initiative aims to develop novel methods in data science, bioinformatics and AI and to apply them to multimodal data analysis of various disease cohorts across omics levels. We are to fill **14 full-time (100% TV-L E13) positions** for

Postdoctoral Researchers (m/f/x).

Employment will start as soon as possible. The project ends October 31, 2024.

With around 8.000 employees, the Düsseldorf University Hospital is one of the biggest employers in Düsseldorf. Here, patients are treated in an interdisciplinary manner, translating latest scientific findings into clinical practice. This is enabled by the close interlinking of patient care with research and teaching at the Medical Faculty of Heinrich Heine University Düsseldorf. We need your competence and enthusiasm for constant progress. We offer you a diverse work environment and many opportunities for professional development.



Heinrich Heine University Düsseldorf is aiming to increase the proportion of women. Applications from women will therefore be given preference if they have the same suitability, ability and professional performance, unless reasons related to the person of a competitor prevail. Heinrich Heine University is committed to the principle of excellence through diversity. We signed the "Diversity Charter" and successfully participated in the Stifterverband's "Shaping Diversity" audit. It is certified as a family friendly university and has set itself the goal of promoting the diversity of its employees. The application of suitable severely disabled and equivalent disabled people according to SGB IX is desired. The work area is generally suitable for part-time staff.

Job description:

- Cutting edge research in medical data science, bioinformatics, and artificial intelligence
- Contribute to a collaborative and interdisciplinary research initiative at the intersection of medical research, data science, artificial intelligence and computational biology
- Method development in multi-omics data science with applications to metabolic diseases

A detailed list of research topics is available from the MODS website (<http://mods.hhu.de/en>). In your application, please include a ranked list of at most three projects of interest.

Requirements:

- Doctoral degree/Ph.D. in a field relevant to MODS, e.g., multi-omics, data science, artificial intelligence/machine learning, computational biology/bioinformatics, or related areas.
- Very good track record of scientific publications
- Good communication skills (English)
- Interest in interdisciplinary collaboration
- Independent, responsible and committed work attitude

Desirable qualifications:

- International research experience / working experience abroad
- Successful interdisciplinary research collaborations
- Organizational and coordination skills
- First experiences in raising third-party funds
- Experience in supervising student projects and Bachelor/Master theses

Our offer:

- Performance-based remuneration according to TV-L E13
- Space for personal responsibility, creativity and personal development
- Flexible and family-friendly working time models
- Childcare options in a UKD day-care center and offers for those returning from parental leave
- 38,5 working hours per week
- Funded advanced training (internal seminar program)
- Inexpensive catering options on the UKD site
- Discounted employee ticket for public transport
- Company pension scheme (VBL supplementary pension in the public sector)

For questions please contact Prof. Dr. Tobias Marschall (e-Mail: Tobias.Marschall@hhu.de) or, for questions on individual projects, the corresponding PIs (see website).

Have we piqued your interest?

Then we are looking forward to your application, including your CV, list of publications, names and contact information of two references until 21.11.2021. Email your application as a single PDF to: sabine.gierling@med.uni-duesseldorf.de