Postgraduate Medical Education
UNIVERSITY OF TORONTO

Educational Objectives for Clinical Fellowship

This form is for recognized specialists whose postgraduate medical training program is designed to give them additional expertise but does not lead to additional credentials for practice. The College of Physicians and Surgeons of Ontario (CPSO) requires the submission of a statement of objectives before issuing a postgraduate education certificate of registration for a clinical fellowship appointment.

☒ Fellowship
☒ SEAP – Subspecialty Examination Affiliate Program
☐ AFC – Areas of Focused Competence Diploma Program

Trainee Information

Name of Clinical Fellow: _____ _____
First name *Last name*

Specialty Certification:

Title of Certification: Diagnostic Radiology

Country Issuing Certification: _____

General Information

Department Name: Medical Imaging

Division Name (If applicable): _____

Name of Fellowship (*Will appear on the Certificate of Completion issued by PGME – please inform PGME of any changes to name of fellowship*): Diagnostic Neuroradiology

Fellowship Site: Toronto Western Hospital-Sunnybrook Health Sciences Centre-St Michael's Hospital-Princess Margaret Cancer Centre-Mount Sinai Hospital-Hospital for Sick Children

Fellowship Start Date: _____ End Date: _____
Month, Day, Year *Month, Day, Year*

If re-appointment:
Reappointment Start Date: _____ End Date: _____
Month, Day, Year *Month, Day, Year*

Name of Supervisor: Dr. Matylda Machnowska, Neuroradiology Program Director

Fellowship Overview

Please provide a brief statement of the clinical focus and educational purpose of the fellowship:
The answer space below will expand to accept point form or paragraph entries. If this fellowship is a re-appointment, please describe the clinical focus and educational purpose of the re-appointment only.

Neuroradiology is the organ/system-based subspecialty of Diagnostic Radiology dedicated to diagnosis and some interventional treatment of diseases of the brain, head & neck, and spine regions utilizing neuro-imaging.

GENERAL GOALS AND OBJECTIVES of 2-Year Neuroradiology Training Program
(For those who choose to take one year of the program only, the goals and objectives are the same, though trainees will achieve less skill and confidence without the full program.)

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Fellowship Objectives: CanMEDS Roles

Where applicable, please provide objective(s) for each of the following:
The answer space below will expand to accept point form or paragraph entries; enter "N/A" if individual CanMEDS role is not applicable

1. Medical Expert

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centered care. Medical Expert is the central physician Role in the CanMEDS framework

a) To become expert in diagnostic skills relevant for diagnosis and to allow therapeutic decisions for ethical & effective patient care
b) To access and apply relevant information to clinical practice
c) To demonstrate effective consultation services with respect to relevance of neuro-imaging studies in relation to patient care, education, and legal opinions
1.1) to acquire an understanding of the physical and technical aspects involved in the formation of images in computer tomography, magnetic resonance imaging, angiography and conventional (plain film) imaging
1.2) to understand the strengths and weaknesses of conventional film, ultrasound/doppler, nuclear medicine, computer tomography, magnetic resonance and angiography as they relate to neuroradiology
1.3) to develop skills in the use of computers in both image acquisitions and post processing
1.4) to develop procedural skills which will include: fluoroscopy, biopsy techniques and angiography
1.5) to become competent in the treatment of medical emergencies and complications related to radiological procedures
1.6) to provide a differential diagnosis based on imaging highlighting the diseases that are most likely
1.7) to recognize anatomical variations
1.8) To recognize artifacts and be able to suggest methods to eliminate them
1.9) To acquire a sound knowledge of the basis of interventional neuroradiology including indications, techniques and clinical outcomes
1.10) to acquire a sound knowledge of natural history, anatomy, physiology, pharmacology, pathology and treatment of diseases related to Neuroradiology

2. Communicator

As Communicators, physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

a) To establish relationships with referring physicians as advocate for patients and families
b) To obtain and synthesize relevant history and information from referring physicians, patients, and families
2.1) To effectively communicate with patients and with other health care professionals
2.2) To maintain complete and accurate medical records

3. Collaborator

As Collaborators, physicians effectively work within a healthcare team to achieve optimal patient care.

a) To effectively consult with other physicians and health care professionals
b) To contribute effectively to inter-disciplinary team activities
c) To provide neuroimaging for optimal patient care, education and research
3.1) To effectively teach other physicians and health care workers regarding the role of medical imaging and its limitations
3.2) To counsel health care professionals on appropriate imaging for various health problems

4. Leader

As Managers, physicians are integral participants in healthcare organizations, organizing sustainable practices, making decisions about allocating ***resources****, and contributing to the effectiveness of the healthcare system.*

a) To utilize time and scarce imaging resources effectively to balance patient care, learning needs, outside activities
b) To allocate finite neuroimaging for health care and health education resources wisely
c) To utilize information technology to optimize patient neuroimaging care, continued self-learning and other activities
4.1) to direct imaging algorithms based on clinical history and findings
4.2) to assign protocols for imaging studies

4.3) to monitor imaging studies and appropriately modify the protocol based on the findings

5. Health Advocate

As Health Advocates, physicians responsibly use their expertise and influence to advance the health and well- being of individual patients, communities, and populations.

a) To recognize and respond to those issues where advocacy is appropriate, especially for the timely and judicious utilizing of scarce neuroimaging resources
b) To identify important determinants of health affecting patients
c) To contribute effectively to improved health of patients and communities
5.1) to triage physician requests regarding the urgency of an imaging study
5.2) to understand the fundamentals of quality assurance

6. Scholar

As Scholars, physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

a) To develop, implement and document personal continuing education strategy
b) To critically appraise sources of medical information
c) To facilitate learning of patients, students, residents and other health professionals
d) To contribute to the development of new knowledge
6.1) to maintain current practice standards through continuing medical education
6.2) to critically appraise the neuroradiology literature
6.3) develop skills in the use of computers in both image acquisitions and post processing
6.4) to understand the methodology of clinical research and appreciate the importance of basic research and outcome analysis

7. Professional

As Professionals, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

a) Delivers highest quality care with integrity, honesty, and compassion
b) Exhibits appropriate personal and interpersonal professional behaviors
c) Practices neuroradiology ethically consistent with obligations of a physician
7.1) suggest appropriate follow-up and management whether it be conservative, medical, surgical or further imaging
7.2) to appraise his/her own professional performance

Additional Comments *(Optional)*

On completion of the University of Toronto Residency program in Neuroradiology the graduate physician will be competent to function as a consultant Neuroradiologist. The expertise will include medical imaging of spine, head and neck, spinal cord and brain in both children and adults.