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Faculté de Médecine
Études médicales postdoctorales

Faculty of Medicine
Postgraduate Medical Education

UNIVERSITY OF OTTAWA NEONATAL-PERINATAL RESIDENCY TRAINING PROGRAM

DESCRIPTION

The University of Ottawa program in Neonatal-Perinatal Medicine is a 2 to 3 year residency-training program designed to train academic neonatologists (although trainees wishing to complete 1-2 years of training for a non-academic role can be considered for admission to the program). The program is currently directed by a Neonatologist who dedicates 1 day per week to the program. The program is open for Royal College subspecialty certification to trainees who have a Royal College Certification in Pediatrics or have completed at least 3 years of a Royal College approved training program in Pediatrics. Clinical Fellows may also be accepted to the program for one or more years to gain additional training in Neonatal-Perinatal Medicine.

Clinical training takes place in the Neonatal Intensive Care Units (NICUs) of the Children's Hospital of Eastern Ontario (CHEO) and in the Neonatal-Perinatal Unit of The Ottawa Hospital General Campus (OHGC), which is the regional perinatal center. These two hospitals are connected by an aerial walkway, which passes through the building housing the Faculties of Health Sciences and Medicine. There are approximately 14,000 live births annually in Eastern Ontario and Western Quebec; our facilities also provide neonatal care for the Baffin Island region of Nunavut.

The NICU at CHEO moved to a new, fully equipped unit in July 2009 and has 21 level III bassinets. CHEO's NICU admits approximately 350 babies per year, all of whom are outborn and transported by the Neonatal Transport Team (a nurse

respiratory therapist). All babies who, in the neonatal period, require surgical procedures, complex subspecialty investigation, or who have significant congenital heart disease are admitted to CHEO. Clinical service is provided by pediatric and neonatal-perinatal residents, in collaboration with a multi-disciplinary team all of whom function under the supervision of the staff neonatologist.

At OHGC there are over 3,200 births annually. The OHGC NICU admits approximately 750 babies per year and has a capacity of 24 bassinets (14 level III, 10 level II). Clinical service is provided by a multi-disciplinary team, which includes residents from several services and frequently clinical assistants at night. There are frequent and extensive consultations and discussion, both formal and informal, with the perinatologists at the OHGC. These include a bi-weekly high-risk neonatal clinic to provide counselling to all expectant parents where a diagnosis of a fetal anomaly has been made, and almost 600 formal antenatal consultations yearly by the neonatal team on hospital in-patients.

ROTATIONS AND RESEARCH

The first year of training focuses on development of knowledge and clinical skills in Neonatal-Perinatal Medicine as well as development of research skills. It includes a total of six 28-day blocks of NICU (3 each at CHEO and The Ottawa Hospital), one block of maternal-fetal medicine, one block of neonatal follow-up and development, and one block of metabolics/genetics (if not done previously). Four blocks are available for research. Some electives for preparation of the Royal College of Physicians of Canada general pediatrics exam are also possible. Fellows doing only one year will be offered 6 to 7 blocks of NICU (3 to 4 each at CHEO and OHGC) and 2 or more Research blocks. They will have the opportunity to do 1 to 3 blocks of extra rotations (MFM, Genetics, Neonatal follow-up, or surgery) depending on availability of these rotations.

The second year objectives are consolidation of clinical knowledge & skills and development of research skills. It includes a total of six 28-day blocks of NICU (3 each at CHEO and The Ottawa Hospital) and one block of neonatal transport. If a resident reaches a high level of proficiency, 1 to 3 of the NICU rotations may be organized in which the trainee functions as a Junior Attending. The remaining 7 blocks are available to complete a research project.

Neonatal-Perinatal Medicine is now a certified Royal College subspecialty, thus trainees eligible for Royal College certification will undergo a written exam at the end of the second year. The third year is devoted to consolidation of research skills and teaching with some blocks of junior attending in the NICU.

Research:

Neonatal-perinatal medicine trainees are expected to undertake research with the aid of a mentor from the division and are provided ample time during the program to pursue research projects. Each trainee is expected to complete at least one research project during their training period and present their results locally or at an appropriate national or international conference. Funds are available to assist the trainee with travel to present his/her findings at such a meeting.

CALL AND VACATION

Call:

There will not be more than 7 calls per 28-day rotation, with 2 free weekends; however the goal is for not more than 6 calls per rotation during the first year of the program, not more than 5 per rotation in the second year, and not more than 4 per rotation in the final year of the program. Whenever possible, this call is scheduled with a junior resident such that the subspecialty resident is senior and second call. If a resident reaches a high level of proficiency, rotations may be organized in which the trainee functions as a Junior Attending. In this case, call is from home, always with the back up of an attending neonatologist. Note: The official count will not be more than 7 calls per block with 2 free weekends.

Vacation:

Vacation entitlement is in accordance with the PAIRO collective agreement. As such, residents are entitled to four weeks paid vacation per academic year. Religious holiday allowance (5 days), conference leave (7 days), and lieu days for statutory holidays are also granted as per the PAIRO agreement. Requests are considered in the order they are received and must be submitted at least 4 weeks before the start of the block in which the vacation is requested (PAIRO recommendation is 6 weeks prior). Some consideration is given to the length of time away from a given rotation and to the amount of vacation requested from core rotations.

FACULTY AND INTERESTS

Dr. Erika Bariciak has an interest in clinical research and is currently investigating ways to better analyze neonatal renal function. *She is a Co-Investigator* of the Medical IDEAs (Intelligent Decision Aid Systems) Research Group, which is developing computer aided decision support approaches for the NICU using artificial neural networks and case based reasoning programs. In addition, she is co-investigator for a clinical pilot study, in collaboration with Computer Engineering PhD students from Carleton University, investigating the clinical

utility of medical thermography in detecting Necrotizing Enterocolitis in premature infants in the NICU.

Dr. Thierry Daboval is the Medical Director of the Neonatal Follow-up Clinic. He is interested in research looking at long term outcome of the extremely premature infant. He has a special interest in research involving the ethics of resuscitation in infants born at the limit of viability

Dr. Emanuela Ferretti joined the division in 2007. She has research experience and interest in neonatal procedural and chronic pain. She is collaborating with the University of Sherbrooke in a research project on human intestinal development and the pathogenesis of Necrotizing Enterocolitis. She is involved in teaching neonatal ethics and models of low and high-fidelity simulation.

Dr. JoAnn Harrold is the acting head of the Division at CHEO. She is interested in medical education including research in this area. She has an interest in neonatal transport and is active in clinical research in the NICU.

Dr. Sarah Lawrence is the Program Director. She has an interest in medical education and research in that area. She has been involved in research pertaining to PDA management in the premature infant and in rational use of antibiotics in the NICU.

Dr. Brigitte Lemyre is the acting head of the Division at The Ottawa Hospital, General Campus. She is involved in research in nasal continuous positive airway pressure and nasal ventilation. She also has an interest in rational use of antibiotics in the NICU, procedural pain relief in neonates and in management of the PDA. She currently is involved in supervising research by residents and fellows in the program.

Dr. Greg Moore has interests in Patent Ductus Arteriosus and its management, mechanical ventilation, Bioethics, improving overall quality of care provided by the multidisciplinary medical team, and education for medical trainees and colleagues

Dr. Nicole Rouvinez-Bouali has interests in medical education, quality assurance in the NICU and simulation. She is responsible for our database and is involved in clinical research and quality assurance projects with the Canadian Neonatal Network. She is a member of CHEO steering committee for high fidelity simulation.

CONTACT

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