

Predocctoral researcher at the Molecular Bionics Research group

Introduction to the vacant position:

The Molecular Bionics Group is looking for a Predocctoral researcher to develop their research thesis on a project focused on the the optomoisation, characterisation and study of nanoparticles for crossing the blood brain barrier.

The candidate will apply for a fellowship “Ayudas para contratos predoctorales para la formación de doctores” associated to the “Severo Ochoa Mención de Excelencia” granted to IBEC by the “Ministerio de Ciencia, Innovación y Universidades”.

Main tasks and responsibilities of the successful candidate will be:

- Design and characterisation of multiplexed and multivalent nanoparticles (These are synthetic vesicles known as polymersome)
- Cell culture and blood brain barrier models and their imaging using fast light sheet microscopy
- Correlation between live cell kinetics, cellular trafficking and physical models

Requirements for candidates:

Essential:

- Grade & MS in Physics, Bioengineering, Chemical Engineering, Physical Chemistry or any field directly related to the tasks described above.
- The candidate must have obtained the MS no later than September 2019.
- Research experience on data analysis using python, Matlab, Mathematica, R or equivalent.
- Good skills on communication, teamwork, proactivity, commitment, integrity, time management, critical and analytical thinking.
- High level of English for daily use in oral and written form.

Advantageous:

- Experience on polymersome or any synthetic vesicles making and characterisation
- Cell culture
- Any optical microscopy

We Offer:

- Number of available positions: 1
- Starting date and working conditions will be those described in the 2019 call text for these fellowships. See 2018 call for reference:
<http://www.ciencia.gob.es/portal/site/MICINN/menuitem.dbc68b34d11ccb5d52ffeb801432ea0/?vgnnextoid=131955e2d5e01610VgnVCM1000001d04140aRCRD>
- Measures to reconcile work and family life (maternity and paternity leave, flexible schedule working hours, teleworking, 23 working days of paid holidays, 9 leave days for personal matters, among others).

- Professional development opportunities: IBEC has a Training catalogue in technical and transferable skills and organizes seminars and PhD discussions. Mobility grants are offered. Mentoring programme for Postdoctoral researchers.
- Induction programme to facilitate incorporation at IBEC and additional support is provided for foreigners to obtain Visa-working permit and to install in Barcelona.

How to apply:

Interested applicants should send their CV, cover letter and the contact of two referees to: jobs@ibecbarcelona.eu before 15/09/2019 (Reference: **PhD-GB**).

Principles of the Selection Process:

Our Recruitment and Selection Policy is based on the OTM Strategy (Open, Transparent and Merit-based recruitment) www.ibecbarcelona.eu/jobs/ and accept applications without distinction on any grounds. Candidates with disabilities are strongly encouraged to apply. Our commitment to OTM-R principles can also be found in our Gender and Diversity plan.



HR EXCELLENCE IN RESEARCH

Protection of personal data:

IBEC ensures that applicants' personal data are processed as required by EU General Data Protection Regulation (GDPR) and Spanish Law 3/2018 on Data Protection. Personal data shall thus be processed solely for the purpose of the selection procedure.

Who we are?

The Institute for Bioengineering of Catalonia, IBEC is an interdisciplinary research center focused on Bioengineering and Nanomedicine based in Barcelona. IBEC is one of the top research institutions named as a Severo Ochoa Research Centre by Ministry of Economy and Competitiveness (in charge of research and innovation policy in Spain), which recognizes excellence at the highest international level in terms of research, training, human resources, outreach and technology transfer.

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 established in 2005 by the Generalitat de Catalunya (Autonomous Government of Catalonia), the University of Barcelona (UB) and the Technical University of Catalonia (UPC).

IBEC is located within the Barcelona Science Park and is managing 3.800 square meters facilities, 21 research groups and a team of researchers and support services of 300 people from 30 different countries. www.ibecbarcelona.eu