SUBSPECIALTY RESIDENCY TRAINING IN PEDIATRIC HEMATOLOGY-ONCOLOGY

GENERAL OBJECTIVES

The goal of the Pediatric Hematology-Oncology training program is to ensure that the specialists have the competence to consult for and treat children and adolescents with cancer of any organ or non-malignant disorders of the blood and blood-forming tissues.

GENERAL CONTENT OF TRAINING

The roles of the physician specialist, as outlined in the CanMeds 2000 Project of the Royal College of Physicians and Surgeons of Canada (RCPSC), include the following: medical expert / clinical decision-maker, collaborator, manager, health advocate, scholar, and professional. In order to meet these expectations, the training program will provide the opportunities, through coordinated learning experiences, to acquire the necessary skills and attitudes as spelled out by the RCPSC. Learning opportunities will be varied but will include access to shared academic half days with other pediatric subspecialties, the adult hematology training program and videoconferencing with another hematology/oncology training center. The actual timing and structure of the program may vary based on scheduling of laboratory training experiences.

Year 1

Diagnostic Skills

Laboratory Hematology (10 Months)

- Cell Diagnostics – Henderson
- Hemostasis/Coagulation – MUMC
- Thromboembolism – Henderson
- Red Cell Disorders – St. Joseph’s
- Transfusion Medicine – MUMC

Years 2 & 3

Basic Clinical Training (15 Months)

- In –patient
- Out-patient
- Consultation (including Neonatal Hematology)
- Radiation Oncology
- Neuro-oncology
- Supportive and Palliative Care
- Long-term Follow-up
- Clinical Trials
- Biostatistics

Hemopoietic Stem Cell Transplantation (3 Months)
Hemoglobinopathies
Clinical Practice Evaluation Skills-Clinical/Basic Research
DESCRIPTION OF VARIOUS COMPONENTS OF THE PROGRAM:

CELL DIAGNOSTICS: The residents have an in-depth training in morphology and cell diagnostics. They learn the laboratory techniques used in diagnosing malignant hematological disorders, including applications of specialized techniques such as cell surface markers, special stains, cytogenetics, DNA techniques, etc.

HEMOSTASIS: The residents are involved in an inpatient and outpatient thromboembolism experience that is primarily clinical (Pediatric thromboembolism clinic).

TRANSFUSION MEDICINE: This training focuses on the development of expertise in transfusion medicine. The residents attend ambulatory clinics in hemophilia and platelet disorders.

RED CELL DISORDERS: The residents obtain expertise in the diagnosis of red cell disorders, including hemoglobinopathies with particular emphasis on protein analysis and molecular techniques. The residents also encounter patients with red cell disorders in the ambulatory clinics.

THROMBOEMBOLISM: The residents are involved in an inpatient and outpatient thromboembolism experience that is primarily clinical (pediatric thromboembolism clinic).

CLINICAL PEDIATRIC HEMATOLOGY/ONCOLOGY: The residents receive training in the investigation and management of Pediatric Hematology Oncology problems, both in the outpatient and inpatient setting (including ICU). There is emphasis on team approach to patient care and the general care of Pediatric and Neonatal Hematology/Oncology patients. The residents undertake a 3-month rotation in hemopoietic stem cell transplantation (SCT) at the Hospital for Sick Children in Toronto. In addition to the forgoing, the residents undergo further training (approved by the Residency Program Committee) in subspecialties of their choice, including Pediatric Hematology, Pediatric Oncology, clinical practice evaluation and research methodology.

BONE MARROW TRANSPLANT OUTPATIENT ROTATION: This rotation is designed to provide the trainee with exposure and experience in haematopoietic stem cell transplantation (HSCT) outside that of what is experienced on the acute BMT unit (8B) – such as appropriate selection of patients for HSCT and the planning and timing thereof, preparing the patient and family, outpatient stem cell collection, appropriate laboratory procedures and investigations and the long-term follow-up of HSCT.

ELECTIVES & RESEARCH: All the residents are expected to take a research elective of at least 3 months duration. There is one demand that defines this elective: the resident must receive excellent training in some aspect of research. All the residents are encouraged to pursue further training in clinical/basic research. All residents are expected to complete a research project and the program has dedicated time to complete this task.