BIOMEDICAL SCIENCE FOR THE BENEFIT OF SOCIETY

"Postdoc - Computational Regulatory Genomics and Diabetes"
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.

In November 2013, the Centre for Genomic Regulation (CRG) received the 'HR Excellence in Research' logo from the European Commission. This is a recognition of the Institute's commitment to developing an HR Strategy for Researchers, designed to bring the practices and procedures in line with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (Charter and Code).

Please, check out our Recruitment Policy

The role

We invite applications for a postdoctoral scientist to join a multidisciplinary team of computational and experimental biologists working at the interface of genetics, regulatory genomics, cellular differentiation, and human diabetes.
The successful candidate will develop statistical and computational methods to tackle questions in two main areas – the exact topic is flexible within this scope. One area is to use single cell genomics and machine learning to understand how the genome is programmed to create functional pancreatic beta cells, and how altered regulation causes diabetes. The other area is to analyse noncoding genomic sequences from patients to discover new forms of human diabetes. The ideal candidate should have experience in genome analysis, but we will consider candidates who have applied data science and statistical skills to other domains.

About the lab

The overarching goal of the Regulatory Genomics and Diabetes lab is to understand the basis of gene regulation in pancreatic beta cells, and to deploy this knowledge to discover genetic causes and treatments for human diabetes. The lab combines computational analysis of in-house genomic datasets (e.g. RNA-seq, ChIP, HiChIP, pcHiC, sc genomics,CRISPR screens, genome variant sequencing) as well as external datasets, along with human stem cell-based and animal model systems. It is a multidisciplinary team that currently includes five computational scientists with varied interests (human genetics, genetics of gene regulation, regulatory genomics, network biology) and 5 experimental scientists, most of whom carry their own genome data analysis.

Relevant published work from the team can be found in https://www.crg.eu/es/programmes-groups/ferrer-lab#block-block-2.

Whom would we like to hire?

Professional experience

Must Have

- You have proven programming competence in Python, R, or C++, or related languages
- You have expertise in Linux and high performance computing environments
- You have proven experience in applying statistical methods to large datasets

Desirable but not required/ Nice to have

- You have familiarity with methods in machine learning and/or statistical inference
- You have experience in genome sequence variant data and/or statistical genetics
- You have experience in transcriptomic analysis
- You have a first-author publication track-record

Education and training

- You hold a Phd (or equivalent experience) in statistical genetics, genome data analysis, computer science, statistics, engineering, quantitative biology, or related fields

Languages

- You are fluent in English

Competences

- Highly developed organization skills
- You have the ability to work both collaboratively and independently within a multidisciplinary environment
- You are excellence-driven

The Offer – Working Conditions

- **Contract duration:** 2 years with possibility of extension
- **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. To check out our training and development portfolio, please visit our website in the [training section](#).

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

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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. Jorge Ferrer
2. A complete CV including contact details.
3. Contact details of two referees.

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

Selection Process

- **Pre-selection**: The pre-selection process will be based on qualifications and expertise reflected on the candidates CVS. It will be merit-based.

- **Interview**: Preselected candidates will be interviewed by the Hiring Manager of the position and a selection panel if required.

- **Offer Letter**: Once the successful candidate is identified the Human Resources department will send a Job Offer, specifying the start day, salary, working conditions, among other important details.

Deadline: Please submit your application by November 23rd, 2020.

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