

## **Pediatric Anesthesia Fellowship with Pediatric Cardiovascular Anesthesia Exposure**

**Duration:** 1 year

**Number of Positions:** There will be a maximum of one fellow per year in this fellowship. This fellow will count towards to the maximum of 3 pediatric fellowships per year at the Montreal Children's Hospital.

**Supervisor:** Maria Alexandre Petre

**Requirements for applicants:** Candidates will not be allowed to apply for this fellowship unless they have completed (or are in the process of completing) a one year fellowship in either general pediatric anesthesia, or adult cardiac anesthesia. In addition, during this fellowship, all candidates must be willing to perform a 2 to 3 month elective in a high volume pediatric cardiac center. This elective will be mutually agreed upon and organized by the fellow and supervisor. Previous fellows have performed electives at the Toronto Sick Kids hospital, or the University of Alberta Hospital.

**Mission Statement:** This 13 period (12 month) fellowship is meant to expose fellows to general pediatric practice, with some additional experience with anesthesia for cardiovascular procedures. The fellow will spend their time in either a general pediatric room or in a cardiovascular oriented room.

### **Expected competencies**

At the end of this fellowship, the trainee is expected to be comfortable with the perioperative management of pediatric patients undergoing cardiac surgical procedures. This includes pre-operative assessment and optimization, intraoperative management including cardiovascular anesthesia techniques and protocols. The fellow will also become familiar with the post-operative care of the pediatric cardiac surgery patient. The trainee will learn how to work in a multidisciplinary team that will include cardiac surgeons, perfusionists and nurses.

### **Expected knowledge**

The trainee will learn about congenital cardiac malformations, their pathophysiology, and the medical and surgical techniques used in their management. The trainee will also learn about the non-invasive techniques used in pediatric cardiology, including cardiac catheterization and therapeutic procedures. The trainee will learn about the various investigative techniques used in pediatric cardiology, including ECG, echocardiography and MRI. The trainee will learn the physiology and management of cardiopulmonary bypass in the pediatric population.

### **Clinical Exposure**

The Montreal Children's Hospital is a teaching and research center located in the vibrant and beautiful city of Montreal. We are a tertiary-care center with approximately 7000 pediatric cases per year.

The Montreal Children's Hospital has a pediatric cardiac surgery program, with roughly one to two procedures per week. In total around 100 cardiac cases are performed per year, 70 of which are pump cases. In addition the hospital has an active cardiac cath lab which performs non-

invasive cardiac procedures one to two times per week. This works out to about 80-100 cases per year. The fellow will participate in cath lab rounds at MCH which includes review of imaging and complex case discussion. There will be an opportunity to provide anesthetic management for adult cardiac congenital patients who are coming for cardiac surgery as well.

### **Clinical Responsibilities**

The fellow will be expected to provide anesthesia services in the operating rooms of the Montreal Children's Hospital for 4 days during the week, with their assignment being determined by the anesthesiologist in charge. They will preferentially be assigned to the cardiac surgery room when it is operating, and will spend 1-2 days per week providing anesthesia for non-invasive cardiac procedures. The OR's will normally start around 7:30, and the fellow will be expected to remain on duty until their list is finished.

### **Call Requirements**

The trainee is expected to perform in house call duties with a maximum of 6 calls per period. Call begins at 15:30 on weekdays, and 7:00 on weekends. The fellow will be expected to be on call a maximum of 3 stat holiday weekends in 12 months. Calls will be scheduled to minimize disruption to cardiac exposure. In addition, the fellow will be expected to be available at all times for any emergency cardiac cases that occur.

### **Academic requirements**

The fellow will be expected to participate in Thursday morning departmental rounds, Thursday afternoon resident/fellow rounds and the McGill department of anesthesia journal club. The fellow will be expected to present regularly at these rounds. Although not a requirement, fellows will be encouraged to undertake or collaborate with research studies. These will take place under the mentorship of a research supervisor chosen based on the fellow's desired research topic. In addition, fellows may be called upon to teach in pediatric courses and other educational events up to 5 times during their fellowship.

If the fellow chooses to be involved with a research project, support will be provided to allow the candidate to attend a scientific meeting to present any paper or scientific exhibit resulting from that project. In addition, fellows will be expected to present a case report or results of a research project at the department of anesthesia's annual research day.

One non clinical day per week will be provided for the fellow. This time will be used to participate in a research project if applicable, prepare for presentations, and to further the educational goals of the fellow. The fellows will have access to the McGill University, Montreal Children's Hospital and Departmental libraries. The fellow will also have access to a computer.

### **Feedback and Evaluations**

The fellow will work with individual staff on a daily basis. Feedback will be provided by these staff. Formal feedback and evaluation will be provided by the fellowship supervisor every 3 months, which will be recorded using the one45 evaluation system used by McGill.

**Notes**

Training undertaken during a clinical fellowship cannot be recognized for credentialing purposes as training leading to certification by the Royal College of Physicians and Surgeons of Canada or the College of Family Physicians of Canada.