

Department of Pediatric Pathology and Laboratory Medicine
University of Tennessee

Program Goals

The goal of the Pediatric Pathology Fellowship is to prepare the fellow to practice pediatric pathology in either an university or private practice setting. This will be achieved by:

- Becoming proficient in basic approaches used in evaluating maternal postpartum and pediatric surgical cases including microscopic examination and correlation with clinical laboratory and radiological studies. This includes the use of histochemical stains, immunohistochemistry electron microscopy and molecular diagnostics as necessary for the particular case.
- Gaining proficiency in performing fetal, perinatal and pediatric autopsies with more emphasis on evaluating the patient for congenital abnormalities, pediatric tumors, and other aspects of the developmental process. This includes discussing cases with other pediatric subspecialties both prior to and after the autopsy, correlating findings with clinical, laboratory and radiologic studies and participating in Mortality and Morbidity Conferences where cases are presented. Newborn and stillborn cases will be discussed with neonatologists and obstetricians at the MED and in the context of their regular mortality reviews.
- Gaining proficiency in examination and evaluation of human placentas and products of conception, including embryo.
- Obtaining experience in performing and evaluating frozen sections. This will include communicating with the surgeon before the frozen section to obtain pertinent history as well as after microscopic evaluation to relate to the findings to the microscopic findings.
- Becoming proficient in basic approaches used in evaluating pediatric bone marrows including microscopic examination and correlation with laboratory, clinical, and radiologic studies. This includes the use of histochemical stains, immunohistochemistry and molecular diagnostics as necessary for the particular case.
- Becoming proficient in basic approaches used in evaluating pediatric cytology examination including microscopic examination and correlation with laboratory, clinical, and radiologic studies. This includes the use of histochemical stains, immunohistochemistry and molecular diagnostics as necessary for the particular case.
- Becoming proficient in basic approaches used in evaluating and consulting results of pediatric laboratory tests and blood bank with clinicians, and correlation with clinical and radiological studies. Becoming proficient in basic approaches used in pediatric laboratory administration.
- Developing self confidence in presenting their views at conferences where either pediatric surgical or autopsy cases are being presented.

General Objectives

By the end of the one year Pediatric Pathology Fellowship program, all fellows are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The fellow should exhibit an increasing level of responsibility and independency as he or she progresses throughout the program.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	GENERAL OBJECTIVES			
	Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Gather essential and accurate information about their patients.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Make informed decisions about diagnostic, therapeutic and prognostic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgments.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Counsel and educate clinicians, sometimes patients and their families.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Use information technology to support patient care decisions and patient education.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Perform competently all diagnostic procedures considered essential for the area of practice.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Provide advices aimed at preventing health problems or maintaining health.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Work with health care professionals, including those from other disciplines, to provide patient-focused care.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Log Review	Daily Monthly Semi-annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Self Directed Learning	Case Discussions	Daily
	SPECIALTY SPECIFIC OBJECTIVES			
	See specific rotations for a detailed list of patient care objectives.			
Medical Knowledge	GENERAL OBJECTIVES			
	Demonstrate knowledge about established and evolving biomedical, clinical, and cognate sciences and the application of this knowledge to patient care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate an investigatory and analytic thinking approach to clinical situations.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Know and apply the basic and clinically supportive sciences which are appropriate to their discipline.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	SPECIALTY SPECIFIC OBJECTIVES			
	See specific rotations for a detailed list of medical knowledge objectives.			
Practice Based Learning and Improvement	GENERAL OBJECTIVES			
	Investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Analyze practice experience and perform practice-based improvement activities using quality improvement methods, and implement changes with the goal of practice improvement.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Incorporate formative evaluation feedback into daily practice	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Log Review	Daily Monthly Semi-annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Self Directed Learning	Case Discussions	Daily
	Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Acknowledge errors, alert patients and appropriate health care providers about the errors, and create a plan of action to minimize them.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Set learning and improvement goals	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Use information technology to manage information, access on-line medical information; and to optimize education.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Participate in the pathological education of patients, families, students, residents, and other health professionals	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	SPECIALTY SPECIFIC OBJECTIVES			
	Evaluate patient care practices, discuss how they meet standards, and develop ways to improve these practices.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Compare clinical practice, patient safety, and quality of care with evidence based medicine.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	Participate in all mandated conferences (include a list of conferences).	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate improvement in clinical management and diagnostic assessment.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Implement new scientific advances and clinical approaches from a variety of sources into current patient care practices.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Analyze and evaluate medical literature and examine alternate sources for information that pertains to their patient's health problems.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Take responsibility for lifelong learning.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Use information technology such as Up-To-Date, PubMed or Ovid to enhance patient care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Teach fellow residents, medical students, and interns.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Maintain appropriate records documenting practice activities (such as patient logs).	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Log Review	Daily Monthly Semi-annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Self Directed Learning	Case Discussions	Daily
Interpersonal and Communication Skills	GENERAL OBJECTIVES			
	Demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients' families, and professional associates.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Work effectively with others as a member or leader of a health care team or other professional group.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	SPECIALTY SPECIFIC OBJECTIVES			
	Carefully listen to patients to assess the patient's health problems including their verbal and non-verbal communications.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrating respectful and considerate attitudes, effectively communicate with patients, families, and other health care personnel across a broad range of socioeconomic and cultural backgrounds, when addressing management plans, patient issues, and especially end-of-life decisions.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Accurately present (verbally and written) a case to attending physicians, fellow residents, and other health care professionals.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Provide timely, legible, and thorough medical record documentation - histories and physical examinations, admission notes, progress notes, procedure notes and	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Log Review	Daily Monthly Semi-annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	discharge summaries.	Self Directed Learning	Case Discussions	Daily
	Provide education and counseling to patients, and families using non-technical and clear language. (Use non-verbal and verbal communication skills)	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Work well within team consisting of students, residents, attending physicians, nurses, and patients.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Function effectively as a consultant for specialty and subspecialty care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
Professionalism	GENERAL OBJECTIVES			
	Demonstrate a commitment to carrying our professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients, society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care confidentiality of patient information, informed consent, and business practices.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate a sensitivity and responsiveness to patients' culture, age, gender, race, religion, sexual orientation, and disabilities.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate respect, compassion, integrity, punctuality, reliability, and honesty with regards to patients and colleagues.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Show regard for the opinions of others.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Display initiative and leadership.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate concern for the educational development of students and residents.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Volunteer for activities for the good of the institution and community.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Ask for help when needed and accept constructive feedback.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Maintain patient confidentiality.	Daily Case Sign Out Conferences	Focused Observation Global Rating Evaluation	Daily Monthly

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Case Discussions Self Directed Learning	Case Log Review Case Discussions	Semi-annually Daily
	Compassionately respond to issues of culture, age, gender, ethnicity, and disability in patient care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
Systems-Based Practice	GENERAL OBJECTIVES			
	Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Practice cost-effective health care and resource allocation that does not compromise quality of care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Advocate for quality patient care and assist patients in dealing with system complexities.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance.	Daily Case Sign Out Conferences Case Discussions Self Directed	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Learning		
	Participate in identifying system errors and implement potential systems solutions	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate ability to deliver high-quality medical care in a private, government, and inner city hospital settings.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate the knowledge of different types of medical practice and health care delivery systems and understand how this affects patient care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate knowledge of business aspects of medical practice including coding, billing, and insurance.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Work with ancillary team members (discharge planners, case managers, and social workers) to provide high quality cost-effective care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Use systematic approaches to reduce errors.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Practice effective allocation of health care resources to avoid compromising quality of care.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Interact with patients, attending physicians and allied health	Daily Case Sign Out	Focused Observation	Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	care personnel as part of a health care team.	Conferences Case Discussions Self Directed Learning	Global Rating Evaluation Case Log Review Case Discussions	Monthly Semi-annually Daily
	Serve as a patient advocate in the outpatient and inpatient setting.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Direct care in inpatient and outpatient settings as a member of a multidisciplinary team.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate knowledge of how the health care system including other physicians, nurses, and health care professionals affect their patient care practices.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Embryo-Fetal, Perinatal, and Placental Pathology Rotation
Newborn Center, Regional Medical Center

By the end of the Embryo-Fetal, Perinatal, and Placental Pathology rotation at the Newborn Center, residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Proficiently perform perinatal autopsy techniques	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Examine the placenta both in the context of autopsies and generally	Daily Case Sign Out Conferences	Focused Observation Global Rating Evaluation	Daily Monthly

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Case Discussions Self Directed Learning	Case Log Review Case Discussions	Semi-annually Daily
	Perform stillborn autopsies (after 20 weeks), abortion autopsies (before 20 weeks), preterm death autopsies, and perinatal death autopsies	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Examine embryo, fetus and neonates for congenital abnormalities or other pathological changes	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Culture and process blood, fibroblasts, amniotic fluid and chorionic villous samples to obtain metaphases for pre-natal and pediatric diagnosis.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Utilize banding techniques, chromosome analysis, karyotyping and preparation of the cytogenetics report with emphasis on appropriate nomenclature	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Prepare, handle and interpret FISH including metaphase and interphase testing (site-specific sequence probes and whole-chromosome painting).	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Observe genetic counseling, amniocentesis/chorionic villous sampling, and specimen handling at the clinic level	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Observe examination, evaluation, counseling and treatment of pediatric patients with known or suspected genetic disorders	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Medical Knowledge	SPECIALTY SPECIFIC OBJECTIVES			
	Expand knowledge and experimental databases by assisting residents with cases, reviewing recent cases designated as exemplary and/or of important diseases, and reviewing archival material through reports, photographs, and databases	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate the understanding of the causes of failed pregnancies	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Describe principles of cell division, nondisjunction error, imprinting, mutation and chromosome structure	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate an understanding of chromosomal syndromes, phenotype-karyotype correlation and laboratory management of patients with chromosomal abnormalities	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Develop managerial aspects of the cytogenetics laboratory including the qualification and certification required of personnel working in the laboratory, and the QA/QC issues of the laboratory including CAP proficiency testing	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Describe the role of the cytogenetics laboratory in patient management, including productive interaction with laboratory personnel, other medical professionals and patients	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Develop an in-depth knowledge of the principles of evaluation and care of premature and acutely ill infants	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Develop familiarity with and understanding of the nutritional, respiratory, and medical support given to these	Daily Case Sign Out Conferences	Focused Observation Global Rating Evaluation	Daily Monthly

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	infants and the role of the pathologist/laboratory in that care.	Case Discussions Self Directed Learning	Case Log Review Case Discussions	Semi-annually Daily
	Evaluate the effect of treatment on laboratory test results and biopsy/autopsy material to better interpret the changes identified	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Assist the care team in understanding the laboratory results, surgical pathology reports, and transfusion practices used in the NICU setting, and how best to use that material to support the patients, as well as fostering the communication between clinicians and pathologists	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Improve diagnostic skills through sign out surgical and autopsy specimens	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
Practice Based Learning and Improvement	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			
	Present cases and topical programs to clinical associates	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Teach pathology residents and medical students	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
Interpersonal and Communication Skills	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			
	Discussing pathological results with neonatologists and obstetricians.	Daily Case Sign Out Conferences Case Discussions Self Directed	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Learning		
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			
Systems-Based Practice	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			

Pediatric Pathology Rotation
LeBonheur Children’s Medical Center

By the end of the Pediatric Pathology rotation at LeBonheur Children’s Medical Center, fellows are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The fellow should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Perform pediatric and preinatal autopsies with emphasis on evaluating congenital abnormalities, metabolic disorders, complications of prematurity, pediatric tumors, and other disorders during development. This includes discussing cases with other pediatric subspecialties both prior to and after the autopsy, correlating findings with clinical, laboratory and radiologic studies and participating in conferences where the cases are presented.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Improve skill of intraoperative consultation by performing gross examination and frozen sections, including communicating with the surgeon before the frozen section to obtain pertinent history as well as after microscopic evaluation to relate to the surgeon the microscopic findings.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Generate a gross description of surgical specimens and learn how to guide pathology assistant to perform the gross examination and sampling.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	Evaluate pediatric surgical pathology cases (e.g., Hirschprung's disease, GI biopsies, liver biopsies, etc.). Evaluate pediatric neuropathology specimens.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Improve skills of specimen selection and procession for different techniques, including but not limited to chromosomal evaluation, histochemistry, flow cytometry, immunohistochemistry, molecular diagnostics and biochemistry (enzyme study).	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate competence in microscopic description. Diagnose common placental and gastrointestinal lesions, pediatric tumors, pulmonary pathology, inflammatory bowel disease, common bone lesions, liver lesions unique to infants and children, and lymphoproliferative diseases	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Perform microscopic photography. Properly utilize gross photography equipment.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Formulate an appropriate differential diagnosis, issuing proper diagnostic reports.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Review and analyze hemoglobin HPLC reports, increasing knowledge of pediatric blood bank practices	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Actively involve clinical laboratory and consultation service	Daily Observations Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Perform diagnostic services in anatomic pathology including routine histopathology, as well as molecular diagnostics, cytology, immunohistochemistry, pertussis,	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Log Review	Daily Monthly Semi-annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	quantitative EBV, in situ hybridization and ultrastructural pathology, microbiology, and virology in this recognized subspecialty.	Self Directed Learning	Case Discussions	Daily
	Demonstrate an understanding of the specific roles of Pediatric Pathology in the clinical practice of specific subspecialties.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Educate and council parents and treating physicians about a variety of pediatric disease states and diagnoses.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
		Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
Medical Knowledge	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate proficiency in basic approaches used in evaluating pediatric surgical cases including microscopic examination and correlation with clinical laboratory and radiologic studies. This includes the use of histochemical stains, immunohistochemistry, electron microscopy and molecular diagnostics as necessary for the particular case.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate proficiency in the use of histochemical stains, immunohistochemistry, electron microscopy, and molecular diagnostics as necessary for the particular case.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate an understanding of dissection techniques as they apply to the pediatric autopsy (e.g. congenital heart disease, congenital malformations) and surgical specimens from pediatric patients (e.g. Wilms' tumor).	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	Demonstrate an understanding of the morphologic and clinical laboratory tools available to reach the correct diagnosis.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	<p>Demonstrate an understanding of the histologic features, etiology, diagnosis, and treatment of the following fetal life, infancy, childhood and adolescent diseases:</p> <ul style="list-style-type: none"> • Pediatric tumors: "Small, round blue cell tumors" - neuroblastoma, primitive neuroectodermal tumor, intrabdominal desmoplastic round cell tumor; Renal tumors- Wilms' tumor, mesoblastic nephroma, others; Pediatric bone and soft tissue tumors- rhabdomyosarcoma, osteosarcoma, others; Germ cell tumors- yolk sac carcinoma, teratoma, Liver tumors- hepatoblastoma, hepatocellular carcinoma, others; Lymphomas including Hodgkin's disease; Childhood leukemias, pediatric brain tumors, histiocytic disorders- Langerhans cell histiocytosis, Rosai-Dorfman disease, others • Gastrointestinal diseases: including reflux esophagitis, Hirschsprung's disease, neonatal necrotizing enterocolitis, malabsorption syndromes, inflammatory bowel disease, infectious colitis, allergic disorders. • Genitourinary diseases: reflux uropathy, undescended testes, herniorrhaphies • Hepatobiliary tract diseases: infantile cholestasis, autoimmune and drug induced hepatitis, others • Metabolic diseases: glycogen storage diseases, Wilson's disease, Niemann Pick, Gaucher, tyrosinemia, galactosemia, urea cycle enzyme deficiencies, fatty acid oxidation defects • Infections: pediatric AIDS, lymphadenitis, osteomyelitis, H. Pylori, infections of immunocompromised host • Immunologic disorders: AIDS, congenital immunodeficiency, autoimmune disease, asthma and allergy 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	<ul style="list-style-type: none"> • Transplant Pathology (liver, heart, bone marrow, kidney, lung): rejection, vascular problems, associated conditions • Renal diseases: nephrotic syndrome, other glomerular diseases, cystic disease. • Endocrine conditions: congenital adrenal hyperplasia, hyperinsulinemia, thyroid disease, calcium and bone disorders, intersex disorders • Pediatric forensic pathology: sudden infant death syndrome, child abuse, child neglect • Diseases of Pregnancy: gestational trophoblastic disease, spontaneous abortion, ectopic pregnancy, intrauterine fetal death, preterm birth, fetal growth restriction, preeclampsia, acute and chronic abruption, perinatal asphyxia, congenital infections (toxoplasmosis, rubella, cytomegalovirus, herpes, syphilis), chorioamnionitis • Chromosomal Abnormalities: trisomies 13, 18, 21, monosomy X, triploidy • Major Congenital Malformations hypoplastic left heart:, ventricular septal defect, atrial septal defect, tetralogy of Fallot, truncus arteriosus, anomalous pulmonary venous return, endocardial cushion defects, patent ductus arteriosus, coarctation of aorta, Eisenmenger's syndrome, neural tube defects, hydrocephalus, Potter's syndrome, osteochondrodysplasias • Conditions of neonatal period: neonatal/hypoxic-ischemic encephalopathy, intraventricular hemorrhage, newborn respiratory conditions, iatrogenic lesions, neonatal necrotizing enterocolitis, early onset neonatal sepsis, complications of prematurity. 			
Practice Based Learning and Improvement	SPECIALTY SPECIFIC OBJECTIVES			
	Develop self confidence in presenting their views at conferences where either pediatric surgical or autopsy cases are being presented.	Daily Case Sign Out Conferences Self Reflection Role Modeling Journal Club	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Participate in quality assurance and quality improvement procedures.	Daily Case Sign Out Conferences	Focused Observation Global Rating Evaluation	Daily Monthly

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Self Reflection Role Modeling Journal Club	Case Discussions 360 degree evaluation	Daily Monthly
Interpersonal and Communication Skills	SPECIALTY SPECIFIC OBJECTIVES			
	Interacts with Pediatric subspecialty staff regarding pertinent clinical, surgical pathology, and autopsy data.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Communicate with the surgeon before the frozen section to obtain pertinent history as well as after microscopic evaluation to relate to the surgeon the microscopic findings.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Express ideas and positions clearly both orally and in writing.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diverse patient populations.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Prompt and well prepared for conferences and teaching assignments.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Assume delegated responsibilities.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Ensure that reports are complete and up to date.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Keep thorough and accurate records.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	Demonstrate respect, compassion, integrity, punctuality, reliability, and honesty with regards to patients and colleagues.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Systems-Based Practice	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate awareness of the role of pediatric pathology services/practice in large medical systems.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Call on system resources to provide appropriate and cost effective services while avoiding compromising quality of care.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Demonstrate an understanding of the reciprocal interaction of pediatric pathology services with that of other health care professionals and organizations.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly

Pediatric Pathology Rotation
St. Jude Children’s Research Hospital

By the end of the Pediatric Pathology rotation at St. Jude, residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year. During this rotation the resident should acquire skill in the evaluation, gross and microscopic description, report generation, and SNOMED coding of the cyto/histopathological, immunohistochemical, and ultrastructural aspects of all types of pediatric surgical and autopsy specimens. The focus is on pediatric neoplastic pathology.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Morphologic Examination <ul style="list-style-type: none"> Gross and microscopically describe and interpret a full spectrum of pediatric surgical, cytological and fine needle aspirate specimens. Review all cases before sign-out with a senior 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	<p>pathologist.</p> <ul style="list-style-type: none"> Review case material before each sign-out is completed. 			
	<p>Immunohistochemistry</p> <ul style="list-style-type: none"> Interpret immunohistochemical data in pediatric neoplasia with special emphasis on basic principles, applications to diagnosis, biology, classification and risk stratification of solid tumors of childhood. 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	<p>Autopsy Pathology</p> <ul style="list-style-type: none"> Interpret gross, microscopic and microbiologic observations in the evaluation of pediatric neoplasia and its direct and therapeutic complications. 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	<p>Consultation Pathology</p> <ul style="list-style-type: none"> Participate in the examination and interpretation of consult and reference surgical pathologic material. 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Describe the gross and microscopic features of the malignant tumors most commonly encountered in children (including hematopoietic and non-hematopoietic neoplasms) as well as with the pathologic features important in the risk stratification of patients presenting with such tumors.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Describe the microscopic features of the most common inflammatory and infectious disorders associated with cancer therapy (including bone marrow transplantation) in children	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Integrate specimen requirements and significance of the ancillary studies (immunohistochemical staining and in situ hybridization, molecular pathology, cytogenetics, microbiology) pertinent to the disease categories mentioned above into patient care practices	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Competently handle samples and autopsy cases related to the pathology specific to patients including: prosection, slide examination, ordering pertinent ancillary studies and	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Log Review	Daily Monthly Semi-annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	integrating their results with the pathologic findings to generate a final pathology report	Self Directed Learning	Case Discussions	Daily
	Perform pediatric autopsies with more emphasis on evaluating the patient for congenital abnormalities, pediatric tumors, and other aspects of the developmental process including: <ul style="list-style-type: none"> • Discuss cases with other pediatric subspecialties both prior to and after the autopsy • Correlate findings with clinical, laboratory and radiologic studies • Participate in conferences where the cases are presented. 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Perform and evaluate frozen sections to include communicating with the surgeon before the frozen section to obtain pertinent history as well as after microscopic evaluation to relate to the surgeon the microscopic findings.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Generate a gross description of common specimens.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Select, cut, prepare and if necessary, fix tissues for various specialized laboratories, including cytogenetics, immunohistochemistry, flow cytometry and molecular diagnostics.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate competence in microscopic description.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Perform microscopic photography.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Diagnose common gastrointestinal lesions, pediatric	Daily Case Sign Out	Focused Observation	Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	tumors, pulmonary pathology, inflammatory bowel disease, common bone lesions, liver lesions unique to infants and children, and lymphoproliferative diseases.	Conferences Case Discussions Self Directed Learning	Global Rating Evaluation Case Log Review Case Discussions	Monthly Semi-annually Daily
	Section tissues thinly to allow adequate fixation.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Properly utilize gross photography equipment	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Formulate an appropriate differential diagnosis.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Perform diagnostic services in anatomic pathology including routine histopathology, as well as molecular diagnostics, cytology, immunohistochemistry, pertussis, quantitative EBV, in situ hybridization and ultrastructural pathology, microbiology, and virology in this recognized subspecialty.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate an understanding of the specific roles of Pediatric Pathology in the clinical practice of specific subspecialties.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Educate and council parents and treating physicians about a variety of pediatric disease states and diagnoses.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Prepare and analyze pediatric intraoperative consultations.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Log Review	Daily Monthly Semi-annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Self Directed Learning	Case Discussions	Daily
Medical Knowledge	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate knowledge of the functioning of the histology histochemistry, immunohistochemistry, and laboratories and how they are used in an integrated manner to diagnose and manage pediatric patients with neoplastic disease.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate proficiency in basic approaches used in evaluating pediatric surgical cases including microscopic examination and correlation with clinical laboratory and radiologic studies. This includes the use of histochemical stains, immunohistochemistry, electron microscopy and molecular diagnostics as necessary for the particular case.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate proficiency in the use of histochemical stains, immunohistochemistry, electron microscopy, and molecular diagnostics as necessary for the particular case.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate an understanding of dissection techniques as they apply to the pediatric autopsy (e.g. congenital heart disease, congenital malformations) and surgical specimens from pediatric patients (e.g. Wilms' tumor).	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate an understanding of the morphologic and clinical laboratory tools available to reach the correct diagnosis.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate an understanding of the histologic features, etiology, diagnosis, and treatment of the following fetal life, infancy, childhood and adolescent diseases: <ul style="list-style-type: none"> • Pediatric tumors: "Small, round blue cell tumors" - neuroblastoma, primitive neuroectodermal tumor, 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	<p>intrabdominal desmoplastic round cell tumor; Renal tumors- Wilms' tumor, mesoblastic nephroma, others; Pediatric bone and soft tissue tumors- rhabdomyosarcoma, osteosarcoma, others; Germ cell tumors- yolk sac carcinoma, teratoma, Liver tumors- hepatoblastoma, hepatocellular carcinoma, others; Lymphomas including Hodgkin's disease; Childhood leukemias, pediatric brain tumors, histiocytic disorders- Langerhans cell histiocytosis, Rosai-Dorfman disease, others</p> <ul style="list-style-type: none"> • Gastrointestinal diseases: including reflux esophagitis, Hirschsprung's disease, neonatal necrotizing enterocolitis, malabsorption syndromes, inflammatory bowel disease, infectious colitis, allergic disorders. • Genitourinary diseases: reflux uropathy, undescended testes, herniorrhaphies • Hepatobiliary tract diseases: infantile cholestasis, autoimmune and drug induced hepatitis, others • Metabolic diseases: glycogen storage diseases, Wilson's disease, Niemann Pick, Gaucher, tyrosinemia, galactosemia, urea cycle enzyme deficiencies, fatty acid oxidation defects • Infections: pediatric AIDS, lymphadenitis, osteomyelitis, H. Pylori, infections of immunocompromised host • Immunologic disorders: AIDS, congenital immunodeficiency, autoimmune disease, asthma and allergy • Transplant Pathology (liver, heart, bone marrow, kidney, lung): rejection, vascular problems, associated conditions • Renal diseases: nephrotic syndrome, other glomerular diseases, cystic disease. • Endocrine conditions: congenital adrenal hyperplasia, hyperinsulinemia, thyroid disease, calcium and bone disorders, intersex disorders • Pediatric forensic pathology: sudden infant death syndrome, child abuse, child neglect 	Journal Club		

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	<ul style="list-style-type: none"> • Diseases of Pregnancy: gestational trophoblastic disease, spontaneous abortion, ectopic pregnancy, intrauterine fetal death, preterm birth, fetal growth restriction, preeclampsia, acute and chronic abruption, perinatal asphyxia, congenital infections (toxoplasmosis, rubella, cytomegalovirus, herpes, syphilis), chorioamnionitis • Chromosomal Abnormalities: trisomies 13, 18, 21, monosomy X, triploidy • Major Congenital Malformations hypoplastic left heart:, ventricular septal defect, atrial septal defect, tetralogy of Fallot, truncus arteriosus, anomalous pulmonary venous return, endocardial cushion defects, patent ductus arteriosus, coarctation of aorta, Eisenmenger's syndrome, neural tube defects, hydrocephalus, Potter's syndrome, osteochondrodysplasias • Conditions of neonatal period: neonatal/hypoxic-ischemic encephalopathy, intraventricular hemorrhage, newborn respiratory conditions, iatrogenic lesions, neonatal necrotizing enterocolitis, early onset neonatal sepsis, complications of prematurity. 			
Practice Based Learning and Improvement	SPECIALTY SPECIFIC OBJECTIVES			
	Participate in all mandated conferences (include a list of conferences) and present cases.	Daily Case Sign Out Conferences Self Reflection Role Modeling Journal Club	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Evaluate patient care practices and diagnostic skills, discuss how they meet standards, and develop ways to improve these practices.	Daily Case Sign Out Conferences Self Reflection Role Modeling Journal Club	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Implement new scientific advances and clinical approaches from a variety of sources into current patient care practices.	Daily Case Sign Out Conferences Self Reflection Role Modeling Journal Club	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	Analyze and evaluate medical literature and examine alternate sources for relevant information that pertains to their patient's health problems.	Daily Case Sign Out Conferences Self Reflection Role Modeling Journal Club	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Interpersonal and Communication Skills	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrating respectful and considerate attitudes, effectively communicate with patients, families, and other health care personnel, especially when addressing end-of-life decisions.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Present a case accurately and succinctly to attending physicians, fellow residents, and other health care professionals.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Provide timely, legible, and thorough medical record documentation - procedure notes and diagnostic findings.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Work well within team context relating to students, residents, attending physicians, nurses, and patients.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse population.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Work with lab personnel and other pathologists.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Demonstrate respect, compassion, integrity, punctuality, reliability, and honesty with regards to patients and colleagues.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Systems-Based	SPECIALTY SPECIFIC OBJECTIVES			

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Practice	Demonstrate ability to deliver high-quality medical care in a private, government, and inner city hospital settings.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Demonstrate knowledge of types of medical practice and health delivery systems and understand how this affects patient care.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Demonstrate knowledge of business aspects of medical practice including coding, billing, and insurance.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly

Forensic Pathology

Regional Forensic Center

By the end of the Forensic Pathology rotation at the Regional Forensic Center, residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Properly perform a forensic autopsy: <ul style="list-style-type: none"> • Review medical history and circumstances of death • Perform an external exam for trauma • Perform a gross dissection for trauma and abnormalities • Review microscopic and laboratory findings • Prepare written descriptions of the gross and microscopic findings • Develop an opinion regarding the cause of death • Review findings with attending • Perform the basic steps of an autopsy: <ul style="list-style-type: none"> • Evaluate the autopsy consent and obtain sufficient history 	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	<ul style="list-style-type: none"> Evisceration, dissection, gross photography and sampling of tissues and fluids Complete the preliminary autopsy report as well as the clinical summary and gross description in a timely fashion Submit tissue samples for microscopy in a timely fashion Microscopic examination and introduction to photo microscopy Presentation at autopsy conference Assist in neuropathology examinations Complete an integrated and communicative report including a clinical pathological correlation 			
	Refine external examination techniques.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Examine body before it has been disturbed at the crime scene	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Gain exposure to forensic anthropology.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
	Demonstrate a satisfactory level of diagnostic competence and the ability to provide effective pathologic consultation under appropriate circumstances.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily
Medical Knowledge	SPECIALTY SPECIFIC OBJECTIVES			
	Describe the difference between “cause”, “mechanism”, and “manner” of death.	Daily Case Sign Out Conferences Case Discussions Self Directed	Focused Observation Global Rating Evaluation Case Log Review Case Discussions	Daily Monthly Semi-annually Daily

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Learning Journal Club	In-service exam	Annually
	Discuss the various means of identification of unknown victims.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Recognize postmortem artifacts such as insect bites, animal destruction, Tardieu spots, Tache noire and decomposition.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Describe the cardiovascular, respiratory and CNS diseases that may result in sudden death.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Identify characteristics and criteria for the following types of gunshot wounds: entrance and exit wounds, contact wounds, and close range wounds.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Describe the distinguishing features of blunt force injury and sharp force injury.	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Observe expert witness testimony/attend court with medical examiner	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
	Demonstrate an understanding of the principles, regulations, and legalities of performing an autopsy linked to criminal persecution or civil litigation	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
	Demonstrate the knowledge of proper acceptance of a case; pros and cons of performing an autopsy; and appropriateness of performing an autopsy	Daily Case Sign Out Conferences Case Discussions Self Directed Learning Journal Club	Focused Observation Global Rating Evaluation Case Log Review Case Discussions In-service exam	Daily Monthly Semi-annually Daily Annually
Practice Based Learning and Improvement	SPECIALTY SPECIFIC OBJECTIVES			
	Make presentation to staff and colleagues on a forensic pathology topic.	Daily Case Sign Out Conferences Self Reflection Role Modeling Journal Club	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Interpersonal and Communication Skills	SPECIALTY SPECIFIC OBJECTIVES			
	Present a case accurately and succinctly to attending physicians, fellow residents, and other health care professionals.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Provide timely, legible, and thorough forensic autopsy reports.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Work well within team consisting of medical examiner, technicians, and death investigators.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
	Communicate effectively when discussing autopsy results with medical examiners and investigators.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	Professionally interact with attending physicians and allied health care personnel.	Daily Case Sign Out Conferences	Focused Observation Global Rating Evaluation	Daily Monthly

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
		Role Modeling Case Discussions	Case Discussions 360 degree evaluation	Daily Monthly
	Demonstrate respect, compassion, integrity, punctuality, reliability, and honesty towards colleagues.	Daily Case Sign Out Conferences Role Modeling Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly
Systems-Based Practice	SPECIALTY SPECIFIC OBJECTIVES			
	Demonstrate an understanding of how forensic pathology affects other aspects of health care.	Daily Case Sign Out Conferences Case Discussions	Focused Observation Global Rating Evaluation Case Discussions 360 degree evaluation	Daily Monthly Daily Monthly