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***“Our vision is to provide safe, high quality seamless service delivered with courtesy and respect. To achieve our vision we expect all our staff to uphold our Trust Values”***

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| **JOB DETAILS** | |
| **Job Title** | Principal Clinical Scientist, Lead for Diagnostic Radiology Physics |
| **Reports to** | Head of Clinical and Radiation Physics |
| **Band** | B8b |
| **Department/Directorate** | Medical Physics / Clinical Specialist Services |

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| **JOB PURPOSE** | |
| The post-holder will work at a senior level with responsibility for the leadership and management of the highly specialised area of diagnostic radiology physics.  The post holder will be an experienced Medical Physics Expert (MPE).  Responsible for managing resources across the speciality, including line management and supervision of clinical, scientific and technical staff, and will liaise with other staff on managing risk, resources and performance across the department.  Responsible for the development and implementation of relevant policies, strategies, processes and procedures, and for adopting and sharing best practice.  Represent the department and the Trust and deputise as required.  The post holder will fulfil the following regulated and/or specialist roles as required:  Medical Physics Expert (MPE)  Radiation Protection Adviser (RPA). | |
| **KEY WORKING RELATIONSHIPS** |  |
| * + Healthcare scientists and trainees   + Service lead in Radiology, Radiologists, Radiographers and X-ray engineers   + Service lead in Cardiology, Cardiologists, and Cardiac Physiologists   + Other clinical professions, incl. medical, nursing, pharmacy and allied health professionals   + Specialist, technical and technical support staff, incl. infection control, recruitment, finance, estates, IM&T and procurement   + Clinical and general managers   + Patients   + Peer group and the wider scientific community   + External clients, partners and suppliers | |
| **ORGANISATIONAL CHART** | |
| Divisional and Medical Director  Cancer Services  Director of Medical Physics and Clinical Engineering  Head of Clinical and Radiation Physics  **Principal Clinical Scientist (THIS POST)**  Specialty Team  Principal Clinical Scientist  Principal Clinical Scientist  Specialty Team  Specialty Team | |
| **KEY RESULT AREAS/PRINCIPAL DUTIES AND RESPONSIBILITIES** | |
| Specific duties include but are not limited to:   * Provision of diagnostic radiology physics services across the Trust and to other clients as agreed and described through service contracts. * To Chair the Trust’s Dose Optimisation Committee (Radiology and Cardiology) * Manage the X-ray quality assurance programmes. | |
| **COMMUNICATION/RELATIONSHIP SKILLS** | |
| * Communicate highly complex scientific information relating to own specialty, within the department and with any/all other staff groups, patients and carers as required. * Communicate highly complex radiation safety and regulatory advice with medical and other staff, patients and carers as required. * Communicate highly complex governance, performance and improvement information, including the results of audit, peer review, quality improvement (QI) and research. * Present work at professional and scientific meetings and conferences and in peer reviewed literature, collaborating with colleagues within and out with the Trust. * When working in other departments and on other sites, the post holder will behave professionally and courteously at all times and will observe local policies, rules and working practices. | |
| **ANALYTICAL/JUDGEMENTAL SKILLS** | |
| * Make judgements in highly complex situations involving the analysis and interpretation of highly complex clinical and scientific data. * Analyse, communicate and manage the performance of own area. Optimisation of radiation services for own area. * Provide advice on procuring, commissioning, accepting and routine quality assurance of highly complex clinical equipment including the assessment, interpretation and communication highly complex information. | |
| **PLANNING/ORGANISATIONAL SKILLS** | |
| * Plan and organise the work of own area including workload and the allocation of work. * Responsible for prioritisation of own work and that of others. * Adjusts plans and strategies in response to changing circumstances and organisational priorities. * Support the commissioning of highly complex clinical equipment which may involve leading on projects. * Manage and participate in project work, including audit, research and QI. * Participate in annual service and business planning processes, eg, service and workforce plans and equipment procurement and replacement plans. * Plan, organise and run meetings. | |
| **PHYSICAL SKILLS** | |
| * Highly-developed physical skills are required, to carry out testing procedures and scientific measurements where a high degree of precision and accuracy is essential. * Perform minute adjustments to medical equipment or instrumentation. * Execute and coordinate equipment-based clinical measurements. * Perform analysis of complex pieces of information and take prompt action as required to maintain safe and effective clinical operations. * Advanced keyboard skills. | |
| **PATIENT/CLIENT CARE** | |
| * Provide highly specialist healthcare science services for own area. * Act as a MPE for own area. * Act as a MPE to support other areas as part of a networked system. * Act as a RPA for own area. * This involves advising medical staff or other healthcare professionals on highly specialised clinical technologies and their application. * Act as an “Operator” as defined under IRMER 17 as required. * Work with and assist other Trust appointed Radiation Protection Advisers in their duties. * Use and develop the quality management system (QMS), or equivalent governance controls (reference ISO9000 and BS70000), to ensure that services are provided to the appropriate standards and are subject to external scrutiny. * Work with the Lead for Radiation Safety for the provision of services involving Non-ionising Radiation. * Work with ionising and non-ionising radiation and other hazardous resources, taking all precautions minimise risk to oneself and others. * Occasionally work and communicate with ill and anxious patients and carers. | |
| **POLICY/SERVICE DEVELOPMENT** | |
| * Lead on policy and strategy development and implementation for own area, contributing to an overall plan for the department. * Lead on QI and service development for own area, contributing to an overall plan for the department. * Use benchmarking and QI techniques to seek out and implement best practice. * Embrace ‘continuous improvement’ as described by QMS standards such as ISO9000 and BS70000. * Be aware of relevant legal and statutory issues, international standards, and guidelines for best practice. | |
| **FINANCIAL/PHYSICAL RESOURCES** | |
| * Responsible for the safe use of highly complex clinical and test and measurement equipment when assigned to the team. * Specify, commission, test and verify highly complex clinical and test and measurement equipment * Selection and requisition of specialist equipment and materials. * Manage physical assets in own area. * Manage a delegated budget for the specialty. | |
| **HUMAN RESOURCES** | |
| * Work autonomously; planning, prioritising and managing own work. * Day to day and line management of staff within own specialty, including recruitment, managing attendance and performance and supporting personal professional development. * Supervise staff under the post holder’s direction and sign off work and reports as required. * Use coaching and mentoring techniques to support staff within and out with own specialty. * Teach and train healthcare scientists, including, for example, apprenticeship programmes and programmes accredited through the National School for Healthcare Science (NSHCS). * Organise and deliver specialist teaching and training for other staff groups and clients. * May need to have difficult conversations with staff and deal with sensitive and challenging behaviours and situations. * Ensure that practices comply with Health and Safety legislation and other relevant regulations, including IRR17 and IRMER 2017. | |
| **INFORMATION RESOURCES** | |
| * Specify, procure, commission, use, test and manage computer systems and software including systems which are used to record and process data relating to own specialty. * Configure and/or write software to process, analyse and report highly complex datasets. * Effectively manage data availability, integrity and confidentiality. * Use and develop the QMS, or equivalent governance controls, to effectively manage document control. | |
| **RESEARCH AND DEVELOPMENT** | |
| * Lead on QI and service development for own specialty including initiating, undertaking and supervising research projects. * Initiate and participate in clinical and service audit. * Participate in, support and supervise clinical trials as required. * Introduce and commission new processes, procedures, protocols and techniques. * Specify, commission, test and verify highly complex clinical and test and measurement equipment. * Present work at professional and scientific meetings and conferences and in peer reviewed literature, collaborating with colleagues within and out with the Trust. * Responsible for own continuous professional development (CPD) and for maintaining professional registration and certification. | |
| **FREEDOM TO ACT** | |
| * The post holder is the lead physicist for their specialty and therefore works with a high degree of autonomy. * The post holder has freedom to work within a set of parameters to ensure patient, staff and public safety and will manage and develop work practices for their area. | |
| **OTHER RESPONSIBILITIES** | |
| To take part in regular performance appraisal.  To undertake any training required in order to maintain competency including mandatory training, e.g. Manual Handling.  To contribute to and work within a safe working environment.  The post holder is 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. | |
| **APPLICABLE TO MANAGERS ONLY** | |
| Evidence that supporting employee health and wellbeing is included in any documents outlining the skills and knowledge that line managers need.  Proportion of line managers whose job descriptions include supporting employee health and wellbeing.  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. | |
| **THE TRUST- VISION AND VALUES** | |
| Our vision is to provide safe, high quality seamless services delivered with courtesy and respect. To achieve our vision we expect all our staff to uphold our Trust values. Our Trust values are:  Honesty, Openness & Integrity  Fairness,  Inclusion & Collaboration  Respect & Dignity  We recruit competent staff that we support in maintaining and extending their skills in accordance with the needs of the people we serve. We will pay staff fairly and recognise the whole staff’s commitment to meeting the needs of our patients.  We are committed to equal opportunity for all and encourage flexible working arrangements including job sharing.  We are committed to recruiting and supporting a diverse workforce and welcome applications from all sections of the community, regardless of age, disability, gender, race, religion, sexual orientation, maternity/pregnancy, marriage/civil partnership or transgender status. We expect all staff to behave in a way which recognises and respects this diversity, in line with the appropriate standards. | |
| **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.  The RD&E is a totally smoke-free Trust. Smoking is not permitted anywhere on Trust property, including all buildings, grounds and car parks. For help to quit call: 01392 207462. | |
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| **POST** | Principal Clinical Scientist, Lead for Diagnostic Radiology Physics |
| **BAND** | B8b |

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| **Requirements** | **Essential** | **Desirable** |
| **QUALIFICATIONS / TRAINING**  Degree in Physics or a related subject  MSc in Medical Physics or related subject  State registered Clinical Scientist (HCPC)  Further specialist training allied to Medical Physics at postgraduate level  Corporate member of IPEM  Chartered Physicist (CPhys)  Chartered Scientist (CSci)  Additional specialist certification:  Medical Physics Expert  Radiation Protection Adviser | E  E  E  E  E  E  E | D  D |
| **KNOWLEDGE / SKILLS**  Advanced theoretical and practical knowledge in relevant area of medical physics sufficient for the role of Medical Physics Expert (MPE).  Expert understanding of relevant legislation, national standards, professional and other guidelines.  Specialist theoretical and practical knowledge of highly complex clinical equipment and systems and specialist test and measurement equipment.  Specialist theoretical and practical knowledge of non-ionising radiation physics and systems and specialist test and measurement equipment.  Specialist theoretical and practical knowledge of relevant medical physics processes, procedures and techniques.  Specialist theoretical and practical knowledge relating to the assessment of risk applied to medical physics.  Ability to use word processing, spreadsheet and database software and relevant software tools for analysis and development. | E  E  E  E  E  E | D |
| **EXPERIENCE**  Extensive post registration experience acting as a MPE and to fulfil any additional specialist roles.  Extensive experience using highly complex clinical equipment and systems and specialist test and measurement equipment.  Extensive experience dealing with governance and regulatory compliance matters.  Experience in introducing/commissioning new equipment and techniques.  Experience in service improvement / research and development.  Experience of clinical trials.  Experience in the structured management of work activities, eg, ISO9000 quality management system.  Experience in delivering specialist teaching and training including professional presentations. | E  E  E  E  E  E  E |  |
| **PERSONAL ATTRIBUTES**  Highly motivated with positive attitude to change.  Able to work under stressful-time sensitive conditions.  Able to work as part of a team.  Able to inspire confidence in clinical, scientific and managerial colleagues.  Able to work with people with illness without becoming unduly distressed. | E  E  E  E  E |  |
| **OTHER REQUIREMENTS:**  Full driving licence / able to travel to different working locations with equipment. | E |  |

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|  | | **FREQUENCY**  **(Rare/ Occasional/ Moderate/ Frequent)** | | | |
| **WORKING CONDITIONS/HAZARDS** | | **R** | **O** | **M** | **F** |
|  | | | | | |
| **Hazards/ Risks requiring Immunisation Screening** | |  |  |  |  |
| Laboratory specimens | N |  |  |  |  |
| Contact with patients | Y |  |  |  |  |
| Exposure Prone Procedures | N |  |  |  |  |
| Blood/body fluids | Y |  | X |  |  |
|  | | | | | |
| **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) | N |  |  |  |  |
| 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 |  |  |  | X |
| Heavy manual handling (>10kg) | Y |  | X |  |  |
| Driving | Y |  | X |  |  |
| Food handling | N |  |  |  |  |
| Night working | N |  |  |  |  |
| Electrical work | N |  |  |  |  |
| Physical Effort | Y |  | X |  |  |
| Mental Effort | Y |  |  |  | X |
| Emotional Effort | Y |  |  | X |  |
| Working in isolation | Y |  | X |  |  |
| Challenging behaviour | N |  |  |  |  |

**COMPETENCY REQUIREMENTS**

To be completed for all new positions

Please tick which of these essential learning s is applicable to this role

(**NB** those that are mandatory for all staff with no variation on frequency are pre-populated with a tick)

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| Safeguarding Children | Group 1 | | 🞏 | Blood Transfusion | BDS18 collection | | 🞏 | Consent Training | 🞏 |
|  | Group 2 | | 🞏 |  | BDS 19 & 20  Preparing & Administering | | 🞏 | VTE Training | 🞏 |
|  | Group 3 | | 🞏 |  | BDS 17 Receipting | | 🞏 | Record management and the nhs code of practice | 🞏 |
|  | Group 4 | | 🞏 |  | Obtaining a blood sample for transfusion | | 🞏 | The importance of good clinical record keeping | 🞏 |
|  |
|  | Group 5 | | 🞏 |  | Annual Update | | 🞏 | Antimicrobial Prudent Prescribing | 🞏 |
|  | Group 6 | | 🞏 |  |  | |  | Control & Restraint Annual | 🞏 |
| Not mapped this one |  | | 🞏 | Safeguarding Adults Awareness | Clinical Staff | | 🞏 | Mental Capacity/DOL’s | 🞏 |
|  | Group 8 | | 🞏 | Non Clinical Staff | | 🞏 |  |  |
| Manual Handling – Two Year | | | 🗹 | Falls, slips, trips & falls | Patients | | 🞏 |  |  |
| Equality & Diversity – One-Off requirement | | | 🗹 |  | Staff/Others | | 🞏 |  |  |
| Fire | | Annual | 🗹 | Investigations of incidents, complaints and claims | | | 🞏 |  |  |
|  | | Two Yearly | 🞏 | Conflict Resolution – 3 yearly | | | 🞏 |  |  |
| Infection Control/Hand Hygiene | | Annual requirement | 🞏 | Waterlow | | | 🞏 |  |  |
|  | | One-Off requirement | 🞏 | PUCLAS | | | 🞏 |  |  |
| Information Governance | | | 🗹 | Clinical Waste Management | | Application principles for clinical staff | 🞏 |  |
| Harassment & Bullying (Self Declaration – One off requirement) | | | 🗹 | Application principles for housekeeping | 🞏 |  |  |
|  | | |  | Application principles for portering and waste | 🞏 |  |  |