



KENYATTA UNIVERSITY TEACHING, REFERRAL AND RESEARCH HOSPITAL

Kenyatta University Teaching, Referral & Research Hospital (KUTRRH) is in the process of establishing an Integrated Molecular Imaging Centre (IMIC). The Project seeks to establish the first ever public Comprehensive Cancer Centre in the country and the region. The Hospital is therefore seeking to recruit highly transformative and dynamic self-driven individuals with a high degree of integrity, professionalism and competence to fill the following positions in the Centre.

1. NUCLEAR MEDICINE PHYSICIAN - KUTRRH/IMIC/DCSNMPN/276 – 2 POSTS

a) Duties and Responsibilities

- Generate medical information and review patient medical history in order to guide and inform the appropriate diagnosis procedures in the Molecular Imaging Centre (IMIC) and radiology unit of the hospital.
- Receive patients referred from other medical units for PET/CT Scanning, radiologic and other imaging diagnosis and schedule them for the respective radiology and therapeutic procedures in the hospital.
- Perform or interpret nuclear imaging procedures including positron emission tomography (PET), nuclear cardiology treadmill studies in the hospital.
- Prepare comprehensive interpretive reports of findings and communicate examination results or diagnostic information to referring physicians, patients and families in the hospital.
- Provide advanced PET/CT Imaging and other nuclear medicine services in order to diagnose complex or complicated medical conditions among patients in the hospital.
- Examine patients to establish their fit and suitability for administration of nuclear examinations in the hospital.
- Provide counselling to nuclear imaging patients to explain the processes, risks, benefits, or alternative treatments in the hospital.
- Formulate, enforce and ensure radio safety standards and procedures and duly implemented and followed in the nuclear imaging unit of the hospital.
- Develop and monitor procedures to ensure adequate quality control of nuclear imaging and therapeutic services in the hospital.
- Ensure that IMIC Imaging machines, equipment and tools are in good working condition and inform biomedical engineering department of the same for timely and quality imaging services delivery in the hospital.



- Provide clinical research and training to students in the IMIC unit of the hospital
- Mentor and guide junior radiology staff, interns and students in the IMIC unit of the hospital.

b) Minimum Qualifications

- Bachelor of Medicine and Bachelor of Surgery from a recognized institution
- Master of Medicine and/or Fellowship in Nuclear Medicine from a recognized institution or College.
- At least three years' (3) working experience in a busy Nuclear Medicine Department
- Experience with PET/CT and/or SPECT/CT Technology in molecular imaging
- Proficiency in Computer applications
- Knowledge of relevant legislations
- Knowledge of professional standards
- Proven track record of clinical research and training in a reputable institution
- Registration with the Kenya Medical Practitioners and Dentists Council
- Valid Practice License
- Professional Insurance Indemnity Cover
- Registration with The Kenya Nuclear Regulatory Authority

c) Soft skills required

- Communication skills
- Analytical skills
- Observation skills
- Team player
- Compassionate



2. RADIOPHARMACIST/NUCLEAR PHARMACIST - KUTRRH/IMIC/DCSRADP/277 – 3 POSTS

a) Duties and Responsibilities:

- Prepares and dispenses radioactive pharmaceuticals used for patient diagnosis and therapy, applying principles and practices of pharmacy and radiochemistry: Receives radiopharmaceutical prescription from physician and reviews prescription to determine suitability of radiopharmaceutical for intended use.
- Verifies that specified radioactive substance and reagent will give desired results in examination or treatment procedures, utilizing knowledge of radiopharmaceutical preparation and principles of drug biodistribution.
- Calculates volume of radioactive pharmaceutical required to provide patient with desired level of radioactivity at prescribed time, according to established rates of radioisotope decay.
- Compounds radioactive substances and reagents to prepare radiopharmaceutical, following radiopharmacy laboratory procedures.
- Assesses prepared radiopharmaceutical, using measuring and analysis instruments and equipment, such as ionization chamber, pulse-height analyzer, and radioisotope dose calibrator, to verify rate of drug disintegration and to ensure that patient receives required dose.
- Consults with physician following patient treatment or procedure to review and evaluate quality and effectiveness of radiopharmaceutical.
- Conducts research to develop or improve radiopharmaceuticals.
- Prepares reports for regulatory agencies to obtain approval for testing and use of new radiopharmaceuticals.
- Maintains control records for receipt, storage, preparation, and disposal of radioactive nuclei.
- Conducts training for students and medical professionals concerning radiopharmaceuticals use, characteristics, and compounding procedures as well as radiation protection measures.

b) Minimum Qualifications

- Bachelor of Pharmacy degree from a recognized institution
- A Master's degree and/or Fellowship in Radiopharmacy/ Nuclear Pharmacy
- At least three (3) years work experience in a hospital setup with a nuclear medicine department.



- Proficiency in Computer applications
- Knowledge of relevant legislations
- Knowledge of professional standards
- Proven track record of clinical research and training in a reputable institution
- Registration with the Pharmacy and Poisons Board
- Valid Practice License
- Professional Insurance Indemnity Cover

c) Soft skills required

- Communication skills
- Analytical skills
- Observation skills
- Team player
- Compassionate

3. NUCLEAR MEDICINE TECHNOLOGISTS - KUTRRH/IMIC/DCSNMTEC/278 - 9 POSTS

a) Duties and Responsibilities:

- Correctly interpret PET/CT and SPECT/CT Request forms and ensure they have been approved and protocolled by the Nuclear Medicine Physician
- Consult with the Nuclear Medicine Physician in case of any doubt in the requests and/or protocols
- Clerking Patients for Scans
- Explain to the patients the procedure and make sure they understand what to expect at each and every step.
- Reconstitution of Radiopharmaceuticals
- Performing PET/SPECT/Planar Examinations
- Manipulation of the acquired data
- Responsible for patient safety including pre-screening for contraindications, aseptic injection technique, etc. and radiation safety/regulations, including proper documentation and technique when working with radioactive materials/patients
- Troubleshoot the scanner, coach and peripheral equipment
- Maintenance and dissemination of the acquired scans



- Documentation and maintenance of departmental records
- Stock control

b) Minimum Qualifications

- Bachelor Degree or Diploma in Nuclear Medicine or Medical Imaging with additional training in PET/CT and SPECT/CT Technology
- At least three (3) years practicing experience in a busy Nuclear Medicine department.
- Certificate in basic life support
- Computer literate
- Knowledge of relevant legislations
- Knowledge of professional standards
- Proven track record of clinical research and training in a reputable institution
- Up to date certification with The Kenya Nuclear Regulatory Authority formerly Radiation Protection Board

c) Soft skills required

- Communication skills
- Analytical skills
- Observation skills
- Team player
- Compassionate

4. PRODUCTION CHEMIST/ RADIOCHEMIST- KUTRRH/IMIC/DCSRADC/279 - 3 POSTS

a) Duties and Responsibilities:

- Oversight of routine production of both clinical and clinical research PET drug products.
- Responsible for the development of new PET drug products for clinical research and provides instruction/training to PET Radiochemists and CNMTs.
- Ensures daily production and quality control of routine PET drugs is carried out accurately and reliably according to standard operating procedures. Completes synthesis of PET drug products for clinical and clinical research studies, as needed.
- Ensures maintenance of synthesizer modules are completed, when necessary, according to SOP.



- Ensuring analytical and general laboratory equipment is maintained, serviced, and calibrated as necessary.
- Responsible for ensuring the accuracy and completeness of documentation associated with the production and manufacturing of the PET drug products.
- Preparation of documentation associated with manufacture of PET drug products and radionuclides under The Kenya Nuclear Regulatory Authority
- Dispatches commercial PET drug doses.
- Synthesis of radiotracers in the unit

b) Minimum Qualifications Knowledge and Skills

- Master's Degree in chemistry or a chemistry-related field,
- Bachelor's Degree in chemistry or a chemistry-related field
- Background in analytical chemistry, preferably organic chemistry.
- Minimum of three (3) years' experience producing and/or developing PET drug products.
- Experience working with radioactivity such as in a PET radiochemistry laboratory, nuclear medicine environment, or commercial nuclear pharmacy specializing in PET drug production.
- Strong word processing and database skills, specifically with Microsoft Word and Excel.
- Knowledge of relevant legislations
- Knowledge of professional standards
- Up to date certification with The Kenya Nuclear Regulatory Authority formerly Radiation Protection Board
- Proficiency in Computer applications

c) Soft skills required for the job:

- Communication skills
- Analytical skills
- Observation skills
- Team player
- Compassionate



5. QUALITY CONTROL CHEMIST- KUTRRH/IMIC/DCSQCC/280- 2 POSTS

a) Duties and Responsibilities:

- Quality Control of the production process for both clinical and clinical research PET drug products.
- Responsible for the development of new PET drug products for clinical research and provides instruction/training to PET Radiochemists and CNMTs.
- Ensures daily production and quality control of routine PET drugs is carried out accurately and reliably according to standard operating procedures. Completes synthesis of PET drug products for clinical and clinical research studies, as needed.
- Ensures maintenance of synthesizer modules are completed, when necessary, according to SOP.
- Ensuring analytical and general laboratory equipment is maintained, serviced, and calibrated as necessary.
- Responsible for ensuring the accuracy and completeness of documentation associated with the production and manufacturing of the PET drug products.
- Preparation of documentation associated with manufacture of PET drug products and radionuclides under The Kenya Nuclear Regulatory Authority
- Dispatches commercial PET drug doses.
- Synthesis of radiotracers in the unit

b) Minimum Qualifications

- Master's Degree in chemistry or a chemistry-related field,
- Bachelor's Degree in chemistry or a chemistry-related field
- Background in analytical chemistry, preferably organic chemistry.
- Minimum of three (3) years' experience producing and/or developing PET drug products.
- Experience working with radioactivity such as in a PET radiochemistry laboratory, nuclear medicine environment, or commercial nuclear pharmacy specializing in PET drug production.
- Experience in Quality Control in a Nuclear Medicine environment.
- Strong word processing and database skills, specifically with Microsoft Word and Excel.
- Knowledge of relevant legislations
- Knowledge of professional standards



- Up to date certification with The Kenya Nuclear Regulatory Authority formerly Radiation Protection Board

c) Soft skills required

- Communication skills
- Analytical skills
- Observation skills
- Team player
- Compassionate

6. CYCLOTRON OPERATOR - KUTRRH/IMIC/DCSCO/281- 2 POSTS

a) Duties and Responsibilities:

- Operate and manage the cyclotron(s) according to proper operating procedures when manufacturing schedule requires.
- Participate in the initial assembly, acceptance testing and validation of new cyclotron/radiochemistry facility.
- Communicate frequently with the RadioChemistry personnel to coordinate cyclotron daily production activities.
- Oversee the routine, non-routine, scheduled, and emergency maintenance on the cyclotron(s).
- Develop SOPs and documentation related to cyclotron operations per work instructions, including preventative maintenance, repair, and audit logs.
- Oversee the diagnosis and repair on the: Electronic equipment, electro-pneumatic systems, high vacuum systems, deionized chilled water systems, high voltage, target, and high-power RF systems.
- Ensure the maintenance and repair of all equipment at the facility including lead-shielded hot cells, radiosynthesis modules, etc.
- Provide timely information to supervisors regarding equipment operation and status.
- Ensure compliance with all procedures and regulations within the site under the Quality Assurance program as applicable, including participating in exception



document reporting (e.g. deviations, corrective and preventive action plans, out-of-specifications, etc.)

- Provide technical training and support to other employees.
- Other duties as assigned.

b) Minimum Qualifications

- Bachelor's Degree in Nuclear Medicine, Medical Physics, Engineering or a related field
- Master's Degree in a relevant field
- Two (2) years' experience in medical cyclotron operation and maintenance.
- Experience with collecting and analyzing data.
- Experience in pharmaceutical manufacturing in regulated environment, or comparable mechanical, electronic, laboratory background.
- Proficiency in Computer applications
- Knowledge of relevant legislations
- Knowledge of professional standards
- Knowledge of basic GMP practices and procedures.
- Knowledge of Radiation Safety, ALARA Concepts and Radioactive Materials.
- Up to date certification with The Kenya Nuclear Regulatory Authority formerly Radiation Protection Board

c) Soft skills required for the job:

- Communication skills
- Analytical skills
- Observation skills
- Team player
- Compassionate

7. MEDICAL NUCLEAR PHYSICIST- KUTRRH/IMIC/ DCSMNP/282 – 3 POSTS

a) Duties and Responsibilities:

- Apply their knowledge of applied physics, mathematics and biomedical technology to specialized medical equipment that helps examine, diagnose and treat cancer patients in the hospital.



- Use a variety of analytical computer aided and bioengineering techniques such as PET/CT, SPECT CT, x-ray imaging, ultrasound, tomography, radiology, nuclear magnetic resonance imaging and lasers to support radiologists and radiographers and ultra-sonographers in making very precise diagnosis among patients in the hospital.
- Use analytical, computer-aided and bioengineering techniques such as radiation therapy to support radiation oncologists and other radiotherapists in treating their patients in the hospital.
- Work with patients and with a wide range of medical, technical and administrative staff in applying their analytical skills in detecting and preventing radiation leak, exposure and poisoning in the hospital.
- Work with IMIC nuclear technology or medical imaging in order to ensure optimal equipment performance in order to advise and help protect against radiation hazards in hospital.
- Conduct research, develop, implement and evaluate new analytical technology and techniques of new instrumentation or imaging techniques and write reports, and advise the on the same in the hospital.
- Conduct research and training and updating nuclear diagnosis and treatment healthcare, scientific and technical staff, interns and students in the hospital.
- Manage nuclear imaging equipment in the hospital.
- Formulate, review, manage, implement and evaluate, and sustain nuclear, radiology and radiotherapy quality assurance programmes in collaboration with the Radiation Safety Officer of the IMIC.

b) Minimum Qualifications

- Bachelor of Science Degree in Physics, or its equivalent from a recognized institution.
- Post graduate training in Nuclear Medicine Physics
- At least two years working experience as Medical Nuclear Physicist in a reputable hospital.
- Computer literate.
- Knowledge of relevant legislations.
- Knowledge of professional standards.
- Proven track record of clinical research and training in a reputable institution.
- Up to date certification with The Kenya Nuclear Regulatory Authority formerly Radiation Protection Board



c) Soft skills required

- Communication skills
- Analytical skills
- Observation skills
- Team player
- Compassionate

8. RADIATION SAFETY OFFICER - KUTRRH/IMIC/ DCSRADSO/283 – 1 POST

a) Duties and Responsibilities:

- Ensure that radiation protection procedures in the daily operation of the facility are developed, distributed, implemented and are up-to-date.
- Ensure possession, use, and storage of licensed material are consistent with the limitations in the license, the regulations, the NSSDR Certificate(s), and the manufacturer's recommendations and instructions.
- Ensure individuals installing, relocating, maintaining, or repairing devices containing sealed sources are trained and authorized
- Ensure training of personnel is conducted and is commensurate with the individual's duties regarding licensed material.
- Ensure that any activity involving licensed material, that the RSO considers unsafe, is stopped.
- Determinations that individuals are not likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits.
- Documentation as to issuance of dosimetry if an individual(s) is determined to be likely to receive, in one year, a radiation dose in excess of 10% of the allowable limits.
- Ensure that when necessary, personnel monitoring devices are used and exchanged at the proper intervals, and records of the results of such monitoring are maintained.
- Licensed material is properly secured.
- Verify that the total effective dose equivalent does not exceed the annual limit for members of the public. This determination is to be documented by measurement or calculation.



- Ensure proper authorities are notified of incidents such as loss or theft of licensed material, damage to or malfunction of sealed sources, and fire.
- Ensure medical Events are investigated and reported
- Ensure audits of the radiation protection program are performed and documented at least annually.
- Ensure violations of regulations or license conditions or program weaknesses are identified, effective corrective actions are developed, implemented, and documented, as needed.
- Ensure an up to date licence of the facility is maintained and that amendment and renewal requests are submitted.

b) Minimum Qualifications and Skills

- Bachelor of Science Degree in Physics, or its equivalent from a recognized institution.
- Post graduate training in Nuclear Medicine Physics
- At least two years working experience as a Radiation Safety Officer in a reputable hospital.
- Proficiency in Computer applications
- Knowledge of relevant legislations.
- Knowledge of professional standards.
- Proven track record of clinical research and training in a reputable institution.
- Up to date certification with The Kenya Nuclear Regulatory Authority formerly Radiation Protection Board

c) Soft skills required

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All the positions listed above will be on Permanent and Pensionable Terms of Service. If your background and competencies match the specifications of any of the posts above, please apply online via: www.kutrrh.go.ke/careers OR send hard copies of your **Application Letter, Curriculum Vitae and Filled Application Form ONLY** to the address below:



**The Chief Executive Officer
Kenyatta University Teaching, Referral & Research Hospital
P.O. Box 7674 – 00100 GPO
Nairobi Kenya**

For all applications, please indicate the subject as follows: **JOB APPLICATION – [JOB REFERENCE NUMBER]**. Please note that you have to attach the *Application Letter, Curriculum Vitae and Filled Application Form* when you apply online via the portal.

The deadline for the receipt of all applications is **15th June 2020**.

Only shortlisted candidates will be contacted.

All shortlisted candidates must fulfill the requirements of Chapter Six of the Constitution of Kenya 2010, including;

- Certificate of good conduct from the Directorate of Criminal Investigations
- Clearance Certificate from the Higher Education Loans Board (for University graduates only)
- Tax Compliance Certificate from the KRA
- Clearance from Ethics & Anti-Corruption Commission
- A report from an approved Credit Reference Bureau

Please take note that all communication to potential candidates is specifically through the official emails/ Phone numbers

Any form of canvassing will lead to immediate disqualification.

KUTRRH is an Equal Opportunity Employer