HCA Bioinformatician – Second choice

Work with our Expression Atlas team to deliver a data production pipeline for single cell RNA-seq data, investigate visualisation tools for single-cell data sets and collaborate with HCA partners to establish best practice in software engineering for the Human Cell Atlas.

Location: EMBL-EBI Hinxton near Cambridge, UK

Staff Category: Staff member

Contract Duration: 3 years

Grading: 5 or 6 (monthly salary starting at £2,507 or £2,805 after tax). For more information about pay and benefits click here

Closing Date: 9 July 2017

Reference Number: EBI\_00974

Job Description

We are looking for a highly motivated bioinformatician to help build the pipelines and associated analysis tools for the single cell data analysis of the Single Cell Portal of Expression Atlas. You will be largely involved in the data production for a visualization portal of the Human Cell Atlas project (HCA). You will work at EMBL-EBI located on the Wellcome Genome Campus, near Cambridge, in the UK.

The HCA project aims to build comprehensive reference maps of all human cells. These maps will provide a basis for both understanding human health and the molecular basis of disease. For more information about the HCA project click here.

The pipelines we are building will access and process data through a cloud infrastructure and prepare the appropriate formats for the different visualizations and bulk downloads that will be made available through our web-interface. As part of this team you will have great opportunities to engage with the data generators, project users and our collaborators from the University of California, Santa Cruz (UCSC), the Broad Institute and the funders the Chan Zuckerberg Initiative (CZI) to build the DCP.

Your role will include the following tasks:

* Working with Expression Atlas team to deliver a data production pipeline for single cell RNA-seq data
* Investigate different SOPs for processing scRNA-seq data from different experimental protocols
* Investigate visualization tools for single cell data sets
* Proposing and implementing new features for the Single Cell Portal and Expression Atlas in general
* Collaborate with experimental teams at the Wellcome Trust Sanger Institute working on single cell transcriptomics
* Keep up to date with modern software engineering best practice and new technologies
* Representing the team and the institute at HCA project meetings and international scientific conferences.

Qualifications and Experience

You should hold an MSc or higher degree in bioinformatics or computer science. Research experience in genomics and bioinformatics would be highly desirable and experience working on single cell transcriptomics analysis is highly advantageous. Experience delivering production quality software on a regular release cycle to meet project needs is desirable.

Do you love developing code as part of a team? The ability to work within a team is critical to this position. Excellent communication skills and an ability to work to tight deadlines are essential. You will be required to communicate technical documents, to contribute to development team meetings, as well as provide user orientated communication with external and internal users of the systems. Experience in working independently but also working within a small development team will be considered an advantage.

You should have a minimum of three years' experience in Bioinformatics, as well as experience working in a Unix-based environment in a high-performance computing cluster environment. Excellent shell scripting skills, along with good knowledge of R (including Bioconductor) and gene expression data analysis. Previous experience in working in a continuous deployment environment with source control and management of releases would be valuable.

Benefits

EMBL is an inclusive, equal opportunity employer offering attractive conditions and benefits appropriate to an international research organisation. The remuneration package comprises a competitive salary, a comprehensive pension scheme and health insurance, educational and other family related benefits where applicable, as well as financial support for relocation and installation. We have an informal culture, international working environment and excellent professional development opportunities but one of the really amazing things about us is the concentration of technical and scientific expertise – something you probably won’t find anywhere else. If you’ve ever visited the campus you’ll have experienced first-hand our friendly, collegial and supportive atmosphere, set in the beautiful Cambridgeshire countryside. Our staff also enjoy excellent sports facilities including a gym, a free shuttle bus, an on-site nursery, cafés and restaurant and a library.

Application Instructions

To apply please submit a covering letter and CV, with two referees, through our online system.

Additional Information

Applications are welcome from all nationalities - visa information will be discussed in more depth with applicants selected for interview.

EMBL-EBI is committed to achieving gender balance and strongly encourages applications from women, who are currently under-represented at all levels. Appointment will be based on merit alone.

This position is limited to the project duration specified.

Applications will close at 23:00 BST on the date listed above.

It is envisaged that interviews will take place in the week commencing 24 July 2017