# 1 PhD student position available for "Image analysis of cardiac development in the mouse" at FUNDACION CENTRO NACIONAL DE INVESTIGACIONES CARDIOVASCULARES CARLOS III (CNIC) & BITPLANE AG

PhD student position available to develop his/her thesis within the Marie Skłodowska-Curie Innovative Training Networks (**MSCA-ITN-EID**) action '4D analysis of heart development and regeneration using advanced light microscopy — 4DHeart', a highly multidisciplinary, inter-sectorial and competitive training programme in cardiovascular research.

## **Description of the project:**

The project aims to generate a computerized 4-D description of early mouse cardiac development at cellular resolution and to build software tools for automated image registration to the cardiac model. The student will be exposed to a multidisciplinary group of researchers focused on advanced live imaging and image analysis. The student will develop research on live imaging of mouse embryos, and image registration procedures of temporal sequences of 3D images.

### **Requirements:**

Applicant must have passed a minimum of 300 ECTS credits in the set of official university studies, with a minimum of 60 credits in Master studies, including education in a technical subject (physics, mathematics, computer science). An interest in image processing and object oriented software development (C++) is essential and experience in microscopy and/or embryology will be valued. Good English communication skills are mandatory. Research experience will also be valued.

## **Eligibility:**

Candidates must be in the first four years (full-time equivalent) of their research careers and have not yet been awarded a doctoral degree.

In addition, candidates must not have resided or carried out their main activity (work, studies) in Spain for more than 12 months in the 3 years immediately prior to the recruitment date.

#### **Offered:**

- 36-month contract, 18 months to be spent at CNIC in Madrid-Miguel Torres Team, and 18 months at Bitplane in Zürich-Peter Majer Team, with a competitive salary (according to Marie Skłodowska-Curie Innovative Training Networks Table)
- Integration in a European network of scientific excellence
- Stays in private companies and partner academic labs
- Extensive training in complementary skills
- Access to state-of-the-art infrastructures.

## **Contact:**

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