

Cytogenetics Rotation - Objectives

Medical Knowledge

1. **Objectives:** What is the medical knowledge base the resident is expected to attain on this rotation?
Residents participate in scheduled teaching conferences during their rotation. Topics covered include constitutional chromosome disorders, myeloid and lymphoid malignancies, solid tumors, and fluorescence in situ hybridization (FISH). Following these conferences with the teaching faculty, the resident is expected to become proficient with the appropriate indications and specimen requirements for cytogenetic evaluation of each disorder discussed. Residents will be able to discuss the conventional and molecular cytogenetic findings in the context of the clinical presentation of patients with the various disorders, relevant physical examination findings, natural history and implications for family members.
2. **Plan:** How is the knowledge base attained?
 - a. What is the basic reading requirement for the rotation?
 1. Basic Reading is organized into modules covered over a four week time period
 - Week One: Constitutional Disorders
 - Week Two: Myeloid and Lymphoid Disorders
 - Week Three: Fluorescence in situ hybridization (FISH)
 - Week Four: Solid Tumors
 2. Computer Resources:
Residents will become familiar with computer resources that pertain to cytogenetic disorders. They are required to locate Online Mendelian Inheritance in Man on the Internet and use it as a resource for the teaching conferences. (<http://www.ncbi.nlm.nih.gov/Omim/>) and also, Atlas of Genetics and Cytogenetics in Oncology and Haematology at (<http://www.infobiogen.fr/services/chromcancer/>)
 - b. What teaching conferences and lectures are the residents expected to attend?
Weekly didactic sessions with cytogenetics faculty
 - Clinical Pathology Lecture Series
 - Clinical Pathology Rounds
 - Adult Hematology/Oncology Clinical Case Conference (Thursdays)
 - Pediatric Hematology/Oncology Leukemia Conference (Second Tuesday of each month)
 - Clinical Genetics Grand Rounds (First and third Thursdays of each month)
3. **Supervision/Assessment:** How is the resident's medical knowledge assessed and by whom
 - a. Assessment occurs at weekly didactic teaching sessions with cytogenetics faculty
 - b. Objective assessment by written exam at the end of rotation.