

## Marie Curie Postdoc Position in Smart Active Drug Delivery Systems (Ref. MC-SS)

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, 16 research groups and a team of researchers and support services of 250 people from 20 different countries. [www.ibecbarcelona.eu](http://www.ibecbarcelona.eu)



The **Smart Nanobiodevices** group at the **Institute for Bioengineering of Catalonia (IBEC)** is looking for **Postdoctoral candidates** to apply for the **2016 calls** of the **European Commission Marie Curie Individual fellowship**.

### Tasks and responsibilities:

- To develop *active* biocompatible/biodegradable nanoparticles (so called nanomotors) as drug delivery systems using various methods depending on candidate skills.
- leading and supervising a competitive project (writing papers, projects, finding and keeping collaborations).
- Bringing the current research on nanomotors to the real medical field (towards in vivo).
- Study drug loading, drug delivery and effectiveness of the active nanoparticle system developed.

### Requirements for candidates:

- PhD Degree in (not exclusive) Chemistry, Materials Science, Biomedical Engineering, Robotics, Biochemistry, Biology.
- Experience in synthesis of nanoparticles using supramolecular chemistry/ polymeric/ inorganic synthesis/ sol gel/ hydrogels or other biodegradable materials.
- Experience in drug delivery systems, cell culture, experience in in vivo tests and 3D bioprinted materials 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.
- **Transnational Mobility Requirement: researchers must not have resided or carried out their main activity (work, studies, etc.) in Spain for more than 12 months in the 3 years immediately prior to the call deadline (14/09/2016).**

### Selected references:

- X. Ma et al. *ACS Nano*, (2016), 10, 3597-3605
- X. Ma et al. *NanoLetters* (2015), 15, 7043-7050
- X. Ma et al. *JACS* (2015) 137, 4976-4979