

## Neonatal follow-up Fellowship Program

- **Length: 12 months**
- **Number of positions: 1 per year**
- **Fellowship supervisor:** Dr Elise Couture
- **The program:** based at the Montreal Children's Hospital is designed for physicians who wish to develop clinical expertise in the field of medical and developmental follow-up of high-risk neonates. The program consists of training in clinical, neurodevelopmental evaluations, family support, interdisciplinary approach to care of infants and toddlers with complex medical problems. Extensive experience with multidisciplinary partners (rehabilitation, specialised developmental disabilities programs) is provided. A short clinical research project or systematic review is completed during the academic year.
- **Candidates:** The program is open to physicians who have completed a four year program in general pediatrics (4 years) or a residency program in neonatology (5 years).

### Detailed description of NNFU Program

The neonatal follow-up program of the MUHC is based at the Montreal Children's Hospital. Its referral base is newborns who are at risk of neurodevelopmental sequelae secondary to pre or perinatal illness. The program is multiservice and multidisciplinary with close collaborations with pediatric neurology (neonatal-neurology clinic), respirology (multidisciplinary clinic for patients who are oxygen –dependent at home) and developmental pediatrics as well as rehabilitation services, dietetics, social service and community medical and developmental services. The fellow also participates in the “Neonatal Bridge Team” which provides anticipatory guidance and discharge planning for neonates with complex neurodevelopmental and medical problems, who have prolonged neonatal admissions.

The core team consists of 5 pediatricians and 2 nurses who provide neurodevelopmental surveillance and management from infancy until age 5-7 years. The neonatal follow-up fellow becomes an integral part of the team, and is encouraged to develop a continuity relationship under supervision with a select population of families for the duration of his/her fellowship.

Trainees' educational curriculae are tailored to their individual career plans and include training in clinical techniques for neurodevelopmental assessment from infancy to early school age, extensive exposure to the multidisciplinary approach to care of children with complex neonatally-acquired medical and developmental problems as well as rotations in related fields (eg feeding disorders, rehabilitation for hearing loss, management of chronic lung disease). Trainees participate in the neonatal fellows teaching programme at McGill University and are expected to complete a short research project or review paper suitable for their level of training. Fellows may also use the research period to complete a project initiated in Pediatrics or Neonatal-Perinatal medicine, provided that it is related to the field of Neonatal follow-up and approval from the Neonatal follow-up fellowship supervisor. They learn to use appropriately the neurodevelopmental assessment tools required in neonatal follow-up. Trainees are encouraged to participate in available research courses (Fellows' Research Epidemiology

Statistics Curricula; McGill University Postgraduate courses in research methods and statistics).

Clinical call duties (at the Montreal Children's Hospital) are concomitant with the level of training (3-4 nights per month for trainees entering after three years of core pediatrics, or 2 nights per month for senior trainees ) in the NICU, the general pediatrics wards or the emergency room as appropriate for the education of the resident.

### **Educational objectives (based on CANMEDS competencies)**

At the end of the Neonatal follow-up training program, the trainee will demonstrate the following skills:

#### **◆ Medical Expert:**

- Discharge planning from neonatal ICU
- Evaluate and manage the special health issues and special needs of neonates, infants and children with complex chronic disorders/pathologies
- Assess psychomotor development/neurodevelopment newborn to school age.
- Screen at-risk newborn populations for developmental problems ( Early identification, Counselling)
- Provide anticipatory guidance to families and medical teams to ensure coordinated discharge planning from the Neonatal Intensive Care Unit.
- Screen for auditory/vision impairment
- Identify and provide guidance for behavioural issues
- Manage in a multidisciplinary approach, various conditions such as:
  - Sequelae of prematurity
  - Developmental delay
  - Auditory/visual impairments
  - Feeding problems
  - Cerebral palsy
  - Behavioral issues
  - Chronic lung disease: BPD
  - Sequelae of perinatal asphyxia
- Become competent in accessing resources for children with special needs and their families
  - In the community
  - Rehabilitation services
  - Parents groups
  - Participation in specialized clinics such as:
    - Neonatal Neurology clinic
    - BPD-home Oxygen clinic

#### **◆ Communicator:**

- Interact skillfully with neonates, infants and children
- Communicate efficiently with parents of children with complex and special needs
- Gather and communicate information efficiently to team members

◆ **Collaborator:**

- Participate in multidisciplinary meetings
- Understand the coordinated approach to care of children who have complex chronic needs and their families
- Function within a team

◆ **Scholar:**

- Demonstrate adequate knowledge of screening tests and neurodevelopmental outcome measures for children with perinatal conditions
- Understand special health and developmental issues related to neonatal risk factors for abnormal outcomes
- Demonstrate knowledge of the epidemiology of perinatal conditions with potential impact on long-term outcome.
- Display self-directed learning
- Attend required teaching sessions and courses.
- Conduct an oral presentation on a topic relevant to neonatal follow-up
- Complete a clinical research project (chart review, systematic review or prospective study) under supervision of a staff member of the Newborn Medicine Division or General Pediatrics

◆ **Health Advocate:**

- Understand the need for pediatricians to advocate for children with complex ongoing needs and their families

◆ **Manager:**

- Understand the paediatrician's role as a member of a multidisciplinary team
- Acquire necessary skills to function in an academic neonatal follow-up clinic

◆ **Professional:**

- Demonstrate respectful behavior with patients, families and different professionals
- Display a sense of ethics and responsibility
- Demonstrate sensitivity to the diversity of cultures, particularly in regard to child development
- Exhibit self discipline