

# **DEPARTMENT OF PEDIATRICS**

## **PEDIATRIC HEMATOLOGY & ONCOLOGY ELECTIVE**

**Course Director: Dominick Sabatino, MD**

**Duration: 4 Weeks**

### **GOALS**

To acquaint the student with the evaluation, work-up and treatment of children presenting with hematologic and/or oncologic disorders.

### **EDUCATIONAL OBJECTIVE**

Open to one student, this four-week elective provides direct involvement in the many aspects of caring for children and adolescents with cancer and chronic hematologic disorders. This involves the management of complex medical problems and the challenge of supporting family members who are dealing with their child's diagnosis. The student will also participate in the management and diagnosis of children and adolescents with acute hematologic problems. The student will be an active member of the clinical pediatric hematology/oncology team and will be involved in their daily activities.

### **CLINICAL EXPERIENCE**

1. Participation in the inpatient and outpatient evaluation and consultation of all children referred to the service. The medical student will work closely with the pediatric resident, and the findings will be discussed with the attending physician
2. The medical student will become familiar with the appropriate techniques used in hem-onc for the evaluation, history and physical examination of the patient. After a careful and thorough history and physical examination, the student will be expected to develop a cogent differential diagnosis and appropriate work-up; this will be presented to the attending physician for discussion
3. All of the appropriate laboratory testing used in the work-up of the patient will be discussed. This will include: the proper evaluation of a CBC and examination of a peripheral smear, common testing used for the evaluation of a bleeding disorder, hemoglobin electrophoresis, evaluation of immune hemolytic disease and disorders, as well as the laboratory evaluation of the anemic patient. Other laboratory testing will be reviewed and discussed as indicated.
4. Participation in the continuity of care of the hem/oncology patient; this will include participation in chemotherapy sessions

### **DIDACTIC EXPERIENCE**

Formal didactic/teaching sessions with the attending physician are held on a regular basis, usually three times per week. The curriculum will include the following topics:

- Evaluation of the patient with suspected anemia: general principles, history, physical exam, classification, fundamental physiopathologic mechanisms with illustrative cases, before appropriate laboratory studies with discussion about:
  - Microcytic/hypochromic anemias
  - Hemolytic anemias
  - Megaloblastic anemias
  - Bone marrow failure syndromes
  - Neutropenias
- Evaluation of the patient with a possible bleeding disorder
- Evaluation of oncologic disorders: acute leukemias, non-Hodgkins lymphoma, Hodgkins lymphoma, neuroblastoma, Wilms' tumor, Ewings (PNET), osteosarcoma, retinoblastoma, and histiocytic malignancies

### **SUGGESTED READING MATERIAL**

*Hematology of Infancy and Childhood*, Edited by Nathan and Oski.

Up-to-date online selected topics

Please note: reading material will be discussed with the student on the first day of the elective. Purchasing a textbook is not necessary. The student will be given a department manual and syllabus which contains the required reading material(s).

### **HOW TO APPLY**

If you are interested in applying, please call 516-572- 5399 or visit us at [www.numc.edu](http://www.numc.edu).