



Department of Surgery

The Department of Surgery at Children's Hospital Boston provides general and specialized surgical services to infants, children and adolescents living with a wide range of congenital and acquired conditions.

Research

The Department of Surgery maintains a major commitment to pediatric surgical research and is one of the largest research departments at Children's Hospital Boston. We are host to world-renowned laboratories involved in angiogenesis research and tissue engineering. Our extensive research initiatives are both laboratory- and clinically-based, providing research training opportunities to a large number of students and fellows.

Current research initiatives and/or labs:

- Cancer and bowel surgery
- Fetal gut development
- Fetal tissue engineering
- Ingber Laboratory (cell mechanics and structure)
- Klagsbrun Laboratory (angiogenesis)
- Laboratory for Transplantation and Tissue Engineering
- Laboratory for Lung Growth
- Maternal-fetal treatment
- Neonatal surgery
- Prostate cancer
- Repair of congenital defects
- Trauma care
- Vascular anomalies and malformations
- Zetter Laboratory (biology of cancer)

Highlights

First . . .

- successful infant lung transplant in New England
- use of the combination of a peripartum EXIT procedure and ECMO to treat an infant with critical airway obstruction
- organized training program for trainees in pediatric surgery
- published textbook in pediatric surgery in the Western world: Ladd and Gross, Abdominal Surgery of Childhood
- definition of the research field of angiogenesis
- successful application of angiogenesis inhibitors to treat a childhood tumor
- description of tracheal occlusion to facilitate development of the "hypoplastic" lung
- development and use of the serial transverse enteroplasty procedure (STEP) as a treatment for Short Bowel Syndrome

Areas of expertise

Our team treats a wide range of conditions, including but not limited to:

- appendicitis
- congenital cystic adenomatoid malformation
- facial fractures
- gallstones
- gastroesophageal reflux
- hernia (umbilical/inguinal)
- inguinal hernia and hydrocele
- liver injuries
- pectus carnicarum
- pectus excavatum
- spleen injuries
- splenectomy
- thyroglossal duct cyst
- Wilms' tumor

Scheduling

**Children's Hospital Boston
Department of Surgery**
300 Longwood Ave., Fegan 3
Boston, MA 02115
617-355-7800
childrenshospital.org/surgery

Andover Surgical Associates
140 Haverhill St.
Andover, MA 01810
617-355-1838

Children's Hospital Boston at Lexington
482 Bedford St.
Lexington, MA 02420
781-672-2100

Children's Hospital Boston at Peabody
Lahey Clinic North
One Essex Center Drive
Peabody, MA 01960
978-538-3600

Children's Hospital Boston at Waltham
9 Hope Ave.
Waltham, MA 02453
781-216-2100

**Children's Hospital Boston Physicians
at Charles River Medical Associates**
571 Union Ave.
Framingham, MA 01701
617-355-0535

**Children's Hospital Boston Physicians
at South Shore Hospital (Weymouth)**
55 Fogg Rd.
Weymouth, MA 02190
617-355-6915

International

For families residing outside of the United States, please contact Children's International Center which facilitates the medical review of patient records and appointment scheduling and which provides assistance with customs and immigration, transportation, hotel and housing accommodations.

childrenshospital.org/international 01-617-355-5209

international.center@childrens.harvard.edu



TERRY L. BUCHMILLER, MD | 617-355-8445

Locations: Boston, Weymouth

Clinical Interests: Prenatal Counseling, Fetal and Neonatal Surgery, Minimally Invasive Surgery, Short Bowel Syndrome

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Running, playing violin



CATHERINE C. CHEN, MD, MPH | 617-355-0535

Locations: Boston, Waltham, Peabody

Clinical Interests: Neonatal Surgery, Pediatric General Surgery, Thoracic Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Playing piano, traveling, knitting, gardening



STEVEN J. FISHMAN, MD | 617-355-3040

Locations: Boston, Lexington

Clinical Interests: Pediatric General Surgery, Thoracic Surgery, Vascular Anomalies and Malformations

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Playing tennis, skiing, spending time with my family and dog



THOMAS E. HAMILTON, MD | 617-355-8544

Locations: Boston

Clinical Interests: Pediatric Surgical Oncology, Neonatal Surgery, Pediatric General Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Soccer, running, fly fishing



TOM JAKSIC, MD, PhD | 617-355-9600

Locations: Boston, Weymouth

Clinical Interests: Pediatric General Surgery, Short Bowel Syndrome

Board Certification: General Surgery, Pediatric Surgery, Surgical Critical Care

Personal Interests: Fishing, running, hiking



RUSSELL W. JENNINGS, MD | 617-355-3038

Locations: Boston

Clinical Interests: Fetal Surgery, Maternal-Fetal Treatment and Surgery, Minimally Invasive Surgery, Neonatal Surgery, Pediatric General Surgery, Robotic Surgery, Thoracic Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Family, travel, health and fitness, motor sports



HEUNG BAE KIM, MD | 617-355-8544

Locations: Boston

Clinical Interests: Fetal Surgery, Liver, Intestine and Kidney Transplantation, Minimally Invasive Surgery, Neonatal Surgery, Pediatric General Surgery, Thoracic Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Golf, computers, spending time with my children



CRAIG W. LILLEHEI, MD | 617-355-3039

Locations: Boston

Clinical Interests: Solid Organ Transplantation, Neonatal and Pediatric General Surgery, Surgical Critical Care, Thoracic Surgery, Inflammatory Bowel Disease

Board Certification: General Surgery, Pediatric Surgery, Surgical Critical Care

Personal Interests: Running



BRADLEY C. LINDEN, MD | 617-355-2458

Locations: Boston, Waltham

Clinical Interests: Minimally Invasive Surgery, Inflammatory Bowel Disease, Neonatal Surgery, Pediatric General Surgery, Robotic Surgery, Thoracic Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Tennis, golf, running, photography



DAVID P. MOONEY, MD, MPH | 617-355-0535

Locations: Boston, Framingham, Waltham

Clinical Interests: Abdominal Surgery, Pediatric General Surgery, Thoracic Surgery, Trauma Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Soccer, music



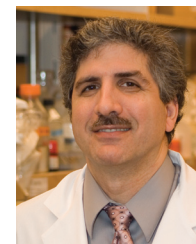
KONSTANTINOS "GUS" PAPANAKIS, MD | 617-355-6915

Locations: Boston, Weymouth

Clinical Interests: Minimally Invasive Surgery, Oncology, Thoracic Surgery, Genitourinary Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Woodworking, antique scooter restoration



MARK PUDER, MD, PhD | 617-355-1838

Locations: Boston, Andover Surgical Associates

Clinical Interests: Neonatal Surgery, Pediatric General Surgery, Thoracic Surgery

Board Certification: General Surgery, Pediatric Surgery

Personal Interests: Spending time with my children and dog



SHAWN J. RANGEL, MD, MSCE | 617-355-3040

Locations: Boston, Peabody, Waltham

Clinical Interests: Neonatal Surgery, Pediatric General Surgery, Thoracic Surgery, Anorectal Malformations, Surgical Safety and Error Prevention

Board Certification: General Surgery

Personal Interests: Bicycling, digital photography, traveling with my wife



ROBERT C. SHAMBERGER, MD | 617-355-8326

Chief, Department of Surgery

Locations: Boston, Waltham

Clinical Interests: Pediatric Oncology, Inflammatory Bowel Disease, Chest Wall Deformities

Board Certification: General Surgery, Pediatric Surgery, Surgical Critical Care

Personal Interests: Biking, traveling, spending time with my family



CHRISTOPHER B. WELDON, MD, PhD | 617-355-4503

Locations: Boston, Waltham

Clinical Interests: Pediatric Surgical Oncology, Pediatric Surgery, General Surgery

Board Certification: General Surgery, Pediatric Surgery, Surgical Critical Care

Personal Interests: Spending time with my family



JAY M. WILSON, MD | 617-355-6019

Locations: Boston, Lexington

Clinical Interests: Congenital Diaphragmatic Hernia, Pediatric General Surgery, Surgical Critical Care, Thoracic and Pulmonary Surgery

Board Certification: General Surgery, Pediatric Surgery, Surgical Critical Care

Personal Interests: Spending time with my dogs and family, boating

Programs and Services

Our specialists bring their expertise to other programs including:

Advanced Fetal Care Center (AFCC):

This program is a collaborative effort between Children's Hospital Boston and its Harvard-affiliated hospital neighbors and their respective Departments of Obstetrics, Maternal-Fetal Medicine and Diagnostic Imaging. The program provides evaluation, genetic and obstetrical counseling, imaging, invasive diagnostics and in utero or peripartum therapy to mothers carrying children with an illness diagnosed in pregnancy.

childrenshospital.org/afcc | 617-355-3896

Center for Minimally Invasive Surgery:

Provides minimally invasive surgical treatment for a variety of acquired and congenital conditions. Using laparoscopic, endoscopic, cystoscopic and robotic-assisted procedures, surgeons perform operations with less pain and quicker recovery.

childrenshospital.org/mis | 617-355-7800

Center for Advanced Intestinal Rehabilitation (CAIR):

CAIR is one of the world's premier programs for the treatment of short bowel syndrome. Physicians specially trained in pediatric gastroenterology, nutrition and surgery, together with fellows, nurses, nurse practitioners, registered dietitians, a social worker and a pharmacist, collaborate to provide a range of treatment options. Plans are carefully customized for each child, and may involve nutritional management, medical services and/or surgical treatment (such as STEP).

childrenshospital.org/cair | 617-355-5275

Congenital Diaphragmatic Hernia (CDH) Program:

Recognized as an international leader in the treatment of CDH and long-term follow-up care for children born with this complex health concern, this multidisciplinary team is dedicated to improving outcomes of children born with CDH.

childrenshospital.org/cdh | 617-355-3038

Esophageal Advanced Treatment (EAT) Center

Children's is the only institution in the world performing the Foker technique for esophageal atresia, wherein traction sutures are used to stimulate growth of truncated esophageal segments prior to anastomosis. The technique fundamentally improves upon the existing therapies of gastric pull-up, colonic or jejunum interposition, spit fistula and gastrostomy by producing a normal, functioning esophagus.

childrenshospital.org/eatc | 617-355-3038

Trauma Program:

Cares for more infants, children and adolescents seriously injured in an accident than any other hospital in New England. Beginning at the accident scene, a multidisciplinary team of pediatric experts coordinate the trauma patient's care from emergency room through their inpatient stay and rehabilitation (when indicated). In addition, the Trauma team supports a child advocacy program for injury prevention in order to reduce the number of childhood traumatic injuries. Also, our program is one of the few in the nation that has received verification from the Committee on Trauma of the American College of Surgeons as a Regional Pediatric Trauma Center, the highest level.

childrenshospital.org/trauma | 617-355-5400

Vascular Anomalies Center:

Known internationally as the preeminent site for the care of individuals with vascular anomalies, which include hemangiomas, vascular malformations and other, less common vascular tumors.

childrenshospital.org/vac | 617-355-5226

Training

Children's Department of Surgery offers several training programs including:

Pediatric Surgery Fellowship Program.

The residency is continuing its proud tradition of training excellence characterized by a large volume of operative activity in an environment committed to education and research. This two-year training program includes elective time in the first year while the second year is devoted to the administrative chief residency position of the pediatric surgical service.

Surgical Critical Care Fellowship Program.

This fellowship is for individuals interested in pursuing a career in pediatric surgery or critical care. The residency is a one-year position with exposure to pediatric surgical patients in the neonatal and pediatric intensive care units.

One-year position at the PGY2/3 level for surgical residents considering a career in pediatric surgery.

The position involves extensive exposure to pediatric surgery with responsibilities in the neonatal intensive care unit, the pediatric intensive care unit, the solid organ transplant unit and three age-based postoperative units.

Two-year positions in surgical research.

Trainees will learn the latest scientific methods while working with established investigators in areas such as vascular biology, transplantation tolerance, organ regeneration, fetal therapy, tissue engineering, vascular anomalies, surgical nutrition and the treatment of short bowel syndrome.