

JOB OPENING AT IRB BARCELONA

‘POSTDOCTORAL RESEARCHER’ (ref. PD/17/09)

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’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 a motivated postdoctoral researcher to work in the **Genome Data Science Laboratory (PI: Fran Supek)** at the Structural and Computational Biology Programme at the IRB Barcelona.

The group aims to attract a computational biologist to work on an ERC-funded project “HYPER-INSIGHT”, which deals with large-scale statistical analyses of genomic, transcriptomic and epigenomic big data. Our goal is to gain an understanding of the mechanisms behind mutational processes that shape the genomes of human tumors. In specific, we’re interested in how DNA repair failures may result in mutation patterns that are evident in genomes of certain tumors. Moreover, we will explore how such genomic patterns may signal new translational opportunities for personalized cancer therapy.

For more information, please refer to the Genome Data Science web site at <https://www.irbbarcelona.org/en/research/genome-data-science>

Relevant recent publications:

- [Clustered Mutation Signatures Reveal that Error-Prone DNA Repair Targets Mutations to Active Genes](#). F Supek, B Lehner (2017) *Cell*.
- [The rules and impact of nonsense-mediated mRNA decay in human cancers](#). RGH Lindeboom, F Supek*, B Lehner* (2016) *Nature Genetics*. (*corresponding authors)
- [Differential DNA mismatch repair underlies mutation rate variation across the human genome](#). F Supek, B Lehner (2015) *Nature*.
- [Synonymous mutations frequently act as driver mutations in human cancers](#). F Supek et al. (2014) *Cell*.

The funds for this post are available for 3 years in the first instance; the initial contract is for 1 year with a possibility of extension. Anticipated starting date is 01-Feb-2018 although it is possible to start before or after that date.

DUTIES

- Perform excellent, high-impact computational biology research that aligns with the interests of the Genome Data Science lab
- Plan, design, carry out and interpret statistical analyses of massive genomic, epigenomic and drug screening data sets.
- Develop and maintain software, web servers and databases
- Present in group and institutional meetings, contribute to manuscripts, mentor junior researchers, attend international conferences and collaborate with other groups in IRB and elsewhere

EXPERIENCE, KNOWLEDGE, SKILLS & SELECTION CRITERIA

Must Have - Required

- Highly motivated, enthusiastic applicants that hold a PhD (or are about to receive one) of any educational background are welcome to apply for this position



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.

- A solid computational skill set is essential
- Good level of spoken English would be required

Desirable

It would be helpful but not necessary to have one or more of the following:

- experience with multivariate data analysis / statistical techniques and software (e.g. R or pandas/SciKit-Learn or Weka)
- a strong publication track record
- experience in working with bioinformatics tools and large genomic data set;
- PhD in a relevant subject area (Computational Biology, Population Genetics, Comparative Genomics)

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.
- **Training and Career:** Postdoctoral researchers joining IRB Barcelona gain access to the Institute's advanced research training and career development opportunities, all within in a competitive international environment. Courses and workshops on themes of particular interest to postdocs are offered regularly by the Institute.
- **International environment:** Nearly 100 Postdoctoral researchers, most than a half of them are non-Spanish nationals, are currently working toward their research at IRB Barcelona.

HOW TO APPLY & SELECTION PROCESS

Applications for the above opening should include a CV (highlighting 1-3 publications and explaining the candidate's contribution to each), motivation letter and contact information of potential referees and should be sent by e-mail to: irbjobs@irbbarcelona.org Reference: PD/17/09

- **Deadline for applications:** 23/11/2017
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: irbrecruitment.suggestions@irbbarcelona.org You will receive a response within a month.



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