The CRTD consists of 25 international research groups working in the field of regeneration across multiple organ systems and diseases, including neural injury and neurodegenerative diseases, hematology, diabetes, and bone regeneration. The CRTD explores the capacity for regeneration of the human body and aims to develop novel regenerative therapies. In order to develop such therapies, the research institute explores mechanisms of tissue repair and stem cell physiology in vivo and in vitro, using different animal models (zebrafish, mouse axolotl). For TUD Dresden University of Technology, 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 Center for Regenerative Therapies Dresden (CRTD), an institute of the Center for Molecular and Cellular Bioengineering (CMCB), the newly established Junior Research Group led by Dr. Darja Andreev, focusing on Tissue Regeneration and Resolution of Inflammation, offers a 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 initially limited to 3 years. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). This position aims at obtaining further academic qualifications (usually habilitation thesis).

**About the research group:** Dr. Andreev’s newly established research group is seeking a post-doctoral researcher at any level to explore mechanisms of bone tissue regeneration, focusing on osteoclast-mediated bone loss (Andreev et al., J Clin Invest. 2020; Andreev et al., Nat Commun. 2024), and resolution of inflammatory arthritis, with an emphasis on innate immune cells (Chen, Andreev et al., Nat Commun. 2016; Andreev, Liu et al., Ann Rheum Dis. 2021).

**Planned methodologies to be used in the lab:**
- cell culture (murine and human eosinophil, macrophage, and osteoclast primary culture; osteoblast and osteocyte cell lines)
- CRISPR/Cas9 gene editing of myeloid cells
- mouse models
- flow cytometry and fluorescence-activated cell sorting
- immunological methods (real-time quantitative PCR, ELISA, western blot)
- omics-technologies (scRNA-seq, ATAC-seq, bulk RNA-seq, RNAscope, metabolomics, proteomics)
- imaging (confocal laser scanning microscopy, light-sheet fluorescence microscopy, imaging mass cytometry, transmission electron microscopy, micro-computed tomography, immunofluorescence, histomorphometry)
- cell metabolism analyses (extracellular flux assays, SCENITH technology)

**Tasks:**
- planning, experimental execution, and analysis of experiments
- teaching and supervision of PhD students, as well as Bachelor’s and Master’s students
- management of mouse experiments and breeding colonies
- preparation of publications
- communication of research results at scientific conferences and public outreach activities

**Requirements:** We aim to find an excellent addition to our team, ideally with experience in the respective research fields. The ideal candidate will have:
- an excellent university degree (biology, biochemistry, medicine, or informatics) and a successfully completed PhD (biology or related field),
- experience in immunological techniques, particularly autoimmune mouse models,
- skills in multicolor flow cytometry, imaging, and transcriptomics,
• ability to work in an international team,
• interdisciplinary and multidisciplinary thinking capabilities,
• high motivation,
• an inclusive and collaborative attitude with excellent communication and social skills,
• proficiency in written and spoken English.

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.

Please submit your detailed application including a CV, statement of motivation, and the names of at least 2 academic referees by September 10, 2024 (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 by sending it as a single pdf file to eike.lau@tu-dresden.de or to: TU Dresden, CRTD, Nachwuchsforschungsgruppe Regenerationsbiologie, Frau Dr. Darja Andreev, Fetscherstraße 105, 01307 Dresden. 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.