UNIKLINIK RWTH AACHEN

PhD Position in Computational Biology -
for understanding mechanisms of fibrosis diseases using single-cell technologies

The newly founded Institute of Experimental Medicine and Systems Biology at the University Hospital RWTH Aachen, Germany, is looking for a highly motivated and team-oriented PhD student with interest in computational biology.

The University is a vibrant place where excellent research is being conducted and an official Excellence University of Germany. At the University's institutes, a large number of international doctoral students, postdocs and researchers are active in teaching and research. Our welcome services are targeted towards professors, visiting researchers, post-docs, and doctoral candidates coming to RWTH Aachen from abroad. Our center for international researchers offers advice and support during preparations for and throughout the stay and also helps with all non-academic questions about the stay in Aachen (http://www.rwth-aachen.de/go/id/opt/lidx/1). The position will be funded according to German public service salary scale level TV-L 13 (65%). The position is starting as soon as possible. Its duration is initially limited to three years with the possibility for extension.

The candidate will work on an own project and also contribute to ongoing projects in the lab aimed to gain new insights in mechanism fibrotic disease with a major focus on kidney and cardiovascular disease. The candidate will perform a project at the forefront of single cell genomic and multi-omic research including single cell and single nuclear RNA and snATAC-seq, spatial transcriptomics in human tissue specimen with the aim to discover new therapeutic targets and biomarkers, and develop novel computational tools for data analysis and integration. The scientist will work in a highly collaborative international environment in close collaboration with the Hayat-lab in Translational Data Science at UniKlinik Aachen (hayatlab.org) Costa-lab (Institute for Computational Genomics, RWTH, www.costalab.org), the Saez-Lab (Institute of Computational Biology, University of Heidelberg, www.saezlab.org) and the Schneider-Lab (Department of Cell-Biology, RWTH, www.schneiderlab.org).

For more information about our team and recent work see http://www.kramannlab.com.

Please send applications directly to Prof. Kramann: rkramann@ukaachen.de, the selected applicants will be invited for a skype / online interview.

Major requirements and responsibilities:

- Good knowledge of programming in Python/R
- Good knowledge of common computational methods (Scanpy/Seurat)
- Experience with transcriptomic data analysis
- Experience with scRNA-seq data analysis or ATAC-seq data analysis is preferred
- Fluent English skills
- Excellent teamwork skills