

The **Center for Regenerative Therapies Dresden (CRTD)**, an institute of the Center for Molecular and Cellular Bioengineering, is one of the leading centres for Regenerative Medicine in the world. It is the interface between fundamental research and clinical application. The target of the CRTD is to explore the self-healing potential of the body and to develop completely new regenerative therapies for previously incurable diseases. The research focuses are Haematology and Immunology, Diabetes, Neurodegenerative Diseases, Osteochondral replacement, Cardiovascular Diseases. Thereby, one of the core tasks is the technology transfer that is realised through a complex technology platform. Here you can find more information about the technology platforms <http://biotp.tudresden.de/biotechnology-platform/>

The **junior research group** of Dr Maximina Yun, **Regeneration of complex structures in adult vertebrates** is offering a position, starting **as soon as possible** as

#### **Research Associate / Postdoc**

(Subject to personal qualification, employees are remunerated according to salary group E 13 TV-L)

The employment contract is offered initially until 31.12.2018 with a possibility of extension. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The major aim of the group's research programme is to understand the molecular and cellular mechanisms underlying regeneration of complex structures in adult vertebrates, using salamanders (newts and axolotls) as model organisms. The group uses a broad range of cutting edge molecular, genetic, biochemical and imaging techniques to investigate regenerative processes. The candidate's research project will focus on understanding the role and regulation of cellular senescence during regeneration of complex structures (Yun *et al*, *eLife*, 2015; Davaapil *et al*, *Development* 2017) with an emphasis on the interplay between cell senescence and the immune response.

**Tasks:** Carry out experimental research into the topic of how regeneration of complex structures is achieved in adult vertebrates. This will be achieved through a combination of techniques including salamander (newt and axolotl) transgenesis, tissue culture, expression analysis (RT-PCR, in situ hybridisation, RNA-seq), immunohistochemistry/fluorescence, functional studies (small molecule treatments, CRISPR mediated transgenesis) and imaging. His/her duties will involve designing and conducting experiments, recording, analysing and interpreting data, communicating results (written/oral) and acquiring appropriate training according to the research project requirements; undertake research-related tasks to the standards and objectives of the specific research project set by the Principal Investigator (Dr Maximina Yun); actively participate in group meetings, meetings with academic and non-academic collaborators, record all work related data, protocols and project discussions both electronically and in hard copy (Lab book); contribute to the production of research reports and publications; provide guidance/supervision as required to other group members and students in relation to research; contribute to the overall activities of the research team and department as required.

**Requirements:** Candidates should be highly motivated with an university degree and a PhD or equivalent in Biological or Biomedical Sciences, who aim to develop an independent research career. A strong background in regenerative biology, cellular senescence and/or

immunology is required. Experience in genetic engineering, flow cytometry, RNAseq/in situ hybridisation, single cell analysis, imaging, bioinformatic analysis and cell culture are highly desirable. Previous experience working with salamanders or other model systems of regeneration is desirable but not essential. Ability to work independently, show self-initiative and attention to detail, and motivation to explore new techniques and concepts are essential. Excellent communicational skills and fluency in English are necessary to be considered. While this position will be funded by the group leader, postdoctoral fellows are expected to apply for their own external fellowship funding.

Informal enquiries should be directed to Dr Maximina Yun ([maximina.yun@tu-dresden.de](mailto:maximina.yun@tu-dresden.de)).

Applications from women are particularly welcome. The same applies to people with disabilities.

We kindly ask you to send your application documents (cover letter describing published and ongoing work, CV, letter or contact for 3 references, statement of future research interest) until **05.01.2018** (stamped arrival date applies) preferably via the TU Dresden SecureMail Portal <https://securemail.tu-dresden.de> by sending it as a single pdf document to **jana.fischer2@tu-dresden.de** or to: **TU Dresden, CRTD, Frau Jana Fischer, 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.