HCA Bioinformatician – First choice

Contribute your valuable bioinformatics expertise to building the HCA Data Coordination Platform. In this role you would help design and extend metadata and integration services, support dataflow, define minimum standards and carry out training. Application deadline: 9 July 2017.

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\_00968

Job Description

We are looking for a highly motivated bioinformatician to join the team building the Data Coordination Platform (DCP) for the Human Cell Atlas project (HCA). You will work at EMBL-EBI located on the Wellcome Genome Campus, near Cambridge, in the UK.

Do you want to work as part of the HCA project to define comprehensive reference maps of all human cells? The HCA is using single cell gene expression techniques as the basis for both understanding human health and understanding different disease mechanisms. We are building and supporting the tools which will be used by the HCA.

We will deliver simple, open and direct access to all HCA data across many cloud based systems and 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.

The DCP will include:

* An ingestion interface enabling users to validate and submit data
* A query API to discover the HCA data
* Containerized analysis pipelines
* Interactive portals for visualization and analysis.

These services will help facilitate scientific discovery based the reference maps of human cells produced by the HCA.

Your role will include the following tasks:

* Designing and extending services to ensure the HCA is collecting high quality metadata to support and enable discovery and integration operations on its data
* Supporting the data flow into the HCA and EMBL-EBI archives from project contributors
* Collaborating with expert biologists and external collaborators to define and extend the minimum standards for the various HCA data types
* Working with biologists and other collaborators to define requirements for HCA services
* Running training courses on how to submit data to the HCA project
* Working with other teams across EMBL-EBI to deliver our components of the HCA Data Coordination Platform
* Representing the team and the institute at HCA project meetings and international scientific conferences.

Qualifications and Experience

You should hold an MSc, PhD or have equivalent experience in Computer Science, Bioinformatics, Genetics or related fields including evidence of your ability to write, understand and maintain complex code.

You should have experience in object-oriented programming, and in developing software in a primarily Unix-based environment. You should be familiar with development tools such as Git and JIRA. Knowledge of Perl is useful as this is the primary programming language of the team. Experience in developing computationally efficient solutions for running complex data flows and familiarity with both relational databases and document stores would be an advantage.

Do you love working in a team to support users to provide high quality, well described data? As a member of this team you will need to interact with users of the system, training them and providing ongoing support while they use the HCA ingestion service. You will also gather requirements from these users to inform new features in the system and help us improve the service we offer. Experience supporting data flow in large scientific collaborations will be considered an advantage.

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