

# Open position: Mechanobiology of senescent fibroblasts

A Master student position is available in our team at the School of Medicine of the University of Barcelona (campus Hospital Clinic), starting by late 2023.

Our team is a multidisciplinary group that explores cell mechanobiology to better understand normal and pathologic processes. We investigate how cells generate and respond to mechanical forces during various cellular functions, such as adhesion and migration.

The Master student's project will explore the mechanobiology of senescent fibroblasts.

### Tasks will include:

- Tissue culture techniques
- Fluorescent optical microscopy
- Use of mechanobiology techniques such as traction force microscopy
- Image quantification with Fiji, Python and Matlab
- Data analysis with R and Matlab

We are looking for candidates with backgrounds in Physics / Biology / Chemistry / Engineering

#### We offer:

- An initial contract to start the PhD (the contract will be renewed later on).
- A highly multidisciplinary research team (biology, physics and biomedical engineering) with access to state-of-the-art microscopy equipment and core facilities.
- A large set of training opportunities to broaden your skills.
- Possibility to do internships in laboratories abroad.

## **Application**

Please send your CV to rsunyer@ub.edu with the subject: "Open Position"

#### **Further information:**

Brief introduction to mechanobiology:

(English) http://biofisica.info/articles-7/mechanobiology-of-collective-cell-systems/

(Spanish) https://rsunyer.com/uploads/NIYC0618 40-47.pdf