Philipps Universität Marburg

Scientists of the Philipps-Universität Marburg and the Max Planck Institute for Terrestrial Microbiology are researching at the **LOEWE-Center for Synthetic Microbiology (SYNMIKRO)** in 35 research groups in the fields of Biology, Chemistry, Pharmacy, Medicine, Physics as well as Mathematics, Computer Sciences and Ethics. Supported by the state of Hesse within its excellence program LOEWE, the interdisciplinary SYN-MIKRO-Center started its work in 2010. Today, SYNMIKRO is one of the largest centers of Synthetic Microbiological research worldwide.

As part of a collaborative project of SYNMIKRO together with the Department of Bioinformatics and Systems Biology of the Justus-Liebig Universität Gießen and embedded into the ERASynBio funded project "ECFexpress: An orthogonal, organism-independent expression platform based on extracytoplasmic function (ECF) sigma factors" we are seeking for a full-time

Research Assistant

Salary and benefits are according to a public service position in Germany (TV-H E 13). The Position starts **as soon as possible and is limited until July 31, 2018**. It is a position in a third-party funded research project, the limitation of which is not pursuant to § 2 Abs. 1 Wissenschaftszeitvertragsgesetz (WissZeitVG). Within the scope of the assigned duties it will offer the possibility of independent scientific research which can be used for further qualification. A limitation up to the period which is adequate to the duration of the qualification period as defined in § 2 Abs. 1 Satz 3 WissZeitVG cannot be assured.

Within this international project with partners from the USA, UK and Austria you will be responsible for the development of software for processing and visualization of bulk RNA-Seq data including the corresponding metadata. Enhanced analysis methods and adequate data structures must be developed for storage and integration of the analysis results and metadata, in order to enable comparison and combined analysis of diverse data sets. In addition, user-friendly visualization methods are required which allow interactive and intuitive exploration of data including the representation of regulatory networks.

The position is part of a bioinformatics sub-project with a focus on the analysis of high-throughput data (next generation sequencing, especially RNA-Seq and derivates) and their interpretation and visualization in a systems biology context. The further development of software infrastructure for data management is another important field of activity. Specific support of data analysis for the sub-project is expected as well as the development of new software tools and algorithms for the analysis and interpretation of high-throughput data from the Microbiology Department.

Candidates are expected to have a PhD in Bioinformatics or Informatics or a related area with documented experience in microbiological fundamental research and software programming in this field. Profound knowledge of the issues entailed in modern high-throughput sequencing technologies is required. Importance is also attached to a working knowledge of relational data bases and the implementation of user interfaces. Data analysis skills using workflow systems (e.g. Galaxy) and statistical evaluation in R/BioConductor are expected, as well as experience working with Unix/Linux operating systems and accomplished handling of Java plus one of the following programming languages: Python, Groovy, Perl.

For more information please feel free to contact Prof. Dr. Alexander Goesmann (alexander.goesmann@computational.bio.uni-giessen.de).

We support women and strongly encourage them to apply. In areas where women are underrepresented, female applicants will be preferred in case of equal qualifications. Applicants with children are welcome – the Philipps-Universität is certified as a family-friendly university. Sharing a full-time position (§ 8 Abs. 2 S. 1 HGlG) as well as a reduction of working time is possible. Applicants with a disability as described in SGB IX (§ 2 Abs. 2, 3) will be preferred in case of equal qualifications. Application and interview costs cannot be refunded.

Please send your application (including, letter of motivation detailing research interests and expertise, curriculum vitae, and copies of relevant certificates) mentioning registration number ZE-0050-synmikro-wmz-2016 electronically as a single pdf-file to jobs@synmikro.uni-marburg.de. Deadline is 10.06.2016.