



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: Radiology

Country Issuing Certification: _____

General Information

Department Name: Medical Imaging

Division Name (If applicable): Neuroradiology

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

Fellowship Site: Toronto Western Hospital

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: Paula Alcaide Leon

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.*

The Joint Department of Medical Imaging at the University of Toronto is pleased to offer a 1-year clinical neuroradiology fellowship position with a focus on advanced neuroimaging techniques. This fellowship is



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designed for aspiring academic neuroradiologists seeking to expand their expertise in the latest advanced MR techniques while strengthening their clinical neuroradiology skills. Participants will have the opportunity to work alongside world-class experts, gain hands-on experience with state-of-the-art imaging technology, and contribute to cutting-edge research projects.

Program Highlights:

1. **Comprehensive Training on advanced neuroimaging:** The fellow will train on acquisition, post processing and interpretation of advanced MRI techniques, including perfusion MRI (ASL, DCE, DSC and SAGE), CVR, MR spectroscopy, fMRI, DTI, QSM, SMWI and vessel wall imaging.
2. **High volume neuro-oncology and movement disorders clinics:** The neuro-oncology clinic at the University Health Network is a national and international referral center caring for 200 patients with newly diagnosed primary nervous system tumors, and around 1,000 patients with brain metastasis each year. The Edmond J. Safra movement disorder clinic is world renowned and receives over 9,000 visits per year. The fellowship presents an exceptional opportunity for fellows to actively participate in MR-guided focused ultrasound treatments for movement disorders, including essential tremor and Parkinson's disease. This hands-on involvement allows fellows to gain invaluable experience in this cutting-edge field.
3. **State-of-the-Art Facilities:** Fellows will have access to cutting-edge imaging facilities equipped with the latest technology. From high-field MRI research scanners including a 3T PRISMA to a PET/MR system, participants will gain hands-on experience with the most advanced tools used in clinical and research settings.
4. **Busy neuroradiology service with 14 clinical MRI scanners including four 3T and over 14 CT scanners.** The exposure to high volume of complex cases will strongly enhance the clinical skills of the fellow.
5. **Multidisciplinary collaboration:** Fellows will actively participate in multidisciplinary rounds, gaining valuable insights from clinicians and learning about challenging cases. The fellowship fosters collaboration with a diverse team of experts, including neuroradiologists, neurologists, neuropsychologists, neurosurgeons, and researchers. Fellows will benefit from engaging with professionals from various disciplines, broadening their perspectives and enriching their learning experience.
6. **Focus on clinical translation:** Fellows will be encouraged to participate in ongoing pilot projects focused on the clinical translation of advanced imaging techniques. This includes the implementation of advanced image post-processing in routine clinical practice and the use of AI-assisted diagnosis. Fellows will actively contribute to the advancement of neuroimaging technology in clinical settings.
7. **Research Opportunities:** Fellows will have 20% protected research time, enabling them to actively participate in research projects. This emphasis on research allows fellows to make meaningful contributions to the field and stay up to date with the latest developments. Fellows will have opportunities to present their research findings at national and international conferences, expanding their professional network and visibility within the field.
8. **Mentorship and Guidance:** Participants will receive personalized mentorship and guidance from experienced faculty members who are at the forefront of neuroimaging research and clinical practice. Mentors will provide valuable insights, support research initiatives, and help fellows navigate their professional growth.
9. **Professional Development:** The fellowship offers 10% protected teaching time, which includes engaging in a city-wide neuroradiology case conference and attending staff lectures. We are committed to the professional development of participants and provide access to a wide range of educational resources, including conferences, lab meetings, workshops, and seminars.
10. **Academic Recognition:** Upon successful completion of the fellowship, participants will receive a prestigious certificate from the University of Toronto, acknowledging their specialized training in advanced neuroimaging. This recognition will serve as a testament to their expertise and dedication, enhancing their career prospects and opening doors to further research or academic opportunities.



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

- Acquire proficiency in the acquisition, post-processing, and interpretation of advanced MRI techniques.
- Demonstrate clinical expertise in diagnosing and managing patients with neurological diseases with an emphasis in neuro-oncological and movement disorders.
- Gain hands-on experience with MR-guided focused ultrasound treatments for movement disorders.

2. Communicator

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

- Effectively convey imaging findings to multidisciplinary teams, ensuring the integration of imaging data in clinical decision-making.
- Maintain open and empathetic communication with patients, ensuring they are well-informed about their diagnostic procedures and results.

3. Collaborator

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

- Actively engage in multidisciplinary rounds, contributing neuroradiology insights to patient care discussions.
- Foster collaborative relationships with professionals from various disciplines, including neurologists, neuropsychologists, neurosurgeons, and researchers.

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.*

- Contribute to the implementation of advanced imaging techniques in clinical settings.
- Take initiative in enhancing the clinical and research capabilities of the neuroradiology service.

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.

- Champion the application of cutting-edge imaging technologies in improving patient outcomes, especially in the context of neuro-oncology and movement disorders.
- Advocate for the optimal use of advanced imaging modalities to enhance patient care.

6. Scholar

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

- Engage in research projects with an emphasis on the clinical translation of advanced imaging techniques.
- Stay updated with the latest advancements in the field, and present research findings at national and international conferences.

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.



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- Adhere to the highest standards of professionalism, upholding ethical considerations in both clinical and research settings.
- Commit to continuous self-assessment, mentorship, and growth, seeking feedback and striving for excellence in the practice of neuroradiology.

Additional Comments *(Optional)*
