

Pediatric Surgery

Institution: Monroe Carell Jr Children's Hospital

Duration: 6 weeks

Supervising Physician: Harold N. Lovvorn, III

Contact Information: 615-936-1050

Year of Training: R4-R5

Educational Objectives:

Increasing Independence in Care of Pediatric Surgical Patient

Medical Knowledge & Patient Care:

- ✓ To acquire increased proficiency in the care of children with surgical conditions.
- ✓ To assimilate the complexities of neonatal, infant, and pediatric physiology.
- ✓ To master fluid, electrolyte, and nutritional management in children having surgical conditions.
- ✓ To master pain control with opioid stewardship.
- ✓ To master the pathophysiology of common surgical conditions in infants and children including pyloric stenosis, intestinal obstruction, appendicitis, foreign body of esophagus and airway, etc.
- ✓ To understand complex neonatal and cardiac disease of childhood, including esophageal atresia, congenital diaphragmatic hernia, mesenteric ischemia in low-flow states, surgical management of malrotation, etc.
- ✓ To manage competently the critically ill or injured child.
- ✓ To be familiar with ECMO indications, cannulation and physiology.
- ✓ To understand the management of complex pediatric solid tumors, including neuroblastoma, Wilms tumor, hepatoblastoma, etc.

Patient Care Skills:

- ✓ To master stabilization of the pediatric trauma patient.
- ✓ To manage the pediatric airway, both in trauma resuscitations and after foreign body aspiration.
- ✓ To become competent in venous access in younger children.
- ✓ To interpret specialized radiologic studies commonly obtained in children, including upper GI series, contrast enema, CT scan, MRI, and radionuclide scans.
- ✓ To master surgery for pyloric stenosis and inguinal hernia in infants, complicated appendicitis, vascular access in infants, and intestinal obstruction in older children.
- ✓ To conduct independently trauma resuscitations in infants and children.
- ✓ To assume increasing independence with on-call duties, functioning as senior resident, both with patient assessment and in the operating room.

Systems-based Practice - Other Attributes of Resident:

- ✓ To recognize and advocate for a system that provides cost-efficient surgical care to children and increases overall value.

Practice-based Learning & Improvement (PBLI) & Interpersonal & Communication Skills - Continuity of Care:

- ✓ To participate in preoperative assessment of the pediatric surgical patient.
- ✓ To participate in the outpatient pediatric surgery clinic.
- ✓ To provide independent inpatient and emergency room consultation.
- ✓ To understand the principles of early and late follow-up for complex surgical problems of childhood through participation in outpatient clinic.
- ✓ Preoperative assessment of all patients is expected including both inpatients and outpatients

Medical Knowledge & Patient Care Milestones:

- ✓ Reiterates understanding of fluids, electrolytes, and nutrition in neonates, infants, and children.
- ✓ Demonstrates thorough examination of pediatric abdominal pain and its broad differential diagnoses.
- ✓ Understands differences in management of omphalocele and gastroschisis and appreciates the associated anomalies.
- ✓ Understands physiology of congenital diaphragmatic hernia and indications for ECMO
- ✓ Masters evaluation, resuscitation and surgical correction of pyloric stenosis.
- ✓ Demonstrates good knowledge of neck anatomy as it pertains to branchial cleft cysts and thyroglossal duct cysts.
- ✓ Mastery of thyroid disease in children and adolescents.

Practice-Based Learning and Improvement

Residents must demonstrate the ability to investigate and evaluate the surgical care of pediatric patients, to appraise and assimilate scientific evidence, and to improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:

- ✓ Write an accurate, detailed, and legible preoperative assessment and counseling note on all patients, especially newborns having congenital anomalies and cardiac defects, for which s/he serves as surgeon of record.
- ✓ Utilize assigned journal articles as well as available textbook chapters and information technology (including PubMed search and literature review).
- ✓ Participate in the education of patients, families, students, residents, and other health professionals.
- ✓ Incorporate formative evaluation feedback into daily practice.
- ✓ Greater responsibility in conferences, presenting both interesting cases, morbidities and mortalities, and lectures in a multi-disciplinary setting.
- ✓ Essentially function as a 3rd fellow.

Interpersonal and Communication Skills

- ✓ The resident should ensure that the attending is aware of the progress of all patients on the service.
- ✓ The resident should clearly, accurately, and respectfully communicate with nurses and other hospital employees.
- ✓ The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians, including residents.
- ✓ The Surgery R4/5 should be an ambassador for the Pediatric Surgery service.
- ✓ The resident should clearly, accurately, and respectfully communicate with patients and appropriate members with their families about identified disease processes (including complications), the expected courses, operative findings, and operative procedures.
- ✓ The resident should ensure that clear, concise, accurate, and timely medical records are maintained on all patients.
- ✓ The resident should be able to clearly and accurately teach medical students and junior residents about the procedures performed on this rotation when qualified to do so by hospital and program policy.

Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents must:

- ✓ Demonstrate compassion, integrity, and respect for others.
- ✓ Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.
- ✓ Demonstrate sensitivity to issues of age, race, gender, and religion with patients, family, and members of the healthcare team.
- ✓ Demonstrate respect for patient privacy and autonomy.
- ✓ Remain honest with all individuals at all times in conveying issues of patient care.
- ✓ Respond to the needs of the patient above one's own needs and desires.
- ✓ Maintain high standards of ethical behavior in all professional activities.
- ✓ Demonstrate a commitment to the continuity of patient care to carrying out professional responsibilities or through assuring that those responsibilities are fully and accurately conveyed to others acting in her/his stead.
- ✓ Understand the institutional policy on duty hours and remain compliant with all duty hour regulations. Residents must enter the number of hours spent in the hospital into the tracking system within 24 hours of duty.
- ✓ Be properly and professionally attired at all times while engaged in patient care.
- ✓ Be properly and professionally groomed at all times when engaged in patient care.
- ✓ At all times treat patients, families, and all members of the healthcare team with utmost respect.
- ✓ Reliably be present in prearranged places at predetermined times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if s/he will be unable to be present.
- ✓ Remain compliant with all required training designated by the institution.

Systems-based practice

- ✓ The resident should be able to assess the risks and benefits of all options for treating patients with pediatric surgical illness.
- ✓ The resident should be able to summarize the financial costs, potential complications, and long-term expectations for planned procedures.

- ✓ The resident should be able to determine the benefit of additional treatment by other surgical services, such as neurosurgery, urology, plastic surgery, interventional radiology, and orthopedics.
- ✓ The resident should be able to determine and convey to appropriate individuals the instruments and other materials necessary for all procedures.
- ✓ The resident should be competent in assembling laparoscopic and endoscopic equipment commonly used in pediatric surgery.

Description of Clinical Experiences:

Specific daily responsibilities of the R4/5 Resident include:
Independence with on-call duties, functioning as senior resident (and “3rd fellow”), both with patient assessment, management, and in the operating room.

Description of Didactic Experiences:

Attend all scheduled education and conferences while on rotation.

Evaluation Process:

Faculty and senior residents will evaluate the performance of each resident using these goals and objectives. Each resident on the service will evaluate the rotation, the service, faculty and any senior residents also on the rotation.

Other Important Rotation Information:

This senior/chief level experience is designed to prepare the resident for a fellowship in pediatric surgery and/or competence in the management of complex pediatric surgical disorders in an International setting.