HEMATOLOGY/ONCOLOGY ROTATION
GOALS, OBJECTIVES AND TEACHING

The rotation in Hematology/ Oncology is intended to promote the compassionate, effective, and developmentally appropriate assessment and treatment of children with common hematological and oncological problems by enhancing the residents’ knowledge of physiology, pharmacology and evidence based medicine.

PART I: PATIENT CARE AND MEDICAL KNOWLEDGE

GOAL: The ongoing acquisition of knowledge regarding established and evolving biomedical, clinical and cognate sciences, with the resultant application of that knowledge to the compassionate, age appropriate, and effective treatment of children with underlying hematologic and oncologic problems.

OBJECTIVES:

1. Information Gathering:
   - Perform an appropriate problem-oriented history and physical examination
   - Gather accurate, essential information from all sources, including medical interviews, medical records and diagnostic/therapeutic procedures.
   - Make informed recommendations about preventive, diagnostic and therapeutic options and interventions that are based on clinical judgment, scientific evidence, and patient preference.
   - Explain the indications and limitations of laboratory and radiologic study abnormalities in the context of disease-specific pathophysiology and formulate a plan for therapeutic intervention, when appropriate.

2. Common conditions: (see table 1):
   - Discuss the pathophysiologic basis of the disease process.
   - Describe the presenting signs of symptoms of the different hematologic and oncologic diseases.
   - Understand the potential complications and consequences of the disease and various treatment options; evaluate prognosis.

3. Management and decision making:
   - Develop and maintain a detailed list of tasks with accurate prioritization
   - Coordinate with multiple consultants involved in the care of the patient
   - Recognize the limits of one’s knowledge, skills, and tolerance for stress levels.

4. Medical ethics and legal issues:
   - Discuss concepts of futility, withdrawal and withholding of care
   - Define brain death
Describe hospital policy on “Do not resuscitate” order.

PART II: INTERPERSONAL AND COMMUNICATION SKILLS

GOAL: Understand and demonstrate effective communication and interpersonal skills with parents, patients and professional associates.

OBJECTIVES:

1. Develop and maintain a therapeutic and ethically sound relationship with patients and their families.
2. Listen effectively
3. Elicit and provide information using effective nonverbal, informative, interrogative, and writing skills
4. Communicate and work effectively with other residents, attendings, consultants, nurses and ancillary staff as part of the critical care team.
5. Communicate frequently and effectively with referring and primary care physicians
6. Consistently maintain accurate, timely and legally appropriate medical records.

PART III: PROFESSIONALISM

GOAL: Understand and demonstrate commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to a diverse patient population.

OBJECTIVES:

1. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society and the profession and a commitment to excellence and on-going professional development
2. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent and clinical practices
3. Demonstrate sensitivity and responsiveness to patients’ culture, age, gender and disabilities.
PART IV: TEACHING METHODS

To achieve the objectives of the Hematology/Oncology rotation, the resident physician will participate in the following educational activities:

1. Teaching rounds:
   a. Prior to the start of daily teaching rounds, it is expected that the resident will:
      i. Examine each patient
      ii. Collect and review all bedside data
      iii. Review all radiographic studies
      iv. Develop a concise, system-based treatment plan.
   b. Teaching rounds will start at 0930 am daily and will continue until all patients have been discussed

2. Hematology/Oncology teaching conference:
   a. Formal didactic teaching conferences will every Tuesday from 1:30 pm – 2:30 pm and will include the following topics:
      i. Disorders of erythrocyte production
      ii. Disorders of hemoglobin, including sickle cell disease and the thalassemias.
      iii. Hemolytic anemias
      iv. Bone Marrow failure syndromes
      v. Hemophilia and von Willebrand disease
      vi. Platelet dysfunction
      vii. Neutropenia
      viii. Acute leukemia and lymphomas
      ix. Brain tumors
      x. Abdominal masses
      xi. Bone tumors
      xii. Infectious complications in oncology and BMT patients
      xiii. Oncologic emergencies
      xiv. Hematologic manifestations of systemic disease.
   b. Once a week the residents will attend the Tumor Board Conference where all new patients are discussed in a multidisciplinary approach with the hematologist/oncologist, pathologists, radiologists and pediatric surgeons.
   c. Once a week the residents will attend a review of all in patient children along with all patients seen in the outpatient clinic.

TABLE 1: COMMON HEMATOLOGIC AND ONCOLOGIC DISEASES:
GENERAL:
Interpret a CBC
Interpret findings on a blood smear
Interpret results of a bone marrow

HEMATOLOGY:
Anemia
Hemoglobinopahties
White blood cell disorders
Coagulation disorders
Platelet disorders
Indications and Complications of blood product transfusions
Leukemias
Lymphomas
Langerhans cell histiocytosis
Tumor Lysis Syndrome

ONCOLOGY:
Brain tumors
Chest masses
Abdominal masses
Lymphadenopathy
Retinoblastoma
Bone tumors