

# THE UNIVERSITY OF MANCHESTER PARTICULARS OF APPOINTMENT FACULTY OF BIOLOGY, MEDICINE AND HEALTH SCHOOL OF HEALTH SCIENCES

# DIVISION OF INFORMATICS, IMAGING AND DATA SCIENCES

Senior Research Radiographer (PET-MR)

Salary: Grade 7

Hours: 1FTE

**Duration:** Permanent

**Responsible to:** Lead Radiographer (PET-MR)

#### **Background**

The University's Imaging Facilities owns scanners across a number of sites in Manchester. There are currently 3 Philips MRI scanners (Salford Royal NHS Foundation Trust, Manchester Trust Clinical Research Facility (MCRF) and WMIC) and a GE Signa PET-MR scanner at St Mary's Hospital, Manchester University NHS Foundation Trust (MFT).

The University purchased a PET-MR scanner under the Dementia Platforms UK (DPUK) initiative, using funds awarded by the Medical Research Council. This is the first PET-MR scanner in the North West and is one of five DPUK-funded PET-MR scanners in the UK.

The scanner is housed in a dedicated suite within the Nuclear Medicine department at St Mary's Hospital. The suite has treatment rooms, a research office, a fully-equipped radiopharmacy room and was formally opened in 2017.

#### **Overall Purpose of the Job**

You will be primarily responsible for conducting PET-MR scans in line with defined protocols and regulatory requirements.

With minimal supervision and with considerable attention to patient care, undertake all aspects of PET-MR imaging; once sufficient training has been given, you will be expected to undertake MR scanning with colleagues.

You will liaise with radiographers and undergraduate students and those other disciplines connected with imaging. You will liaise with the Lead Radiographer(s) and Primary Investigators to ensure that all research and clinical scans are performed to agreed schedules and protocols. You are encouraged to have an active involvement in research projects, and will be expected to adopt one or two projects in which you will contribute to the design of the study, the analysis of data and the preparation of scientific reports and presentations, under the supervision of a Principal Investigator.



The postholder will be required to rotate across the Imaging Facilities sites, as outlined above, to meet scanning demand. A keen interest in developing skills in MR imaging is essential.

# **Key Accountabilities**

# Operational

- Perform PET-MR scanning in volunteers and patients according to clinical research protocols and standard operating procedures. This will involve:
  - drawing up, diluting, assaying and subsequent safe administration of a range of established and novel radiopharmaceuticals
  - > scanning of volunteers within the scanner suite
  - withdrawal of blood samples from patients
  - performing these activities in strict accordance with approved protocols, procedures, GDPR, IR(ME)R, Ethics, Clinical Governance, Good Clinical Practice (GCP), Quality, Health and Safety at Work and Radiation protection requirements.
- Perform clinical scanning as part of NHS service contracts
- Ensure the safety of volunteers, patients and staff is maintained and any incidents relating to the health and safety of volunteers, patients and staff are reported in accordance with clinical governance, agreed contractual arrangements and University reporting procedures
- Liaise with Principal Investigators, Clinical Fellows, University colleagues and external contractors, to ensure the PET-MR suite operates smoothly
- > Scheduling and coordination of scans and radiopharmaceuticals with external suppliers and internal colleagues

# Strategic

- ➤ Participate in the development of protocols for new research projects by close interaction with scientific investigators and academic/laboratory staff
- Author and contribute to publications/papers in the field of radiography, as required
- Compile and amend SOPs, risk assessments, validation and quality management documents, as required, in accordance with current external and University procedures
- ➤ Attend, and contribute to, management and research meetings and prepare and give presentations

#### General

- Maintain adequate stock control and storage of consumables and pharmacy supplies
- ➤ Identify and procure resources (equipment and consumables) needed for performing research protocols
- > Conduct general housekeeping duties to ensure the PET-MR suite maintains its fitness for purpose and comply with infection control requirements
- Participate in preventative maintenance and quality assurance of equipment and materials;
- Participate in quality control of imaging, monitoring and other equipment as required; ensuring problems are highlighted to University colleagues in a timely manner
- Maintain and help to improve the quality of all patient imaging and image processing procedures
- Maintain quality records and ensure they are accurately completed in a timely manner



- Ensure all records (including patient health, financial, personal and administrative) comply with GDPR and data protection legislation. The records may be paper, electronic, microfiche, audio or videotapes, images etc. Confidentiality of all records, whether patient records or University information, must be maintained even beyond employment at the University
- ➤ Adherence to all Health and Safety policies, procedures and local rules
- ➤ Authorship and review of relevant Health and Safety and Quality documentation to ensure engagement with the Imaging Facilities Quality Management System and compliance with regulations
- Ensure the safe storage and disposal of radiopharmaceuticals and other waste materials, according to local rules and procedures
- Ensure Ionising Radiation and Environment Agency regulations are adhered to
- Ensure training is kept up-to-date for all defined health and safety and GCP requirements
- To be actively involved in Continuing Professional Development (CPD)
- > To encourage staff development and provide training where necessary
- > To participate in research and audits
- > To assist in monitoring the quality of the services to patients/subjects and referring clinicians, and where appropriate, participate in the development and implementation of initiatives for improvement in line with GCP
- To maintain close relationships with other disciplines within the University, the Trusts and the Clinical Research Facility
- Undertake weekend and evening working occasionally as required
- > To support the Lead Radiographer (PET-MR) on occasions, carrying out administrative duties.
- > To observe and work in accordance with the following:
  - Relevant Health and Safety Regulations (e.g. COSHH, IRR)
  - Standard Operating Procedures and local rules
  - DoH Research Governance Framework
  - GDPR/Data Protection legislation
- Undertaking scanning at other Imaging Facilities sites, for which training will be provided
- > Take part in PDRs
- Other duties commensurate with the grade may be required, as appropriate

# **Person Specification**

#### **Education and Professional Qualifications**

# Essential

- DCR, BSc (Radiography) or equivalent
- DRI, PGD (Nuclear Medicine Technology)
- Health and Care Professions Council (HCPC) registered Radiographer or RCT registered Technologist

# <u>Desirable</u>

• Current Good Clinical Practice (GCP) certification

# Skills and knowledge

#### Essential

 Knowledge and understanding of IR(ME)R 2017 and Ionising Radiation Regulations 2017 (IRR17)

Academic Profile: R7



- Willingness and ability to adopt new knowledge and research procedures
- Good interpersonal skills
- Self-motivation
- An ability to adapt protocols and procedures
- An interest in developing skills in MR imaging

#### **Desirable**

• Knowledge of MR safety rules

# **Experience**

#### **Essential**

- Experience in clinical and/or research based nuclear medicine
- Experience of dealing with members of the public and patients
- Experience of intravenous cannulation
  - Experienced in the use of intravenous contrast agents in clinical PET-CT, PET-MR or CT imaging
- Experience in handling and injecting radioactive materials
- Experience of working with IR(ME)R and Ionising Radiation Regulations 2017 (IRR17)
- Experience of using systems such as PACS and DICOM
- Ability to work as part of a multidisciplinary team
- Ability to work flexibly including the ability to work flexibly across all sites
- Ability to, at short notice, rearrange work patterns according to business need

# **Desirable**

- Experience in PET-MR scanning
- Experience in cross-sectional imaging
- Experience in handling blood samples

#### **Expectations and success factors**

- To be a proactive team member and treat all colleagues and students with respect in accordance with the established PS Behaviours.
- To be willing to work across organisational boundaries
- To seek new knowledge and share ideas
- To be open and responsive to change and innovation