



JOB DESCRIPTION

AFC No.: PTB0416

JOB TITLE: Clinical Lead Technologist

BAND: 7

DEPARTMENT: Nuclear Medicine

GROUP: Imaging

RESPONSIBLE TO: Chief Technologist in Nuclear Medicine

ACCOUNTABLE TO: Head of Department (scientific and administrative matters)

Consultant in Nuclear Medicine (clinical matters)

JOB SUMMARY

The workload is in in the region of 5,000 patient studies per annum and is extremely varied, and includes cardiac, pulmonary, and gastro-intestinal studies, as well as non-imaging procedures using automatic sample counters. The department has a national (and wider) reputation in nuclear medicine and as such provides specialist scans not available at other smaller centres. We are also a reference training centre for some specialist techniques (e.g., DaTSCAN for Parkinsons disease, VQ imaging and myocardial perfusion studies.) Nuclear medicine team members operate the National Krypton gas generator production and distribution service, which is based at Birmingham University. The post holder will participate in the krypton service (after a period of training) and work on a rota with other members of the team.

The Nuclear medicine Department provides a very comprehensive diagnostic imaging and non-imaging service, and also carries out I131 thyrotoxicosis therapy and Y90 synovectomies. The post holder will act as a senior technologist in Nuclear Medicine, and will work on the City Hospital site, and be based at the University of Birmingham during Krypton production weeks. You will be required to perform the full range of patient investigations both imaging and non-imaging using gamma cameras and associated computer systems, this will include the dispensing and administration of radio pharmaceuticals and the acquisition and analysis of images and non-imaging studies. You will carry out advanced practices including cardiac stressing and radioiodine therapy counselling/administration. The postholder will also be responsible for the continual upkeep of clinical protocols.





MAIN RESPONSIBILITIES:

1. Nuclear Medicine Service

- 1.1. To carry out the full range of nuclear medicine procedures, both imaging and non-imaging studies including complex and non-routine investigations, to Include injection, imaging and data processing of results, working to agreed protocols for most procedures.
- 1.2. Use the established computer protocols to analyse data and produce summary images for reporting.
- 1.3. The post holder will be expected to help organise and monitor the imaging work of the department in the absence of the chief and operational lead technologists, liaising with technologists, medical, nursing and secretarial staff as necessary.
- 1.4. Participate in the department's early/late cover rota.
- 1.5. Be involved in the production of new image protocols/research studies.
- 1.6. Dispense sterile radioactive injections without direct supervision, for parenteral adult and paediatric use following agreed procedures. This involves working in a shielded laminar flow cabinet and dispensing injections quickly and accurately to pre-defined tolerances, retaining due regard to radiation safety principles.
- 1.7. Calculate and adjust dispensed injection volumes with due regard to radioactive decay principles and also as required for paediatric patients and for overweight patients where protocol requires increased activity.
- 1.8. Perform intravenous, subcutaneous and intra-dermal radioactive injections, and take blood samples from patients, following departmental procedures.
- 1.9. For all patient administrations carry out all necessary checks on patient identification, pregnancy and breastfeeding issues, drug history and seek advice if patient circumstances do not comply with written protocols.

2. Prepare Radio-Labelled Meals.

2.1. Work to agreed protocols for all procedures.





- 2.2. To be responsible for the safe use of gamma cameras and other complex high value equipment.
- 2.3. Take responsibility for more junior members of staff, when they are working under the direct supervision of the post holder.
- 2.4. Assist with the immobilisation of babies and toddlers during imaging procedures, to provide high quality paediatric images.
- 2.5. Accurately record receipt, disposal and movement of radioactive materials appropriately.
- 2.6. Follow departmental procedures for the control and disposal of radioactive materials, as determined by the RWA.
- 2.7. Provide advice and technical support to other junior members of staff.
- 2.8. Carry out daily quality control checks on equipment, reporting any problems.
- 2.9. Carry out patient monitoring procedures associated with cardiac stress studies i.e., apply 3 and 12 lead ECG electrodes, and provide ECG traces and BP monitoring.
- 2.10. Administer selected drugs either intravenously or orally as part of the imaging procedure.
- 2.11. Preside over the continual review/update of clinical protocols.
- 2.12. As a senior member of staff, insert venflon needles and assist other members of staff with difficult patients.

3. Krypton Gas Generator Production

- 3.1. After a period of training, participate in the krypton rota producing generators for use by other NHS hospitals. This will require autonomous working during evening shifts to prepare, load, and dispatch generators remaining compliant with GMP at the Cyclotron Unit, University of Birmingham.
- 3.2. There is a daily requirement for the post holder to transfer a limited number of generators by road from Birmingham University to City Hospital.





- 3.3. Regular training sessions will be provided throughout the year to maintain competency.
- 3.4. Complete deviation and error reports as required using a high standard of written English.
- 3.5. Partake in regular feedback meetings with the Krypton Production manager to review documentation and performance.
- 3.6. Liaise with customers in a professional and courteous manner.

4. Advanced Practice

- 4.1. Carry out technologist-led cardiac stressing on rotation, using adenosine and rapiscan as appropriate.
- 4.2. Attend and maintain training in Immediate Life support/Clinical Life support as recommended by the Trust.
- 4.3. Assist doctors carrying out Dobutamine cardiac stress studies.
- 4.4. Counsel patients for radioiodine therapy and administer I131 capsules as part of our outpatient thyrotoxicosis therapy service, with support from MPE and ARSAC license holders.

5. Teaching, Training and Research

- 5.1. Assist in teaching and training other staff (technical, junior medical and scientific) in the basic concepts of nuclear medicine.
- 5.2. Take an active role in research and development.
- 5.3. Present work at scientific meetings
- 5.4. In all matters concerning technical staff, their work and their problems, consult with the Chief technologist in the first instance.

6. Professional

6.1. Contribute to the continued development of departmental policies and procedures.





- 6.2. Attend suitable conferences and seminars and regularly update CPD evidence.
- 6.3. Continue to ensure that all activities carried out meet the requirements of professional standards and regulatory bodies.

CONFIDENTIALITY:

• The post holder must maintain confidentiality of information relating to patients, staff and other Health Service business.

HEALTH AND SAFETY:

- Employees must be aware of the responsibilities placed on them under the Health & Safety at Work Act (1974) and the Manual Handling Operations Regulations (1992). This ensures that the agreed safety procedures are carried out to maintain a safe environment for employees, patients and visitors to the Trust.
- If you are a manager, you will be responsible for the Trust's policy on Health and Safety and for taking all reasonable steps to maintain and where necessary to improve health and safety standards. This will include training to ensure that all employees are able to carry out their health and safety responsibilities effectively.

RISK MANAGEMENT:

• All staff have a responsibility to report all clinical and non-clinical accidents or incidents promptly and, when requested, to co-operate with any investigation undertaken.

EQUAL OPPORTUNITIES:

• The Trust has a clear commitment to its equal opportunities policy, and it is the duty of every employee to comply with the detail and spirit of the policy.

CONFLICT OF INTEREST:

 The Trust is responsible for ensuring that the service provided for patients in its care meets the highest standard. Equally it is responsible for ensuring that staff do not abuse their official position for personal gain or to benefit their family or friends. The Trust's Standing Orders require any officer to declare any interest, direct or indirect with contracts involving the Trust. Staff are not allowed to further their private interests in the course of their NHS duties.





USE OF INFORMATION TECHNOLOGY:

• To undertake duties and development related to computerised information management to meet the changing needs and priorities of the Trust, as determined by your manager and in accordance with the grade of the post.

SAFEGUARDING - CHILDREN/YOUNG PEOPLE AND VULNERABLE ADULTS:

 Every employee has a responsibility to ensure the safeguarding of children and vulnerable adults at all times and must report any concerns immediately as made clear in the Trust's Safeguarding Policies.

INFECTION CONTROL:

The Trust is committed to reducing the risk of health care acquired infection.
Accordingly, it is essential that you adhere to all Trust infection control policies,
procedures and protocols (to include hand decontamination, correct use of PPE
(Personal Protective Equipment) and care and management of patients with
communicable infections). You are required to report any breaches/concerns
promptly using the Trust's incident reporting system.

SMOKING:

 This Trust acknowledges it responsibility to provide a safe, smoke free environment, for its employees, service users and visitors. Smoking is therefore not permitted at any point whilst on duty, in accordance with the guidelines set down within the Trust No-Smoking Policy.

The above duties and responsibilities are intended to represent current priorities and are not meant to be a conclusive list. The post holder may from time to time be asked to undertake other reasonable duties. Any changes will be made in discussion with the post holder in the light of service needs and will be commensurate with the grade and competencies of the post.

I agree that responsibiliti	this Job Description is an accurate reflection of my current role and
Name:	
Signature:	
Date [.]	