

**Pompeu Fabra University (UPF), PRBB, Barcelona**  
**Cell Biology Group**  
**Bioinformatician / Big Data Analyst**

We are recruiting a Bioinformatician / NGS (Next Generation Sequencing) Data Analyst who will join our research team, the Cell Biology Group ([www.upf.edu/cellbiology](http://www.upf.edu/cellbiology)), at the Department of Experimental and Health Sciences of the Pompeu Fabra University (UPF) in Barcelona. We investigate the mechanisms underlying the loss of stem cell regenerative decline with aging, by combining genome-wide experiments and cutting-edge genetic, molecular and biochemical assays.

You will be part of a dedicated team of molecular and cell biologists with high interest in bioinformatics' synergies with science. You will actively participate in projects that combine molecular biology, transcriptomics, epigenetics and bioinformatics, mouse genetics and tissue injury-regeneration, as well as proteostasis and senescence approaches, to define the intricate regulatory circuitry of stem cell aging, and potential rejuvenating strategies.

We are looking for a highly motivated individual who works closely together with wet lab scientists. The tasks include developing state-of-the-art approaches for exploration, integration and interpretation of high-throughput data, including NGS (RNA-seq, ATAC-seq and ChIP-seq), and performing computational biology analysis such as differential expression, transcription factor motif and pathway enrichment analysis. Applicants are expected to hold an academic degree (BSc, MSc, PhD in Bioinformatics, Biostatistics, or Life Sciences) and must have a good knowledge of Linux, bash scripting, statistical programming and data manipulation using e.g. R/Bioconductor or Python. Besides, some familiarity with HPC work environments would be desirable. Experience in epigenetic mechanisms of gene regulation and analysis of circadian rhythms is welcome.

Candidates are expected to be fluent in English, have excellent communication- and inter-personal skills and be highly motivated to become an integral part of a driven and dynamic multi-disciplinary team. Strong applicants should show critical and independent thinking.

We offer a dynamic and international working environment at the Department of Experimental and Health Sciences (UPF), located at the Barcelona Biomedical Research Park (PRBB), a world-class research institute offering a vibrant community of international researchers and state-of-the-art facilities.

CV, list of publications and contact information for referees should be sent to: [marina.raya@upf.edu](mailto:marina.raya@upf.edu)

**Recent publications from the lab**

- Solanas G, Peixoto FO, Perdiguero E, Jardí M, Ruiz-Bonilla V, Datta D, Symeonidi A, Castellanos A, Welz PS, Caballero JM, Sassone-Corsi P, Muñoz-Cánoves P\*, Benitah SA\*. Aged Stem Cells Reprogram Their Daily Rhythmic Functions to Adapt to Stress. **Cell** 170:678-692, 2017
- Proteostatic and Metabolic Control of Stemness. García-Prat L, Sousa-Victor P, Muñoz-Cánoves P. **Cell Stem Cell** 20:593-608, 2017
- Autophagy maintains stemness by preventing senescence. García-Prat L, Martínez-Vicente M, Perdiguero E, Ortet L, Rodríguez-Ubreva J, Rebollo E, Ruiz-Bonilla V, Gutarra S, Ballestar E, Serrano AL, Sandri M, Muñoz-Cánoves P. **Nature** 529:37-42, 2016
- Geriatric muscle stem cells switch reversible quiescence into senescence. Sousa-Victor P, Gutarra S, García-Prat L, Rodríguez-Ubreva J, Ortet L, Ruiz-Bonilla V, Jardí M, Ballestar E, González S, Serrano AL, Perdiguero E, Muñoz-Cánoves P. **Nature** 506:316-21, 2014