Benchmarking and optimization of Genomics Software

Centre for Genomic Regulation (CRG)

The Institute

The Centre for Genomic Regulation (CRG) is an international biomedical research institute of excellence, based in Barcelona, Spain, with more than 400 scientists from 44 countries. The CRG shares principles of an interdisciplinary, motivated and creative scientific team that is supported by high-end and innovative technologies and a flexible and efficient administration.

CRG has been conferred with a badge of ‘HR Excellence in Research’ by the European Commission, in recognition to its progress in implementing the European Charter for Researchers and the Code of Conduct for Recruitment of Researchers, that among others consists of transparent, merit-based recruitment procedures and attractive work-life balance working conditions.

For further information: [www.crg.eu](http://www.crg.eu)

The role

The candidate will be in charge of developing a live benchmarking procedure for key bioinformatics software. Live benchmarking will involve containerisation, pipeline adaptation using the Nextflow language and the development or adaptation of reference datasets along with their benchmarking procedure. The software and algorithm will relate to various aspects of bioinformatics including genomic analysis, comparative analysis, evolutionary analysis and the modelling of longitudinal trajectories. Some of these tools are under active development within the lab and the candidate will contribute towards the research effort associated with new publications.

The candidate will also be occasionally expected to contribute towards the maintenance of the lab web servers. This aspect of the work has a slightly lower priority and in the case of a candidate lacking these specific skills, training will be provided as well as in-house support.

About the team/ lab/ department

The lab is a relatively small – about ten members – interdisciplinary and highly collaborative structure. We specialise in the development of comparative methods for genomics data but also have a strong interest in the development of behavioural data comparisons and analysis. Two of our most visible output have been the T-Coffee multiple aligner and the Nextflow pipeline language.

Whom would we like to hire?

- You hold a Phd in Bioinformatics or related topics
- You have 5 years of experience in/with the development of bioinformatics software
- You have proven experience in/ with containerization and pipeline development in the Nextflow language
- You are fluent in English

Desirable but not required

- Web development
The Offer

- **Contract duration:** 2 years
- **Estimated annual gross salary:** Salary is commensurate with qualifications and consistent with our pay scales.
- **Target start date:** July 2019

We provide a highly stimulating environment with state-of-the-art infrastructures, and unique professional career development opportunities.

We offer and promote a diverse and inclusive environment and welcomes applicants regardless of age, disability, gender, nationality, race, religion or sexual orientation.

The CRG is committed to reconcile a work and family life of its employees and are offering extended vacation period and the possibility to benefit from flexible working hours.

Application Procedure

All applications must include:
- 1. A motivation letter addressed to Dr Cedric Notredame.
- 2. A complete CV including contact details.
- 3. Contact details of two referees.

All applications must be addressed to Dr. Cedric Notredame and be submitted online on the CRG Career site - [http://www.crg.eu/en/content/careers/job-opportunities](http://www.crg.eu/en/content/careers/job-opportunities)

**Deadline:** Please submit your application by 15/06/2019

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