

Job Description

Job Title: Registered Clinical Scientist – Radiotherapy Physics	Band: 7
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Accountable to: Head of Radiation Services
Responsible to: Lead for Radiotherapy Physics
Contact with: Scientific, technical and engineering staff within Radiotherapy Physics and the Radiation Services CDG, Therapeutic Radiographers and Clinical Oncologists principally. Other staff groups on the Ipswich and Colchester Hospital sites occasionally. Patients, external suppliers, equipment manufacturers, external NHS / DH agencies, scientific and clinical staff at other Trusts

Principal Objectives

- To assist in the provision of the Radiotherapy Physics Service (external beam radiotherapy and molecular radiotherapy) at Ipswich Hospital under the overall responsibility of the Lead for Radiotherapy Physics and the Head of Radiation Services
- Participate in research and development activity

Key Responsibilities:

Clinical and Scientific

- Provide clinical and scientific support, and work closely with other members of the multi-disciplinary team to ensure a high quality clinical, scientific and technical service to the Radiotherapy Department at Ipswich Hospital.
- Maintain high standards in the safe and effective application of physical principles to Radiotherapy Physics in the performance of staff, clinical procedures and the utilisation of equipment and radiation sources
- Become familiar with all aspects of the operation of radiotherapy imaging and treatment equipment including complex software for radiotherapy treatment planning utilised in external beam radiotherapy
- Participate in a programme of Quality Control to ensure all systems are fit for clinical use, and regularly checked in accordance with national guidance and professionally recognised best practice
- Assist in the introduction of new external beam radiotherapy procedures
- Participate in the commissioning of new radiotherapy equipment, systems and software
- Provide highly specialist and highly complex scientific and technical advice to clinical oncologists and other radiotherapy and oncology staff as required
- Undertake external beam radiotherapy treatment planning and plan checking including highly complex, advanced treatment techniques as required by the needs of the service
- Participate in the delivery of the Therapeutic Radioisotope Service (molecular radiotherapy) working closely with colleagues in Nuclear Medicine, Clinical Oncology and Endocrinology as required
- Create and format spreadsheets and databases to meet departmental requirements
- Produce scientific reports and other documentation regarding radiotherapy services and treatment for dissemination amongst Radiotherapy, the Radiation Services CDG and other departments in the Trust as required
- Maintain a good working knowledge of relevant radiation safety legislation and guidance

Managerial

- Ensure good communication between staff in Radiotherapy Physics and other departments within the CDG, oncology and the wider Trust
- Assist in the introduction of new services and equipment
- Keep careful records of all work performed and complete other appropriate records
- Contribute to the development and maintenance of the Radiation Services Quality Management System (ISO9001:2015) including local audit

Teaching, Training and Research

- Carry out research and development projects relevant to the scientific and clinical work of Radiotherapy Physics and the Radiotherapy Service, as directed by the Lead Radiotherapy Physicist and the Head of Radiation Services
- Present original work at national and international conferences and in publication
- Participate in credentialing and benchmarking programmes for randomised, controlled clinical trials where radiotherapy is the modality under investigation
- Participate in teaching and training programmes for staff, undergraduate and post graduate students and others as required including Specialist Registrars studying for FRCR
- Provide training and supervision for STP trainees and physicists following route 2 to registration within Radiotherapy Physics
- Participate in the delivery of physics lectures and tutorials for undergraduate and postgraduate students of therapy radiography at the University of Suffolk
- Participate in courses and training for scientific and clinical staff from other hospitals

Professional

- Maintain evidence of Continuing Professional Development in order to maintain HCPC registration as a Clinical Scientist
- Keep abreast of the latest technical and scientific developments and new practices relating to Clinical Oncology and Radiotherapy Physics
- Attend suitable seminars, meetings and courses as part of personal development and to further the work of the department

Miscellaneous

- Carry out all duties in accordance with the requirements of the Health and Safety at Work Act, relevant Statutory Regulations, Approved Codes of Conduct and Local Rules
- Work hours necessary for the proper and efficient performance of the work. In practice, the appointee will occasionally be required to perform duties outside the normal working hours of the department
- Perform other appropriate duties that may be required from time to time by the Lead Radiotherapy Physicist or Head of Radiation Services

General

- To be responsible for complying with Trust and local Safeguarding policies and procedures.
- To be responsible for the quality of data recorded. The data should be accurate, legible (if hand written), recorded in a timely manner, kept up to date and appropriately filed.
- All employees must comply with the East Suffolk and North Essex NHS Foundation Trust's Equality and Diversity Policy and must not discriminate on the grounds of sex, colour, race, ethnic or national origins, marital status, age, gender reassignment, disability, sexual orientation or religious belief.
- Employees have a responsibility to themselves and others in relation to managing risk and health and safety, and will be required to work within the policies and procedures laid down by East Suffolk and North Essex NHS Foundation Trust. The Trust seeks to establish a safe and healthy working environment for its employees and operates a non-smoking policy.
- All employees have the right to work in an environment which is safe and to be protected from all forms of abuse, violence, harassment and undue stress. All employees are responsible for helping to ensure that individuals do not suffer harassment or bullying in any form. All employees will be personally accountable for their actions and behaviour in cases of complaint of harassment or bullying.
- All staff have a responsibility to contribute to a reduction in the Trust's carbon footprint and should pro-actively reduce and encourage others through own actions to reduce their contribution to carbon emissions. This includes switching off electrical appliances that are not in use, turning down heating, closing windows, switching off lights and reporting carbon waste etc.

This job description is issued as a guide to your principal responsibilities. It may be varied from time to time to meet new working requirements and does not form part of your Contract of Employment

Prepared By:	Head of Radiotherapy Physics	Date:	April 2024
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Person Specification

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Criteria	Essential	Desirable
Qualifications	<ul style="list-style-type: none"> • Masters degree in an area of Medical Physics or equivalent level of specialist knowledge • State registered Clinical Scientist 	<ul style="list-style-type: none"> • PhD • Membership of relevant professional body
Knowledge and Experience	<ul style="list-style-type: none"> • Proven significant post graduate experience in radiotherapy physics or successful completion of the Scientist Training Programme specialising in Radiotherapy Physics • Ability to act as an entitled Operator under IR(ME)R17 within the field of Radiotherapy • Routine treatment planning and quality assurance on radiotherapy equipment • Knowledge of clinical applications of radiotherapy • Understanding of patient and staff risks arising from equipment failure • Ability to prioritise and manage own work • Ability to exercise initiative when dealing with issues within own specialist area of competence • Basic working understanding of all relevant legislation, standards, guidelines and safety principles relating to Radiotherapy 	<ul style="list-style-type: none"> • IMRT / VMAT treatment planning and QA • Commissioning of radiotherapy equipment • Experience of Varian linacs, treatment planning system and ARIA oncology management system • Evidence of research and development activity
Personal Skills	<ul style="list-style-type: none"> • Good analytical and reasoning skills • Good scientific skills including application of scientific method and interpretation of data • Ability to demonstrate the compassionate values and behaviours needed for dignified care • Ability to determine the reasoning for erroneous test results, interpretation of tests, determining the exact cause of subtle or non-reproducible equipment tests 	<ul style="list-style-type: none"> • Programming

	<ul style="list-style-type: none"> • Ability to give basic radiation protection advice • Skills to analyse faults in complex patient equipment • Exercising judgement when dealing with patient enquiries, analyse of resolve patient problems • Ability to prioritise and manage own work • Ability to plan QA and audit schedules for equipment and software • Ability to work as part of a team • Ability to work unsupervised • Flexible approach to work time • IT and technical literacy • Ability to use Word, Excel etc to set up documents and spreadsheets and extract information • Highly developed skills to manipulate complex therapeutic equipment • Ability to undertake manual lifting – for example setting up a technical test • Ability to concentrate frequently when subjected to unpredictable work patterns • Ability to concentrate for prolonged periods • Ability to deal with frequent distressing circumstances • Good interpersonal and communication skills including report writing and presentations • Ability to communicate with staff at all levels • Ability to explain basic concepts of Radiotherapy and radiation risks to lay persons • Ability to communicate complex information at postgraduate level to other professional groups • Good patient handling, communication and consultation skills • Ability to present scientific papers at national and international conferences 	
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