



POSTDOCTORAL RESEARCH FELLOW POSITION

High resolution MRI for cardiac substrate imaging and for guiding interventional procedures

IHU LiryC – University of Bordeaux - France

Job description

Two postdoctoral research fellow positions are open (2 years duration each) in the imaging team of IHU LIRYC, Bordeaux France (<https://www.ihu-liryC.fr/en/>). This research program includes developmental work on new cardiovascular MRI sequences/reconstruction algorithms, hardware development and preclinical validation in experimental models. Objectives are to better characterize the cardiac substrate involved in arrhythmia through high resolution MRI and improve real-time image-guided therapies using dedicated catheters.

The recruited person would be responsible for conducting independent research in the field of MRI engineering and will be focused on:

- Pulse sequence programming and real-time image reconstruction and processing
- Developing and interfacing new hardware with new MR-imaging methods
- Preclinical evaluation

Technical requirements include knowledge in pulse sequence programming (Siemens IDEA), development of image reconstruction algorithms (Gadgetron/ICE/Matlab), and an ability to operate an MRI scanner. Postdoctoral research fellows will be expected to prepare manuscripts and conference abstracts related to the project. It is essential that applicants have excellent interpersonal skills, oral and written communication skills, problem solving skills, and leadership qualities. Fellows will work in a collaborative group setting, and will interact with multiple faculty, postdoctoral researchers, and student trainees.

Salary will be commensurate with qualifications and experience. The research program is funded by French national Research Agency and does not require applications for grants or external support.

Facilities

Two 1.5T MRI scanners from Siemens (Avanto and Aera) 100% dedicated to technical and preclinical research, with access to source code and sequence development/reconstruction environment. The research team has established experience in real-time processing using Gadgetron environment. All facilities are available for preclinical evaluation. The clinical translation of these techniques will mainly be performed at the University Hospital of Bordeaux equipped with identical MRI facilities (1.5T Siemens scanners).

If interested, please send a cover letter and curriculum vitae to

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Applications will be accepted until the two positions are filled