



Date of publication of the job offer	April 8th 2022
Job title. Ukrainian Researcher in cell and structural biology	
Job description <p>We open a position for an Ukrainian researcher in the fields of cell biology and structural biology in the context of a HFSP-funded project. The project will derive structural measurements of macromolecular complexes from Single Molecule Localization Microscopy (SMLM) and live-cell imaging. Functionality will be assed by yeast genetics.</p> <p>In the past, our lab combined cell engineering and advanced live-cell imaging to develop PICT, a new method that can resolve molecular architectures in vivo with up to 2 nm precision (Picco et al, 2017, Cell; Irastorza-Azcarate et al, 2019, Structure). In collaboration with the groups of Daniel Castaño-Díez (Univ. Basel, Switzerland) and Alex de Marco (Monash Univ., Australia), we received a HFSP grant to continue pushing the limits of microscopy to investigate molecular structures in situ. The researcher is expected to lead the development of imaging and computational tools that allow us to extract quantitative models from super resolution data and to deliver mechanistic insight about the 3D organization of the cell machinery. The tasks of the candidate will include the implementation of new imaging methods and image analysis to measure physical constraints based on SMLM and data modelling, machine learning etc. The project might also be focused on functional experiments based on yeast genetics and biochemistry approaches.</p> <p>The researcher will join an international team developing imaging techniques in the frontier between cell biology and structural biology. The lab is truly interdisciplinary, with all the necessary facilities and expertise for the cell biology, live-cell imaging, single molecule localization microscopy and computational modelling. As part of the Pompeu Fabra University, the lab is located at the PRBB, one of the strongest scientific campus in south Europe. With state-of-the-art research facilities, PRBB offers an ideal scientific and international environment.</p>	
Project and Institution that finance the contract: The project is funded by HFSP	
Official number reference	
Information on the minimum requirements <p>Any research expertise in the fields of cell biology, structural biology or biophysics is welcome, either computational or experimental background.</p> <p>It is required to have a minimum of 1-year expertise and training in any of the following:</p> <ul style="list-style-type: none">• Optical physics applied to light microscopy, bioimage analysis or data modelling.• MSc or PhD degree in computer sciences, Cell biology, Biochemistry, (Bio-)physics, (Bioscience) engineering, or related disciplines.• Expertise in SMLM or yeast genetics will be valued.	



Universitat
Pompeu Fabra
Barcelona

Departament
de Ciències Experimentals
i de la Salut

English conversation level required

Benefits of the opening

- Full-time contract, salary according to the researcher expertise

Information on the application process : If you are interested, please send a short cover letter and your CV to oriol.gallego@upf.edu

Deadline to submit applications: 31/07/2022