

## **National Heart and Lung Institute**

The Cardiovascular Magnetic Resonance (CMR) Unit of the Royal Brompton Hospital and National Heart and Lung Institute at Imperial College was established in 1984. It dedicates its research to the cardiovascular system and runs one of the largest cardiovascular clinical services in the world. Research ranges from basic physics and the development of artificial intelligence methods to clinical applications and involves a dedicated interdisciplinary team. The research programme in big data and artificial intelligence in health imaging led by Dr Guang Yang focuses on generating promising tools for assisting clinicians in application fields such as cardiovascular image analysis, cancer management and innovation ecosystem to respond to a pandemic.

We are now looking for a postdoctoral researcher (an MRI expert with computing/AI knowledge) to join our group (<https://www.yanglab.fyi/>) at National Heart and Lung Institute, Imperial College London as a Research Associate. The position is initially funded for 3 years with potential extensions with a recently awarded UK Research and Innovation Future Leaders Fellowship. The successful candidate will join a multi-disciplinary team of physicists, computer scientists, AI specialists, cardiologists and technologists and work on MRI sequence development and image reconstruction under the supervision of Dr Guang Yang at his Smart Imaging Lab. While cardiac MRI has already been successfully applied in clinical research studies, it remains a time-consuming method that is only available in a handful of specialist research centres and is only applicable in healthy volunteers and highly cooperative patients. The successful candidate will develop, implement and test advanced AI methods improving the efficiency, clinical applicability and reliability of cardiac MR, helping to transform this novel research method into a clinically useable tool. The successful candidate will also hold an honorary contract with the Royal Brompton and Harefield NHS Foundation Trust in addition to the Imperial College employment. The post is also with funded travelling and short-term visiting scholar opportunities to work at the EPSRC Cambridge Mathematics of Information in Healthcare Hub (CMIH), the University of Cambridge, The National Institutes of Health, and Siemens Healthineers.

More details can be found in <https://www.imperial.ac.uk/jobs/description/MED02803/research-associate>

### **Candidate qualifications include:**

- Hold a PhD (or equivalent) in MRI, Computer Science, Medical Physics, Bioinformatics, Bioengineering or a closely related discipline, or equivalent research, industrial or commercial experience
- Knowledge of MRI, MR physics, MR sequence design and implementation, artificial intelligence, medical image analysis, deep learning, image reconstruction
- Knowledge of research methods and statistical procedures
- Practical experience within a research environment and/or publication in relevant and refereed journals

**Applications are open until 15 December 2021.**

### **Application Process:**

Please apply through the link above or send your CV to [g.yang@imperial.ac.uk](mailto:g.yang@imperial.ac.uk)