

THE UNIVERSITY OF MANCHESTER
PARTICULARS OF APPOINTMENT
FACULTY OF BIOLOGY, MEDICINE & HEALTH
CHOOSE AN ITEM.
WOLFSON MOLECULAR IMAGING CENTRE
SENIOR EXPERIMENTAL OFFICER PRE-CLINICAL MR

Salary:	Grade 7
Hours:	1 FTE
Duration:	Permanent
Responsible to:	Head of Technical Services

Overall Purpose of the Job:

To provide technical, management and academic expertise to the Imaging Facilities preclinical MR imaging laboratories; in accordance with expertise and grade, to contribute to research papers and grant proposals. The post-holder will be based at the Preclinical MR Imaging Centre within the Stopford Building on the central university campus but may also work at the Wolfson Molecular Imaging Centre (WMIC) on The Christie site and will take overall control of preclinical MR imaging undertaken at the University of Manchester. The post holder will run the day to day operations of the Preclinical MR at Stopford and will play a key role in delivering imaging focussed research programmes in collaboration with colleagues predominantly within the Manchester Cancer Research Centre, the Division of Neurosciences and Experimental Psychology, the Division of Informatics, Imaging and Data Sciences the Division of Pharmacy and Optometry. The successful candidate will also be expected to work within a multidisciplinary team, including both clinical and non-clinical scientists, to develop methods required for the successful application of MR-imaging biomarkers applied mostly to cancer and neurosciences.

Key Responsibilities, Accountabilities or Duties:

You would take control of the preclinical portfolio and would be expected to:

Operational Activities

- Manage the pre-clinical 7T MRI Laboratory
- Hold and Manage the Imaging Facilities imaging development project licence
- Provide hands on in-vivo support for a wide range of users in the MRI Laboratory
- Be responsible for the planning and execution of MRI components of preclinical studies across schools in FBMH.

- Ensure users of the Preclinical MRI laboratory have received appropriate training, hold a current Home Office Personal Licence and strictly adhere to Approved Imaging Protocols, Standard Operating Procedures, Policies, Risk and COSHH Assessments at all times.
- Line manage and supervise Imaging facilities technical staff and students at Stopford
- Be responsible for maintenance of MRI scanning equipment which includes but is not limited to nitrogen gas fills, liaising with Bruker engineers, managing the computational hardware, managing/fixing/troubleshooting ancillary hardware (e.g. coils, gases)
- Be responsible for maintaining the preclinical preparation area and ensuring preclinical consumables are in stock and readily available for use.
- Represent Preclinical MRI and report finding at project meetings and the Imaging Facilities Preclinical Imaging Executive (PRIME) meeting
- Provide clear and timely written work and to communicate results at a variety of levels, which will involve contributing to journal and conference publications, internal discussion and demonstrating work with other collaborators.
- Provide support and training for students and more junior staff
- Act as local safety advisor for the 7T laboratory at Stopford and ensure compliance with Health and Safety legislation.
- Act at all times in accordance with the University's policies and procedures relating to Equal Opportunities, Health and Safety and all other policies and procedures that apply to the post
- Undertake appropriate training and development activities
- Contribute to other duties, appropriate to the post and grade that may be reasonably requested.

Research Activities

- Provide imaging expertise to the University of Manchester's 7T MRI Laboratory
- To be responsible for the development of a range MRI Imaging sequences and methods for preclinical imaging applications and expand the capabilities of the system.
- Determination of research priorities in consultation with the preclinical imaging leads
- Authoring peer review publications.
- Contribute to research focused teaching where appropriate
- Contribute to research papers and grant proposals
- Present work at national and international conferences and to collaborators and funders as appropriate.
- Direct and lead imaging research to ensure the best outcome.

PERSON SPECIFICATION

Essential Knowledge, Skills and Experience:

- A PhD in a relevant science subject or equivalent research experience, in magnetic resonance imaging research.
- Graduate honours degree (2:1 or above) in a science or engineering related discipline
- Substantial practical experience in MRI with a minimum of 3 years' experience working in MRI imaging.
- Skilled in the development of sequences and analytical tools relevant to magnetic resonance imaging

- Demonstrates numeracy, analytical and problem solving skills with the ability to identify and resolve issues effectively.
- Excellent organisational and time-management skills, including the ability to deliver timely and high quality outputs.
- Ability to develop effective working relationships with all levels of staff, students and external contacts
- Ability to manage staff and coordinate work activities
- Excellent verbal and written communication skills and the ability to communicate with a wide range of people at all levels
- Ability to work under pressure and maintain a high degree of accuracy
- Ability to work independently, use own initiative, where appropriate, and be proactive in approach to work
- Ability and enthusiasm to learn new skills
- Has experience of Health and Safety Management within an imaging centre setting

Desirable Knowledge, Skills, Experience and Qualifications:

- A personal licence to carry out regulated procedures issued by the Home office
- Knowledge of brain anatomy of the mouse and rat, brain atlases and co-registration methods
- Knowledge of the use of experimental cancer and neuro models in imaging research
- Appropriate skills in pre-clinical experimental techniques compatible with non-invasive imaging procedures
- NEBOSH Health and Safety Qualification