

**Open Pre-Doctoral (FI) Position
Pompeu Fabra University (UPF)
Barcelona Biomedical Research Park (PRBB)
Barcelona, Spain**

One pre-doctoral position is available in the group of Pura Muñoz-Cánoves at the Pompeu Fabra University (UPF), Department of Experimental and Health Sciences (Cell Biology Unit), in the Barcelona Biomedical Research Park (PRBB), Barcelona, Spain.

At present, the major interest of our group is to understand muscle stem cell regulation and functions during skeletal muscle regeneration and aging. Our group has provided insights for muscle stem cell regenerative decline during aging (Sousa-Victor P. et al. Nature 2014). Geriatric muscle stem cells switch quiescence into senescence, due to de-repression of p16INK4a. Furthermore, we demonstrated that p16INK4a silencing in geriatric muscle stem cells restores quiescence and muscle regenerative functions. Recently, we also unveiled that the process of autophagy is essential to maintain stemness in aging (Garcia-Prat et al, Nature 2016). These findings may provide a basis for stem cell rejuvenation in sarcopenic muscles.

We work intensively on two additional research areas: 1) Understanding the coordinated actions between inflammatory cells and muscle stem cells required for efficient muscle tissue growth and repair, 2) Understanding the mechanisms leading to muscle fibrosis in Duchenne Muscular Dystrophy.

Other publications of the group include:

Perdiguero et al, EMBO J 2007; Serrano et al, Cell Metabol, 2008; Vidal et al, Genes Dev, 2008; Perdiguero et al JCB 2011; Ardite et al JCB 2012; Vidal et al Hum Mol Genet 2012; Pessina et al Stem Cell Reports 2015.

We are looking for highly motivated candidates with a B.S. in Life Sciences fulfilling the FI-2018 fellowship requirements. The most likely successful candidate will have excellent previous experience in cellular and molecular biology.

Terms of salary and employment: MINECO FI program conditions apply.

Application

Applicants should submit his/her application containing a motivation letter and the CV (in English, including degree final score), and they should arrange for two recommendation letters to be sent to: marina.raya@upf.edu, pura.munoz@upf.edu

Application deadline: **August 31st, 2018**

More information: <http://www.upf.edu/cellbiology/>