

JOB OPENING AT IRB BARCELONA

SCIENTIFIC IT AND GENOMICS LAB MANAGER (ref. LAB/20/11)

IRB Barcelona is a world-class research centre devoted to understanding fundamental questions about human health and disease. It was founded in October 2005 by the Government of Catalonia (Generalitat de Catalunya) and the University of Barcelona (UB), and is located at the Barcelona Science Park (Parc Científic de Barcelona). The institute is a member of the BIST (Barcelona Institute of Science and Technology).

The Institute's missions include conducting multidisciplinary research of excellence at the unique interface between biology, chemistry and medicine, providing high-level training in the biomedical sciences to staff, students and visitors, driving innovation through active technology transfer to the benefit of society, and actively participating in an open dialogue with the public through a series of engagement and education activities.

IRB Barcelona seeks an experienced Scientific computing and genomics specialist to work at the IRB Barcelona.

The institute aims to attract a Lab Manager to work on managing bioinformatics pipelines and high-performance computing infrastructure. Their overall goal will be to organize the infrastructure that enables analyses of genomic massive data sets, thus fostering translational and basic research of genetic disease.

The role of the Scientific IT and Genomics Lab Manager will focus on the provision of state-of-the-art bioinformatics/genomics pipelines and high-performance computing services, in the collaborative setting of the IRB Barcelona.

In particular, this will involve being responsible for developing and maintaining the code of the genomics pipelines administering compute clusters (e.g. Linux system admin; SLURM workload manager admin); assisting the IRB IT service in management of disk storage systems; interfacing with the IRB IT service to expedite solutions for diverse IT-related issues; supervising and training IRB members in their use of the institute's HPC resources and of supercomputers.

The initial contract is for 1 year with a possibility of extension. Anticipated starting date is 01-Dec-2020 (flexible).

DUTIES

- Provision of broad, state-of-the-art high-performance computing and bioinformatics services to support excellent research at the IRB Barcelona.
- Developing and running genomics pipelines on own cluster or on supercomputers.
- Maintaining compute clusters (Linux system administration and software installation; SLURM workload manager administration).
- Assisting IRB's IT service in management of the NetApp and Synology storage systems and of Linux workstations.
- Choosing and purchasing new computing equipment.
- Interfacing with the IRB IT service to expedite finding solutions for IT-related issues in the group.



IRB BARCELONA endorses the Requirements and Principles of the *European Charter for Researchers*, the *Code of Conduct for the Recruitment of Researchers* and Open, Transparent, Merit-based recruitment promoted by the European Commission and follows Equal Opportunities policies.

On 9th December, 2014, IRB Barcelona was awarded the "HR Excellence in Research" logo. This recognition reflects the commitment of the Institute to continuously improving its human resources policies in line with the *Charter & Code*. The Institute works to ensure fair and transparent recruitment and appraisal procedures.

- Supervising and training lab members in their use of IT resources, e.g. of MareNostrum/StarLife supercomputing, and of cloud computing services.
- Collaborating on others' research projects with groups at IRB and elsewhere.
- Have presentations at group and/or department meetings.

EXPERIENCE, KNOWLEDGE, SKILLS & SELECTION CRITERIA

Must Have - Required

- Experience: some experience with and/or enthusiasm about genomics/bioinformatics tools. Some experience with and/or enthusiasm about administering Linux machines (preferably servers or compute clusters).
- Education: BSc or MSc or PhD in field relevant to the duties described, such as (but not limited to): computer science or engineering, applied mathematics/statistics, computational biology.
- Skills: Ability to work independently, and interact well within an international team environment consisting of researchers of diverse career stages (PhD students, postdocs) and backgrounds (life scientists, computer scientists).
- Languages: A solid level of spoken English is required.

Desirable

- Experience: advanced-level usage and administering the Slurm or SGE workload managers; some experience with supercomputers (e.g. MareNostrum) and/or cloud computing (e.g. AWS or Azure or similar)
- Knowledge: genomics/bioinformatics methods and software (aligners/mappers, mutation callers, structural variant callers). Some knowledge of deep learning algorithms would be a plus.
- Skills: supervision/training of junior colleagues. Ability to deal with exceptional situations on short notice.

WORKING CONDITIONS & ENTITLEMENTS

- **Working conditions:** Employed in compliance with Spanish legislation and regulations under a full-time contract. Employees receive the benefits of the Spanish Social Security system covering sickness, maternity/paternity leaves and injuries at work. Salary commensurate with experience and qualifications.
- **International Environment:** The opportunity to join a prestigious international research institution and become a member of an established research group funded by a European project.
- **Continuous training** in a high-quality research environment.

HOW TO APPLY & SELECTION PROCESS

Applications for the above opening should include (i) a **CV and track record** (listing 2-4 achievements relevant to the call, for example: technical achievements, or software tools developed, or work on collaborative projects, or scientific publications; the text needs to briefly explain the candidate's particular contribution to each listed achievement), (ii) **motivation letter**, and (iii) **contact information of 2-3 potential referees**. All candidates must apply on <https://recruitment.irbbarcelona.org/>

Reference: LAB/20/11

- **Deadline for applications: 24/11/2020**

When the applicants do not fit the requirements, the deadline will be able to be extended.

- **Number of positions available: 1**
- **Selection process**
 - **Pre-selection:** Will be based on CV, motivation letter and experience.
 - **Interviews:** Short-listed candidates will be interviewed.
 - **Offered Position:** Job Offer will be sent to the successful candidate after the interview.

For more information please visit our website at: www.irbbarcelona.org

Note: The strengths and weaknesses of the applications will be provided upon request.

If you, as an applicant, have any suggestion or wish to make a complaint regarding the selection process, please contact us at the following email address: irbreruitment.suggestions@irbbarcelona.org You will receive a response within a month.