The mission of the Berlin Institute of Health at Charité (BIH) is medical translation: transferring biomedical research findings into novel approaches to personalized prediction, prevention, diagnostics and therapies and, conversely, using clinical observations to develop new research ideas. The aim is to deliver relevant medical benefits to patients and the population at large. The BIH was founded in 2013 and is funded 90 percent by the Federal Ministry of Education and Research (BMBF) and 10 percent by the State of Berlin. Since 2021 the BIH has been integrated into Charité as its so-called third pillar.

The BIH is looking as soon as possible temporary for a

**Senior Research Assistant (WiMi) in Computational Biology / Data Science (f/m/d)**

We are seeking a highly motivated fellow with a background in computational biology/data science to join the team of Prof.Dr. Peter N. Robinson, centrally located at the Berlin Institute of Health (BIH) in Berlin-Mitte. The Robinson lab is relocating to the BIH with the support of an Alexander-von-Humboldt Professorship for Artificial Intelligence. The Robinson lab has played an internationally leading role in several areas of translational bioinformatics, including the development of the Human Phenotype Ontology (HPO) and of software for phenotype (HPO) driven diagnostics, including Phenomizer and LIRICAL.

Our Exomiser software is widely used by projects such as the 100,000 Genomes project to assess diagnostic exome and genome data. Peter Robinson leads the machine learning subgroup of the National COVID Cohort Collaborative (N3C), and recent projects have included the application of machine learning to EHR data of COVID-19 patients. A more complete list of software and publications can be found on the Lab homepage (https://robinsongroup.github.io/). Our lab strives to be a welcoming and supportive environment where people of all backgrounds develop algorithms and software at the cutting edge of translational bioinformatics. Lab members typically focus on one or two areas of interest in fields such as ontologies, semantic algorithms, or machine learning. We provide extensive on-the-job training in algorithms and software engineering as needed for the projects.

## Your job description:

The successful applicant will work closely with an international, interdisciplinary, and highly collaborative group, including clinicians, biologists and computational biologists across the BIH/Charité community and with members of the Monarch Initiative, an international (US, UK, Germany) collaboration for translational ontology (http://monarchinitiative.org/), providing a range of opportunities to learn new skills. The ideal candidate has a strong computational/analytical background, interest and possibly some experience in the analysis of biomedical data, and the ability to integrate and work within a team of scientists. We expect the candidate to participate in collaborations, which means concretely participating in virtual conferences and co-developing code using GitHub. Senior fellows in the lab are expected to lead projects involving the development of novel algorithms and implementation of robust, high-quality software.

The general responsibilities will include, but are not limited to, the following activities:

- Development of algorithms or software pipelines to address problems and challenges in translational bioinformatics (topics will be similar to those in existing publications on the Robinson lab homepage, but will be determined collaboratively to address current needs and opportunities). Appropriate software engineering measures (software testing, documentation, integration with existing tools and APIs).
- Appropriate software engineering measures (software testing, documentation, integration with existing tools and APIs).
- Participation in preparation of manuscripts and scientific presentations.
- Document progress, communicate and present analyses to group, institute members and collaborators verbally and in writing.
- Work with members of the group and collaborators as well as independently with respect to experimental design, data analysis, visualization, and interpretation.

## Your profile:

- Master degree in a quantitative discipline (e.g. computational biology, computer science, statistics, bioinformatics) with significant experience in computational analyses will also be considered for the position. PhD ist a strong plus.
- Experience in software development and software engineering
- Experience with big data management, statistical analysis, and data visualization.
- Background in statistics and statistical models.
- Strong self-motivation, organizational skills, and ability to lead and develop scientific projects.
- Scientific curiosity, analytical thinking, and interest in contributing to projects.

- Keen interest in learning new skills, research techniques, data processing and analysis/interpretation of results.
- Ability to work in a team of young scientists, to be flexible, and flourish in a fast-paced environment.
- Strong communication and interpersonal skills, ability to work collaborate effectively with expert individuals of different backgrounds in a multidisciplinary team.
- Please send applications as a single PDF file, including a cover letter (max. 2 pages) indicating past, current, and future research interests, potential starting date, a curriculum vitae, publication list, names and contact information of up to three references. We are looking forward to hearing from you!

**We offer:**

- A varied job in a forward-looking research institute
- Flat hierarchies and short decision-making processes
- Very good opportunities for further education and training
- A limited full-time position (39h/week) until the 31.12.2028. Part-time can also be possible (min. 30h/week)
- Remuneration up to TVöD VKA-K EG13, taking into account personal requirements.
- Additional benefits customary in the public sector (e.g. annual bonus, VBL, Gympass)
- 30 vacation days per year (with a five-day week) and up to 24 flex days per year
- Flexible working hours and option to work mobile for a better work-life balance
- Very accessible and attractive workplace in location

**We live diversity!**

BIH strongly encourages qualified women to apply. Applications from people with a migration background who meet the hiring requirements are expressly encouraged. Applicants with severe disabilities and those of equal status will be given preferential consideration in the event of equal suitability.

Please submit your application via the **BIH career portal https://jobs.bihealth.org** by **07.01.2024**, quoting the reference number **BIH-109.23**.

**Note:** If you have a foreign university degree, please note that it may be necessary to obtain a certificate from the ZAB. You can find more information at: https://www.kmk.org/zab/central-office-for-foreign-education.html
For those born after 1970, proof of measles immunity / measles vaccination is required.

For more information on BIH, please visit www.bihealth.org