Post-doctoral Research Associate in MRI of Cerebral Vascular Function and Oxygen Metabolism

Cardiff University Brain Research Imaging Centre (CUBRIC), UK

The Cardiff University Brain Research Imaging Centre seeks a creative and experienced MRI research scientist to join its team, working on a new award from the EPSRC to develop MRI methods to efficiently map cerebral vascular and oxygen metabolic function. See the following website for further details of the project (https://tinyurl.com/yxrtlktr).

The project aims to take our MRI tools, based on quantitative FMRI approaches, to the next level required to have clinical impact. We propose to expand the range of pathologies for which the tools are reliable, speed up data acquisition and implement artificial intelligence-based data analysis to improve robustness of estimation of the brain’s physiological state. We aim to demonstrate potential clinical benefits in imaging primary brain tumours.

We are seeking an excellent candidate, with a relevant PhD, who has the capacity to develop the advanced MRI, biophysical modelling and data analysis methods. The candidate should have the interpersonal skills and enthusiasm to engage with clinical researchers and people newly diagnosed with a primary brain tumour, who volunteer to take part in this research. Experiments will involve functional MRI, arterial spin labelling and respiratory (FMRI calibration) methods in patients and healthy volunteers.

This is an exciting career opportunity to join a successful neuroimaging centre benefitting from access to a suite of Siemens MRI systems, including a 7T Magnetom system, two 3T Prisma systems and a Connectom system (3T with 300mT/m gradients). These systems are well-supported by an on-site Siemens scientist, a comprehensive master research agreement with Siemens, and a talented team of physicists, engineers, radiographers and scientific support officers. The project will involve working with industrial, research and healthcare partners including the Velindre Cancer Centre.

Cardiff University is recognized as one of the UK’s leading research-intensive universities. We are ranked in the top 5 in the UK’s Research Excellence Framework based on the quality of our research. CUBRIC offers excellent scientific connections underpinned by funded national networks for microstructural imaging and 7T MRI. In CUBRIC’s research field, Psychology, Psychiatry and Neuroscience, Cardiff University is ranked 2nd in the UK on research quality. CUBRIC offers a new, positive and vibrant research environment in which to work and is situated in the lively and well-connected capital of Wales.

CUBRIC moved to new purpose-built premises in 2016. The significant expansion has been brought about by funding from Cardiff University, UK Medical Research Council, Wellcome Trust, UK Engineering and Physical Sciences Research Council, The Wolfson Foundation, Welsh Government and Welsh European Funding Office. The new CUBRIC houses up to 200 researchers and in addition to the MRI systems, MEG, EEG, TMS, tDCS and a clinical research unit. You can learn more about CUBRIC at: http://sites.cardiff.ac.uk/cubric.

Salary: £33,199 - £39,609 per annum (Grade 6). It is not expected to appoint above grade 6.32, £35,211 per annum.

This post is full-time, available from 1 October 2019 and is fixed term until 30 March 2023.

Applying:
In advance of submitting a full application, applicants are strongly encouraged to engage in informal discussions with CUBRIC’s Head of MRI and Principal Investigator for the project (Prof Richard Wise, wiserg@cardiff.ac.uk).

Applications can only be made through Cardiff University jobs website: http://www.cardiff.ac.uk/jobs/. Full details of the required criteria for the position can be found in the job pack online (job reference number 8971BR). Please submit with your full CV, together with a summary of research interests and career goals, and a clear enumerated statement of how you meet each of the essential criteria (and any of the desirable criteria) for the role.

Please be aware that Cardiff University reserves the right to close this vacancy early should sufficient applications be received.

Cardiff University is committed to supporting and promoting equality and diversity and to creating an inclusive working environment. We believe this can be achieved through attracting, developing, and retaining a diverse range of staff from many different backgrounds who have the ambition to create a University which seeks to fulfil our social, cultural and economic obligation to Cardiff, Wales, and the world. In supporting our employees to achieve a balance between their work and their personal lives, we will also consider proposals for flexible working or job share arrangements.

For other job opportunities at CUBRIC and the School of Psychology, please see http://psych.cf.ac.uk/aboutus/jobs.html