



centre nacional d'anàlisi genòmica
centro nacional de análisis genómico



“Senior Post-doctoral Research Position – Single cell Analysis”

Centro Nacional de Análisis Genómico (CNAG-CRG)

The Institute

The Centro Nacional de Análisis Genómico (CNAG-CRG) is one of the largest Genome Sequencing Centers in Europe. CNAG-CRG researchers participate in major International Genomic Initiatives such as the International Cancer Genome Consortium (ICGC), the International Human Epigenome Consortium (IHEC), the International Rare Diseases Research Consortium (IRDiRC) and the European Infrastructure for life-science information (ELIXIR), as well as in several EU-funded projects.

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

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 have an opening for a Senior Post-doctoral Researcher through the ERC-funded project BCLL@las. The BCLL@las project aims to investigate the B-cell lineage and chronic lymphocytic leukaemia at single cell resolution. Topics for the Senior Post-doctoral Researcher will include bioinformatics analysis of single cell RNA and other single cell omic sequencing experiments (next-generation sequencing), and interpretation of results.

We are looking for highly motivated and creative thinking individuals who are interested in working in an environment with a high level of technical sophistication. The holder is also expected to help with tutoring of younger group members, support project reporting and writing of manuscripts.

About the team

The successful candidate will be integrated into the BCLL@las project of the Biomedical Genomics Group lead by Dr. Ivo Gut and the Single Cell Genomics Team lead by Dr. Holger Heyn.

Dr. Ivo Gut is the CNAG-CRG director and head of the Biomedical Genomics group. He coordinates the BCLL@las project and the European Advanced Sequencing Infrastructure project (EASI-Genomics), funded by the European Commission. Dr. Ivo Gut participates in H2020 projects B-CAST, SPIDIA-4P, ELIXIR-ACCELERATE, SOLVE-RD, EJP-RD and EuCanCan. In addition, the CNAG-CRG participates in major Spanish initiatives in Personalized Medicine such as the PERIS projects MedPERCAN and URDCat, the 1,000 Catalan Genomes project, and the Navarra project on personalized medicine. The Biomedical Genomics Group focusses on furthering the understanding of diseases using different types of genomic data, novel statistical approaches and bioinformatics. Big data approaches are used to identify patterns on genome, transcriptome and epigenome level that correlate with a disease and the evolution across the course of the disease. The objective is to answer questions that go beyond the initial hypotheses that



centre nacional d'anàlisi genòmica
centro nacional de análisis genómico



underlay the studies to shed light on how genome sequence, structure and usage relates to disease, disease initiation, disease progression and disease mechanisms. The group also studies genomic features related to disease at different cellular levels. The disease areas range from rare to common disorders including cancer.

Web: <https://www.cnag.cat/teams/genome-research-unit/biomedical-genomics-group>

The Single Cell Genomics Team at the CNAG-CRG is dedicated to advance genome research of single cells. The mission of the group is the implementation of single-cell sequencing technologies and their application in a research and translational context. The group focuses on the systematic integration of transcriptional and epigenetic data from individual cells to elucidate causalities underlying phenotype formation. We successfully established sequencing protocols to quantify gene expression and open chromatin of thousands of single cells. Our newly developed computational pipelines include methods to deconvolute tissue composition and track to transcriptional dynamics. Our international team joins computational, technical and biological knowledge in order to establish and apply best practices in single-cell research. The group combines collaborative research, development activities and follows research lines on the generation of human cell atlases and on translational cancer research. We are member of the Human Cell Atlas Project.

Web: <http://www.cnag.cat/teams/genome-research-unit/single-cell-genomics-team>

Whom would we like to hire?

Professional experience

Must Have

- You have post-doctoral experience
- You have good knowledge of analysing next-generation sequencing data

Education and training

- You hold a Phd degree in Bioinformatics, Mathematics, Statistics or similar

Languages

- You are fluent in English

Technical skills

- You are competent in R or Python
- You have experience working with remote distributed job systems (e.g Slurm)

Competences

- You are very well organized
- You have the ability to guide younger group members and collaborate in the BCLL@las network
- You have good communication skills

The Offer – Working Conditions

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



centre nacional d'anàlisi genòmica
centro nacional de análisis genómico



- **Target start date:** March 2021.

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, ethnicity, religion, sexual orientation or gender identity.

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. Ivo Gut.
2. A complete CV including contact details.
3. Contact details of two referees.

All applications must be addressed to Dr. Ivo Gut 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 February 28th, 2021.

Suggestions: The CRG believes in **ongoing improvement** and promotes a **culture of feedback**. This is one of the reasons we have in place, at your disposal as a candidate, a mechanism to gather your suggestions/complaints concerning your candidate experience in our recruitment processes. Your feedback really matters to us in our aim at creating a **positive candidate journey**. You can make a difference and help us improve by letting us know your suggestions through the [following form](#).



HR EXCELLENCE IN RESEARCH



European Research Council



This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme.