UNIVERSITY OF LEEDS

PhD Studentship in

Quantitative PET-MR Image Reconstruction at Ultra Low Radioactive Doses

We are looking for a keen individual to pursuit research towards a doctoral degree in Medical Imaging. The aim of this project is to optimize image reconstruction in order to achieve low dose PET/MRI. Mathematical, statistical and physical models will be utilized to achieve quantitative PET-MR images. The successful candidate will develop pioneering mathematical methods in open source software libraries and will address key problems involved in PET imaging. The methods will be translated in a clinical context and assessed in rabbits and patients suffering from atherosclerosis. Existing collaboration with Siemens will be pivotal in translating the methods to their commercial systems and a successful project may have international impact.

The successful candidate will register for doctoral studies with the new division focusing on Biomedical Imaging at the **University of Leeds** in United Kingdom and will work together with **Dr Harry Tsoumpas**, **Dr Robert Aykroyd**, both Leeds, and **Professor Zahi A. Fayad**, Director of the **Translational and Molecular Imaging Institute at Icahn School of Medicine at Mount Sinai** in New York, who will be the clinical advisor of this project. The University of Leeds is the second largest University in the United Kingdom and the Leeds Teaching Hospital is the second largest healthcare provider in the country. The student will have the opportunity to work for a few months at Mount Sinai in New York.

Closing date for applications and references to be received is on the **8th of December 2014**. The studentship will cover the cost of tuition fees (UK/EU rate) and a standard maintenance package. Only applications from UK/EU nationals will be valid for this particular scheme. To be considered for a PhD, applicants should hold a strong degree (equivalent to at least a UK upper second class honours degree) in a relevant area of Applied Mathematics, Statistics, Computer Science, Engineering, Physics, or other similar disciplines. Experience in computer programing will be useful but not essential. Excellent communication skills will be necessary.

For expression of interest contact Dr Tsoumpas (**C.Tsoumpas@leeds.ac.uk**). For information on the competitive scheme and how to apply: **http://lnkd.in/d4i9V9i**