A) **General Description:** The Department of Diagnostic Radiology offers two-week elective experiences at each of the three teaching hospitals.

The elective will involve a rotation through each of the following imaging modalities: plain films, ultrasound, CT, MRI and interventional radiology. In addition, the student will be scheduled to spend time reporting with both residents and staff radiologists. The student will also be given learning modules and assigned readings to further enhance their radiological knowledge. Students will be assigned AM and PM half days in the various subspecialty areas, with some time left free for self-study. It will be an expectation that the students attend every day of the 2-week session. The student is welcome to also attend rounds and encouraged to attend the Academic Afternoon sessions held every Thursday afternoon along with the residents.

Elective students are selected via lottery with a maximum of three students accepted per two-week block – 1 student at Victoria Hospital, 1 student at University Hospital and 1 student at St. Joseph’s Hospital (**with a maximum of one 2 week elective allowed per student**). The policy of three students per block will be adhered to.

On the first day of the elective, students should report to Dr. Pandey at UH (2nd floor, Radiology Department), Dr. Brahm at VH (Room D1-140), and Vickie Kline at SJH (C0-234, Diagnostic Imaging Department).

Elective students may choose to spend part of their time in the Nuclear Medicine departments of each hospital. The students will be exposed to a variety of clinical cases. There will be ample time provided for reading and use of other instructional resources.

B) **Learning Objectives**

At the conclusion of the elective, the student should:

- Be able to initiate appropriate radiologic procedures for checking clinical hypotheses
- Acquire information required to solve problems from the diagnostic imaging tests
- Abide by the principles in the Code of Ethics as published by the Canadian Medical Association and keep informed of changes in the code
- Apply the concept of cost-effectiveness to public health interventions as they pertain to diagnostic and interventional radiology
- Demonstrate skill in self-directed learning by:
  - Ability to identify areas of deficiency in one’s own knowledge and skills.
  - Ability to find appropriate educational resources.
  - Ability to evaluate personal learning progress.
Ability to use new knowledge in the care of patients.
- Opportunity to learn and apply the scientific method.
- Determine the validity and applicability of published data through critical appraisal.
- Develop the self-knowledge necessary for personal growth and continuous learning.
- Develop the ability to work effectively as a member of a team, as participant or leader.
- Demonstrate skill in finding common ground when differences of opinion exist.
- Demonstrate the ability to communicate effectively with peers and colleagues by contributing to productive communication and co-operation among colleagues engaged in education, research, and health care.
- Establish effective relationships with colleagues and other members of the health care team by:
  - Considering their suggestions and criticisms.
  - Tactful handling of differences of opinion.
  - Providing support and direction to less experienced personnel.
  - Recognize personal biases and ensure that they do not interfere with the patient’s best interests.
- Use the concepts of evidence-based medicine to guide patient care decisions.
- Develop an awareness of personal assets, biases, and limitations.
- Be willing to seek help, advice or consultation when needed.

In addition, while on the elective, the student should:

- Have seen many of the diagnostic and interventional procedures performed in radiology.
- Have an organized approach to analyzing common examinations.
- Be able to understand the various diagnostic procedures in an efficient manner.
- Have taken an active part in the day-to-day operation of the department, including all resident rounds and seminars.

C) Type of Clinical Experience
   In-patient and out-patient

D) Night and Weekend Call
   Yes ( )
   No (X)

E) Evaluation Procedure
   Informal: based on attendance, enthusiasm and clinical knowledge.

F) Number of Students Accepted
   Each Block: Three students per block city-wide.

G) Other Comments, Regulations or Expectations:
A wide variety of clinical problems are seen in the Department of Medical Imaging every day. The student is expected to show initiative in seeing as much as possible while in the department. The amount of direct one-on-one personal instruction will vary depending on workload, personnel, holiday and conference time. Students will be encouraged to utilize self-learning teaching aids (i.e. teaching file, computer video disks, CD-ROMS, etc.) at each hospital. Special requests will be taken into consideration, where possible. Absences will be recorded (see “E” above).
NUCLEAR MEDICINE

PROGRAM DIRECTOR: Dr. Cigdem Akincioglu

EDUCATION COORDINATOR: Carol Anderson
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Carol.anderson@lhsc.on.ca

A) General Description: The Department of Nuclear Medicine offers electives to undergraduate medical students. The time frame of the elective is at the request of the student and can range between two weeks and one month. The elective will include rotation through general nuclear medicine, nuclear cardiology and PET/CT and may take place at one or a combination of sites including University Hospital, Victoria Campus and St. Joseph’s Hospital. The student will spend time with nuclear medicine residents and staff during case review and reporting. Students are encouraged to attend morning rounds when available and nuclear medicine resident academic half-day.

The elective with the Department of Nuclear Medicine can be arranged through Carol Anderson via the contact information listed above.

B) Learning Objectives

Primary objectives:
1. To observe and become familiar with standard nuclear medicine studies such as bone scans, renal scans, cardiac nuclear imaging, gastric emptying exams, PET/CT, hepatobiliary imaging, imaging of infection and inflammation, ventilation perfusion lung scans, pediatric nuclear medicine imaging, sports nuclear medicine, bone mineral densitometry and nuclear neuroimaging. (Medical expert)

2. To observe and participate in the administration of radionuclide therapies for the treatment of thyroid malignancy, benign thyroid disease, and neuroendocrine malignancies. (Medical expert)

3. To attend academic sessions such as nuclear medicine resident half-day which may include clinical didactic rounds, the radiopharmacy course and the nuclear medicine physics course; to attend nuclear medicine grand rounds and interesting case rounds when available. (Medical expert, Scholar, Professional)

Secondary objectives:
1. Discuss clinical cases with residents, fellows and consultants. (Communicator)
2. Interview patients for selected procedures (diagnostic and therapeutic) to assist in protocol selection, study interpretation and therapeutic intervention. (Medical expert, Communicator, Manager)
3. Work effectively with residents, fellows, technologists, nurses and consultants to deliver effective patient care. (Collaborator)
4. Research topics of academic interest for discussion and/or presentation with team. (Medical Expert, Scholar)

Number of Students Accepted: 1 student per block