

Mater Misericordiae University Hospital Dublin



Job Description & Person Specification

Senior Physicist (Locum)

Job Title / Grade: Senior Physicist (Locum)

**Department / Division: Medical Physics (Radiology),
Mater Misericordiae University Hospital (MMUH)**

Directorate Radiology

**Location: Mater Misericordiae University Hospital providing services to
Regional Hospital Mullingar, Our Lady's Hospital Navan & National
Orthopaedic Hospital Cappagh.**

Reporting Relationship: Chief Physicist MMUH

Responsible to: CEO MMUH

JOB DESCRIPTION

Job Purpose:

To provide a Medical Physics Expert (MPE) support service to Regional Hospital Mullingar & its satellite units located in Longford and Athlone, Our Lady's Hospital Navan (OLHN) and the National Orthopaedic Hospital Cappagh (NOHC).

ROLE SUMMARY

Working locally with other healthcare professionals, this senior grade hospital physicist will provide scientific and technical support to the three hospital facilities. He/she will work to ensure that all physics related activities at these major teaching hospitals are safe, of the highest quality, and are cost-effective. In particular the post-holder will perform the duties expected of a medical physics expert. He/she will liaise closely and be locally directed, as relevant, by the Radiation Protection Advisor (RPA). She/he will ultimately report to the Chief Physicist at MMUH.

SPECIFIC TERMS & CONDITIONS OF POST

- The appointment is a locum position covering maternity leave.
- Annual Leave allowance is 30 days per annum.
- The person appointed must not give less than three month's notice, in writing, of intention to resign.
- Normal working hours will be 35 hours per week.
- The post is based at the Mater Misericordiae University Hospital also attending Regional hospital Mullingar, Our Lady's Hospital Navan and National Orthopaedic Hospital Cappagh.
- The post holder must be a registered Medical Physics Expert on the Irish College of Physicists register. An MPE certificate will be required.

KEY RESPONSIBILITIES

Reporting to the chief physicist (MMUH) and working closely with the Radiation Protection Advisor (RPA) to these hospitals, the Senior Physicist will be responsible for the practical aspects of providing an expert medical physics service to this sub-group hospitals which MMUH has service level agreements with to provide medical physics support services. Due to the nature of this initiative, the post holder will be expected to exhibit independent thinking and must be capable of problem-solving initiatives.

CORE COMPETENCY

The appointee must be an experienced hospital physicist capable of taking responsibility for the routine scientific aspects of medical physics services provided locally at these hospital

Primary Duties and Responsibilities of the Senior Grade Physicist (Medical Physics Expert)

- a) While the post is contracted by the Mater Misericordiae University Hospital (MMUH), the post will be based at the Regional Hospital Mullingar & its satellite units located in Longford and Athlone, Our Lady's Hospital Navan (OLHN) and the National Orthopaedic Hospital Cappagh (NOHC). The senior physicist will be expected to attend RHM on two full days per week, OLHN for one full day per week, NOHC for one full day per week. The fifth day in each working week will be based at MMUH for consultation, review, education and CPD relating to the three hospitals. These figures are nominal and subject to a degree of flexibility based on temporal variations in demand. However, they represent the expected regular average site attendance.
- b) Provide a Medical Physics Expert service (Annex I) as part of the requirements of Statutory Instrument 256 of 2018 (and subsequent corresponding legislation). While reporting directly to the Chief Physicist at MMUH, the post-holder will also liaise closely with the Radiation Protection Advisor (RPA) based at MMUH and with Directors of Radiology and Radiography Service Managers at the three hospitals.
- c) Assist with specifying, evaluating and recommending as well as participate in the selection, installation, acceptance testing and commissioning of new equipment in diagnostic imaging departments as part of the requirements of Statutory Instrument 30 of 2019 (and subsequent corresponding legislation)
- d) Participate in and supervise where relevant, on-going Quality Assurance Programs for all aspects of Diagnostic Imaging Equipment. This includes participation in internal and external audits of radiology and of the physics service as applied to radiology.
- e) Contribute to radiation user training; advise on X-ray equipment purchase, operation, servicing and replacement; Provide safety and user advice in relation to radiation equipment.
- f) Participate in the development of technical and clinical protocols.

- g) Be available for consultation with Medical Consultants and other medical staff, radiographers, service engineers, and other physics staff
- h) Assist and take active involvement with preparation for inspections such as those carried out routinely and unannounced by the competent authorities who govern ionising radiation e.g. EPA, HIQA etc
- i) Participate in research, development and innovation and in the design and execution of projects, instruments and interfaces needed by the clinical equipment users in the Hospital.
- j) Contribute, where required, to the planning and equipping of new installations.
- k) Participate, as required, in education and training programmes for the medical, paramedical, scientific, technical and other staff and ensure his/her own knowledge and skills are kept up to date by participation in appropriate continuing education and training activities.
- l) Actively participate in activities that constitute continuing professional development.
- m) Keep records and provide such information as is consistent with good professional practice.
- n) If appropriate, the appointee will be encouraged to establish and maintain links with relevant academic institutions (e.g. Faculty of Radiologists, University College Dublin).
- o) Clinical requirements may dictate that from time to time work will need to be provided out of normal working hours.
- p) Be willing to undertake any other duties or training as requested by the Chief Physicist in order to maintain quality of the Medical Physics service to the patients and staff.
- q) Maintain throughout the Hospital awareness of the primacy of the patient in relation to all hospital activities.
- r) The requirement to support the principle that the care of the patient comes first at all times and will approach their work with the flexibility and enthusiasm necessary to endeavour to make this principle a reality.

Note: duties and responsibilities are a reflection of the current service requirements and may be subject to review and amendment to meet the hospital's changing needs

Annex I: Duties of the Medical Physics Expert (MPE) as defined in SI 256 of 2018

- (a) takes responsibility for dosimetry, including physical measurements for evaluation of the dose delivered to the patient and other individuals subject to medical exposure,
- (b) gives advice on medical radiological equipment, and
- (c) contributes, in particular, to the following:
 - (i) optimisation of the radiation protection of patients and other individuals subject to medical exposure, including the application and use of diagnostic reference levels;
 - (ii) the definition and performance of quality assurance of the medical radiological equipment;
 - (iii) acceptance testing of medical radiological equipment;
 - (iv) the preparation of technical specifications for medical radiological equipment and installation design;
 - (v) the surveillance of the medical radiological installations;
 - (vi) the analysis of events involving, or potentially involving, accidental or unintended medical exposures;
 - (vii) the selection of equipment required to perform radiation protection measurements;
and
 - (viii) the training of practitioners and other staff in relevant aspects of radiation protection

General Responsibilities and Accountabilities

1. Confidentiality

You will be aware of the confidential nature of Hospital work and in particular, the right of patients to confidentiality.

2. Policies & Procedures

You are required to familiarise yourself with and adhere to all policy and procedural documents relevant to your position.

3. Hygiene Standards

The highest standard of hygiene must be maintained in the Hospital at all times and all staff members are responsible for ensuring compliance with the Hospital's requirements and standards with regard to hygiene. It is the responsibility of all staff to have a fundamental understanding of their individual responsibility in maintaining departmental & site hygiene standards.

4. Health and Safety

Ensure that effective safety procedures are in place to comply not only with the Safety, Health and Welfare at Work Act 2005 but also within the spirit of the Hospital's mission, vision and values, and they are known and followed by staff. You are required to familiarise yourself with the requirements of employees under the Safety, Health and Welfare at Work Act 2005 and to promote a work environment that is compliant with the Safety, Health and Welfare at Work Act 2005. Each staff member is individually responsible for ensuring that the Hospital remains a safe place to work.

5. Information Technology

Ensure the most effective and efficient use of developments in information technology for administrative support in a manner, which integrates well with systems throughout the organisation.

6. Business Continuity Management

Business Continuity Management (BCM) is a holistic management process that identifies potential impacts that threaten an organisation and provides a framework for building resilience and the capability for an effective response that safeguards the interests of its key stakeholders and reputation" (BS 25999) All Staff employed in the Mater Misericordiae University Hospital are obliged to:

- make themselves familiar with the Organisational Business Continuity Plan
- attend BCM education sessions provided for them
- make themselves familiar with their individual roles as set out in their departmental business continuity plan if applicable and or the Organisational business continuity plan

Note:

These duties and responsibilities are reflection of the present service requirements and may be subject to review and amendment to meet the changing needs of the Hospital. The incumbent will be required to maintain, enhance and develop their professional knowledge, skills and aptitudes necessary to respond to a changing climate.

PERSON SPECIFICATION

Job Title/Grade	Senior Physicist Locum (Maternity Leave Cover)
Department	Radiology (Medical Physics)
Location	MMUH (serving RHM, OLHN & NOHC)
Date	June 2024

Requirements	Essential	Desirable
Qualifications		
Good (1 st or 2 nd class) honours degree in Physics	X	
Relevant MSc or higher degree	X	
Experience		
At least four years working as a diagnostic medical physicist	X	
Significant experience in implementing and developing QC programmes for diagnostic radiology equipment	X	
Significant understanding of the application of radiation protection principles	X	
Significant knowledge of CT dosimetry, image quality & QC	X	
Experience of Magnetic Resonance and Ultrasound		X
Principles of radiation protection with Nuclear Medicine		X
Organisational Knowledge		
Must have sufficient capacity to recognise when more senior support is required	X	
Able to communicate highly complex information [e.g., postgraduate level physics material to other professional groups, e.g., radiologists, radiographers]	X	
Professional Knowledge		
Medical Physics Expert Certificate (ICPM)	X	
Core Competencies		
Must be capable of working in an unsupervised capacity	X	
Able to prioritise and manage own work	X	
Excellent verbal & written communication skills	X	

Demonstrate strong problem solving skills	X	
Evidence-based decision-making skills	X	
Able to exercise own initiative when dealing with unexpected or spontaneous issues	X	
Able to present scientific papers at national and international conferences	X	
Able to train groups of other professional staff	X	
Able to prepare and deliver teaching and training on complex subjects	X	
Excellent record keeping and documentation	X	
Significant experience of software development, including signal processing and analysis software (e.g., Matlab, Python)		X
Other Skills		
Clean driving licence and access to car to drive to hospitals when required	X	

