

Department of Clinical Neurological Sciences
Cerebrovascular Disease Fellowship

(1) Name of Fellowship:

Cerebrovascular Disease Clinical fellowship

(2) Duration

- ▶ We offer three levels of stroke certification for fellows based on the Canadian Stroke Consortium National Fellowship certification program, tailored to their objectives:
 - ▶ **o Stroke Certificate: 6 months**
 - ▶ **o Stroke Expert: 1 year**
 - ▶ **o Stroke Scholar: 2 years**

(3) Fellowship Supervisor(s):

Drs. Chrysi Bogiatzi, Sebastian Fridman, Alexander Khaw, Lauren Mai (**Fellowship Program Director**), Jennifer Mandzia, Luciano Sposato.

(4) Description:

London Health Sciences Center is the regional academic Stroke Center for the Southwestern Ontario Region. It has a 31-bed stroke unit which includes 6 beds in a level 2 unit for the management of the hyperacute stroke patient. It has a dedicated Urgent Stroke Prevention and TIA clinic which runs 5 days per week (seeing over 2000 referrals per year). The endovascular thrombectomy service is growing rapidly and in 2021/2022 fiscal year 196 mechanical thrombectomies were performed. The stroke program is an internationally recognized interdisciplinary group of neurologists, neuroradiologists and neurosurgeons with strong interests in education, research, and stroke policy and advocacy. There are numerous educational and training opportunities for fellow training.

Fellows will have a supervised experience in the assessment and management of patients with stroke and TIA, including diagnosis, investigation, and treatment, in the ambulatory clinic, emergency department, and in-patient settings. They will have additional opportunities to be involved in research activities including project study design and analysis, participation in ongoing investigator-initiated research projects and training in medical writing. We have an active stroke research office, participating in both international trials and local investigator-initiated studies. Our fellows receive the training and experience to conduct clinical research as investigators. They will play an active role in teaching medical students, residents, and other fellows. They will gradually build up their competency to the level of junior consultant.

(5) Learning Objectives:

Upon completion of the fellowship, the trainee will be a skilled stroke neurologist capable of independently:

- a) Diagnosing and managing acute ischemic stroke patients and making decisions for revascularization therapy including IV thrombolysis and endovascular thrombectomy.
- b) Distinguishing common stroke mimics.
- c) Managing acute intracranial hemorrhage and its complications.

- d) Diagnosing and managing acute and chronic post stroke complications including malignant cerebral edema, post tPA intracranial hemorrhage, and seizures.
- e) Identifying stroke etiology, syndromes and risk factors.
- f) Applying secondary stroke prevention strategies, including patient education.
- g) Critically appraising the stroke literature.
- h) Developing a research question, and with the help of the supervisor carrying out or participating in a research or quality improvement project.
- i) Teaching trainees and continue to participate in self-directed life-long learning

(6) Curriculum:

The curriculum is based on the Canadian Stroke Consortium National Stroke Fellowship Certification Program (<https://strokeconsortium.ca/fellowship-certification-program-info>) and adapted to meet the required standards. All fellows are expected to enroll in the program, complete the requirements and sit for the final written exam. For foreign trained fellows they will need to complete a 3-month pre-assessment evaluation period (PEAP) at the beginning of their fellowship.

Minimum requirements

The number of blocks will vary depending on the duration of the fellowship. For fellows completing a second year of the training (scholar stream) time will be devoted to the fellow's research or quality improvement project. During this time, reduced clinical service is required. If the second-year fellowship is more clinically oriented, the fellow will have more time for clinical electives.

By the end of the first-year fellows will have completed up to:

- 1) 4-6 months on the CTU stroke service (includes acute and hyperacute stroke unit, stroke protocols in the Emergency Department)
- 2) 4-6 months in the outpatient setting (Stroke prevention Clinic and general stroke clinic)
- 3) Up to 2 months for clinical electives in interventional neuroradiology, neurocritical care, and/or physiatry/rehabilitation medicine. Other clinical electives will be considered.

Dedicated Stroke Fellow Teaching & Learning Opportunities

- a) Recommended reading of key articles and guidelines.
- b) Participation in local bi-weekly Stroke Fellow Seminars.
- b) Attendance at bi-weekly acute stroke rounds, stroke journal clubs and monthly National Stroke Fellow rounds.
- d) The fellow is expected to be involved in one research project. Quality improvement initiatives and projects count as research projects.

(7) Service expectations:

Fellows will rotate through either the outpatient or inpatient settings at a given time (see above for curriculum).

- a) While on the outpatient setting they will do up to 4 half day clinics per week in either the TIA stroke prevention clinic or the consultant's general stroke clinic.
- b) Fellows will rotate for up two weeks at a time on the inpatient CTU stroke service. This includes attending acute stroke protocols and consults in the emergency department and in hospital code strokes. This includes managing patients in the hyperacute stroke unit.
- c) Calls will take place during nights and weekends. The fellow may do up to 4 calls per month (maximum of two 24-h weekend days in a standard 28-day block). On-call,

fellows will participate in hyperacute stroke management and inpatient care, but will not be first-call for ward issues and generally will function in the role of a junior consultant.

- d) On clinical Electives- service requirements will be determined by the clinical elective supervisors.

(8) Academic expectations:

- a) For the fellows in the scholar stream, with the help of the supervisors, the candidate will be expected to participate in one research project with the goal of submitting and/or publishing one paper during their fellowship.
- b) The trainee will be encouraged to present these results at one scientific meeting.
- c) Completion of the curriculum of the Canadian Stroke Consortium Fellowship Certification Program and additional requirements based on certification level.

(9) Assessment:

- a) Direct evaluation of clinical and educational activities, and research activities by the supervisors.
- b) Regular feedback from other members of the stroke team (e.g. nurses, non-stroke neurologists, allied health team).
- c) Quarterly written evaluations per PGME requirements
- d) Completion of EPAs per Canadian Stroke Fellowship Training Program and other requirements for the program.

(10) Funding:

\$60, 000 + statutory benefits in Canadian dollars per year before taxation. Fellows who have scholarship funding will be topped up to the above salary.

(11) Vacation entitlement:

Four weeks of vacation per year