



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Biomedical Imaging, Faculty of Medicine and Health



Salary: Grade 7 (£33,199 – £39,609 p.a.)

Reference: MHL1185

Closing date: 12 July 2019

Fixed-term for three years

Research Fellow in Biomedical Imaging School of Medicine Leeds Institute of Cardiovascular and Metabolic Medicine

Are you interested in developing new methods for clinical cardiac diffusion magnetic resonance imaging (MRI)? Do you have a background in diffusion MRI and biomedical image analysis?

The University of Leeds invites applicants for a research fellow position in the field of advanced diffusion MRI in the heart. The project, funded by the British Heart Foundation, seeks to develop cutting-edge diffusion MRI-based methods for extracting novel markers of cardiac tissue microstructure, including measures of cell dispersion and heterogeneity, with higher specificity than existing methods. The developed methods will be applied in patient cohorts to evaluate their potential for improving diagnosis and staging of myocardial disease in the clinic. The central clinical aspect of the work will be complemented by validation using preclinical MRI, histology and synchrotron radiation imaging.

Cardiac diffusion MRI remains a challenging prospect. We are looking for an experienced and resourceful individual to undertake this significant programme of work. You will join an established team driving development of diffusion MRI in the heart, both in preclinical and clinical applications. You will have access to Siemens 3T Prisma and Bruker Biospec 7T MRI scanners, and be part of a stimulating and collaborative environment comprising leading scientists and clinicians.

What does the role entail?

As Research Fellow, your main duties will include:

- Working closely with the Principal Investigator and other members of the research team to ensure the project is successfully completed;
- Planning experimental approaches and developing the underpinning technologies, in collaboration with the research team;
- Acquiring, analysing and integrating multi-modality imaging data, including clinical and preclinical MRI, SRI and histological data. Training and support will be provided;
- Publishing in peer-reviewed journals;



- Presenting at local and international conferences;
- Generating and pursuing original research ideas;
- Preparing progress reports to grant funding and regulatory bodies;
- Engaging in knowledge-transfer activities, including attending and presenting at Departmental and Institute research seminars and meetings;
- Maintaining good records and laboratory notebooks of research work carried out;
- Maintaining your own continuing professional development;
- Contributing to the supervision of undergraduate and postgraduate students in areas relevant to the project, and acting as a mentor to less experienced colleagues as appropriate.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

You will report to Dr Irvin Teh, Senior Research Fellow and MR Lead for the Experimental and Preclinical Imaging Centre (ePIC).

What will you bring to the role?

As Research Fellow, you will have:

- A PhD or equivalent degree (or close to completion, meaning, submitted initial version of thesis at point of application) in MRI, Medical Physics, Imaging Sciences or related field;
- A strong background in biomedical image analysis;
- Good knowledge of diffusion MRI;
- Good publication track record in diffusion MRI, cardiac MRI and/or biomedical image analysis;
- Extensive experience with Matlab, Python, C/C++ or other relevant programming languages and software;
- Excellent organisational skills with ability to simultaneously manage and prioritise multiple tasks;
- Excellent written and verbal communication skills including presentation skills and the ability to communicate effectively with a wide range of stakeholders;
- A proven ability to work well independently and as part of a multi-disciplinary team;
- A strong commitment to your own continuous professional development.



You may also have:

- Experience operating and/or pulse programming on MRI platforms (Siemens and Bruker);
- Experience in cardiac MRI.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Interviews are anticipated to take place week commencing 22 July 2019.

Contact information

To explore the post further or for any queries you may have, please contact:

Dr Irvin Teh, Senior Research Fellow

Tel: +44 (0)113 343 4877

Email: I.Teh@leeds.ac.uk

Or Prof Jürgen Schneider, Professor in Biomedical Imaging

Tel: +44 (0)113 343 8310

Email: J.E.Schneider@leeds.ac.uk

Additional information

Find out more about the [Faculty of Medicine and Health](#) and the [School of Medicine](#)

Find out more about the [Leeds Institute of Cardiovascular and Metabolic Medicine](#)

Find out more about [Athena Swan](#) in the Faculty.

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.

Candidates with disabilities



Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974 (Exceptions) Order 1975

This post requires a standard criminal record check from the Disclosure and Barring Service (DBS), and any equivalent overseas authorities where relevant. The successful candidate will be required to give consent for the University to check their criminal record status. All applicants are required to make a self-declaration where applicable.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

