

Join us at UHB



Welcome from our CEO

Professor David Rosser



Dear Candidate,

Thank you for your interest in working with us here at University Hospitals Birmingham NHS Foundation Trust (UHB).

Please take some time to read through this application pack to gain a better understanding of our Trust in general, this role in particular, and why UHB is a great place to work.

UHB is one of the largest teaching hospital trusts in England, serving a local, regional, national, and international population. We employ around 22,000 colleagues and are committed to investing in your training, development, health and wellbeing and future career with us.

We see and treat more than 2.2 million patients every year across our four hospital sites - Good Hope, Heartlands, Queen Elizabeth Hospital Birmingham and Solihull Hospital - and through our community services and clinics. We are centres of excellence in many clinical specialties.

But it's not just our patients we invest in at UHB; we also invest in our staff. In fact, we believe we are defined by our people, not the state-of-the-art equipment or facilities we work out of. We have high standards and we want to build healthier lives for patients and our teams, wanting you to enjoy your job, and flourish in it.

To reinforce this commitment, we recently refreshed our values after hearing from over 1,400 colleagues about what made them proud to work at UHB

We will be:

Kind: the kindness that people show to each other every day Connected: the connections we build with everyone around us Bold: the ability to be bold in how we think, speak and act

We hope you find this pack useful and look forward to receiving an application from you for this role within our Trust.

Yours sincerely,

Professor David Rosser, Chief Executive Officer

JOB DESCRIPTION

Job Title	Deputy Chief Clinical Technologist (Nuclear Medicine)
Pay Band	8a
Department	Nuclear Medicine
Division	1
Reports to	Chief Clinical Technologist / Technical Service Manager
Professionally	Head of Nuclear Medicine
Responsible to	
JOB SUMMARY	

Department:

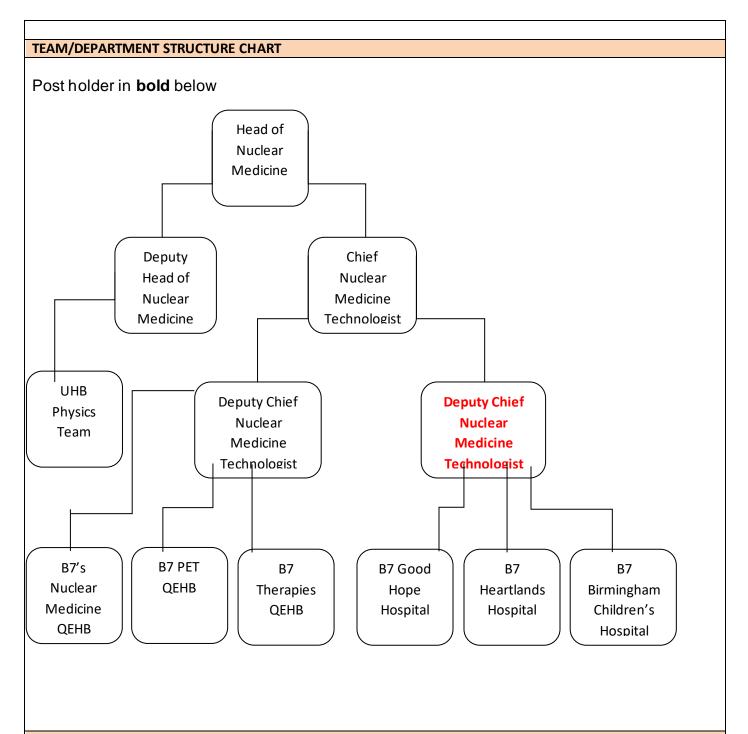
The Nuclear Medicine Service is a specialised diagnostic and treatment facility based on several sites; the Queen Elizabeth Hospital Birmingham (QEHB), Good Hope Hospital (GH), Birmingham Heartlands Hospital (HH) and Birmingham Children's Hospital (BCH). The case mix is highly specialised and this is reflected in the range of investigations and treatments that are provided. Some investigations and treatments routinely provided at UHB would not be provided at an average district general hospital. The Service actively participates in R&D.

Job / post-holder:

- Deputy Chief Technologist, deputising for the Chief technologist as required
- Undertakes a leading role in development of the service and carrying out operational management duties on a daily basis
- Take a lead role in all specialist areas within the Nuclear Medicine Service
- Provides specialist knowledge of the service delivery as well as performing a wide range of diagnostic and therapeutic procedures on patients of all ages.
- Acts as an RPS and H&S Officer for the NM service
- Provides Senior support and site leadership (together with supporting Clinical Scientists) for all aspects of Radiation Protection including EPR, IRR and IR(ME)R related matters
- Provides formal and informal training, mentoring, teaching and tutorials to a wide range of staff and students / trainees
- Carries out Line Management duties for staff up to Band 7
- Carries out a lead role in the recruitment of staff in the department
- Takes a lead role in the development and retention of staff working in the department.
- Performs any other duties that may be required by the Chief Technologist, Head of Department or Operational Managers when deemed appropriate







Main Duties and Responsibilities

Managerial and organisational:

- 1. Manage a multidisciplinary team of clinical technologists, assistant clinical technologists and nursing staff, holding line manager responsibility for a number of staff
- 2. Manage at least one specialist service across sites, liaising with senior section staff to identify and meet training needs, resource requirements and legislative standards
- 3. In liaison with the Chief Technologist, be responsible for the day to day organisation of Nuclear Medicine imaging / non-imaging services.



- 4. Be responsible for planning and organising the daily and future workload of the main department taking into account investigation complexity, equipment, staffing and other resource levels, liaising with Chief Technologist where necessary. Prioritise appointments as necessary.
- 5. Be responsible for adapting the appointment schedules in response to changes in levels of demand and capacity and communicating this to the wider Nuclear Medicine team.
- 6. Be responsible for managing and developing the Single Trust Imaging Service.
- 7. Act as deputy to the Chief Technologist in all operational matters.
- 8. Perform personal development reviews on selected staff groups ensuring personal development plans are drawn up and reviewed at least annually.
- 9. Carries out a lead role in the Recruitment and Selection process / Recruitment and Retention program for clinical technologists.
- 10. Work in close collaboration with clinical scientists, radiopharmacists, clinical technologists, medical, nursing and clerical staff to ensure the smooth running of the day to day Nuclear Medicine service
- 11. Work together with other senior staff and managers in the department to contribute to the leadership of the department escalating issues as required.
- 12. Provide leadership to specialist clinical aspects of projects such as the introduction of new services or the replacement of equipment.
- 13. Together with other senior staff undertake personnel management duties including oversight of annual leave requests, shift patterns, management of sickness absence, flexible working requests and management of classified workers under the lonising Radiation Regulations 2017.
- 14. Oversee the timely review and update of standard operating procedures and clinical protocols within Nuclear Medicine and ensure these are incorporated into the document management system.

Clinical / Technical:

Imaging

- Undertake a specialist role in Nuclear Medicine imaging and non-imaging, applying expert knowledge of Nuclear Medicine clinical technology to analyse sometimes highly complex problems and make judgements to provide advice and guidance to doctors, technical staff, nursing staff and other health care professionals
- Undertake the authorisation of diagnostic investigation referrals as agreed with the ARSAC (Administration of Radioactive Substances Advisory Committee) holding nuclear medicine practitioners; working within written protocols in compliance with the lonising Radiation Medical Exposure Regulations 2017 (IR(ME)R 2017).





- 3. Liaise directly with junior and senior medical staff on all matters relating to patient specific investigations; seeking further information or giving advice where appropriate.
- 4. Act as point of contact to provide pre-appointment (diagnostic and therapy) advice to patients with regards to medication, drug interactions, restrictions etc.
- 5. Perform a full range of diagnostic imaging investigations on patients of all ages and suffering a wide range of illnesses including cancer. Work unsupervised, performing all diagnostic investigations within agreed departmental protocols.
- 6. Be responsible for the safe operation of a variety of complex and potentially dangerous imaging systems (gamma CT and PET-CT cameras).
- 7. Supervise and provide expert guidance to junior staff undertaking diagnostic imaging investigations, ensuring the investigation is complete before the patient is released.
- 8. Use judgement to check sufficient imaging data is acquired for diagnostic interpretation on a full range of investigations. Instruct junior staff in extra imaging that may be required due to patient's medical condition.
- 9. Working unsupervised analyse a full range of patient images and data using complex computer programs.
- 10. Supervise junior staff during the processing and analysis of acquired clinical patient data. Provide advice and guidance to junior staff during the manipulation and analysis of patient data.
- 11. Produce optimised images and analysis for reporting. Prepare, check and send images to PACS.
- 12. Undertake the intravenous, oral and inhalation administration of diagnostic radiopharmaceuticals and radiolabelled blood products; under authorisation from the ARSAC certificate holding nuclear medicine practitioner and in accordance with local policy and protocols.
- 13. Undertake the administration of radiopharmaceuticals and radiolabelled blood products to in-patients.

Single Trust Imaging Service:

- 1. Be responsible for managing and developing the Single Trust Imaging Service.
- 2. Liaise directly with the ARSAC holding practitioners to ensure the smooth running of the service, taking into account equipment availability, staffing and other resource levels, liaising with the chief technologist and senior administrative staff where necessary.
- 3. Examine the protocols and procedures ensuring continuity across all sites.
- 4. Continue to develop the SLN program including the penile cancer service and liaise with other senior staff to further develop the SLN service as a whole.
- 5. Under authorisation from consultant radiologist practitioner; work unsupervised,





performing the sub-dermal injection of radiotracer for Sentinel Lymph Node scintigraphy.

- 6. Lead the development and maintenance of centralised booking together with the Medical Physics office manager, liaising closely with colleagues on other sites to ensure bookings match the resource available, comply with legal requirements and are undertaken in a timely manner
- 7. Together with other senior staff contribute to business cases and projects on the Good Hope, Heartlands and Birmingham Children's Hospital sites
- 8. Responsible for the daily line management of Senior staff across the sites and if necessary, communicating any issues with the Chief Technologist and/or Head of Nuclear Medicine.

Diagnostic Non-Imaging:

- Working unsupervised perform a broad range of diagnostic non-imaging radionuclide investigations; undertaking the sampling of blood, urine, breath and faecal specimens and the subsequent preparation and manipulation of these samples. Perform all diagnostic non-imaging investigations within agreed, authorised departmental protocols
- 2. Supervise junior staff undertaking diagnostic non-imaging investigations, ensuring the investigation is complete and sufficient diagnostic information is acquired before the patient is released. Provide guidance and advice to junior staff undertaking these tasks
- 3. Take blood samples as required from patients undergoing diagnostic imaging and non-imaging investigations.
- 4. Perform accurate and precise manipulations of patient samples using a variety of laboratory and related equipment.
- 5. Use specialist radiation counting equipment to determine the levels of radionuclides present in patient specimens.
- Undertake the input and manipulation of counting data into complex computer programs and spreadsheets to generate analysis results for diagnosis. Supervise junior staff undertaking this task.

Patient care:

- 1 Provide a high level of patient care. Paying particular attention to the welfare and dignity of all patients undergoing imaging and non-imaging procedures. Ensure that at all times the needs of the patient are met and that confidentiality of patient data is maintained.
- 2 Provide detailed, accurate and sometimes complex information to patients of all ages, backgrounds, ethnicity and religion undergoing routine and complex imaging and non-imaging procedures. Convey such information to patients in a manner and using terminology that is easily understood. Be aware of limits of own knowledge, referring patients to a more senior member of staff where required answers exceeds level of own knowledge/understanding.
- 3 Demonstrate empathy towards patients of all ages (including paediatric) suffering a wide





- range of illnesses (often terminal).
- 4 Act as point of contact for enquiries and complaints from patients relating to their care whilst in the department. Report such incidents to the chief technologist and through them to head of department

Safety:

- 1 Ensure that the work areas are maintained in a safe, clean and tidy manner with respect to mechanical, electrical and radiation safety. Be aware of mechanical, electrical and radiation hazards surrounding imaging and related equipment and the potential risk and harm to patients and staff.
- 2 Act as the Health and Safety Officer across the sites
- 3 Supervise and mentor junior staff, trainees on placement, supernumerary students, patient escorts and visitors within the imaging rooms and ensure conduct conforms to operational procedures and departmental local rules.

Radiation Safety:

- 1 Be a named Radiation Protection Supervisor across sites and provide high level support for radiation protection matters.
- 2 May be called upon in the event of a major radiation incident (by those on the first line call out duties) to assist in the setting up of, and providing support at, either the A&E Department or a Remote Monitoring Unit including possible out of hours attendance.
- 3 Provide detailed radiation protection advice to patients, escorts, and carers on matters of radiation protection arising from the administration of diagnostic radionuclides. Provide advice and guidance on complex issues that may arise.
- 4 Provide radiation protection information and advice to ward staff caring for patients. Take appropriate action where necessary.
- 5 Participate in the review and update of IR(ME)R (2017) authorisation criteria for Nuclear Medicine procedures.
- Take part in and supervise junior staff in the radioactive decontamination of rooms where unsealed radioactive materials are used. Store all materials from decontamination in a safe manner according to departmental protocols.
- 7 Take part in and supervise junior staff in the routine radiation and contamination monitoring of all patient areas and work areas within the nuclear medicine department. Report any unexpected findings to the departmental RPS.
- 8 Participate in radiation decontamination procedures and clean-up of hazardous radioactive spills when required.





- 9 Take part in, and supervise junior staff with the measurement of radioactive waste produced from diagnostic (and therapy) usage of radionuclides within the nuclear medicine department ensuring waste is stored in a safe manner.
- 10 Take part in, and supervise junior staff in the safe storage and disposal of liquid and solid radioactive waste.
- 11 Undertake the receipt and consignment of radioactive substances ensuring compliance with the RSR Environmental permits issued to the Trust under the Environmental Permitting Regulations 2016 and the National regulations for the transport of radioactive material.
- 12 As a department Radiation Protection Supervisor ensure; radiation protection audits are completed (environmental, hand, foot monitoring), local rules are adhered to, monitoring is being carried out and records are up to date, the waste management process is followed and is affective, that staff doses are reviewed and analysed. Provide feedback to the Radionuclide Protection Committee and checking that dose levels remain within the exposure limits expected, the legislation if followed and processes / protocols are up to date to reflect any legislative changes, that classified workers are medically assessed at appropriate intervals.

Quality Assurance:

Perform routine checks, calibration and quality assurance testing of imaging and nonimaging equipment. Report faults, defects or deviations from expected results to clinical scientists.

Research and Development:

- 1 Take part in and support any research activities carried out by the Nuclear Medicine department as required by the Head of Department or Chief Technologist.
- 2 Take a lead role in the development and review of investigation protocols and procedures. This may include delegating responsibility for the development of a technique or a new procedure to a more junior member of staff.
- 3 Act as authorising signature for a range of investigation protocols and departmental procedures.
- 4 Undertake the presentation of scientific data at local, national and international meetings when required.

Training, Quality & Governance:

- 1 Be responsible for ensuring that all staff are adequately trained for their duties and that competencies are maintained through regular assessments and updates of key duties.
- 2 Work closely with the departmental trainer to ensure that competency and training records are kept.





- 3 Advise the Chief Technologist on the training and education needs of the service. Identify training needs of technical staff and arrange necessary training programs through departmental trainer. This includes mandatory training, competency training and staff development.
- 4 Support the Chief Technologist and Head of Department in ensuring all staff are professionally and operationally updated. Ensure training plans and competency records are up to date and appropriate and report to the chief technologist and the head of department on a regular basis
- 5 Promote self-development of individuals, as well as maintaining own development needs.
- 6 Deliver theoretical and practical training to members of staff and other healthcare staff.
- 7 Perform assessments on junior staff to ensure they are competent to perform all imaging and non-imaging investigations.
- 8 In collaboration with the departmental trainer monitor all training issues relating to supernumerary Medical Physics trainees for nuclear medicine UHB.
- 9 Undertake, as required external lecturing on a range of nuclear medicine topics.
- 10 Oversee all aspects of the service with regard to Quality, Patient Safety and Governance.
- 11 Participate in the investigation of Datix Incidents and root cause analysis together with the governance lead
- 12 Assist in the oversight of department workload and measurement against performance metrics including all relevant KPIs.

Professional:

- 1 Participate in a continuing professional development (CPD) program to keep up to date with new techniques and technologies.
- 2 Ensure that all duties are conducted in conformance within departmental, local and national policies, guidelines and regulations.





KEY WORKING RELATIONSHIPS

Internal:

Clinical Technologist colleagues, Clinical Scientists, other Health Care Scientists, medical, nursing and clerical staff; department and divisional managers, other Health Care Professionals.

External:

Patients and relatives. Healthcare professionals

EFFORT

Physical Effort

- Possess manually dexterity for the manipulation of laboratory and related equipment e.g. precision pipetting.
- Specialist developed skills to manipulate equipment to ensure accurate preparation and dispensing of radiopharmaceuticals, ensuring sterility whilst keeping radiation exposure to a minimum
- Able to manoeuvre patient wheelchairs, beds, imaging couches and chairs safely at all times
- Frequent requirement to exert moderate physical effort for several short periods e.g. manoeuvring medium/heavy equipment e.g. radionuclide generators, lead collimators, lead shielding.
- Required to safely undertake patient transfers from beds and wheelchairs regularly
- Staff is trained and able to perform basic life support, adult and paediatric

Mental Effort

Frequent requirement to:

- Concentrate for prolonged periods of time when analysing patient data using complex computer programs and spreadsheets.
- Concentrate for prolonged periods when handling and manipulating unsealed radioactive sources and bio hazardous material.
- Concentrate through frequent interruptions and unpredictable work patterns
- Work under pressure and in sometimes unpredictable circumstances.
- Work within time schedules and to deadlines.
- Deal with enquiries from patients, medical staff etc. relating to diagnostic investigations, results etc.

Emotional Effort





Frequent requirement to:

- Deal with patients who may be upset, angry or confused and suffering a wide range of illnesses including psychiatric disorders, drug / alcohol related conditions, dementia victims and cancer sufferers.
- Deal with terminally ill patients of all ages (including paediatric) undergoing lengthy procedures.
- Show empathy and understanding towards patients of all ages undergoing lengthy investigations; and also to their relatives/carers.
- There is occasional requirement to deal with emergency medical crises including cardiac arrests.

The post holder will undertake other duties as may be required to achieve the Trust's objectives, commensurate with the grading of the post.

TRUST VISION & VALUES

The Trust is clear on its vision and values and aims to make sure that they are reflected in all areas of activity. Our vision is simple; building healthier lives. Our values apply to every member of staff and help us in all we do and how we do it. They are:

Kind: The kindness that people show to each other every day **Connected**: The connections we build with everyone around us **Bold**: The ability to be bold in how we think, speak and act

ADDITIONAL INFORMATION

This job description is designed to assist post holders with understanding what is expected of them in their role. University Hospitals Birmingham NHS Foundation Trust may ask them to undertake other duties, as required, which are not necessarily specified on the job description but which are commensurate with the grade of the post.

The job description itself may be amended from time to time in consultation with the post holder, within the scope and general level of responsibility attached to the post.

All post holders must take responsibility to ensure that they are aware of and adhere to all Trust policies, procedures and guidelines relating to their employment regardless of their position within the Trust.

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PERSON SPECIFICATION

JOB TITLE: Deputy Chief Clinical Technologist (Nuclear Medicine)

TRAINING, QUALIFICATIONS AND PROFESSIONAL REGISTRATIONS





ESSENTIAL	DESIRABLE
 BSc Hons Clinical Technology or equivalent Knowledge and experience equivalent to MSc level Highest level of specialist knowledge and experience in all areas of specialist work of nuclear medicine clinical technology gained over a significant period Post graduate diploma/certificate in Nuclear Medicine Significant experience of delivering teaching and training Significant experience of clinical service and staff management including PDRS Evidence of continual professional development 	Registered Clinical Technologist
EXPERIENCE & KNOWLEDGE	
ESSENTIAL	DESIRABLE
 Able to plan and organise the work of a team of nuclear medicine technologists Able to plan and organise the technical and clinical functions of a service Able to participate in staff selection and recruitment Able to deal sensitively with a range of confidential issues involving staff and patients Able to conduct staff performance and development reviews Able to identify, address and manage training needs of a multidisciplinary team Able to act as first line of contact for complaints from patients, relatives and other staff groups Able to lead a team to ensure departmental and Trust objectives are met whilst considering Trust ethos 	
 Possess the highest level of specialist skills and knowledge in clinical technology relating to nuclear medicine to provide expert advice and guidance to medical, technical, nursing and other healthcare professionals Possess a highly developed level of communication skills as acquired through at years of experience at senior level 	





- To have a working knowledge of a range of specialist practice. Innovative skills required to participate in developing work procedures taking guidance when necessary from peers, legislation & national guidance.
- Significant experience of direct involvement with the technical support for a clinical nuclear medicine department, covering a full range of in vivo and in vitro procedures, therapy applications and radiopharmacy
- Possess a developed specialist theoretical and practical knowledge of nuclear medicine imaging and non-imaging procedures. Able to perform a full range of diagnostic test procedures.
- Performance of intravenous administration of a full range of diagnostic and therapeutic radiopharmaceuticals.
- Able to devise, write and implement departmental and investigational protocols, policies and procedures.
- Expected to develop & carry out highly specialised procedures with highly complex equipment
- Knowledge of the safe use of expensive and highly complex imaging, non-imaging and related equipment (>£50,000)
- Has knowledge of NHS working environment within the field of nuclear medicine
- Possess a developed theoretical and practical knowledge of radiation protection Provide complex information and advice to medical, nursing, technical and other health care professionals on all aspects of radiation protection relating to nuclear medicine.
- Possess a specialist knowledge of legislation relating to nuclear medicine i.e, lonising Radiations Regulations 2017, lonising Radiations (Medical Exposure) Regulations 2017, Environmental Permitting Regulations 2016, National Regulations for the Transport of Radioactive Substances, Administration of Radioactive Substances Advisory Committee (ARSAC) guidelines.
- Demonstrate a specialist theoretical and practical knowledge relating to the hazards posed by and the precautions required when dealing with ionising radiation arising from sealed and unsealed radioactive diagnostic and therapeutic

- Possess a developed specialist theoretical and practical knowledge of paediatric nuclear medicine.
- Possess specialist theoretical and practical knowledge of radiopharmacy with the ability to organise and manage the aseptic preparation/dispensing of sterile intravenous radiopharmaceuticals.



- sources and patients.
- Possess an understanding of patient, staff and public risks arising from radiation exposure.
- Experience of working within a quality management system including the ability to participate in the development of a quality management system
- Demonstrate significant experience of providing and delivering teaching, training and assessment of a range of staff
- Able to manipulate scientific data (eg to present at national/international scientific meetings etc)

Analytical/judgement

- Able to use highly developed analytical, interpretation and judgement skills to make decisions outside written protocols eg decide if deviation from protocol would be required to get best possible information from investigation.
- Able to critically analyse patient data and make judgements and decisions on format of investigational procedure.
- Use analytical and judgement skills when manipulating and analysing diagnostic imaging and non-imaging patient data for a full range of nuclear medicine investigations, considering complex facts and involving a range of options.
- Able to manage and deal with complex unpredictable technical/clinical situations.
- Able to use highly developed skills to make analysis, comparisons & interpretations when making decisions.
 Problems may have unique characteristics with no obvious solutions.

SKILLS & ABILITY

DESIRABLE
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Communication

- Able to communicate (verbally/written) detailed, accurate and sometimes highly complex information to staff groups where the subject matter is unfamiliar (eg explaining to medical staff the requirements and limitations of some highly complex investigations and advising what actions should be taken).
- Able to communicate with NHS staff at all levels and grades.
- Able to deliver teaching and training on a wide range of nuclear medicine subjects to junior staff.
- Able to deliver teaching of a wide range of nuclear medicine subjects at locally and nationally organised events or courses.
- Able to deliver teaching and training on complex issues/subjects to a range of staff groups eg presenting to surgeons on sentinel lymph node study days.
- Able to communicate detailed, accurate, sensitive and complex information to patients undergoing diagnostic investigations and therapy procedures.
- Able to present scientific/clinical data at local/national meetings.
- Able to communicate well with all age groups from the very young to the elderly where there will often be barriers to understanding.
- Able to communicate appropriately in difficult, pressured or unpredictable situations and circumstances.
- Able to deal with complaints from patients, relatives and others.
- Able to demonstrate excellent interpersonal skills.

OTHER SPECIFIC REQUIREMENT	
ESSENTIAL	DESIRABLE
Must be able to work across all Trust sites including other Trusts where an SLA is in place (ie BCH at present)	
Personal qualities	





- Able to organise a number of complex activities and demonstrate excellent team working abilities.
- Able to demonstrate excellent leadership and motivational skills.
- Able to demonstrate enthusiasm and show commitment.
- Able to apply own knowledge and skills to identify and develop training plans for individuals and teams
- Able to demonstrate high level of selfmotivation.
- Able to demonstrate a high degree of initiative.

Emotional

- Able to deal with patients who may be upset, angry or confused and suffering a wide range of illnesses including psychiatric disorders and cancer.
- Able to deal with terminally ill patients of all ages (including paediatric) undergoing lengthy procedures.
- Able to show empathy and understanding towards patients of all ages undergoing lengthy investigations; and also to their relatives/carers.
- Able to deal with emergency medical crises including cardiac arrests

Mental

- Able to concentrate for prolonged periods of time eg when analysing and manipulating patient data and when handling and manipulating unsealed radioactive sources and bio-hazardous materials.
- Able to concentrate through frequent interruption and unpredictable work patterns.
- Able to frequently work under pressure and in unpredictable circumstances.
- Able to deal with the pressures of running and delivering an efficient service.
- Able to work within strict schedules and to deadlines.
- Able to deal with enquiries and complaints from patients, colleagues and other staff groups.





Physical

- Possess manual dexterity for the manipulation of laboratory and related equipment eg precision pipetting, preparation of sterile radiopharmaceuticals
- Able to manoeuvre patient wheelchairs, beds, imaging couches and chairs safely at all times.
- Able to manoeuvre medium/heavy equipment eg radionuclide generators, lead collimators, lead shielding
- Able to safely undertake patient transfers from beds and wheelchairs
- Able to perform basic life support

