Leader: Ms Liz Parkinson
Credit points: 3
Prerequisites: NMS5020, RTS5022
Co-requisites: NMS5024

Synopsis:
Clinical experience in PET, hybrid imaging and CT relevant to the use of hybrid imaging systems. Participation in radionuclide therapy (including iodine ablation therapy). Continued experience in paediatric studies and non-imaging studies. Radiopharmaceutical administration. Quality assurance procedures in the clinical setting. Students will also gain experience in complimentary imaging modalities including sonography, MRI and DEXA. Additional experience in routine nuclear medicine.

Objectives:
Through appropriate rostering, students will extend their clinical knowledge, understanding and skills addressed in Nuclear medicine and radiopharmacy 3 and Physics and Instrumentation 2. This clinical placement will also contribute to the learning outcomes for Evidence based practice in Medical Radiations. Upon completion of this unit students will be able to practice as follows, to the level of a competent nuclear medicine scientist:

1. Conduct, modify and adapt routine and advanced nuclear medicine imaging and non-imaging studies and techniques, in relation to patient status, clinical question, procedural variations, patient or professional communication, image evaluation, organisational or legal obligations;
2. Prepare and administer radiopharmaceuticals for diagnostic purposes (intravenous administration exempted).
3. Prepare and administer oral Iodine-131 radionuclide therapy and manage patient requirements;
4. Facilitate administration of other radionuclide therapies and manage patient requirements;
5. Participate in CT examinations and demonstrate understanding of relevant techniques, radiation protection strategies, quality assurance principles and organisational and legal obligations pertinent to diagnostic hybrid imaging systems;
6. Recognise imaging / sectional anatomy as presented by CT.
7. Display a commitment to quality management, and perform quality control procedures;
8. Manage a camera room, hot laboratory/radiopharmacy practices;
9. Demonstrate effective communication skills with clinical staff and patients (and their carers), provide a safe working environment, demonstrate effective work practices, and conduct nuclear medicine studies in a professional and ethical manner.
10. Identify ongoing personal learning goals in respect to the continued development of professional expertise in nuclear medicine.

Assessment
Learning contract + Case reports related to examinations and patient interactions + Clinical skills assessment + Clinical studies professional portfolio

Off-campus attendance requirements:
Placement for 14 continuous weeks in a clinical nuclear medicine centre (5 weeks academic credit, 9 weeks professional credit).