

Job description and Person Specification – Clinical Scientist

Thank you for considering a role at [Cambridge University Hospitals NHS Foundation Trust](#), which includes Addenbrooke's and the Rosie Hospitals.

About Us

The Trust is one of the largest and busiest hospitals in the country and is a leading clinical and academic centre with a national and international reputation for excellence. Recognised as providing 'outstanding' care to our patients and rated 'Good' overall by the Care Quality Commissioner, is testament to the skill and dedication of the people who work here. It is their teamwork, energy, commitment and imagination that make us one of the best hospitals in the UK.

Our Values

The Trust's philosophy is to keep the patient at the heart of everything we do and we expect staff to uphold our values of **Together - Safe, Kind, Excellent** at all times. The Trust's Values and Behaviour Standard is attached to this job description; it provides more information about the type of behaviour we expect and love to see, and those we do not want to see. In considering whether to apply for the post you should consider whether you understand and feel able to live our Values.

Supporting you to be the best you can be

The Trust is committed to bringing the best out of its employees. We want everyone who works here to enjoy job satisfaction and feel proud to be an employee of the Trust. Each pay band has a set of Performance Standards which explains the level of competency and standard of delivery required to perform the role, you can download the performance standard for this post with the application pack. The Trust is committed to providing on-going feedback, development and an annual appraisal discussion.

Your Health and Well-Being

As a world leading healthcare organisation, CUH is a champion of good health and is committed to providing a smoke free campus to protect its staff, patients and visitors. Smoking is not permitted on the CUH campus and all employees must comply with the requirements of the CUH No Smoking Policy and support the processes and practices in place in relation to patients and visitors.

Your health and well-being are important to us. If you have any concerns about a health condition or disability that you have please read this Job Description and Person Specification carefully to ensure that you would not be putting yourself at risk.

We offer an extensive staff benefits package, including childcare, flexible-working schemes and the NHS pension scheme along with a range of facilities that includes on-site sport and leisure facilities. Do visit our website for more information about working at CUH and living in Cambridge: [Working for us](#)

Submitting your application

Please read this job description thoroughly before submitting your application. As well as meeting the essential requirements of the person specification, be sure that you can demonstrate commitment to our Values, teamwork, reliable attendance, dedication and the ability to show compassion, care and respect to our patients, visitors and colleagues.

We recommend that you download the 'Information for Applicants - Completing your application' document which provides further details about how to complete each section of your application form and further information about the application process.

Job title:	Clinical Scientist - EARRPS
Band:	7
Hours of work:	37.5
Location:	Addenbrooke's Hospital
To whom responsible:	Lead Clinical Scientist
Job summary:	<p>The East Anglian Regional Radiation Protection Service (EARRPS) is a high-quality scientific and technical advisory service in the field of radiation protection and diagnostic radiology physics. A team of scientists, technologists and administrative staff provide a wide range of services to NHS and private healthcare organisations, dental and veterinary practices, laboratories and schools.</p> <p>Services include imaging equipment performance testing and optimisation, radiation facility design and environmental monitoring, patient radiation dose assessment, regulatory audits and advice, instrument calibration, radioactive waste management and training.</p> <p>EARRPS runs an HSE Approved Dosimetry Service (the Cambridge Personal Radiation Monitoring Service), an HSE Recognised RPA Body, and an ISO 9001:2015 Quality Management System.</p> <p>The post holder will:</p> <ul style="list-style-type: none"> • support the provision of radiation protection and diagnostic radiology physics services, including performance testing of x-ray imaging equipment and auditing clients' compliance with regulatory requirements in relation to radiation safety. • deliver teaching and training to staff within the service and its clients. • be required to work to extremely high standards of safety to ensure the safe use of highly complex equipment. • liaise with staff in a large number of departments working with ionising and non-ionising radiation and will visit external organisations on a frequent basis. There may also be a requirement to work periodically from other hospitals in the region, depending on future service developments and individual circumstances.

Key duties and responsibilities:

1. Clinical/Scientific

As appropriate to the postholder's training and experience:

- 1.1 Perform commissioning, acceptance and routine performance testing throughout East Anglia, on complex, patient critical, X-ray equipment requiring high precision measurements. Investigate faults found, at the survey or reported by the user, in order to inform maintenance engineers.
- 1.2 Assist in providing advice on compliance with IRR, IRMER, EPR and other radiation protection legislation – through audit visits, written reports, telephone advice and liaison

with clients.

- 1.3 Analyse data gathered on radiation safety and quality assurance surveys and prepare reports with recommendations for correction or improvement.
- 1.4 Collaborate in the maintenance and development of radiation protection policies and procedures.
- 1.5 Support the provision of radiation safety and radiation shielding advice to those planning new or modified radiation facilities; and assessing the adequacy of engineering controls and radiation safety arrangements prior to a facility's introduction into service.
- 1.6 In conjunction with a Radiation Protection Adviser (RPA), perform Critical Examinations on new installations as required.
- 1.7 In liaison with a Medical Physics Expert (MPE) estimate patient radiation doses and give advice on methods of radiation dose optimisation.
- 1.8 Assess staff and public doses in a variety of complex situations. Use expert knowledge to determine relevant parameters, derive effective radiation doses and advise on radiation risks and appropriate courses of action. Assist in providing radiation monitoring for staff where relevant.
- 1.9 Be involved, as and when necessary, in the calibration of a range of radiation monitors.
- 1.10 Provide support as required in the event of an accident or major incident involving radiation, including those handled under the 'National Arrangements for Incidents involving Radioactivity' (NAIR) scheme.
- 1.11 Provide radiation protection advice and support within other areas of EARRPS, as appropriate to the needs of the Service.

2. Managerial

- 2.1 Prioritise and manage own work, including booking visits to EARRPS clients premises.
- 2.2 Supervise trainees and other staff when they are performing work under the post holder's direction.
- 2.3 Implement and ensure compliance with set Quality System requirements, in any areas of work for which the post holder carries responsibility.
- 2.4 Respond in a timely manner to enquiries from equipment users, ensuring a high quality responsive service.
- 2.5 Contribute to decisions on the purchase of test equipment used by the service including discussing possible purchases with manufacturers, evaluating demonstration models and obtaining quotations.
- 2.6 Keep careful records of all work performed and complete other appropriate records as required by legislation and Departmental procedures.

3. Teaching, training and research

- 3.1 Support the educational and training responsibilities of the service. This will include the preparation and giving of lectures on areas of radiation physics to multi-disciplinary staff groups.
- 3.2 Assist in the training of other EARRPS staff and trainees on placement.
- 3.3 Support and undertake research and development projects as agreed with the line manager.
- 3.4 Support service development through the introduction and evaluation of new technologies.
- 3.5 Present papers at national and international scientific meetings.

4. Professional

- 4.1 Participate in appropriate Continuing Professional Development programmes. This includes activities related to the development of evidence suitable for inclusion in applications for accreditation as a qualified expert (Medical Physics Expert, Radiation Protection Adviser, Radioactive Waste Advisor and/or Laser Protection Advisor as agreed with the line manager).
- 4.2 Keep abreast of the latest technical, scientific and legislative developments and their applications in medical and associated fields and attend suitable seminars and courses as part of personal development and to further the work of the service.
- 4.3 Ensure that all activities are carried out within a quality framework and meet regulatory requirements.
- 4.4 Act as an internal auditor for accredited Quality Systems used in the department.

5. Miscellaneous

- 5.1 When working in other Departments, the post holder will liaise with local Heads of Department, radiographers, nursing staff etc. as appropriate, adhering to local policies and practices.
- 5.2 The post holder will behave courteously and professionally at all times and seek to ensure the highest level of customer service is provided.
- 5.3 Implement and ensure compliance with set procedures, including an accredited Quality System, in the areas of work for which the post holder carries responsibility. Reports of all work will be produced in a format agreed by the Service and within an acceptable timescale following audits/surveys.
- 5.4 It will be necessary, on occasions, to work outside normal hours. This may include carrying out surveys during evenings and at weekends. Where relevant, this work will be compensated for by time off in lieu and unsocial hours payments, in accordance with standard Agenda for Change conditions.
- 5.5 The post holder will follow Trust policies and procedures designed to manage risks during the course of their duties, including those from road travel, display screen use and manual handling.

General Compliance:

1. To comply with all Trust Policies and Procedures, with particular regard to
 - Risk Management
 - Confidentiality
 - Equal Opportunities
 - Health & Safety
 - Data Quality
 - No Smoking
 - Information Governance
 - Freedom of Information
 - Being Open: a duty to be candid
2. All staff have a responsibility to comply with the current infection prevention and control policies, procedures and standards and ensure they have received an annual update on infection prevention and control issues including hand hygiene. All staff should practice and encourage appropriate hand hygiene and act professionally to ensure the hospital environment is clean, safe and tidy.
3. To perform your duties to the highest standard with particular regard to effective and efficient use of resources, maintaining quality and contributing to improvements.
4. To follow all the Trust Security policies and procedures and be vigilant to ensure the safety and secure environment for care.
5. All staff that have access to or transfers any data are responsible for those data, it must be kept secure and they must comply with the requirements of the Data Protection Act 1998 and the common law on confidentiality. All data must be kept in line with the Trust's policies and procedures. Data includes all types of data i.e. patient, employee, financial, electronic, hard copies of printed data or handwritten data etc.
6. The post holder is responsible for data quality and complying with the policies, procedures and accountability arrangements throughout the Trust for maintaining accuracy and probity in the recording of the Trust's activities.
7. The Trust is committed to carefully screening all staff who work with children and vulnerable adults. If this applies to this post, the appointment will be subject to a satisfactory Disclosure and Barring Service disclosure (formerly the CRB disclosure) of the appropriate Level.
8. All staff will receive training on Child Protection -Safeguarding Children Policies and Procedures as part of Induction and updates, this will equip the post holder with the knowledge of what you will need to do if you have concerns about the welfare of a child/young person under aged 18.
9. Participate in an annual Appraisal and Development Review meeting and ensure you are meeting the Trust's Performance Standard for the post.
10. CUH is a smoke free campus. All employees must comply with the requirements of the No Smoking Policy and support the processes and practices in place in relation to patients and visitors
11. To uphold the Trust Values and Behaviours standard.
12. Perform any other duties that may be required from time to time.

Every post holder can make a difference to a patient's experience. You will come across patients as you walk around the hospital; we rely on all our staff to be helpful, kind and courteous to patients, visitors and each other.

This job description may be altered to meet changing service needs, and will be reviewed in consultation with the post holder.

Our Trust values and behaviours

Values	Behaviours	Love to see	Expect to see	Don't want to see
Safe I never walk past, I always speak up	Safety	Shares lessons learned to help others to improve safety.	Always follows agreed safety and wellbeing procedures. Learns from mistakes and asks for help if they need it.	Shows a lack of focus on safety and wellbeing in their day-to-day work.
	Raising concerns	Encourages others to raise concerns about safety or attitude.	Speaks up every time standards on safety, care or dignity are not met. Welcomes feedback.	Keeps concerns to themselves, and rejects feedback about their own behaviour.
	Communication	Seeks ways to enhance understanding of information being communicated to meet people's needs.	Keeps people informed and gives clear explanations in ways people can understand.	Doesn't give people the information they need. Uses jargon inappropriately.
	Teamwork	Encourage others to contribute and demonstrates better ways of working within and across teams.	Works as part of a team. Co-operates and communicates with colleagues. Values other people's views.	Excludes others and works in isolation.
	Reassuringly professional	Is constantly aware that what they say and do affects how safe other people feel.	Is calm, patient and puts people at ease. Takes pride in their own appearance and our environment.	Passes on their negativity/stress. Is critical of other teams or colleagues in front of others. Displays unprofessional appearance.
Kind I always take care of the people around me	Welcoming	Goes out of their way to make people feel welcome.	Is polite, friendly, makes eye contact, smiles where appropriate and introduces themselves. 'Hello my name is...'	Ignores or avoids people. Is rude or abrupt, appears unapproachable/ moody.
	Respectful	Applies a broader understanding of the diverse needs of patients/ colleagues. Supports others to be themselves.	Treats everyone as an equal and valued individual. Acts to protect people's dignity.	Ignores people's feelings or pain. Makes people feel bullied, belittled or judged.
	Helpful	Thinks about the needs of others. Goes the 'extra mile' for other people.	Is attentive and compassionate, helps people who need help, or finds someone who can. Never walks by.	Makes people feel like a burden: 'It's not my patient / job / problem'.
	Listen	Makes time to listen to people even when busy.	Listens to people in an attentive and responsive manner.	Disinterested, dismissive or talks over people.
	Appreciate	Goes out of their way to make people feel valued for their efforts and achievements.	Encourages people's efforts. Notices when people live up to our values, says thank you.	Doesn't notice or appreciate people's efforts.
Excellent I'm always looking for a better way	Aiming high	Their positive attitude inspires others to achieve the highest levels of quality.	Always aims to achieve the best results.	Accepts mediocrity or moans without looking for solutions.
	Improving	Helps others to find creative solutions to problems and shares good practice.	Suggests ideas for better ways of doing things and looks for opportunities to learn.	Resists change: 'we've always done it this way'.
	Responsible	Shows enthusiasm and energy to achieve excellent results.	Takes responsibility and has a positive attitude.	Avoids responsibility. Blames or criticises others.
	Timely	Always respects the value of other people's time.	Is on time, efficient, organised and tidy. Apologises and explains if people are kept waiting.	Misses deadlines or keeps people waiting, without explanation/apology.
	Makes connections	Helps others to understand how services connect.	Thinks beyond their own job and team to make things easier for people.	Focuses on their own department needs to the detriment of the people they serve.

Together-**Safe** | **Kind** | **Excellent**

Post Title – Clinical Scientist

Band 7

Department EARRPS

How evidenced: **A** = Application Form **I** = Interview **T** = Test

Factors	Essential Criteria	How Evidenced	Desirable Criteria	How Evidenced
1 Qualifications	1. BSc degree in Physics or other relevant subject. 2. MSc in Medical/Radiation Physics (or equivalent). 3. Registration as a Clinical Scientist (<i>a candidate working towards registration may however be appointed on Agenda for Change Annex 21 until registration is obtained</i>)	A	1. Membership of relevant professional body.	A
2 Experience	1. Specialist experience in the use of testing equipment employed to measure the safety and performance of x-ray imaging equipment and in interpreting results. 2. Specialist experience of radiation protection in a range of disciplines, including diagnostic radiology and work with radioactive materials. 3. Experience in interpreting different situations and judging measures required to ensure regulatory compliance in areas related to the use of ionising radiation in healthcare.	A / I	1. Experience of working within a Quality Management System. 2. Experience of teaching/ lecturing within diagnostic radiology physics and/or radiation protection. 3. Experience of radiation protection outside of the Diagnostic Radiology field, including work with radioactive substances and non-ionising radiation.	A / I

3 Knowledge	<ol style="list-style-type: none"> 1. Comprehensive knowledge of radiation physics. 2. Working knowledge of relevant legislation, national standards, professional and other guidelines. [E.g. IRR, IR(ME)R, IPREM guidelines etc.]. 3. Knowledge of the techniques employed to measure the performance and radiological safety of state of the art imaging equipment. 4. High level of understanding of patient and staff risks arising from ionising radiation exposure. 	A / I	<ol style="list-style-type: none"> 1. Expert level knowledge and understanding of ICT infrastructure requirements for clinical systems. 	A / I
4 Skills	<ol style="list-style-type: none"> 1. Able to prioritise and manage own work, exercising initiative when dealing with issues within own specialist area of competence. 2. Able to communicate complex information to specialists and non-specialists. 3. Able to use MS Excel, Word, Access, PowerPoint etc. to record, structure, analyse, interpret and report on complex data. 4. Able to use non-standard software for the analysis of radiological images including an ability to handle DICOM data appropriately. 5. Able to make measurements with a high-degree of precision and hand-eye coordination using sophisticated test equipment. 6. Able to lift and transport medium weight testing instrument cases (in excess of 15kg) sometimes upstairs. 7. Able to drive, with heavy equipment, distances up to 150 miles away. 8. Able to concentrate frequently for prolonged periods when subject to unpredictable working patterns. 9. Able to train groups of other professional staff to perform complex tasks. 10. Able to deal with complex unpredictable situations and rare distressing circumstances. 	A / I		A / I
5 Additional Requirements	The ability to understand and behave at all times, towards patients, visitors and colleagues according to the Trust values of <i>safe, kind, excellent.</i>	A / I		

Information for Applicants - Terms and Conditions of Employment

This information is a summary of the main terms and conditions for pay, annual leave, hours and pension that is governed by the NHS Terms and Conditions of Service Handbook.

Pay

The advertisement provided the information about the pay band for this role. All pay bands have a minimum and maximum point with opportunity for progression to the next pay step point when a minimum length of service has been reached. This is subject to meeting expected levels of performance. For more information about Agenda for Change Pay please visit: <http://www.nhsemployers.org/your-workforce/pay-and-reward/pay/agenda-for-change-pay>

New entrants to the NHS will normally commence on the minimum point of the pay band. Only in exceptional circumstances where the employee has considerable relevant experience to the post can a higher starting salary be considered. If a current NHS employee applies for a post at a higher band they move onto the higher band receiving a promotional increase in accordance with NHS Terms and Conditions. Current NHS employees transferring on the same pay band retain the same salary.

Pay Progression

Employees will receive progression to the next pay step point (where available) subject to meeting expected performance and compliance requirements. If you are an existing NHS employee applying for a role on the same band, progression will be awarded in accordance with the Trust's current ADR and Pay Progression policy. If you are new to the Trust or are applying for a promotion, progression will be awarded in accordance with the new national framework agreement.

Hours

Full time is 37.5 hours per week and is in accordance with the working patterns/rota patterns within the ward/department. These may be changed from time to time depending upon patient / service needs. If the post you have applied for is part time, the salary will be calculated pro rata to 37.5 hours. If you are required to work nights/weekends/public holidays you will receive the appropriate unsocial hour's enhancements.

Annual Leave Entitlement

This is dependent on complete years of NHS service.

Years NHS service	Annual leave entitlement per year
0-5 years completed NHS service	202.5 hours (based on 27 days x 7.5 hrs per day) plus public holidays (pro rata for part time)
5-10 years completed NHS service	217.5 hours (based on 29 days x 7.5 hrs per day) plus public holidays (pro rata for part time)
Over 10 years completed NHS service	247.5 hours (based on 33 days x 7.5 hrs per day) plus public holidays (pro rata for part time)

Pension

Employees are automatically enrolled onto the NHS Pension Scheme upon commencement. There is both an employer and an employee financial contribution to the pension scheme, with the employee contribution ranging from 5% to 14.5% depending upon your salary. New employees will receive a detailed information pack on commencement. For further information about the scheme and how to opt out following commencement, please visit www.nhsbsa.nhs.uk