The research group of Prof. Dr. Bodo Grimbacher at the Center for Chronic Immunodeficiency (CCI) is looking for a

Researcher for genetic analysis / Database programmer (100%) for the

genetic analysis of primary immunodeficiencies

The group is working on the identification and molecular characterization of inherited defects of the immune system using an "omics" approach. The methods range from DNA sequencing, including 'Whole Exome Sequencing' (WES), 'Whole Genome Sequencing' (WGS), and '16s rRNA sequencing', to methylome sequencing, including 'Whole Genome Bisulfite Sequencing' (WGBS) and 'Reduced Representation Bisulfite Sequencing' (RRBS), and to bulk and single-cell RNA sequencing.

Current projects focus on the genetic identification and molecular characterization of both novel and known genetic defects leading to primary immune deficiencies, autoimmunity and antibody deficiency. The Genetics and Genomics Unit (GGU) of the group aims to combine diagnostics and research, providing questions and hypothesis that fuel the different projects carried out in the group. In that regard, the group studies the role of genes such as *ADA2*, *CTLA4*, *LRBA*, *NFKB1*, *NKFB2*, *STAT1* and *STAT3* in the immune system and the consequences of certain mutations in gene function. In addition, the group complements the genetic and functional research with microbiome, transcriptomic and epigenetic data, aiming to understand the contribution of additional factors to immune-mediated diseases.

Your tasks:

- Analysis and reporting of genetic data
- Participate in the development of the group's database
- Contribution to different research projects of the group
- Contribution to the publication of data
- Teaching and mentoring students

Your profile:

- A MSc or PhD in bioinformatics, immunology, or genetics
- Experience and knowledge with NGS technologies and analysis
- Very good computer skills
- Very good English language skills
- Experience in the field of genetics and cellular immunology
- Independent and autonomous self-motivated work
- A motivated, dedicated, and communicative personality

We offer:

- A laboratory with the latest technology for basic medical research
- Participation in further education and training opportunities in our own training center
- Very friendly and supportive working environment
- Good professional and personal development opportunities
- · Accommodation in one of our staff residences, if required

The position is available at the earliest possible date in full- or part-time but initially limited to one year. However, an extension may well be possible.

Please send your application with the usual documents until end of August 2020 to:

Jonas Olbertz <u>ifi-sekr@uniklinik-freiburg.de</u>

University Medical Center Freiburg Center for Chronic Immunodeficiency Breisacherstr. 115 79106 Freiburg Germany