The **Systems Medicine of Diabetes group** at the **Institute of Computational Biology** is looking for a

PostDoc in 'Multivariate analysis methods for omics datasets'

Job Description:
Large-scale multi-omics datasets are now readily available, covering measurements on genomics, epigenomics, transcriptomics, proteomics, metabolomics and further technologies. However, statistical methods specifically tailored for the analysis of such highly complex datasets are still rare.

This project will focus on the application and extension of multivariate statistical methods for the analysis of multi-omics datasets, going beyond univariate associations to identify and interpret highly correlated groups of omics markers. Typical methods from this field include multivariate regression, canonical correlation analysis and O2-PLS. Moreover, we will work on adapting graphical modeling methods (such as Gaussian graphical models, GGMs) for multi-omics datasets.

We will apply the newly developed methods in the field of diabetes research, on large-scale multi-omics datasets which already exist at our institute. The goal is to gain deeper insight into disease etiology and to predict future disease outcomes from the omics data.

Your Qualifications:
- PhD in bioinformatics, biostatistics, mathematics, physics, computer sciences or a related discipline
- profound experience in statistical analysis and machine learning
- affinity for the biological interpretation of achieved results
- being comfortable at interacting with colleagues in an interdisciplinary setting

Our Offer:
- working in an innovative, well-equipped and scientifically stimulating surrounding
- further training opportunities
- initial short-term employment contract with a standard public service salary (TV EntgO Bund, EG13)

Further information about the group:
http://www.sysdiab.de

contact: Dr. Jan Krumsiek, jan.krumsiek@helmholtz-muenchen.de

We are looking forward to receiving your comprehensive online application.
https://fragebogen.candibase.de/helmholtz/mainform.php?param=e6c260bf7117460cb6d1913c3555edc0&&vs=1&comp=0&lang=en