UNIVERSITY OF LEEDS

PhD Studentship in

Motion Correction for PET-MR Imaging of Coronary Atherosclerosis

Following the improvement of spatial resolution of clinical positron emission tomography (PET) to 3 *mm* the main limiting factor hampering its further progress is subject motion. Developing motion correction techniques for different types of motion is challenging but important for advancing PET imaging. Possible solutions might be offered by combining PET and magnetic resonance (MR) imaging systems. The use of MR can provide independent estimation of the subject motion to correct PET data. In this research project, the student will utilise PET-MR data to achieve motion correction of PET imaging of atherosclerosis in the coronary arteries, which would be feasible to translate into clinical practice.

The successful candidate will register for doctoral studies with the Division of Medical Physics at the University of Leeds in United Kingdom and will work together with Dr. Harry Tsoumpas, Professor David L. Buckley, both Leeds, and Professor Zahi A. Fayad, *Chair of Radiology at the Translational and Molecular Imaging Institute at Icahn School of Medicine at Mount Sinai Hospital in New York*, who will be the clinical advisor of this project.

Closing date for applications and references to be received is the 30th of April 2014. The studentship will cover the cost of tuition fees (UK/EU rate) and a standard maintenance package. An allowance towards travel / training costs will also be available. UK/EU applicants will be eligible for a full award paying tuition fees and maintenance. To be considered for a PhD, you should hold a strong degree (equivalent to at least a UK upper second class honours degree) in a relevant area of Computer Science, Engineering, Physics, or other discipline.

For expression of interest contact Dr Tsoumpas (C.Tsoumpas@leeds.ac.uk). Closing date for applications is on the 30th of April 2014.