

Updated May 26, 2020



STOLLERY Pediatric Cardiac Critical Care Medicine FELLOWSHIP

Overview:

This 12-month fellowship is focused on the clinical assessment, evaluation and management of the critically ill neonate, infant or child with congenital or acquired heart disease. The suitable candidate will use this year to build on a strong foundation of pediatric critical care and/or neonatal intensive care training through exposure to high volume, high complexity pediatric cardiac surgical, mechanical extracorporeal life support (ECMO, iLA, VAD), pediatric pulmonary hypertension and critical care transport programs at the Stollery Children's Hospital in Edmonton, Alberta, Canada.

The Pediatric Cardiac Intensive Care Unit in Edmonton is currently a 16-bed environment. It is part of the Cardiac Sciences program at the Stollery Children's Hospital and a surgical site for the Western Canadian Congenital Heart Network; a program that provides complex cardiovascular care to a broad geography encompassing the majority of Western and Northern Canada with a referral population of ~ 10 million. The PCICU admits ~ 500 patients per year with a surgical volume of 400-500 cases per year (placing the program amongst the top 10 in North America). A high-risk interventional cardiac catheterization team complements the management and care of these patients. The unit manages a high volume of pediatric ECMO, VAD and heart and lung transplant.

Exposure will consist of rotations in the PCICU and structured rotations in cardiac echo, cardiac electrophysiology and cardiac catheterization. Elective opportunities are available in heart failure/VAD, pulmonary hypertension, and adult congenital and pediatric cardiac anesthesia.

Qualifications:

The suitable candidate will have completed an ACGME accreditation training program in pediatric critical care and/or neonatal intensive care and be board eligible or certified in one of those subspecialties. Trainees solely from a pediatric cardiology background will usually require general pediatric critical care training before being considered for this fellowship; some exceptions can be made. Candidates will need either to be Canadian citizens or qualify under Immigration Canada to hold a work permit for the duration of their training.

Training goals:

The goal of this one year Senior Fellowship is to expose the trainee to the clinical and academic environment of a high-acuity pediatric cardiac sciences programme in a structured Pediatric Cardiac Intensive Care fellowship. The trainee will be expected to take on increasing accountability for leading teams and directing the management plan of the patients while concurrently being supported by a consultant Pediatric Cardiac Intensivist. Upon completion of the training year, the successful candidate would be expected to function successfully in a medium to large pediatric cardiac intensive care unit as a consultant/attending physician.

Responsibilities:

See Curriculum overview

Edmonton as a Place to Live:

Edmonton is a dynamic, cosmopolitan centre in the midst of the spectacular wilderness of the Western Canadian prairies and the Rocky Mountains. It has all the trappings of culture of a



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multi-cultural city of 1.4 million (top-tier restaurants, opera, symphony, professional sports). In addition, however, Edmonton's renowned river valley creates an urban oasis with one of the largest urban networks of running and biking trails in North America. It is a vibrant and safe city in which to learn, live and raise a family.

<https://exploreedmonton.com/>

Timelines:

Suitable interested candidates are invited to submit their application, which should consist of a one-page letter of interest, updated CV and three references to the contact listed below by September 30, 2020. A short list of candidates will be finalized by October 10, 2020 and short-listed candidates will have a scheduled video-teleconference interview before October 25, 2020. A final candidate will be selected and notified by October 30, 2020 and this individual will be named in the submission for funding to the Stollery Foundation.

Contacts:

Program Director: V. Ben Sivarajan MD MS FRCPC, email: ben.sivarajan@ualberta.ca

Program Administrator: Ms. Angela Sperling, email: sperling@ualberta.ca

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STOLLERY Pediatric Cardiac Care Medicine Fellowship University of Alberta

Preamble

This is a one year of focused Cardiac Critical Care Training that is directed toward those candidates who are eligible to sit for board examinations in general pediatric critical care:

Program Goals

1. To provide a year of advanced training focusing on the management of pediatric peri-operative, post-operative and medical cardiac patients
2. To provide exposure to other non-ICU specialties relevant to cardiac ICU (such as echocardiography, electrophysiology, thrombosis medicine, cardiac surgery, VAD, and cardiac catheterization)
3. To provide learners with graduated responsibility such that they are functioning as attending physicians (with support) in the PCICU
4. The curriculum (as has been developed over the past 5 years of sequential fellows) has demonstrated a significant ability to be tailored to the existing aptitudes and goals of the individual trainee.

Eligibility

Eligibility requirements:

- Completed accredited training in pediatric critical care medicine (PCCM) or equivalent
- Eligible for educational licensure through the College of Physicians and Surgeons of Alberta
- Complete application received prior to deadline including:
 - o CV
 - o Letter of references (3)
 - o Letter of intent
 - o Proof of English proficiency (if applicable)
 - o Documentation of immigration status (if applicable)

Application Process and Deadlines

Applicants can submit their complete application materials (above) by February 1 and September 1 of each year. Applications are for the subsequent academic year (interviews in 2020 are for the 2021-22 academic year). Interviews of selected applicants will be organized and completed within 6 weeks of this deadline. A single named candidate will emerge from this process and constitute our application to our funding source (this is a multispecialty funding competition). Confirmation of funding is usually communicated by August and January.

We also invite applications from trainees that are self-funded. There is a process to screen suitability of applicants in this situation. We do not ALWAYS guarantee the ability to accommodate a self-funded fellow (if capacity is reached through traditionally funded fellows).

Curriculum Overview



This one-year fellowship will be broken up into 13 4-week blocks. One block will be reserved for vacation. The remaining blocks will largely be spent in the Pediatric Cardiac Intensive Care Unit (PCICU) at the Stollery Children's Hospital.

The curriculum will be based on the Royal College's Competence by Design (CBD) model with four stages: Transition to Discipline, Foundations of Discipline, Core of Discipline and Transition to Practice. Trainees will move through each stage after demonstrating the required competencies:

1. *Transition to Discipline.*

- This stage will provide orientation to the PCICU at the Stollery Children's Hospital.
- Trainees will function as *senior fellows* in the PCICU
 - Call: Senior resident call in PCICU
- Learners will be expected to demonstrate competence in:
 - Basic and advanced airway management (BMV, intubation)
 - Pediatric resuscitation (CPR, PALS)
 - Central and arterial lines
 - Basic crisis resource management skills
 - Hospital structure/documentation/processes
 - Safe and efficient patient handover
 - Effective communication and collaboration with other members of the health care team

2. *Foundations of Discipline.*

- Trainees will function as junior attendings in the PCICU with *direct supervision* of a PCICU attending
 - Call: Attending call with *direct supervision* of a PCICU attending
- Learners will be expected to demonstrate competence in:
 - Application of cardiopulmonary physiology/anatomy/surgical strategies in the care of patients in the PCICU
 - Management of common complications post cardiopulmonary bypass
 - Assessment of analgesia/sedation/withdrawal in the PCICU
 - Development of a treatment plan for typical patients in the PCICU including ECLS management and initiation
 - Recognition and treatment of common post-operative complications (including LCOS, chylothorax, dysrhythmias, bleeding, organ failure)
 - Provide education to the health care team around basic PCICU concepts (resident level teaching)
 - Coordinate patient movement in and out of the PCICU
 - Understanding own limitations
 - Update family members on treatment plans
 - Point of care echo – pericardial effusion, function

3. *Core of Discipline.*

- Trainees will function as junior attendings in the PCICU with *indirect supervision* of a PCICU attending
 - Call: Attending call with *direct supervision* of a PCICU attending
- Learners will be expected to demonstrate competence in:

- Implementation of a comprehensive treatment plan for typical and complex patients in the PCICU
- Coordinate patient care, bed flow and team functioning in the PCICU
- Provide education to the health care team around more complex PCICU concepts (PICU resident level teaching)
- Conduct family meetings discussing treatment plans, goals of care
- Provide end-of-life care (including organ donor management as needed)
- Application of current PCICU literature in management of patients
- Develop a research question and plan

4. *Transition to Practice*

- Trainees will function as junior attendings in the PCICU with *minimal* supervision of a PCICU attending
 - Call: Attending call with *indirect supervision* of a PCICU attending
- Learners will be expected to demonstrate competence in:
 - Independent manage all patients in a PCICU directing patient care and flow, team functioning
 - Mature approach to conflict resolution
 - Direct family meetings in the PCICU including end of life care, disclosure of adverse events, conflict resolution
 - Provide education and feedback to all learners in the PCICU
 - Champion best practices in clinical care
 - Contribute to the profession

Evaluation

The trainee will receive weekly evaluations from the attending they were on service with. In addition, they will receive written feedback about their performance in the PCICU from junior learners and PCICU nurses and respiratory therapists. Evaluations will be based on a competency-based education model with increasing levels of responsibility granted to trainees as their ability to perform certain pre-specified competencies increases (rather than based on time spent in the program). To that end stage-specific Entrustable Professional Activities (EPAs) will be developed following the Royal College's Competence by Design (CBD) model.