

The **pediatric radiology fellowship** is a one-year program in general pediatric radiology in Edmonton, Alberta at the Stollery Children's Hospital. There are opportunities to do a second year.

### **Modalities include:**

Magnetic resonance imaging, computed tomography, fluoroscopy, x-ray, and ultrasound. Nuclear Medicine, in particular PET, also has important applications in pediatric imaging. Procedures in pediatric imaging may be guided by fluoroscopy, US or CT. These are usually performed by a pediatric radiologist.

### **Responsibility**

The Fellow will be primarily responsible to the Mentor(s) for this Fellowship position (Dr. L. Jamieson). Ultimately responsibility is to the Academic Chair (Dr. D. Emery).

Scope of practice is at the [Stollery Children's Hospital](#), with some practice at the Royal Alexandra Hospital and the Grey Nuns Community Hospital. The Pediatric Radiology & Diagnostic Imaging department at the Stollery Children's Hospital in [Edmonton](#) provides a complete range of diagnostic services. There is a broad patient base, including oncologic, cardiac, transplant, trauma, as well as routine pediatric outpatient imaging. Radiology training at the Stollery included neuroimaging and training in common ultrasound guided procedures.

### **Magnetic Resonance Imaging**

There are approximately 200 pediatric MRI cases performed per week between two sites. The fellow will be scheduled in MRI for at least 2 months, supervising and reporting 10 - 15 cases per day. In addition to this, the Fellow will be exposed to/have access to cases reported by residents/staff with ample opportunity for discussion of interesting findings. The MRI service includes neurologic, body, cardiac, MSK and fetal imaging.

### **Fluoroscopic Procedures**

Fluoroscopy involves the full range of upper and lower GI studies as well as VCUG, sinograms, sialograms and other contrast procedures. The Fellow is scheduled in fluoroscopy for at least 2 months.

### **Computed Tomography**

The Fellow will be on a CT rotation (with ultrasound) for at least two months, and cases include a variety of emergency, oncologic, cardiac and outpatient cases.

### **Ultrasound**

The Fellow will be scheduled in ultrasound for at least two months (with CT). The fellow will supervise studies performed by technologists as well as scan cases personally. Cases include abdominal imaging, neonatal head ultrasound, and vascular studies. There are occasionally MSK studies. Common ultrasound guided procedures include liver biopsies, kidney biopsies, solid mass biopsies, thoracenteses, and abdominal/abscess drainage.

### **Radiography**

The Fellow will be scheduled in a rotation combined with fluoroscopy for at least two months. This includes rounds with the PICU and NICU staff, as well as outpatient and emergency films.

### **Graduated Responsibility**

At the beginning of the year, the Fellow is expected to observe a number of procedures and scans being performed and interpreted by staff. Within a week or two, the Fellow is expected to participate in the performance and reporting of these studies. By the end of the first quarter, the fellow should be performing the common imaging guided procedures unsupervised and be able to teach residents how to perform the procedures. In MRI, CT and Ultrasound, the first several weeks will require some adjustment of the Fellow to our scanning procedures and protocols. By the end of the first quarter, the Fellow should be supervising and reporting the cases with minimum supervision and by the 4<sup>th</sup> quarter should be capable of supervising services at staff level. All scans and procedures are double read by a member of staff which provides an excellent opportunity for teaching and feedback.

### **On Call Responsibilities**

The Fellow will take call at a staff level in general radiology, pediatric radiology, and pediatric fluoroscopy at the University of Alberta Hospital site. There is a radiology resident in house who reports the CT imaging on call in the evening, and the fellow is available to supervise the resident. Evening call can be done from home, whereas the daytime call on the weekend is in house. The bulk of the daytime on call is plain film radiography and involves checking emergency films reported by the resident and intensive care/general inpatient plain film radiography. The Fellow is expected to start taking call two months after arrival and will be on-call for a total of 8 weeks in the remaining 10-month period. This is to include one long holiday weekend.

### **Education/Teaching**

#### **Continual Viewerside Education**

All scans or procedures are double read by a member of staff, which provides extensive one on one teaching. The Fellow will find a significant part of the day is occupied in reviewing cases.

#### **Didactic Teaching**

Didactic teaching will be provided to the fellow by members of the Pediatric Radiology Division with a weekly lecture schedule outlined in the beginning of the year. In addition, the fellow will participate in Canada wide lecture series with other fellowship programs in Canada, for less common topics, including wellness, Equity Diversity and Inclusion, and unique topics not available at each Canadian center.

The Fellow is expected to be involved in seminars/lectures to be given to the residents and medical students. Over the course of the year this includes:

- 3-4 interesting case rounds to residents
- Tumor board rounds once per week
- NICU rounds once a month
- One presentation at Diagnostic Imaging Grand Rounds
- QA rounds for pediatric radiology

The Department of Radiology has a Journal Club, and the Pediatric Radiology Division is responsible for this once a year.

The fellow will have electronic access to e-anatomy and StatDx.

The fellow will have access to preparation and support through practice exams for preparation for the Canadian pediatric Royal College exam, which is typically held in the September following the fellowship.

### **Monthly Meetings**

The pediatric subgroup meets monthly to review clinical practice and discuss subgroup related issues.

### **Clinical Meetings**

The fellow will be involved in many multidisciplinary rounds including pediatric emergency, respiratory, gastrointestinal, surgical, MSK and neuro critical care, to discuss interesting cases and issues related to diagnostic imaging in their specialties.

### **Radiology Rounds**

Pediatric Radiology Rounds (teaching/tutorials) for the Residency Training Program are every second Friday morning at 0730. The Fellow is expected to attend these rounds which are conducted/chaired by a staff radiologist. The Fellow is also invited to attend other departmental rounds when available.

### **Teaching File**

At present individual members of the Pediatric Division maintain their own teaching file material. The Fellow may be expected to assist with the gathering of clinical teaching material.

### **Research**

The Pediatric Radiology Division is involved in active research, performed primarily by Dr. Michelle Noga and Dr. Jacob Jaremko. The fellow will be involved in at least two research projects. Both should be submitted for publication before year end and presented at national and/or international meetings. The Fellow is encouraged to bring forward ideas for research projects before commencing the post or on arrival. The fellow will have 20 dedicated research days throughout the year, which can be scheduled around the fellow's research schedule. There is funding to attend and present a pediatric conference.

Journals that scientific papers would most likely be submitted to include:

- [Canadian Association of Radiologists Journal](#)
- [Radiology](#)
- [American Journal Roentgenology](#)
- [Pediatric Radiology](#)
- [Clinical Radiology](#)
- [British Journal of Radiology](#)
- [European Journal of Radiology](#)
- [Investigative Radiology](#)
- [Journal of Magnetic Resonance Imaging](#)

**Scientific meetings:**

- [Canadian Association of Radiologists Annual Scientific Meeting](#)
- [Radiological Society of North America Annual Scientific Meeting](#)
- [American Roentgen Society Annual Scientific Meeting](#)
- [Society of Pediatric Radiology Annual Scientific Meeting](#)

**Progress**

The Fellow and staff of the Pediatric Radiology Division follow the progress of the individual fellow and the program. This includes:

- Daily logbook kept by Fellow of all procedures performed.
- Logbook kept by Fellow of interesting cases.
- Minutes of all meetings.
- Quarterly reports submitted to Fellowship Program Director to include status of clinical and research progress.
- Terminal report at the end of each fellowship year to Fellowship Program Director and academic chair.
- Certificate of successful completion.

**Interested applicants should contact our fellowship administrator,  
Lynda Loiseau at [loiseau@ualberta.ca](mailto:loiseau@ualberta.ca).**