The Heidelberg University Hospital is one of the most important medical centers in Germany and stands for the development of innovative diagnostics and therapies as well as their rapid implementation for the patient. With approximately 10,000 employees in more than 50 clinical specialist departments with approximately 1,900 beds, around 66,000 patients are treated on an outpatient basis or 1,000,000 times on an outpatient basis.

The division of **Bioinformatics and Systems Cardiology** at the Klaus Tschira Institute for Integrative Computational Cardiology / Department of Internal Medicine III, seeks to fill one full-time position:

Postdoc in Bio-medical Data Mining and Machine Learning (m/f)

Starting date: 1 May 2017 / Duration: Initially 2 years; option of further extension.

The successful applicant will enter a collaborative research environment focusing on **data-driven approaches to advance our understanding of cardiovascular health and disease**. We are looking for a talented investigator to integrate molecular data from different levels of biology with phenotypic data from animal models and electronic health records.

Tasks

You will apply unsupervised and supervised machine learning techniques to genomic, molecular and phenotypic data from heart development, regeneration and disease models. We are specifically interested in new methods for time-resolved, network-level and cross-species/individual analyses. You will explore how variations between individuals (genetic, lifestyle) could lead to different phenotypic outcomes.

Required Qualifications

You will require a PhD in a relevant field, and possess expertise in machine learning, Bayesian statistics, or a related discipline, and have experience of working in a highly interdisciplinary team. A proven competence in mathematics and programming data analysis methods as well as a strong interest in bio-medical topics is also essential.

What we offer

The Dieterich Lab (www.dieterichlab.org) offers a stimulating, diverse and international research environment. We are embedded in a vibrant community of cardiovascular research labs and collaborate with many experimentally or theoretically oriented labs in the Heidelberg area.

The University Hospital Heidelberg is one of the major healthcare centers in Germany. Our objective is the development of innovative diagnostics and therapies as well as their quick implementation for the patient. With about 10,000 employees in more than 50 specialized clinical departments with roughly 1,900 beds, about 66,000 patients in part-time and full-time inpatient treatment as well as 1,000,000 patients in ambulant treatment are medicated each year.

Contact & Application

Please upload a covering letter/supporting statement, including a brief statement of research interests, CV and the details of two referees as part of your online application.

Applications should be sent by email in ONE pdf-file to sekretariat.dieterich@med.uni-heidelberg.de

Please do not hesitate to contact us if you have any further questions.

University Hospital Heidelberg
Department of Internal Medicine III
Section of Bioinformatics & Systems Cardiology
Prof. Dr. rer. nat. Christoph Dieterich
Im Neuenheimer Feld 669
69120 Heidelberg
sekretariat.dieterich@med.uni-heidelberg.de