



“Bioinformatician– 4D Genome Project” *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

The role

In the framework of the [4DGenome project](#) we are seeking for a bioinformatician for the management and analysis of high-throughput sequencing data (mainly Hi-C, ChIP-Seq and RNA-Seq).

The job responsibilities of the candidate will be:

- Process the sequencing data generated in the 4DGenome with the existing analysis workflows
- Implementation of computational pipelines and development of interactive web applications to automate the analysis and visualisation of large genomic datasets
- Provide data analysis support to members of the project to facilitate the interpretation of the results and decision-making
- Sustain the team culture of documentation, automation, data traceability and autonomy for the experimenters

About the project

The 4DGenome project (ERC Synergy 609989) brings together 4 multi-disciplinary groups from the CRG/CNAG (Miguel Beato, Thomas Graf, Marc Marti-Renom and Guillaume Filion) which aim at analyzing the changes in the 3D organization of the genome during induced stable cell fate changes and transient hormonal response. Fulfilling such objective requires the production of high quality, high coverage datasets of genome-wide spatial contacts in an important amount of cell types and conditions. All the sequencing data are processed through a dedicated pipeline developed in house to facilitate sample tracking, analysis and data release.





Whom would we like to hire?

Studies:

- You hold a Phd or MSc degree in Bioinformatics or related field.

Experience:

- You have experience with the management and analysis of high-throughput sequencing data.

Technical skills:

- Proficient in the cleaning, processing and quantitative analysis of genomics data
- Experienced in the use of Unix/Linux environments and HPC systems
- Shell scripting, Python and R are highly required; use of Git for software version control is needed
- Knowledge of common bioinformatics tools is required (e.g. mappers, peak callers, differential expression analysis tools)
- Use of tools to comply with the reproducibility of the analyses will be highly valued (e.g. Jupyter notebooks, RStudio, Markdown)
- Familiarity with SQL databases and tools for the development of web applications (e.g. R Shiny) will be a plus

Languages:

- You are fluent in English

The Offer

- **Contract duration:** 1 year, with an option to be extended
- **Estimated annual gross salary:** Salary is commensurate with qualifications and consistent with our pay scales.
- **Target start date:** As soon as possible

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.

We are committed to reconcile a work and family life for our employees and are offering the opportunity to benefit from annual leave, flexible working hours and teleworking.





Application Procedure

All applications must include:

1. A motivation letter addressed to Dr. Miguel Beato.
2. A complete CV including contact details.
3. Contact details of two referees.

All applications must be addressed to Dr. Miguel Beato and be submitted online on the on the CRG Career site - <http://www.crg.eu/en/content/careers/job-opportunities>

Deadline: Please submit your application by the **11th of February 2018**

ERC Synergy grant agreement 609989 (4DGenome)

