RTS4025 CLINICAL STUDIES 3

Leader: Ms Liz Parkinson
Credit points: 3
Prerequisites: RTS4000, NMS4021, RTS4020, RTS4022,
Co-requisites: RTS4023, RTS4024

Synopsis:
SPECT and gated nuclear medicine imaging studies. Further experience in routine planar imaging studies and patient care. Studies primarily on a range of adult patients, however students will be introduced to paediatric, geriatric and patients of non-English speaking background and those with special needs. Introduction to pharmacological interventions, common study contraindications and digital image processing. Quality assurance procedures in respect to imaging studies, equipment and radiopharmaceutical preparation. During this clinical rotation, students will gain the equivalent of one week of experience in the hot laboratory/radiopharmaceutical dispensing.

Objectives:
Through means of appropriate rostering and clinical supervision, students will continue to gain experience in the imaging and radiopharmacy practices addressed in Nuclear Medicine and Radiopharmacy 1, Physics and Instrumentation 2 and Professional Practice 3. Upon successful completion of this unit, students will be able to:

1. Implement and adapt appropriate routine planar nuclear medicine imaging studies on adult patients with minimal supervision;
2. Implement basic SPECT and gated acquisitions on adult patients and conduct more complex imaging acquisitions under supervision;
3. Demonstrate beginner level expertise in digital image processing;
4. Demonstrate beginner level expertise in diagnostic radiopharmaceutical preparation and dispensing;
5. Apply quality assurance principles to nuclear medicine imaging systems and radiopharmacy procedures;
6. Evaluate routine imaging studies in terms of patient presentation, the clinical question, radiopharmaceutical biodistribution, results obtained, additional views or requirements and image quality;
7. Identify personal learning goals in respect to the development of professional expertise in imaging studies;
8. Appreciate the nature of the professional inter-relationship between all members of the nuclear medicine team during imaging procedures.
9. Demonstrate effective work practices, including the management of resources.
10. Provide a safe work environment, by practising the principles of radiation safety and protection, occupational health and safety, and infection control for patients, themselves and staff;
11. Demonstrate effective communication skills with clinical staff and patients (and their carers), and conduct nuclear medicine studies in a professional and ethical manner.

Assessment:
Case reports related to examinations and patient interactions + Clinical skills assessment (imaging & radiopharmacy) + Clinical studies professional portfolio

Off-campus attendance requirements:
Placement for 5 continuous weeks in a clinical nuclear medicine centre (4 weeks academic credit, 1 week professional credit).