

Bwrdd Iechyd Prifysgol Abertawe Bro Morgannwg University Health Board

### ABERTAWE BROMORGANNWG UNIVERSITY HEALTH BOARD

# **JOB DESCRIPTION**

#### **JOB DETAILS**

Job Title:	Radio Pharmaceutical Scientist (Team Leader)		
Grade:	Band 7		
Department:	Directorate of Medical Physics and Clinical Engineering		
Base:	Singleton Hospital		
Division:	Diagnostics, Therapeutics & Community Services		

# ORGANISATIONAL ARRANGEMENTS

Accountable to:	Head of Nuclear Medicine	
Responsible for:	Highly specialised Nuclear Medicine Radiopharmacy Services	
Key Relationships:	Clinical scientists, Clinical technologists, Consultant Clinical Staff including Oncologists, Physicians and Radiologists, Staff Grade Clinical Staff, Nursing Staff, Pharmacy Technical Services, Immunology Service, Radiology Services at Morriston Hospital, Suppliers and Transport services.	

#### JOB PURPOSE

Nuclear Medicine is a highly specialized service providing Radiopharmaceuticals, Diagnostic Investigations, Radionuclide Therapy and DXA scans to patients of Trusts and Local Health Boards in the South West Wales Area.

Within this service the post holder will be part of a highly skilled team involved in the preparation of radiopharmaceuticals under Aseptic Conditions, non imaging diagnostic investigations and radionuclide therapy. Radiopharmaceuticals can be used for diagnosis by demonstrating both physiological and anatomical processes including cancers. They can also be used for treatment of both malignant and non-malignant conditions.

Academic and professional training allows these senior staff to gain the necessary high degree of dexterity required to accurately dispense radiopharmaceuticals, blood and urine samples for diagnostic tests and undertake the highly complex procedure of white cell labelling for infection.

The position includes the handling of radioactive substances within lead shielding on a daily basis.

Team members will have the knowledge and skills to work independently and be able to differentiate between technical and clinical problems

Patients may be paediatric, elderly, infirm, mentally or physically impaired, barrier nursed so the test must be explained in an empathetic manner to ensure the patient's co-operation in these highly complex procedures. Investigations are also carried out on paediatric patients and those who may be barrier nursed.

# **DUTIES AND RESPONSIBILTIES**

#### **Managerial and Organisational**

- 1. To be responsible for the day to day management, organisation and provision of Radiopharmacy services.
- 2. To act as Deputy Production Manager for Radiopharmacy
- 3. To act as COSHH lead for Radiopharmacy to ensure safe handling and storage of chromatography solvents and other chemicals
- 4. To manage Complaints, Change Control, Deviations and Recalls including determination of CAPA and Route Cause Analysis
- 5. To manage the use of Unlicensed Products in Radiopharmacy
- 6. To manage the cleaning of sterile environments, including rotation of sterile disinfectants and biocides.
- 7. To be responsible for planning daily work schedules for the team in Radiopharmacy, Non-Imaging Nuclear Medicine and Radionuclide Therapy.
- 8. To be responsible for stock control of radiopharmaceuticals, ensuring that statutory limits for accumulation and disposal of radionuclides are not exceeded.
- 9. To be responsible for the accuracy of records produced by the Radiopharmacy, Non-Imaging Nuclear Medicine and Radionuclide Therapy services.
- 10. To provide supervision and guidance for junior staff in the performance of their duties

- 11. To act as line manager, including performance of staff appraisals.
- 12. To take a leading role in audits and inspections from external agencies, such as MHRA (Medicines and Healthcare products Regulatory Agency).

#### **Clinical and Technical**

- 1. To prepare radiopharmaceuticals in a Grade A environment (isolators) with a high degree of accuracy and speed to maintain the sterility of the product.
- 2. To act as Radiopharmaceutical Production Checking Officer.
- 3. To perform radionuclide and radiochemical purity testing on prepared radiopharmaceuticals, ensuring their suitability for QC Release.
- 4. To dispense and prepare chromatography solvents for thin layer chromatography.
- 5. To be responsible for ensuring that equipment used within the Radiopharmacy is within specified tolerances by the carrying out routine checks and reporting any abnormalities.
- 6. To dispense diagnostic and therapeutic radiopharmaceuticals within a specified accuracy under clean room (and sometimes aseptic) conditions.
- 7. Aseptic cleaning of sterile environments, including use of detergents, disinfectants and biocides.
- 8. To carry out the highly complex procedure of white cell labelling. This involves the collection of blood samples from patients by venepuncture, the manipulation of blood products under aseptic conditions and their re-injection intravenously back into the patient for diagnostic investigations.
- 9. To be responsible for carrying out Non-Imaging Nuclear Medicine studies, specifically glomerular filtration rate and blood volume analysis, including the collection of blood samples by venepuncture, manipulation of samples, sample counting and calculation of results.
- 10. Administration of Radiopharmaceuticals orally, intradermally or intravenously.
- 11. Ordering of Radiopharmaceuticals on an individual patient basis, taking into account radioactive decay and reference dates.
- 12. To be an approved Operator under Ionising Radiations Medical Exposures 2017 Regulations, (IRMER 2017).

- To prepare transport packaging and shipping certificates for Radiopharmaceuticals in accordance with the Carriage of Dangerous Goods (CDG) Regulations 2009.
- 14. Preparation and decontamination of the designated radionuclide therapy room.
- 15. The decontamination and/or decay storage of radioactively contaminated items.
- 16. To be responsible for the recording of patient data on the designated databases and statistical analysis of the patient data for Nuclear Medicine and the preparation of data for invoicing Private patients, other Health Boards as required.
- To ensure service procedures and maintenance records are maintained accurately for the Radiopharmacy and non-imaging services within Nuclear Medicine
- 18. To ensure the safe use of expensive and complex equipment and for the safety of patients, colleagues and other members of staff.

#### **Policy and Service Developments and Implementation**

- 1. Cooperate with senior staff in the planning of service developments in Nuclear Medicine.
- 2. To develop Capacity Plans for Radiopharmacy.
- 3. To provide assistance with the development of changes in any Directorate Quality System that will have a specific impact in their own area of responsibility but also generally within Nuclear Medicine.
- 4. To provide leadership in the development of changes to Health and Safety Policies that will impact particularly in their own area of responsibility but also generally within Nuclear Medicine.
- 5. To assist the manager of any directorate Quality System in the development and implementation of new policies and procedures.

#### **Teaching and Training**

- 1. Undertake training of junior staff as required.
- 2. To participate fully in the directorates CPD program by attending all necessary manufacturers or suppliers training courses and other relevant associated courses, conferences and seminars.

3. Provide specialised training to other staff from within the Directorate or from other Directorates in Radiopharmacy.

#### **Research and Development**

- 1. To participate in programs of research and development as appropriate to the clinical needs of the Trust.
- 2. To participate in clinical trials as required.
- 3. To provide guidance for junior staff in technical aspects of developments within Radiopharmacy.

# HEALTH AND SAFETY REQUIREMENTS

All employees of the Trust have a statutory duty of care of their own personal safety and that of others who may be affected by their acts or omissions. Employees are required to co-operate with management to enable the Trust to meet its own legal duties and to report any hazardous situations or defective equipment.

### FLEXIBILITY STATEMENT

The content of this Job Description represents an outline of the post only and is therefore not a precise catalogue of duties and responsibilities. The Job Description is therefore intended to be flexible and is subject to review and amendment in the light of changing circumstances following consultation with the post holder.

#### Dr. Neil Hartman Head of Nuclear Medicine REVIEW

This Job description is subject to annual review and any changes shall be discussed with the individual before implementation.

<i>Record of reviews</i> Date	Signature of Post-holder	Signature of Manager/Director