



**Date of publication of the job offer: April 15<sup>h</sup> 2021**

Pompeu Fabra University (UPF), PRBB, Barcelona

**Pura Muñoz-Cánoves Lab**

**Specialized Technician in Function and regulation of muscle stem cells**

### **Job description**

Available position for a **specialized technician** to work effectively and execute complex experiments of different projects on-going in the laboratory, aiming to study function and regulation of **stem cell aging**.

We are looking for highly motivated and ambitious candidate to join our research team, working in coordination at two locations: the National Cardiovascular Research Center (CNIC), in Madrid, and the Department of Experimental and Health Sciences of the Pompeu Fabra University (UPF) at the PRBB, in Barcelona. We study the mechanisms underlying the loss of stem cell regenerative decline with aging, and in particular the failure in proteostasis and entry into senescence of aging stem cells, as well as potential mechanisms to reverse these aging-associated defects.

You will be employed on the **AEI-RTI2018-096068-B-I00 (FEDER/UE) - MUSCLFIX** project of the Spanish Research Agency co-funded with FEDER funds, and be part of a dedicated team of molecular and cell biologists. 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

### **Recent publications from the lab**

- Proteostatic and Metabolic Control of Stemness. García-Prat L, Sousa-Victor P, Muñoz-Cánoves P. **Cell Stem Cell** 20:593-608, 2017
- 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
- 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

**Project and Institution that finance the contract**

Spanish Research Agency (AEI)

**Official number reference**

AEI-RTI2018-096068-B-I00 cofunded by FEDER

**Internal budget reference** > PRESPO4819

**Information on the minimum requirements**

- Experience in general laboratory running.
- Experience in general laboratory techniques.
- Experience in animal models (mouse) housing, colony control, in vivo techniques.
- Experience in cellular and molecular techniques.
- Experience in microscopy and data analysis.
- Team work abilities.
- Previous experience in skeletal muscle research will be highly valued.
- Excellent communication skills in written and spoken English.
- Strong analytical skills, and a problem-solving and result-oriented attitude.

**Benefits of the opening**

To be defined depending on the candidate profile.

**Information on the application process**

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

**Deadline to submit applications**

May 6<sup>th</sup>, 2021

**Contact:** [pura.munoz@upf.edu](mailto:pura.munoz@upf.edu)