The Institute of Human Genetics, Department of Genomics, School of Medicine, University of Bonn, Germany, invites applications for a

PhD position (TV-L EG 13, 65%) (m/f/d)

The PhD position will be based in the multidisciplinary, multicenter research project “Towards a mechanistic understanding of common and rare genetic risk variants for bipolar disorder: studies in iPSC models and extended families”, which is financed by the German Research Foundation (DFG) and the Swiss National Science Foundation (SNSF). The project aims to improve understanding of the molecular basis of bipolar disorder. To achieve this, innovative strategies and methods will be applied (e.g. short-read and long-read whole-genome sequencing data, transcriptomic and cellular analyses).

The Institute of Human Genetics is one of Germany's leading centers in the identification of genetic risk factors for multifactorial disorders. It provides a unique scientific environment for researchers, combining expertise in the analyses and interpretation of genomic data and providing access to state-of-the-art high-throughput genomic technologies (microarrays, next-and third-generation-sequencing, bioinformatics).

The focus of the proposed PhD will be on the characterization and functional interpretation of molecular genetic and transcriptomic (expression and small RNA profiling) data. In addition to the generation of primary data, the proposed work will involve the performance of advanced bioinformatic- and biostatistical analyses. The successful candidate will apply state-of-the art genotyping and next-generation sequencing technologies; manage and analyze the generated data (e.g., data mining, application and interpretation of polygenic risk scores, gene-based tests, gene-set enrichment, pathway and network analyses); and follow-up relevant findings.

We are seeking a highly motivated, team-oriented graduate candidate with a strong interest in human genetics and complex disease who is eager to work in a modern laboratory environment and to apply cutting-edge genomic and molecular biology technologies. Preferably, the successful candidate will hold a diploma or a master's degree in Molecular Biology, Biomedical Sciences or a related subject. Proficiency in German and English, as well as good skills in using molecular genetics techniques (DNA/RNA work, DNA genotyping, NGS, PCR) are required. Experience in cell culture, CRISPR/Cas, and cloning as well as experience in the use of computers and computational tools (MS Office, MS Windows, Linux, R), and applied data analysis and database usage would be beneficial.

The PhD position will be integrated into the PhD Program of the School of Medicine at the University of Bonn and the Graduate School of Clinical and Population Sciences. Successful candidates are awarded a PhD.

The position is initially limited to three years with the possibility of extension.

We offer:
- The salary will be according to the German salary scale (EG 13, 65%)
- There is also a possibility to use the day care center
- Supplementary benefits in the public sector (pension plan according to VBL)

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. It aims to increase the proportion of women in areas where women are under-represented and to promote their careers in particular. It therefore urges women with relevant qualifications to apply. Applications will be handled in accordance with the Landesgleichstellungsgesetz (State Equality Act). Applications from suitable individuals with a certified serious disability and those of equal status are particularly welcome.
For further information, please email Prof. Markus Nöthen (PhD_bipolar_disorder@uni-bonn.de).

Applicants should send their application in a single PDF-file including cover letter, detailed CV, scanned academic degrees and the contact details of two referees by email only to PhD_bipolar_disorder@uni-bonn.de within two weeks after publication, mentioning Reference number 699_2019.

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