



University of Toronto

CARDIAC IMAGING

GENERAL INFORMATION

Location	University Health Network (Toronto General, Toronto Western, Mount Sinai, Princess Margaret, Women's College hospitals) Toronto, Ontario, Canada
Duration	12 months
Deadline for Applications	Early PGY4
Number of Fellowship Positions	<p>There are currently three funded clinical fellowship positions available with the possibility of a self-funded position if there is an appropriate candidate. There is no distinction among applicants based on nationality.</p> <p>Eligibility criteria are:</p> <ul style="list-style-type: none"> • Certification by the Royal College of Physicians and Surgeons of Canada in Diagnostic Imaging or • American Board of Radiology certified/eligible or • Certified with equivalent qualifications and • Proficient in both written and spoken English.
Fellowship Website	http://medical-imaging.utoronto.ca/Cardiac-Fellowship
Contact Information	<p>Fellowship Director: Dr. Mini Pakkal mini.pakkal@uhn.ca</p> <p>Fellowship Coordinator/Administrator: Amy Shea Fellowship Program Assistant Tel: 416-978-0514 a.shea@utoronto.ca</p>

WORKFLOW

<p>General structure</p>	<p>The fellowship lasts 12 months with time evenly split between cardiac MR and CT. 80% of the fellowship is clinical and 20% is dedicated to research. It is the fellow's responsibility, under appropriate supervision, to triage, protocol, monitor and report CMR and CT cases. The fellows attend and present cases at the weekly, multidisciplinary Adult Congenital Heart conferences. After the initial 6 months of the cardiac fellowship, candidates have an option to be integrated into a busy chest radiology service (38,000 Chest CT, 120,000 chest radiographs per year) for one week every month, for the remaining 6 months of the fellowship to allow concurrent training in thoracic imaging.</p> <p>Cardiac MR: There is a large clinical caseload, ~2500 per annum comprising approximately 40% complex adult congenital heart disease, 40% acquired heart disease (viability studies, cardiomyopathies, cardiac masses), the remaining 20% focus on the thoracic aorta.</p> <p>Cardiac CT: The current clinical caseload, ~1800 cases per annum comprising 85-90% CT coronary angiography and calcium score CT, the remaining 10-15% focus on assessment of pulmonary veins pre and post ablation and complex congenital heart disease (one of the largest adult congenital heart disease CT programs in the world performing 80 such studies a year for this indication).</p> <p>Fellows are also eligible to complementary participation in the Level 2 Cardiac CT course run from the University of Toronto Advanced Imaging and Education Center (AIEC) located within the Medical Imaging Department at Toronto General Hospital. The cardiac schedule provides Level II training in cardiac CT and a foundation in cardiac MR.</p>
<p>Are there times when fellows overlap and share work?</p>	<p>As there are 6 fellows total between cardiac, cardiothoracic and thoracic streams and one day a week is given as academic time for each fellow, there is more than enough volume between the thoracic CT, cardiac CT and cardiac MR workflows.</p>
<p>How many rounds are you expected to attend? Contribute to?</p>	<p>While on the cardiac service, the fellows attend and present cases at the weekly, multidisciplinary Adult Congenital Heart conferences. Faculty in the cardiac section provide dedicated weekly cardiac teaching rounds and multiple weekly educational sessions comprised of case-based and didactic lectures, which include exposure to echocardiography. There are multidisciplinary cardiac rounds three times per week and the fellows have access to chest rounds that also occur twice per week. These include Adult heart disease rounds, TAVI rounds and monthly lectures for fellows (for both thoracic and cardiac).</p>
<p>Other than rounds, are there teaching responsibilities?</p>	<p>Other teaching is ad-hoc for radiology/respirology/cardiology residents, observers and medical students who may be present on service as well.</p>
<p>How procedure focused is the fellowship?</p>	<p>Minor to minimal focus of the fellowship (see below)</p>
<p>Which procedures are you responsible for?</p>	<p>CT-guided lung biopsies if on thoracic service. There are about 15 CT-guided lung biopsies per week (~3 per day). In addition the fellow monitors the gated cardiac CT and MR stress tests and administers appropriate medications for each while on the cardiac service.</p>
<p>Additional Comments about Workflow:</p>	<p>Days generally begin at 8AM and finish by 6 PM. Fellows are responsible for monitoring, protocolling and reporting cases during the day.</p>

Hosinec Fellowship Option: It is possible to extend the cardiac CT/MR fellowship to an additional year of echocardiography, nuclear cardiology or research for suitable candidates. Details are subject to availability and discussion.

RESEARCH

What are the Research Expectations?

Using the 20% dedicated research time, fellows are expected to produce a minimum of one manuscript during the fellowship for a hypothesis-driven research project. Fellows can select from a list given to the program director at the beginning of their fellowship.

Presentation of research work at international scientific conferences is financially supported and encouraged. There is a dedicated research MR (1.5T, General Electric) adjacent to the reporting area and a dedicated research 320MDCT (Vision, Toshiba) is being installed in June 2013. A research integrated MRI-PET system (Siemens) and Cyclotron will be installed in Fall 2013.

Fellows may receive \$2,000 a maximum of 2 times (must be different papers) to present at an academic conference.

How much protected time is given for research (per week)?

One day per week

CALL

General

The cardiac/cardiothoracic/thoracic imaging fellows are part of a collective call pool and do a week of home call once every 6 weeks. Weeknights the fellow takes home call and the staff report until 11 PM; on weekend days the fellow reports with staff in-house from 8 AM to 5 PM all XR and CT studies, after which he/she is on home call.

Responsibilities on Call:

Modalities covered: CT & XR
Average number of studies completed per call shift: weeknight/home call volumes are low, although weekends are relatively busier

Is there a call stipend?

No

Additional comments about call

HOLIDAYS AND PAY

Number of paid holiday's (in weeks):

2 weeks per 6 month block of fellowship

Sick and Caregiver time (in days):

As per university policy

Extra time off (in days):

Conferences: Up to 5 days per academic year
CME: as per university policy

	Teaching: as per university policy
Income before tax (CAD):	As per university policy, PARO PGY6 level salary (\$76,210)
Opportunities for additional income (directly related to the fellowship):	No
Additional Comments about Holidays and Pay:	In general fellowships follow University of Toronto policies