



BIOMEDICAL SCIENCE FOR THE BENEFIT OF SOCIETY

“Postdoctoral position - Bioinformatics and Single cell genomics”
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

The newly established Single Cell Genomics of Tissue Regeneration lab at CRG Barcelona is looking for a Postdoc (bioinformatics), funded for 2 years, to work on a challenging interdisciplinary project in the context of leukemia stem cells and single-cell multi-omics. Our lab is part of the LekoSyStem consortium, a junior research alliance funded by the German government, which aims to dissect leukemia formation at various scales using single cell genomics. In particular, our lab's goal is to resolve lineage dynamics in AML using a combination of single cell genome- and transcriptome sequencing. The successful candidate will lead the data analysis in this project, and be involved in coordinating data generation as well as the interactions with the consortium partners.

About the lab

Research in the lab focuses on the development of cutting-edge single-cell genomic and bioinformatic tools to study the maintenance, regulation and development of adult stem cells in health and disease, with a focus on the hematopoietic system and myeloid leukemia. In the past, we have used single-cell RNA-seq to challenge the text book model of hematopoiesis ([Velten et al., 2017](#)), and we have developed integrated spatial and single-cell genomic approaches to map the organization of the hematopoietic stem cell niche ([Baccin et al., 2020](#)). In parallel, we have developed wet-lab and computational methods for single cell genomics (e.g. [Velten et al., 2015](#)). Of particular importance to this project, we have developed new approaches to track leukemia sub-clones in single cell RNA-seq data ([Velten et al., biorxiv](#)). In the new lab, we will further expand on this method in order to profile the molecular consequences of leukemia evolution at large scale.

Whom would we like to hire?

Professional experience

Must Have

- You have experience in statistical modelling
- You have willingness to interact with wet-lab and clinical scientists
- You have a first author publication from PhD





Desirable but not required/ Nice to have

- You have understanding of biology and genomics methods

Education and training

- You hold a PhD in bioinformatics or genomics, ideally with initial experience in the analysis of single cell transcriptome data
- You hold a university degree in Bioinformatics, Physics, Computer Science, Biology, or Biotechnology

Languages

- You are fluent in English

Technical skills

- You have good working knowledge of statistics
- You have in-depth knowledge of R and/or python
- You have knowledge of Bayesian methods (MCMC) is a plus

Competences

- You have willingness to learn new skills, possibly outside of your comfort zone. We work in a highly interdisciplinary manner.
- You have entrepreneurial spirit needed to help set up a new lab.

The Offer – Working Conditions

- **Contract duration:** 2 years
- **Estimated annual gross salary:** Salary is commensurate with qualifications and consistent with our pay scales.
- **Target start date:** April – October 2020

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.

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. Lars Velten.
2. A complete CV including contact details.
3. Contact details of two referees.





All applications must be addressed to Dr. Lars Velten 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 15th of February, 2020.



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