

Post-doctoral Researcher position in Computational Biology at CNRS-EISBM, Lyon, France, in relation to the IMI-eTRIKS Consortium

Contribution to the development of eTRIKS Galaxy tools and workflows for disease stratification and biomarker discovery from single and multiple omics datasets

Employer: CNRS

Website: <http://www.eisbm.org>

Location: CNRS-EISBM, Lyon, France

Expires: 15 February 2016

Qualifications: PhD

Salary: Depending on qualifications and experience, based on CNRS salary grid

Duration: 18 months

Starting date: March/April 2016

Keywords: Galaxy, R, Bioinformatics, Systems Biology, Big Data Infrastructure

A post-doctoral researcher position in Systems Biology is available as part of the European Translational Research Information and Knowledge Management Services project (eTRIKS, <https://www.etriks.org/>; <http://www.imi.europa.eu/content/etriks>), funded by the Innovative Medicines Initiative (IMI, <http://www.imi.europa.eu/>) of the European Commission 7th Framework Programme and the European Federation of Pharmaceutical Industries and Associations (EFPIA).

EU project: The eTRIKS Consortium is dedicated to delivering knowledge management services initially for all IMI projects and then for other translational research projects. These projects encompass translational bioinformatics, clinical research informatics, health/clinical informatics and the development of new analytical tools. They use transSMART as part of the software knowledge management platform: <http://www.transmartproject.org>. eTRIKS is a collaboration between multiple partners from academia and industry, merging their resources and expertise in data hosting, curation, analysis and compliance with the international standards. Within the eTRIKS project, the CNRS-EISBM team works on developing tools for advanced data analysis and interpretation.

Job context: The development of user-friendly interfaces for cutting-edge bioinformatics tools is the next step in empowering all biologists in the projects supported by eTRIKS to perform in-depth analyses of their data. The work to be performed by the selected applicant would fulfill this goal, along with interfacing with knowledge management software, interpretation solutions and Big Data computing infrastructures.

Job description: Within the eTRIKS project, the CNRS-EISBM team is tasked to identify, pilot and deploy bioinformatics tools for the analysis of clinical and omics data of complex diseases. In order to speed up this process and provide a code-less interface for advanced bioinformatics tools, eTRIKS is developing a portfolio of Galaxy tools and workflows.

The tasks to be handled by the applicant are:

- Follow-up on the work already performed regarding Galaxy tools and workflows, and liaise with the other teams within eTRIKS and the supported projects working on the subject.
- Generate new implementations for tools already selected and implemented in R or other computing languages.
- Establish generic workflows to tackle common bioinformatics queries.

- Link the Galaxy interface and the data interpretation tools developed in eTRIKS and the computational biology community, and explore the possibility of a link with the SPARK infrastructure for Big Data computing developed by other eTRIKS colleagues.

The selected candidate will be based in Lyon-Gerland within the CNRS-EISBM team led by Dr. Charles Auffray, hosted by Claude Bernard University on the Charles Mérieux campus (<http://www.eisbm.org>).

Required experience / Skills: The successful candidate should hold a PhD in Sciences, Computer Sciences, Bioinformatics, Computational Biology or equivalent. A strong basis in programming is required, with fluency in the R and Python programming languages, experience in omics data analysis and excellent IT skills. Experience in Big Data computing is a plus, and good communication skills in English are required.

Application: Please send your CV, motivation letter and names of two references to Dr. Charles Auffray: jobs@eisbm.org. Please mention the reference 'EISBM-12-15-BDM' in your application.