The Cardiff University Brain Research Imaging Centre (CUBRIC) seeks a highly motivated and collaborative scientist to join their research community. This a unique and exciting opportunity to be part of a cutting-edge project, at a key stage in the evolution of ultra-low field MRI, that has potential to have a huge impact on access to MRI across the world.

The post-holder will work on developing ultra-low field MRI for use in the assessment of brain tissue microstructure as part of two externally-funded projects. The post itself is funded by Wellcome-LEAP under the “First 1000 days of life” project, (see https://wellcomeleap.org/1kd). CUBRIC is part of the ‘Khula’ consortium, led by Prof Kirsten Donald (University of Cape Town), which comprises experts in MRI, EEG, cognitive neuroscience, paediatrics, nutrition and the microbiome to understand the influences on the development of executive function in the first 1000 days of life, in two LMIC settings: South Africa and Malawi.

The post-holder will develop acquisition methods and acquire data across three separate scanners in CUBRIC: the Hyperfine Swoop system (64 mT), the Siemens Connectom system (with 300 mT/m gradients) and the Siemens 7T Magnetom system. In addition to extending the capabilities of the Hyperfine system through sequence/protocol optimisation to facilitate microstructural imaging, a key component of Khula’s programme is to apply image quality transfer approaches, using the Connectom/7T data to boost the fidelity of the Hyperfine images. This will be in close collaboration with the research team of Prof Daniel Alexander at University College London and the Khula postdoc recently appointed there.

The Hyperfine scanner was funded through the UNITY project (Ultra-Low field Neuroimaging In The Young), an initiative funded by the Bill and Melinda Gates Foundation, and led by Prof Steve Williams at Kings College London. This comprises a network of 6 high income settings for MR physics development, and approximately 25 Hyperfine scanners in LMIC settings. The post-holder will be developing microstructural MRI protocols (predominantly diffusion MRI) for roll-out to these LMIC settings.

We are seeking a highly motivated and curious individual with a good understanding of MRI to help us to take this project forward. The project is highly collaborative, and would suit a flexible, adaptive and ambitious individual who enjoys working in a highly interdisciplinary research team. Full details of Essential and Desirable Criteria are available in the Job Description.

It is highly recommended that interested candidates get in touch with Prof Derek Jones (jonesd27@cf.ac.uk) for an informal chat about the position prior to submitting a full application.
ABOUT CUBRIC

CUBRIC currently houses approximately 180 researchers, 4 Siemens human MRI systems (1 x Connectom with 300mT/m gradients, 1 x 7T and 2 x Prisma systems), the Hyperfine Swoop MRI scanner, MEG, EEG, TMS, tD CS, sleep laboratories, cognitive testing laboratories and a clinical research unit. You can learn more about CUBRIC here: [http://sites.cardiff.ac.uk/cubric](http://sites.cardiff.ac.uk/cubric)

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, 7T MRI and magnetoencephalography. In CUBRIC’s research field, Psychology, Psychiatry and Neuroscience, Cardiff University is ranked 2nd in the UK on research quality. CUBRIC offers a positive and vibrant research environment in which to work and is situated in the lively and well-connected capital of Wales.

MORE INFORMATION ABOUT THE POSITION AND HOW TO APPLY

Please visit: [http://www.cardiff.ac.uk/jobs/](http://www.cardiff.ac.uk/jobs/) and search the job reference numbers given above (13700 BR) for full details, and the required criteria.

Please note that applications can only be made through Cardiff University jobs website.

Appointment Level: Appointment will be made at Research Associate (Grade 6)

Salary: Grade 6: £34,304 - £40,927 per annum

**IMPORTANT:** In advance of submitting a full application, applicants are strongly encouraged to engage in informal discussions with CUBRIC’s Director (Prof Derek K Jones, jonesd27@cardiff.ac.uk)

Please apply with your full CV, together with a summary of your research interests and career goals, and a clear **point-by-point statement of how you meet each of the essential criteria (and any desirable criteria).**

**DATE ADVERTISED:** Friday 18th February 2022  
**CLOSING DATE:** Friday 11th March, 2022

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.
Cardiff University is a signatory to the San Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions we will evaluate applicants on the quality of their research, not publication metrics or the identity of the journal in which the research is published. More information is available at: https://www.cardiff.ac.uk/research/our-research-environment/integrity-and-ethics/responsible-research-assessment