

## **Pediatric Critical Care Fellowship in Simulation-Based Education (SBE)**

**Name of Institution:**

Montreal Children's Hospital, McGill Steinberg Centre for Simulation and interactive Learning (SCSIL); Institute of Health Sciences Education (IHSE)

**Type of Fellowship:**

Fellowship in Simulation-based Education

**Number of positions:**

One (1).

**Length:**

One (1) year

**Program Summary**

The McGill University Pediatric Critical Care Simulation-based Education Fellowship is designed to prepare participants for future careers as Pediatric Critical Care faculty simulation educators. This one-year fellowship provides supervised teaching experiences as SBE fellows will be active facilitators as well as learners in a robust McGill Pediatric Critical Care simulation program. The Program will also include a Simulation core curriculum, a focused area of scholarship / research and clinical medicine.

**Fellowship Program Director and Supervisor:**

Dr. Patricia Fontela, Associate Professor  
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**Goals and objectives**

By the end of this fellowship, the fellow will be able to:

- Apply educational theories and principles while promoting learning during SBE experiences.
- Demonstrate different debriefing techniques while facilitating Simulation sessions.
- Formulate effective clinical feedback to learners at the bedside using principles of debriefing.
- Conduct learning needs assessments and convert them into Pediatric Critical Care well-constructed learning objectives.
- Design simulation educational scenarios coherent with learning objectives.
- Utilize appropriate simulation modalities based on the simulation scenario and the learning objectives.
- Translate real-world clinical PEDIATRIC CRITICAL CARE cases and experiences into simulation-based educational experience.
- Articulate the advantages and disadvantages of in-situ or workplace-based SBE compared to traditional lab-based approach.

- Use different media, technologies, and software to create effective simulation-based educational modules.
- Participate in planning and teaching the principles of simulation-based team training in simulation-based educational sessions including:
  - Crisis Resource Management (CRM)
  - Patient Safety and Human Factors
  - Interprofessional education
- Use different approaches to promote safe simulation-based learning environments.
- Demonstrate effective interactive large and small group teaching approaches.
- Implement objective assessment methods to assess debriefing (“Debrief the debriefers”).
- Articulate evidence-based approaches to the overall design of a SBE curriculum.
- Design an SBE scholarly project to address a gap in SBE knowledge, practice, or research.
- Participate in Faculty Development Simulation activities to train faculty in their roles as teachers and educators.
- Utilize different approaches to evaluate simulation-based educational activities and programs.
- Describe the principles of effective management and administration of SBE.

## Curriculum

The curriculum will be comprised of the following activities:

- **Clinical responsibilities:** Simulation fellows will work as Pediatric Critical Care senior residents 5-6 blocks/academic year. Approximately one half of the shifts will incorporate teaching responsibilities including providing feedback to Pediatric Critical Care residents, off-service residents, and medical students based on the learner’s level of training. (The SBE fellowship will not interfere with core Pediatric Critical Care PGME activities and will likely enhance the educational experiences of all Pediatric Critical Care Residents.
- Participation as “junior faculty” in the planning, delivery and assessment of simulation sessions (approximately 2 sessions/month) at either the McGill Steinberg Centre for Simulation and interactive Learning (SCSIL), the Montreal Children’s Hospital Pediatric Intensive Care Unit, or the Montreal Children’s Hospital Centre for Pediatric Simulation.
- SBE Core curriculum will be comprised of various small group sessions including:
  - Orientation to Audio Visual & Patient Simulation Equipment
  - Introduction to Simulation Centre Administration & Operations
  - Educational Theory and Simulation
  - Curriculum Design in Simulation
  - Designing Needs Assessments
  - Principles of Crisis Resource Management
  - Simulation Scenario Development
  - General principles of techno-pedagogy and application to common simulation-based educational technologies
  - How to effect multidisciplinary simulation with independent and mutual learning objectives
  - Debriefing 101

- Managing the Difficult Debrief
- Debriefing the Debrief
- SBE Program Evaluation
- Technical Skills Simulation: PEDIATRIC CRITICAL CARE task trainers, props & moulage
- Research in SBE
- **Educational Scholarship / Research:** During the fellowship, trainees will spend 7-9 blocks/academic year dedicated to simulation training. It is expected that fellows will select one specific aspect of SBE to serve as an area of interest. Fellows will be paired with a faculty supervisor with specific expertise in the fellow's simulation desired area, and then design supplemental activities to facilitate the development of additional expertise and competence. Faculty supervisor will be responsible for meeting with trainee monthly to follow learning progress, to monitor the progress of scholarly activity, and to provide feedback. Faculty supervisors have expertise on various subjects including the roles of emotions in educational activities, short virtual simulations, applications of virtual and augmented reality and online learning methods, laparoscopic surgical simulators, serious games in health professions education and interprofessional team-based teaching and learning such as surgical ergonomics and simulation on a social mission. Fellows are required to complete at least one educational scholarship project in their area of interest during the fellowship.

### **Assessment, Evaluation & Feedback**

The Fellowship Program Director will meet with fellows every month throughout the year and complete an in-training performance assessment (ITER) based on all available performance data, including:

- Core faculty assessment of the fellows' teaching and instructional performance.
- Learner evaluations, where applicable.
- The progress and quality of the required educational scholarship project.

Written evaluations will be completed on a quarterly-basis as per McGill University promotion guidelines. Successful completion of the fellowship will be determined by the Fellowship Director.

The fellow will evaluate all components of the fellowship as well as core faculty.

### **Application Process**

Fellows can begin the SBE Fellowship following completion of a FRCP-PEDIATRIC CRITICAL CARE, or equivalent.

Candidates must secure funding to apply for this Fellowship.

For information regarding the application process, salary amount and acceptable sources of funding, please visit <http://www.mcgill.ca/pgme/admissions/prospective-fellows>

Applications are due by September 1.

### **Additional Costs**

All costs for ancillary courses or conferences (if applicable) will be paid by the sponsor/resident. McGill University will not pay for any costs related to the Simulation- based Education (SBE) Fellowship.