The Center for Regenerative Therapies Dresden (CRTD), an institute of the Center for Molecular and Cellular Bioengineering (CMCB), is a research center at the TUD Dresden University of Technology with currently over 20 research groups. The research focus of CRTD lies in regeneration and stem cell research from fundamental research to clinical-translational applications in the areas of hematology/immunology, diabetes, neurodegenerative diseases, and bone and tissue regeneration. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the CRTD, the Chair of Stem Cell Research with focus on cell-based approaches to regenerative biomedicine (Prof. Dr. Michael Sieweke) offers a project position as

**Research Associate / Postdoc (m/f/x)**
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible**. The position is limited until February 28, 2026, with the option of extension in follow-up projects, within the framework of the DFG-funded research group FOR2599 "Type 2 Immunity". The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

The research group studies how macrophages influence regeneration, aging, and cancer, with a focus on gene regulatory mechanisms and long-term epigenetic changes controlling self-renewal, activation, aging and "trained immunity" (e.g. PMID: 35210623, PMID: 32169166, PMID: 26797145). The group utilizes molecular, genetic and bioinformatic analyzes in mouse and human cells, employing both in vivo and in vitro model systems.

**Tasks:** The aim is to investigate the relationships between macrophage type 2 polarization and self-renewal, focusing on alveolar macrophages in lung tissue regeneration and aging based on findings described in PMID: 35210623 and PMID: 26797145. The project aims to investigate the cell intrinsic and extrinsic mechanisms, in particular transcription factors and cytokines, that link self-renewal and type 2 polarization in macrophages, particularly AM. The project will investigate the important implications for regenerative capacity, aging and susceptibility to cancer development in the lung.

**Your profile:**
- university and PhD degree in biology, biomedical science or related subject
- background in immunology, stem cell research, aging, regeneration or related discipline
- quality publications or other evidence of successful research achievements
- knowledge of FACS, cell culture, cell- and molecular biology, immunological assays
- experience with RNA-Seq and ATAC-Seq (bulk and single cell), ideally with bioinformatic skills
- experience in mouse genetics and experimentation
- strong interpersonal and communication skills
- capable of autonomously leading a high-profile research project
- ability to effectively implement collaborations and supervising junior lab members
- good self-organizational skills to structure tasks and document data
- capable to maintain a good overview of the relevant literature
- very good skills in written and oral English.

Are you passionate about unsolved problems? You combine technical skill with creative thinking? Then you are probably the right person for the job. We are looking for a highly motivated postdoc with team spirit to join our international research team in Dresden. Besides tackling some of the most fascinating questions in biology, such as how a cell maintains its identity, senses and records its interaction with...
the environment and coordinates this with cell division, your findings might have a major impact on new cellular therapies in regeneration and cancer and thus benefit patients in the future.

We offer:

- opportunity to shape your research projects and implement your own ideas
- collaborate and profit from the group's extensive network with leading figures in the field
- access to state-of-the-art equipment and efficient core facilities (microscopy, FACS, NGS sequencing, bioinformatics, iPS engineering, animal housing etc.)
- vibrant research environment with active seminars, training courses and conferences
- lively campus with a cluster of institutes in clinical and basic research
- diverse career development prospects, profiting from the group's international network, maturing into senior positions in the lab, in a spin-out biotec company or science management positions on campus
- working on exciting basic biology questions with direct medical impact on new therapies
- being part of a dynamic international team
- competitive salary and comprehensive benefits package (sports, health, retirement)
- excellent child care facilities with privileged access in close vicinity of the institute
- support for international candidates (formalities, German courses, international office)
- participating in research networks (DFG research networks on oncology, regeneration, and metabolism, cell therapy cluster Cluster4Future SaxoCell, international research project with group's researchers at CIML France).

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

We are looking forward to receiving your detailed application, which should highlight your expertise and personal motivation for the position. Please submit your application documents by **November 14, 2023** (stamped arrival date or the time stamp on the email server of TUD applies), preferably via the TUD SecureMail Portal [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf file to corinna.barth@tu-dresden.de or to: TU Dresden, CRTD, z. Hd. Corinna Barth, Fetscherstr. 105, 01307 Dresden, Germany. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: [https://tu-dresden.de/karriere/datenschutzhinweis](https://tu-dresden.de/karriere/datenschutzhinweis).