Job posting

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Title

Postdoc in Computational Biology (f/m/d)

Institution

The research group for “Bioinformatics and Computational Genomics” is seeking a Postdoctoral researcher in area of multi-omics integration to prediction immune response to infection. The goal of this project is to apply systems genetics and deep learning methods to analyse multi-omics datasets (including DNA variation, DNA methylation, transcriptome, protein/metabolite abundance, microbiome,) from patients and healthy controls, to identify biomarkers to predict disease phenotypes, which can be used as therapeutic targets for personalized medicine in infection research. The project is under the supervision of Prof. Cheng-Jian Xu, who collaborates locally, nationally and internationally with biologists, immunologists and clinicians.

The research group is associated with the Department of Computational Biology of Infection Research at the Helmholtz Centre for Infection Research (HZI), and based at the Centre for Individualised Infection Medicine (CiiM) in Hannover, which is a joint venture of the Helmholtz Centre for Infection Research (HZI) and Hannover Medical School (MHH). Located on the biomedical campus in Hannover, it is the first research institution devoted to the elucidation of individual characteristics relevant for infection susceptibility, disease progression and therapeutic outcome. Based on these finding, CiiM will pioneer individual prognosis and diagnosis of infectious diseases and subsequently optimized and customized prevention and therapy for the benefit of the individual patient (www.ciim-hannover.de).

Our CiiM bioinformatics group is a young, dynamic and international consists of 6 PhD-students and 5 postdocs.
Responsibilities

• Develop novel bioinformatic tools for integrating results from genome-wide association studies with biological information at single cell resolution.
• Work with other computational and experimental lab members and collaborators to turn new findings into experimentally and computationally testable hypotheses.
• Train graduate students, research associates or technicians in experimental design, technique, and performance and identifies and resolves technical problem in research projects.
• Actively participate in writing journal articles and grant proposals.

Requirements

• PhD degree in Systems Biology, Computational Biology, Bioinformatics, Biophysics, Computer Science or a related discipline
• a proven track record in statistical analysing large omics datasets
• excellent skills in statistics is a plus
• Advanced programming skills in R are highly desirable.
• Experience with working in high performance computing/Linux environments
• Well-developed collaborative skills
• Excellent oral and written communication skills
• Fluency in English

Severely handicapped persons with equivalent professional qualifications are given preference. In order to protect your rights, we ask you to provide us with a clearly recognizable reference to the existence of a degree of severe disability in your cover letter or resume.

The HZI strives for professional equality between women and men.
The position is suitable for part-time work and will be realized within the scope of the possibilities of the service.

Starting date: As soon as possible.
The contract will initially run for two years.
Salary: E 13 TVöD Bund
Working time: 39 hours per week
Place of work: Hannover
Probation period: 6 months
Closing date: 22.09.2021

Application procedure
(deadline etc.)

When sending us your application documents, please confirm that you have read our privacy policy and that you agree to the processing of your personal data. Please use the text module in our privacy policy for this purpose.
Without these declarations we cannot consider or process your application and will immediately delete any application documents already received after the application deadline.
Please send your application with a cover letter outlining briefly your experience, motivation and interest the announced position, and a complete curriculum vitae including a list of publications and academic references referring to code 100/2021 by e-mail to JobsHZI@helmholtz-hzi.de or to: Helmholtz Center for Infection Research GmbH, Personnel department, Inhoffenstraße 7, 38124 Braunschweig. If you send your application in electronic form, please provide a summary in one single (1) pdf document.

Contact

For questions regarding the offered position, you are encouraged to contact directly Prof. Xu using the following email contact address: Cheng-Jian.Xu@helmholtz-hzi.de