

JOB DESCRIPTION

JOB DETAILS	
Job Title	Clinical Technologist (Radiation Physics)
Reports to	Lead Physicist for Nuclear Medicine
Band	5
Department/Directorate	Medical Physics Department / Specialist Services Division

JOB PURPOSE
<p>The Clinical & Radiation Physics service provides scientific and technical support to all users of ionising and non-ionising radiation within the Medical Physics SEND network (south, east and north Devon). This includes quality assurance and acceptance testing of radiological equipment and the provision of a radiation protection service. This service provides advice and develops processes and procedures to ensure the Trust's compliance with all relevant legislation.</p> <p>This role specifically supports the provision of radiation protection and radiological equipment testing services to the Trust and others. The jobholder will also liaise with external customers.</p>

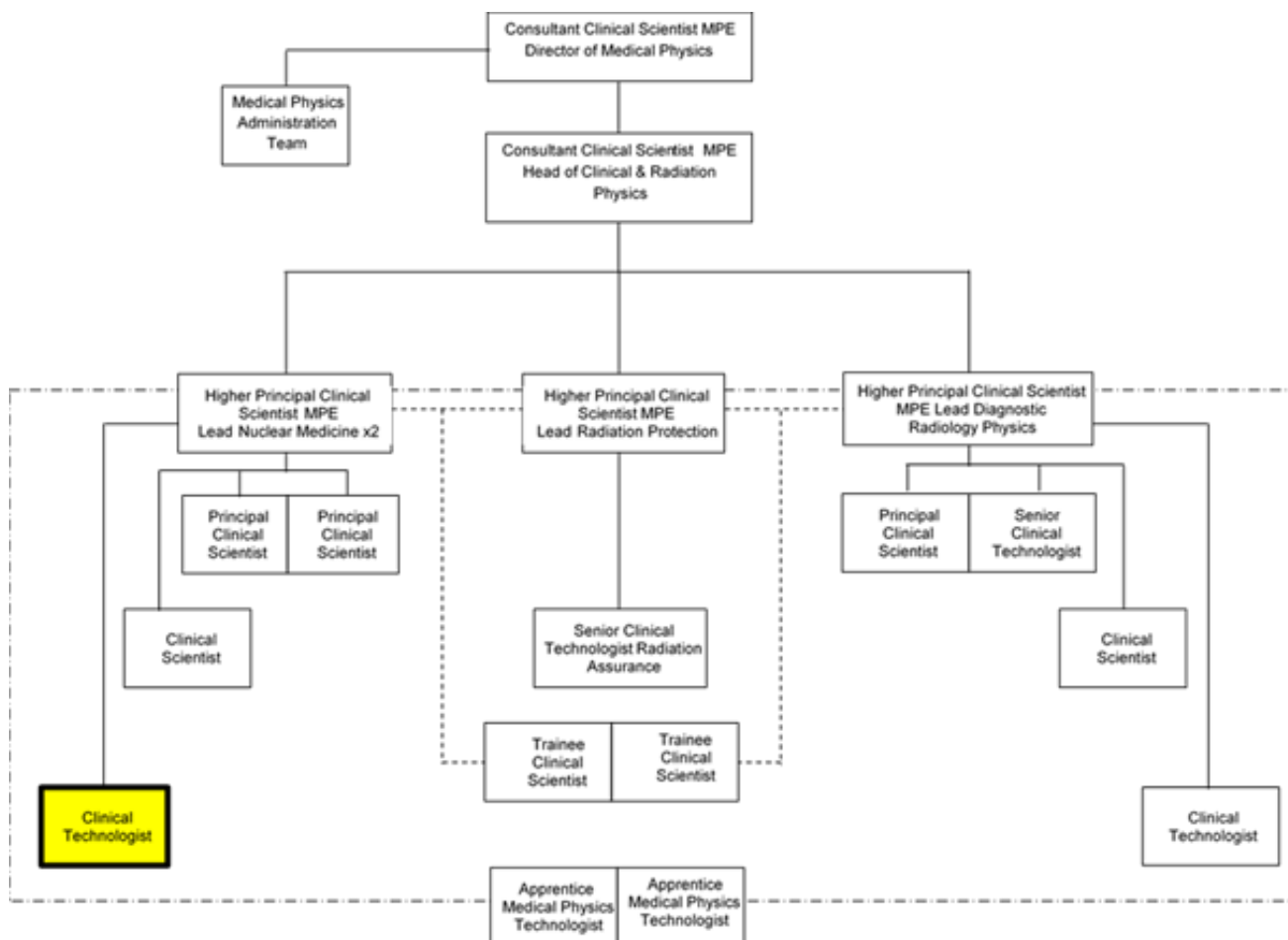
KEY RESULT AREAS/PRINCIPAL DUTIES AND RESPONSIBILITIES
<p>Provide clinical technical services to maintain and enhance the medical physics services to both NHS and commercial customers concerned with the safe use of ionising and non-ionising radiation. This includes:</p> <ul style="list-style-type: none"> • undertaking equipment testing (QA) on complex systems & provision of technical support • undertaking radioisotope stock control & manage records • administration of the personal dosimetry service & provision of technical support • co-ordinating the environmental monitoring programme • undertaking and administering calibration of complex radiation measurement equipment • carrying out audits of safe working practices • carrying out radiation protection tasks including contamination monitoring and radioactive waste disposal • provide basic radiation protection training • supervise and/or train staff/students/trainees within scope of practice

KEY WORKING RELATIONSHIPS
<p>The post holder is required to deal effectively with staff of all levels throughout the Trust as and when they encounter on a day-to-day basis. In addition, the post holder will deal with external engineers, external organisations and the public. This will include verbal, written and electronic media.</p>

Of particular importance are working relationships with:

Internal to the Trust	External to the Trust
<ul style="list-style-type: none"> • Clinical Scientists • Radiographers • Clinical Technologists • Engineers 	<ul style="list-style-type: none"> • Engineers • Private customers e.g. vets and dentists • Trainees

ORGANISATIONAL CHART



FREEDOM TO ACT

As a Clinical Technologist the post holder has the freedom to act within established parameters and is guided by precedent and clearly defined occupational policies, protocols and procedures, or codes of conduct, deciding when it is necessary to refer to their manager.

Work autonomously under the direction of the Lead Physicists within Clinical & Radiation Physics prioritising and managing own schedule.

COMMUNICATION/RELATIONSHIP SKILLS

To routinely communicate complex information relating to radiation protection and risk in written or verbal form to a wide range of staff, including clinical teams and members of the public. This includes the communication of technical data in test reports relating to diagnostic imaging equipment and radiation protection instrumentation. This is complex scientific information that will need to be delivered to ensure it is effectively understood by both technical staff and persons unfamiliar with the scientific basis and ensure the appropriate action is taken.

ANALYTICAL/JUDGEMENTAL SKILLS

Required to make judgements involving a range of facts or situations, which requires analysis or comparison of a range of options to determine the appropriate course of action. For example judgements involving testing complex radiological equipment.

PLANNING/ORGANISATIONAL SKILLS

- Plan, organise and carry out equipment testing at the required frequency and produce reports in line with the Trust's Quality Assurance programme

- Plan and carry out environmental monitoring programme for controlled areas under guidance of Trust RPA
- Plan and carry out annual programme of calibration of radiation measurement equipment
- Able to prioritise work, work to tight deadlines and meet schedule demands across multiple workstreams

PATIENT/CLIENT CARE

Provide clinical technical services primarily equipment performance and measurement tests against local and nationally defined standards to ensure equipment is performing as required.

POLICY/SERVICE DEVELOPMENT

To work in accordance with all Trust and Departmental Policies

Propose changes to policies/procedures in own work area in order to improve the service.

Contribute to service improvement through auditing and investigations as directed by senior members of staff

FINANCIAL/PHYSICAL RESOURCES

Responsible for the safe use of complex radiological equipment used extensively in diagnostics and interventional procedures used across the Trust and by external customers.

HUMAN RESOURCES

Responsible for day-to-day supervision or co-ordination of staff within a section/function of a department/service, regularly responsible for professional/clinical supervision of a small number of qualified staff or students and regularly responsible for providing training in own discipline/practical training or undertaking basic workplace assessments.

INFORMATION RESOURCES

- Keep accurate records of all work and data analysis performed.
- Ensure records are updated as appropriate.
- Generate appropriate technical reports of equipment testing.
- Generate appropriate audit reports for compliance and governance records.
- Enter data received from the approved dosimetry service into local systems for management of Personnel Dosimetry, ensuring that all data is correct and current in accordance with statutory requirements and is shared with appropriate users as required.
- Plan and carry out radiation protection tasks and compliance audits to the required schedule and produce records/reports in a timely fashion.

RESEARCH AND DEVELOPMENT

- To keep an up-to-date knowledge of the skills required for this post and be able to demonstrate these in Continuing Professional Development (CPD).
- Regularly undertakes equipment testing to support optimisation of imaging exposure techniques as part of routine practice and in support of clinical trials.
- Undertakes specialised audits in own area designed to improve practice and the service.

PHYSICAL SKILLS

- The post requires highly developed physical skills, where accuracy is important in the manipulation of fine tools or materials.

- Ability to safely handle and manipulate sealed and unsealed radioactive sources
- Manual dexterity to handle and make small adjustments to equipment

PHYSICAL EFFORT

There is a frequent requirement for sitting or standing in a restricted position for a substantial proportion of the working time and for light physical effort for several short periods during a shift as follows:

- Plan, perform and execute testing of medical equipment. These activities require:
- Ability to stand for Long periods (hours) whilst sometimes wearing heavy PPE (lead aprons)
- Manipulate (push) heavy pieces of equipment (assisted by trolleys and tables on wheels)
- Lift heavy ($\leq 15\text{kg}$) test equipment (in accordance with relevant manual handling protocols)
- Ability to sit for long (hours) period of time in front of computer monitors

MENTAL EFFORT

- There is a frequent requirement to concentrate for prolonged periods (hours) on equipment measurement results, report writing and meeting attendance.
- Able to extract relevant information from complex datasets - frequent

EMOTIONAL EFFORT

The post holder must be able to deal with unexpected situations involving emotional distress. Equipment testing is primarily undertaken in clinical areas so there exists the potential for occasional indirect exposure to distressing or emotional circumstances.

WORKING CONDITIONS

Routinely working (daily) in radiation controlled areas associated with exposure to ionising radiation and non-ionising radiation. The post holder will follow safe working practices to minimise exposure to themselves and others.

Requirement to use Visual Display Unit equipment for several hours on most days

OTHER RESPONSIBILITIES

Take part in regular performance appraisal.

Undertake any training required in order to maintain competency including mandatory training, e.g. Manual Handling

Contribute to and work within a safe working environment

You are expected to comply with Trust Infection Control Policies and conduct him/herself at all times in such a manner as to minimise the risk of healthcare associated infection

As an employee of the Trust, it is a contractual duty that you abide by any relevant code of professional conduct and/or practice applicable to you. A breach of this requirement may result in action being taken against you (in accordance with the Trust's disciplinary policy) up to and including dismissal.

You must also take responsibility for your workplace health and wellbeing:

- When required, gain support from Occupational Health, Human Resources or other sources.
- Familiarise yourself with the health and wellbeing support available from policies and/or Occupational Health.
- Follow the Trust's health and wellbeing vision of healthy body, healthy mind, healthy you.
- Undertake a Display Screen Equipment assessment (DES) if appropriate to role.

DISCLOSURE AND BARRING SERVICE CHECKS

This post has been identified as involving access to vulnerable adults and/or children and in line with Trust policy successful applicants will be required to undertake a Disclosure & Barring Service Disclosure Check

GENERAL

This is a description of the job as it is now. We periodically examine employees' job descriptions and update them to ensure that they reflect the job as it is then being performed, or to incorporate any changes being proposed. This procedure is conducted by the manager in consultation with the jobholder. You will, therefore, be expected to participate fully in such discussions. We aim to reach agreement on reasonable changes, but if agreement is not possible, we reserve the right to insist on changes to your job description after consultation with you.

Everyone within the Trust has a responsibility for, and is committed to, safeguarding and promoting the welfare of vulnerable adults, children and young people and for ensuring that they are protected from harm, ensuring that the Trusts Child Protection and Safeguarding Adult policies and procedures are promoted and adhered to by all members of staff.

Northern Devon Healthcare NHS Trust and the Royal Devon and Exeter NHS Foundation Trust continue to develop our long standing partnership with a view to becoming a single integrated organisation across Eastern and Northern Devon. Working together gives us the opportunity to offer unique and varied careers across our services combining the RD&E's track record of excellence in research, teaching and links to the university with NDHT's innovation and adaptability.

PERSON SPECIFICATION

Job Title	Clinical Technologist (Radiation Physics)
------------------	---

Requirements	Essential	Desirable
QUALIFICATION/ SPECIAL TRAINING BSc/ good honours degree in Healthcare Science (Medical Physics Technology)/physics/engineering or equivalent knowledge and experience Registered Clinical Technologist or equivalent Further professional membership (MIPeM/MSRP etc.)	E E D	
KNOWLEDGE/SKILLS Specialist theoretical and practical knowledge of radiation protection & application to the healthcare sector Specialist theoretical and practical knowledge of ionising and non-ionising radiological equipment & testing methods Specialist theoretical knowledge and experience of relevant legislation, national standards and other guidelines Able to prioritise and manage own work. Able to use Microsoft Office applications in order to set up documents & spreadsheets, record information, calculate results and prepare reports. Able to lift and transport testing equipment cases up to 15 kg sometimes via stairs. Ability to safely handle and manipulate sealed and unsealed radioactive sources Manual dexterity to handle and make small adjustments to equipment Able to concentrate when subject to frequent unpredictable working patterns Able to communicate scientific and technical information, providing explanation and guidance to non-technical staff	E E E E E E E E	
EXPERIENCE Able to accept high level of autonomy and act under own initiative, including knowing when to seek advice from senior colleagues Experience in surveillance of radiological equipment Able to solve complex problems using analytical skills and clinical judgement. Experience in using software to analyse data and extract information. Experience of working within a Quality Management System Experience in communicating complex information.	E E D D D D	

PERSONAL ATTRIBUTES Ability to prioritise work Ability to complete work to a deadline A proactive approach to service improvement Good organisational skills Professional approach Able to work effectively as a member of a team Good verbal and written communication skills. Able to communicate complex information to many different groups of staff at a range of levels and across professional boundaries. Rarely, able to deal with distressing circumstances.	E E E E E E	 D D
OTHER REQUIREMENTS The post holder must demonstrate a positive commitment to uphold diversity and equality policies approved by the Trust. Ability to travel and transport bulky equipment to other locations as required Occasional requirement to work extended hours	E E E	

WORKING CONDITIONS/HAZARDS		FREQUENCY (Rare/ Occasional/ Moderate/ Frequent)			
		R	O	M	F
Hazards/ Risks requiring Immunisation Screening					
Laboratory specimens	N				
Contact with patients	Y	R			
Exposure Prone Procedures	N				
Blood/body fluids	Y		O		
Laboratory specimens	N				
Hazard/Risks requiring Respiratory Health Surveillance					
Solvents (e.g. toluene, xylene, white spirit, acetone, formaldehyde and ethyl acetate)	N				
Respiratory sensitisers (e.g isocyanates)	N				
Chlorine based cleaning solutions (e.g. Chlorclean, Actichlor, Tristel)	N				
Animals	N				
Cytotoxic drugs	N				
Risks requiring Other Health Surveillance					
Radiation (>6mSv)	N				
Laser (Class 3R, 3B, 4)	Y	R			
Dusty environment (>4mg/m3)	N				
Noise (over 80dBA)	N				
Hand held vibration tools (=>2.5 m/s2)	N				
Other General Hazards/ Risks					
VDU use (> 1 hour daily)	Y				F
Heavy manual handling (>10kg)	Y		O		
Driving	Y		O		
Food handling	N				
Night working	N				
Electrical work	N				
Physical Effort	Y		O		
Mental Effort	Y			M	
Emotional Effort	N				
Working in isolation	N				
Challenging behaviour	N				