

Post-Doctoral Research Fellow in Bioinformatics of Single Cell Genomics (#VTPD17)

The Institute of Molecular Biology (IMB) is a Centre of Excellence for Life Sciences, funded by the Boehringer Ingelheim Foundation, and located in Mainz, Germany. Applications are invited for a postdoctoral researcher position in the laboratory of Dr. Vijay Tiwari (www.imb-mainz.de/research-at-imb/tiwari). The successful applicant will contribute to internationally competitive research on epigenetic regulation of cell-fate specification during development. The group employs high-throughput genomics assays in combination with stem cell biology and neurobiology and cutting-edge epigenetics and molecular biology tools. The resulting datasets are analysed using bioinformatics, statistics and systems biology approaches to generate a comprehensive model of epigenetic regulation of gene expression during embryonic development.

You will

- Decode gene regulatory networks by analysing single cell genomics and epigenomics datasets.
- Develop analysis pipelines to analyse and integrate single cell and bulk genomics and epigenomics datasets.
- Study epigenetic mechanisms that regulate cell-type specification during embryonic development
- Obtain training in epigenomics, computational biology, developmental biology and gene regulation
- Have access to all IMB Core Facilities that offer genomics, single cell genomics, epigenomics and proteomics support.
- Collaborate with internal and external partners
- Work in close cooperation with a team of experimental and computational researchers to facilitate novel discoveries

Required qualifications

- PhD in Bioinformatics or Computational Biology or Systems Biology or related areas
- At least one first author paper in an international peer reviewed journal
- Experience in analysis and integration of Next-Generation sequencing (NGS) datasets including RNA-seq and ChIP-seq
- Good knowledge of analytical tools such as R and proficiency in Linux and shell scripting
- Knowledge of clustering methods and machine learning techniques is preferable.
- Experience with High Performance Computing (HPC) environment
- Programming skills in one of the following languages: Perl, Python, or C/C++
- Motivation to solve complex biological problems and experience in productively working in an interdisciplinary environment
- Good written and spoken English

We offer

- The possibility to work on cutting-edge projects using state-of-the-art technology
- A stimulating, diverse and international research environment
- Advanced training opportunities
- Career development
- Competitive salary
- Highly motivated research team

IMB is an equal opportunity employer.

To apply, please email a cover letter, your CV (in English), contact address of at least two professional referees and certificates of your degrees as a PDF quoting Ref. No. #VTPD17 to personnel@imb-mainz.de. Informal enquires should be addressed to Dr. Vijay Tiwari (v.tiwari@imb-mainz.de).

Deadline for applications: 30th September 2017

Starting date: 15th November 2017 or later; duration: Initially 2 years with option of further extension.