

JULIUS-MAXIMILIANS-UNIVERSITÄT WÜRZBURG, GERMANY
Institute for Molecular Infection Biology (IMIB)

Postdocs and PhD students

Programmable RNA antibiotics

The Institute for Molecular Infection Biology at the University of Würzburg is seeking doctoral researchers and postdocs to drive a 5-year collaborative research program on RNA-based antibiotics. The program aims to build a platform technology for the computational prediction, molecular analysis and validation of next-generation programmable antibiotics. For more information on the project, see www.bayresq.net/projekte-rbiotics-de/

Successful candidates will work in the groups of Profs. Jörg Vogel, Franziska Faber or Lars Barquist, which bring together expertise in pathogenic model organisms, state of the art RNA-centered molecular biology and computational biology. As a member of the interdisciplinary team, the candidates will apply molecular approaches in anti-infectives research, high-throughput RNA-sequencing (RNA-seq) and other functional genomics techniques, as well as innovative statistical and machine learning methods to develop RNA-based anti-infectives targeting single microorganisms in mixed microbial populations.

Qualifications of molecular scientists:

The successful candidate will work with relevant model microorganisms and apply microbiology techniques and sequencing-based technologies.

- Experience in microbiology, RNA biology, infection biology, or biochemistry.
- Good written and spoken English-language communication skills, desire to work as part of an international team of researchers.

Qualifications of computational scientists:

The successful candidate will be involved in the design and analysis of experiments at all stages of project development, and will have access to a wide range of data including RNA-seq, transposon insertion sequencing, sequencing-based experimental evolution assays, and metagenomics.

- Solid programming skills in at least one scripting language (e.g. Python, Perl) and R. Experience with large data sets or sequencing data preferred.
- Basic knowledge of statistics.
- Good written and spoken English-language communication skills, and interest in working as part of an international team of researchers.
- An interest in RNA biology, infection biology, and microbiology, or desire to learn.

Requests for further information should be directed to joerg.vogel@uni-wuerzburg.de

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.

Applying:

Please send your application as **a single PDF file** including your CV, list of publication, a short description of research interests, future directions and at least two academic references **by January 19st, 2022** to Monika Schraut (monika.schraut@uni-wuerzburg.de).