

We are looking to support our rapidly growing team from 1 February 2027:

Computational PhD Student (f/m/x) in Cancer Genomics

Institute for Computational Cancer Biology

TV-L: 29 h/week (75,32%)

PhD student position, fixed-term for 3 years in accordance with the German Academic Fixed-Term Contract Act (WissZeitVG)

Your salary will be based on TV-L pay grade E13

Your tasks

As a successful candidate you will develop algorithms and models to investigate cancer evolution and chromosomal instability. A focus lies on the development of AI methods for improved phylogenetic reconstructions and feature space embeddings from complex genomics data. You will be part of CLONETRAC, a collaborative consortium with the aim of tracking the clonal dynamics of cancer through treatment at the single-cell level, funded by the Bruno and Helene Jöster Foundation. You will be embedded in a thriving interdisciplinary and collaborative team of computational biologists, computer scientists and clinicians at the University Hospital of Cologne.

Your profile

Ideal candidates will have a Masters degree in Physics, Mathematics, Computer Science, Bioinformatics or a related field. A strong background in theoretical and/or applied machine learning and AI, and a strong interest in medical research is expected. Prior experience in cancer genomics is a plus. Successful candidates will show a strong work ethic and should be enthusiastic about working in a highly interdisciplinary

Your future with us

We are one of the leading university hospitals in Germany and network research, teaching and health care at the highest level. That's why many things are a lot bigger for us: the spectrum of exciting development opportunities. The limitless openness with which specialists from all over the world work together here. Or our commitment as an employer to support all employees as best we can in reconciling their job with their goals and life situations.

This is the University Hospital of Cologne: Everything but ordinary.

Your future in detail

Our computational group is interested in understanding the role of chromosomal instability, somatic copy number alterations (SCNA) and chromatin structure in cancer evolution. We develop and apply algorithms for reconstructing and simulating cancer evolution in close collaboration with our clinical and experimental partners. We are part of several national and international consortia, such as the ICGC-ARGO, TRACERx, and SATURN3 consortia and hold close ties to BIFOLD, the Berlin Institute for the Foundations of

environment. Excellent communication skills and the ability to work in a team are required.

Learning and Data.

Our offer

- **Everything but ordinary:** You can expect a secure job in a challenging, innovative environment – including company pension schemes and regular working hours without business trips.
- **Work-life balance:** Whether full-time or part-time, with or without children – with numerous support options, we will find the right path together.
- **Team spirit in R(h)ine culture:** You will be warmly welcomed by an interdisciplinary team that values mutual respect and helpfulness.
- **Strong perspectives:** We offer extensive training opportunities – so you can continuously grow and set new goals.

Applications from female candidates are expressly welcome and will be given priority in the event of equal suitability, competence and professional performance. People with disabilities are welcome to apply and will be treated preferentially in the event of equal suitability and qualification.

Contact

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Geschäftsbereich Personal
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Uniklinik Köln Karriere

Application deadline: 6 December 2026

Job-ID: sop26imd

apply now

We look forward to receiving your application and getting to know you!