

## Postdoc in Cardiac Physiology

The Cardiac Physiology Group at the Institute of Cellular and Molecular Physiology of the Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg has an immediate opening for a full-time postdoctoral position.

### About us

Our research group, led by Prof. T. Volk and PD T. Seidel, investigates the pathophysiology and molecular signaling of heart failure on the cellular and tissue level and is involved in the development of methods for living cardiac slice culture. We are particularly interested in cardiac electrophysiology, excitation-contraction coupling, the microstructure of cells and tissues and the respective remodeling in disease. We use in-vitro models, methods of electrophysiology, immunofluorescent and live-cell imaging, computational image analysis and signal processing. Our group consists of several MD and PhD students, postdocs and technicians and maintains close collaborations with clinicians and other basic research institutions in Germany and abroad. We strive for win-win solutions, support each other and take responsibility.

### Who you are

- You have obtained a PhD or MD/PhD degree in life sciences, preferably in physiology, biology, molecular medicine, biophysics, bioengineering or a related field.
- You have in-depth experience in one or more of the following methods:
  - Confocal and/or superresolution microscopy
  - Cellular electrophysiology (patch clamping)
  - Live-cell  $\text{Ca}^{2+}$  imaging
  - Signal processing, image analysis and/or cardiac modeling
  - Gene modification in cardiac cells or tissues
- Ideally, you also possess one or more of the following skills:
  - Isolation and culture of cardiac cells or tissues
  - Creation of genetically modified mouse models
  - Programming with scripting languages (Matlab, Python, etc.)
- You are capable and motivated to write scientifically, as evidenced by publications as a first author.
- You can work independently on your project, but also enjoy participating in collaborative projects with other lab members or external partners.
- You have a good command of spoken and written English and strong communication skills.

### Tasks

- Conduct experiments with animal and human cells and tissues and document the results
- Analyze and present data in weekly lab meetings and on conferences
- Participate in the supervision and instruction of MD or PhD students and dissertations
- Write and publish scientific articles
- Write or contribute to grant proposals
- Contribute to teaching medical physiology for students of medicine, dental medicine, molecular medicine (optional)

### **What we offer**

- A modern, well-equipped workplace and IT infrastructure.
- An international team.
- Administrative and technical support.
- Support in taking the next step on your way to becoming an independent scientist (Habilitation).
- If desired, training and continuing education in student teaching are possible
- Payment according to TV-L E13
- Duration of employment: initially 2 years, possibilities for extension are given

### **About the employer**

With more than 38,000 students and more than 250 fields of study, the Friedrich-Alexander-University Erlangen-Nürnberg (FAU) is the second largest state university in Bavaria and belongs to the top 10 largest universities in Germany. The research output of the FAU Faculty of Medicine ranks among the top 6 in Germany.

### **Contact**

Please send your application documents (letter of motivation, CV, references, list of publications) collected as one PDF to [physiologie2-hr@fau.de](mailto:physiologie2-hr@fau.de)

