

## Marie Curie Postdoc Position in 3D Bioprinting for Vascular Replacement (Ref. MC-DN)

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 **Cellular and Respiratory Biomechanics** 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:

- 3D Bioprinting of neovessel-like structures.
- *Ex-vivo* bioreactor for bioprinting maturation.
- Assessment of mechanics and viability of 3D neovessels.
- Pre-clinical safety-efficacy studies in animal models.

### Requirements for candidates:

- PhD Degree in engineering, physics or biological sciences.
- Motivation for interdisciplinary research.
- 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:

- - Stanisavljevic et al. Snail1-expressing fibroblasts in the tumor microenvironment display mechanical properties that support metastasis. *Cancer Res* 2015; 75:284-95.
- Andreu et al. Heterogeneous micromechanical properties of the extracellular matrix in healthy and infarcted hearts. *Acta Biomater* 2014, 10:3235-42.
- Perea-Gil *et al.* In vitro comparative study of two decellularization protocols in search of an optimal myocardial scaffold for recellularization. *Am J Transl Res* 2015, 7:558-573.