**PhD position / Early Stage Researcher (ESR) available in Computer Modelling**

Do you want to work in the growing sector of medical technology? Do you want to start your career in a European network of leading universities, hospitals and industry?

The University of Bordeaux is one of the institutions in the new EU-project “Personalised In-silico Cardiology” (PIC), with 15 young researchers (F1 to F15) divided between 10 different European research institutions and companies. We are looking for excellent candidates to fill our fellowship for a 3-year Early Stage Researcher position (PhD-student) at the University of Bordeaux / Liryc Institute in the topic of personalized modelling of atrial arrhythmias to improve ablation efficacy. The PhD project will be part of the PIC project, which is an Innovative Training Network funded through the Marie Skłodowska-Curie actions.

**Liryc, The Electrophysiology and Heart Modelling Institute,** is a unique cross-disciplinary research institute focussed on cardiac research. It has a core of over 100 researchers ranging from basic scientists, mathematicians, and engineers to clinicians. Liryc is one of six national Hospital-University centres of excellence, and is a collaboration between France's national research agencies (INRIA,INSERM, and CNRS) along with the University of Bordeaux and the Bordeaux Hospital Board (CHU Bordeaux). The goal of LIRYC is to improve the treatment of cardiac diseases through innovative approaches and training. Research at Liryc includes basic science with animal faciltiies, electrophysiological measurements, metabolic monitoring, computer model development and application, imaging, signal processing, as well as clinical treatment.

**PIC** will educate young researchers (biomedical engineers) to become international experts in key areas of medical technology through a coordinated plan of individual research projects addressing specific topics in cardiac computer models to monitor function, guide therapy and aid in the diagnosing process. Multi-disciplinary dialogue and work between clinicians, experimentalists, and biomedical engineers is crucial to address the challenges in this emerging field. By providing researchers with knowledge and training from specific topics in device technology, computational biology, biomedical engineering, research methodologies, innovation and entrepreneurship, the link between academic research and industry will be strengthened. The scientific and clinical goal of this PIC project is to develop better computer models to aid in the determination of ablation lines to terminate atrial fibrillation.

**Qualifications**

* Must have a Master degree in one of the following fields: biomedical engineering, biophysics, physics, biology, or mathematics. Candidates from related scientific disciplines are welcome to apply.
* Good programming knowledge / experience with Python and/or experience in Matlab or similar are required.
* Knowledge and experience with electrophysiology is advantageous.
* Strong academic record with research experience.
* Emphasis on teamwork, innovation, being dynamic and enthusiastic as well as collaborating well with other members of a team.

Relevant certificates, including all grades, credits and marks and recommendation letters must be submitted along with the application. Certified copies of study credits with grades will be needed from those called to an interview.

**Special rules for eligibility of ESR candidates:**

Early-Stage Researchers (ESRs)shall, at the time of recruitment by the host organization, be in the first four years (*full-time equivalent research experience*) of their research careers and have not been awarded a doctoral degree.

**Mobility Rule**: at the time of recruitment by the host organization, researchers must not have resided or carried out their main activity (work, studies, etc.) in France for more than 12 months in the last 3 years. Compulsory national service and/or short stays such as holidays are not taken into account.

You will find more information about Liryc at: [www.](http://www.ivs.no/)liryc-ihu.fr

Application deadline: 1st October 2017.