

Neonatal Perinatal Medicine Scholar Fellowship

Administrative Information

Name of Institution: McGill University

Duration: 1 or 2 years (this will depend on research project planned)

Number of positions: Maximum of 3 positions (this will depend on funding available)

Training Sites:

McGill University Health Center-Children's NICU

Jewish General Hospital NICU

Parent Training Program: Neonatal-Perinatal Medicine (Director: Doctor Julie Bartholomew, NPM residency Program Director, based at the Jewish General Hospital)

Fellowship Director: Dr. Marc Beltempo

Fellowship Coordinator: Tamara Slovic, Glen Site

Fellowship Training Committee Members

1-Marc Beltempo, Neonatologist at MUHC, NPM Scholar Fellowship Director

2-Julie Bartholomew, Neonatologist, JGH, NPM residency Program Director

3-Nina Nouraeyan, Neonatologist at JGH, Curriculum Coordinator

4-Elisabeth Hailu, Neonatologist at MUHC, MUHC NICU rotation coordinator

5-Michelle Ryan, Neonatologist at MUHC, Simulation coordinator

6-Victoria Bizgu, Neonatologist at JGH, JGH NICU rotation coordinator

7-Gabriel Altit, Neonatologist at MUHC, mentorship program coordinator

8-External member: To be determined

Rationale and Mission:

Rationale

Neonatology is probably one of the youngest and one of the most advanced fields in Pediatrics. The numerous discoveries made through research has led to the most advanced and innovative treatments allowing preterm babies as young as 23 weeks gestation to survive and thrive. A graduating Neonatal Perinatal Medicine resident should be given the opportunity to obtain advanced training in research methods, if he/she shows enthusiasm for neonatal research. These skills will not only lead to a genuine ability to study and appraise new interventions/treatments, it will also lead to better teachers of future clinicians and scientists. This fellowship is designed to be flexible so as to accommodate interests and timelines of good research projects.

Mission

The purpose of the Neonatal Perinatal Medicine Scholar Fellowship is to provide the Neonatal trainee with additional knowledge, skills and experience needed to begin training toward a potential career as an independent investigator.

Fellowship Objectives

Medical Expert:

- A. Exercise the role of a consultant
- B. Share knowledge of the basic and clinical sciences: during the antenatal period, delivery room practices and resuscitation of newborns and postnatal intensive and convalescent care
- C. Teach and supervise (in a graded appropriate level):
 - a. a problem-solving oriented assessment of the fetal and neonatal patient for the purposes of diagnosis, management, health promotion, and disease prevention
 - b. the selection and appropriate use, in a cost-effective and ethical fashion, of investigation tools and prescriptions of medications
 - c. Recognition and management of emergency situations
 - d. Appropriate use and performance of procedural skills, both diagnostic and therapeutic
 - e. The coordination of transport of ill newborns
 - f. Effective coordination of discharge and follow-up of NICU patients.
 - g. Appropriate consultation from other health professionals, and recognition of limits of one's expertise:

Communicator:

Teach and supervise, in a graded appropriate level:

- A. Effective therapeutic relationships with families of ill newborns characterized by understanding, trust, respect, honesty, and empathy
- B. Effective collection and synthesis of relevant information and perspectives, involving parents, families, colleagues, and other professionals
- C. Conveying relevant information and explanations to families, colleagues, and other professionals

Collaborator:

Teach and supervise, in a graded appropriate level:

- A. Effective and appropriate participation in an interprofessional health care team
- B. Effective prevention, negotiation, and resolution of interprofessional conflict

Leader:

Teach and supervise, in a graded appropriate level:

- A. Contribution to the effectiveness of the NICU activities
- B. Teach and mentor effective time management principles
- C. Appropriate allocation of finite health care resources

Health Advocate:

- A. Teach and mentor approach to responding to individual patient and family health needs
- B. Teach and supervise identification of determinants of health and subsequent health needs for the communities and populations under one's care

Scholar:

- A. Maintain and enhance professional – research activities through ongoing learning**
 - a. Demonstrate knowledge of the principles of maintenance of competence in research
 - b. Describe the requirements of the maintenance of Certification Program of the Royal College of Physician and Surgeons of Canada
 - c. Describe the principles of continuing professional development
 - d. Execute strategies for implementing a personal knowledge management system
 - i. Recognize and reflect on research learning issues in practice
 - ii. Recognize and correct deficits in research knowledge through targeted learning
 - iii. Pose an appropriate research question
 - iv. Access and interpret the relevant evidence
 - v. Integrate new learning into practice
 - vi. Evaluate the impact of any change in research practice
 - vii. Document the research learning process
 - viii. Formulate relevant personal research learning projects
 - e. Conduct personal practice audits

- B. Critically evaluate scientific information and its sources and apply this appropriately to research practice decisions**
 - a. Describe the principles of critical appraisal
 - b. Critically appraise retrieved evidence in order to address a clinical research question
 - c. Integrate critical appraisal conclusions into research

- C. Proficient in facilitating the learning of patients, families, students, residents, other health professionals, the public, and others in research related problems**
 - a. Describe principles of learning relevant to research
 - i. Select teaching strategies for patient and health care professional
 - b. education based on the principles of research
 - c. Identify collaboratively the learning needs and desired learning outcomes of others working on his/her research projects

- d. Select effective teaching strategies and content to facilitate others learning
- e. Deliver effective lectures or presentations
- f. Assess and reflect on teaching encounters
- g. Provide effective feedback
 - i. Assess the knowledge, skills, and competence of junior research learners
 - ii. Conduct debriefing sessions as a teaching and reflective tool following difficult resuscitations or incidents
- h. Describe the principles of ethics with respect to research

D. Contribute and complete the development, dissemination and translation of new knowledge and practices

- a. Describe the principles of research and scholarly inquiry
- b. Describe the principles of research ethics especially in application to infants and pregnancies
- c. Complete a scholarly research that can be and is not limited to Basic Science Research, Clinical Research, Epidemiology, Education, Quality Improvement or Public Health. This project must be relevant to Neonatal- Perinatal Medicine and suitable for peer-reviewed publication or presentation at an academic meeting
 - i. Present the scholarly project at a national, or international forum

Professional:

- A. Model and mentor principles of medical professionalism
- B. Model and mentor principles of commitment to patients, profession, and society through ethical practice
- C. Model and mentor principles of commitment to patients, the profession, and society through participation in profession-led regulation

Academic Facilities:

Jewish General Hospital:

Neonatal Intensive Care Unit, office space

Montreal University Hospital Center:

Neonatal Intensive Care Unit, office space

Libraries and information Technology:

Electronic access to McGill Life Sciences Library from computers in dedicated resident/fellow rooms at each site; hospital libraries accessible at all training sites

MUHC Research Institute:

Computer lab, biostatistics support and clinical research infrastructure

Program Structure and content:

The fellowship in neonatology research consists of 1 or 2 years of additional training in laboratory or clinical research methods, under the supervision of a primary faculty supervisor. The duration of the fellowship will depend on the predicted time frame of the research project and funding. The supervisor and the duration of the fellowship will be identified and agreed by all concerned, including the fellowship director, before the fellowship begins. A 1 year fellowship may be extended to a second year if all parties agree (including McGill University postgraduate office and the sponsor, where applicable). Patient care responsibilities are designed to maintain clinical competence in Neonatology and to enhance knowledge and experience in neonatal diseases targeted by the fellow's research.

Only PhD or MD researchers with faculty appointments at McGill University will be permitted to supervise research fellows. The fellowship director and fellowship committee members must approve research proposals.

Training:

- A. Research: Supervised laboratory or clinical/epidemiologic research for 11- 22 blocks
- B. Clinical: 1-2 blocks of NICU service per year (1 at JGH, 1 at MUHC) and 3 to 5 night calls per block. Clinical part of training will account for 15-25% of total fellowship time.
- C. Optional course work as appropriate
- D. Teaching: 4 Friday afternoon teaching sessions given to NPM residents, 2 Tuesday afternoon teaching sessions given to pediatric residents, Help teach 2 classes in CCHCSP, 1-2 presentations at Neonatal Rounds, 2 presentations at Journal Club

Evaluation:

- A. Senior Research ITER to be completed after every research block by the primary supervisor
- B. Junior Attending ITER to be completed after every NICU rotation (2 per year) by the supervising Neonatologist
- C. Supervising attendings may complete O-scores
- D. The competence committee will review and complete summative evaluations every 6 months.

Reading materials:

Will depend on the research subject and techniques

Conference attendance:

- A. Neonatal Rounds every Friday afternoon
- B. Journal club every other Tuesday morning
- C. Pediatric Academic Society meeting once per year
- D. Other conferences appropriate for research purposes

Fellow Duties, responsibilities and resources:

- A. Call: 3-5 in-house calls per block
- B. Resident Supervision: The fellow will supervise residents and students during clinical duties and will provide mid-rotation and end of rotation feedback.
- C. Academic Activities: Fellow will be expected to present his/her work at a national or international conference
- D. Support staff: Administrative tasks will be managed by the program coordinator.

Teaching Faculty and Research Interests are available at: www.mcgillneonatology.ca

As well as submitting your [online application](#), please provide the following documents to tamara.slovick@muhc.mcgill.ca:

- 1. Recent CV
- 2. Letter from the current Program Director confirming that the resident will complete a 2 year core NPM residency in a recognized Canadian NPM residency program
- 3. Letter of intent
- 4. Academic goals for the year (in addition to those described in the Neonatal Perinatal Medicine Scholar Fellowship)
- 5. Description of how this training will be an asset in your future career
- 6. A brief description of the research done to date
- 7. Brief research proposal which should include research protocol
- 8. A description and timeline of how the third year will be spent

Approved by RTC November 22 2019