

IBEC (Institute for Bioengineering of Catalonia) is an interdisciplinary research center focused on Bioengineering and Nanomedicine based in Barcelona. IBEC's mission is to develop international high quality interdisciplinary research that, while creating knowledge, contributes to making a better quality of life, improving health and creating wealth. A close link with key universities, reference hospitals and corporations, are assets that facilitate achieving the mission.

IBEC was founded in 2005 by the Generalitat de Catalunya, the University of Barcelona (UB) and the Polytechnic University of Catalonia (UPC).

IBEC is located within the **Barcelona Science Park**, with premises of 2.500 square meters, 20 research groups and a team of researchers and support services of 250 people from 20 different countries. www.ibecbarcelona.eu



Marie Skłodowska-Curie Early Stage Researcher (PhD student) on Nanoscale Composition Mapping with Electrostatic Force Microscopy (Ref. MC-GG2)

The [Nanoscale Bioelectrical Characterization Group](#) at the Institute for Bioengineering of Catalonia (IBEC) is looking for an Early Stage Researcher (PhD student) to develop his PhD thesis project on the **label-free mapping of biological membranes' composition with nanoscale spatial resolution**. The contract will be within the framework of the **SPM2.0 Marie Skłodowska-Curie European Training Network (MSCA-ITN-2016-721874)**, whose objective is to train a new generation of early stage researchers in the most advanced Scanning Probe Microscopy techniques.

The successful candidate will develop research involving:

- Multicomponent lipid bilayer and natural bio membrane preparation techniques
- High resolution topographic imaging techniques (e.g. Atomic Force Microscopy)
- High resolution nanoscale dielectric measurement techniques (e.g. Electrostatic Force Microscopy)

Requirements for candidates:

- Degree and Master on any field on Physics, Chemistry, Biotechnology or Engineering (this requirement has to be fulfilled before the contract starting date (September 2017 or earlier), not at the closing date of application)
- Multidisciplinary qualifications (Physics/Bio, Engineering/Bio, etc.), knowledge on Nanotechnology, specifically on Scanning Probe Microscopies will be a plus.
- Self-critical, capacity to learn and bring knowledge, High level of English
- High motivation and ability to be involved in an international multidisciplinary team, Excellent team working and communication skills

Marie-Curie fellowship Mobility requirement:

At the time of recruitment by IBEC, candidates must not have resided or carried out their main activity (work or studies) in Spain for more than 12 months in the 3 years immediately prior to their recruitment.

We Offer:

- Full time 3 year contract. Very competitive salary. Starting date: From 1st March to 1st September 2017.
- Stimulating, interdisciplinary research and high quality international scientific environment

Selected references:

- M. v. Hofstadt et al., **ACS Nano** (2016)
- A. Dols-Pérez et al., **Nanoscale** 7, 18327 (2015)
- D. Esteban-Ferrer et al., **ACS Nano** 8, 9843 (2014)
- A. Cuervo et al., **PNAS** E3624 (2014)
- L. Fumagalli et al. **Nature Materials** 808, 11 (2012)

IBEC is committed to the principles of the Code of Conduct for the Recruitment of Researchers of the European Commission. Thus, there are no restrictions of citizenship or gender and candidates with disabilities are strongly encouraged to apply.



Interested applicants should send their CV, cover letter and references to: jobs@ibecbarcelona.eu, by **28/02/2017 (Reference: MC-GG2)**.