

The Institute of Medical Bioinformatics at the University Medical Center Göttingen (UMG) is filling positions for

### **PhD candidates (m/f/d) in the field of Medical Bioinformatics**

- Duration: initially limited to two years with the option of extension,
- Part-time (65%)
- Compensation according to TV-L

#### **About us:**

Our institute is a leader in the bioinformatic analysis of genetic high-throughput data, particularly in the development of biomarker signatures and advanced approaches of machine learning for personalized and systems medicine.

Within different DFG or BMBF funded Collaborative Research Projects focused on for instance on pancreatic cancer, colorectal cancer, we pioneer the development of innovative computer-assisted methods in bioinformatics and artificial intelligence. This includes the analysis and integration of various OMICs data, including genomics, transcriptomics, and spatial transcriptomics.

#### **PhD Topics:**

Within these research groups, we offer ambitious young scientists the opportunity to work at the forefront of research in Medical Bioinformatics. Possible topics for doctoral theses are deeply rooted in the analysis of complex datasets and the development of methods essential for progress in the treatment of pancreatic and colorectal cancer.

Furthermore in context of our new project GöNoMix, we develop computational methods to reconstruct gene regulatory networks (GRNs) in emerging model organisms. We integrate ATAC-seq, RNA-seq and TFBS analyses, model WNT signaling, improve machine-learning methods and create tools for cross-species comparisons.

We are looking for PhD candidates interested in statistical data analysis, machine learning methods, gene regulation, bioinformatics, and integrative omics approaches.

#### **Your Tasks:**

- Support in the analysis of genomic data
- application and analysis of NGS-based data sets and pipelines

- Application and further development of methods of artificial intelligence and machine learning

### **Your Profile:**

- Degree (Diploma/M.Sc.) in Biology, Computer Science, Bioinformatics, Data Science, or a related field.
- Basic understanding of biological and biomedical concepts
- Expertise in computer science, data science, and machine learning
- Proficient in programming languages such as Python, Java, R, or JavaScript
- Enthusiasm for working with complex data models
- Interest in interdisciplinary collaboration
- Excellent English language skills in both written and spoken; knowledge of German is advantageous
- High motivation, teamwork, and initiative

### **Our Offer:**

- Structured and guided onboarding
- Diverse activities in a multidisciplinary, interdisciplinary team
- Support for internal and external training as well as scientific events
- Participation in structured PhD programs in Biology, Molecular Medicine, Computer Science, or Data Science

### **Equal Opportunity and Inclusion:**

The University Medical Center Göttingen strives to increase the proportion of women in areas where they are underrepresented and therefore expressly encourages qualified women to apply. The promotion of professional participation of people with disabilities is a particular concern for us. Applications from disabled individuals will be given preferential consideration if they are equally qualified. Please indicate any disability/equal opportunity in your application letter.

We look forward to receiving your application by 11.1.2026 via our [application portal](#).