



Universitat  
Pompeu Fabra  
Barcelona

Departament  
de Ciències Experimentals  
i de la Salut



EXCELENCIA  
MARÍA  
DE MAEZTU



AGENCIA  
ESTATAL DE  
INVESTIGACIÓN

**Date of publication of the job offer:** 1st of March 2021

#### PhD position

##### Job description

4-year founded PhD position for researcher willing to carry out PhD project in Cancer Biology lab (<https://www.upf.edu/web/cancer-biology>) at The Department of Experimental and Health Sciences - Faculty of Health and Life Sciences (DCEXS - FCSV; <https://www.upf.edu/cexs/>) at Pompeu Fabra University (Barcelona).

##### Lab research projects:

The tumour suppressor gene p53 is mutated in half of the human cancers, and there is still extensive morbidity and mortality associated with cancers bearing p53 mutations. Given the difficulties in developing strategies for targeting wild-type or mutant p53, further understanding of its basic biology is required for successful clinical translation. Recent studies, including ours, have challenged the previously understood model of how the p53 gene is involved in tumour suppression. We found that several p53 activated target genes implicated in DNA repair have critical functions in suppressing blood cancer development. Based on this observation, we hypothesise that coordination of DNA damage repair is the most critical mechanism by which p53 suppresses tumour development. In line with this hypothesis our laboratories current research focuses on answering following questions i) how p53 controls a DNA repair-coordinated program to protect tumorigenesis; ii) how tissue specificity controls which p53-regulated DNA repair effectors are crucial for tumour suppression and iii) how we could use p53-dependent DNA repair signaling therapeutically to kill tumour cells.

##### Selected publications:

Best et al., CDDis 2020

Janic et al., Nat Medicine 2018

Valente et al., Oncogene 2016

Valente et al., Cell Reports 2013

More info about our research at <https://www.upf.edu/web/cancer-biology>

##### Project and Institution that finance the contract

DCEXS Unidad de excelencia María de Maeztu, Pompeu Fabra University, funded by the Ministerio de Ciencia, Innovación y Universidades. DCEXS is specialized in Biomedical Research (Cell and Molecular Biology, Molecular Medicine, Evolutionary Biology and Complex Systems, Biomedical Informatics, Genetics and Neurosciences, Biomedical Engineering, and Public Health and Education in Health Sciences), Teaching Degrees (Human Biology, Medicine and Biomedical Engineering) and Teaching Master's degrees (Biomedical Research, Bioinformatics for Health Sciences, Pharmaceutical and Biotechnology Industry, Clinical Analysis Laboratory, and Public Health).



#### Official number reference

CEX2018-000792-M

#### Information on the requirements

- Bachelor and master's degree in Medicine, Biology, Veterinary Medicine or similar
- Previous research experience in Cell/ Molecular Biology and Bioinformatics will be appreciated
- English (fluent)

#### Benefits of the opening

The candidate will receive a full-time contract and an annual salary according to the UPF salary guidelines. She/he will be able to receive training in complementary through courses of Pompeu Fabra University and the PRBB Intervals Programme.

#### Information on the selection process:

Please send the following documents

- Academic CV (include the Bachelor and Master grades)
- Cover letter

to the email address [ana.janic@upf.edu](mailto:ana.janic@upf.edu) with "*PhD position application*" in the email title.

Confidentiality in document handling and equality of opportunities policy are guaranteed by Pompeu Fabra University.

**Deadline to submit applications:** 30/04/21

**Pre-selection:** Will be based on CV, motivation letter, experience, management of research

**Interviews:** Shortlisted candidates will be invited for online interviews in May 2021.

PhD start date is flexible; preferable date 1<sup>st</sup> of September 2021

#### Contact

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