JULIUS-MAXIMILIANS-UNIVERSITÄT WÜRZBURG, GERMANY

Center for Microbial Single-Cell RNA-seq (MICROSEQ)

2 Scientist/Postdoc Positions

(molecular biology, computational science)

Applications are invited for two staff **scientist positions**, one molecular biologist / NGS scientist and one bioinformatician / data scientist, to build the newly founded DFG-funded Centre for Microbial Single-cell RNA-seq (MICROSEQ) at the University of Würzburg. While single-cell RNA-seq (scRNA-seq) of eukaryotic cells has become routine, transcriptomics of individual bacteria remains largely uncharted territory. However, thanks to recent breakthroughs in methodology, including pioneering work from Würzburg scientists (see, for, e.g., Saliba AE et al. 2027 *Nature Microbiology*, Imdahl F et al. 2020 *Nature Microbiology,* Homberger C et al. 2023 *mBio*), bacterial scRNA-seq is now feasible. This approach promises a new microbiology, for instance, by enabling high-resolution profiling of gene activity in complex microbial consortia such as the microbiome, or monitoring drug susceptibility of pathogens based on RNA signatures from clinical samples.

MICROSEQ will develop generic protocols for rapid, cost-effective and high-throughput bacterial scRNA-seq, provide state-of-the-art data analysis and visualisation strategies, and offer training opportunities for microbiologists. This will involve close interactions with the local NGS Core Unit SysMed (www.med.uni-wuerzburg.de/cu/sysmed) and the Würzburg Single-Cell Center (www.single-cell-center.de).

Applicants should have a doctoral/PhD degree in either molecular biology/genomics or computational science. For the NGS scientist position, we need independent development, optimization and documentation of methods for microbial scRNA-seq, project management

experience, budget planning capabilities, and the ability to support bioinformatic data processing and data analysis. For the bioinformatician / data scientist position, we need independent development or implementation of (bio)informatic software and analysis pipelines for data and metadata storage, data quality control, and visualization of complex data. Being unique in the world, MICROSEQ aims to cater not only to the German microbiology community but also to microbiologists working abroad. Hence, the two scientists are expected to have excellent communication skills and enjoy working on multiple projects in parallel. Further information about these jobs can be obtained from the **Head of MICROSEQ, Prof. Jörg Vogel (email: joerg.vogel@uni-wuerzburg.de)**.

MICROSEQ will provide a highly dynamic research environment and excellent career opportunities. The position can be filled in full- or part-time as soon as possible and will be available for two years with the possibility of extension to five. Salary will be based on the pay scale for the public sector in Germany (TV-L) and comply with qualification. The University aims to increase the proportion of female employees, therefore applications from qualified women are particularly welcome. Preference will be given to handicapped persons in case of otherwise equal aptitude.

Please send applications by **April 4th, 2023** including a short letter of motivation, CV and publication list, copies of relevant documents and certificates as well as contact information of at least two academic references as **a single PDF-file via E-mail to Monika Schraut** (monika.schraut@uni-wuerzburg.de)**.**

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