

UAB Department of Surgery



Herbert Chen, MD, FACS

**Professor and Chairman, Department of Surgery, Fay Fletcher Kerner Endowed Chair
University of Alabama at Birmingham (UAB)
Surgeon-in-Chief, UAB Hospital and Health System**

- 3rd Largest Public Hospital in US
- 1,157 licensed beds
- 49,149 discharges per year



UAB Surgical Program

- 70 operating rooms
- Surgical volume
 - ◆ 2015 = 33,427 cases
 - ◆ 2016 = 33,761 cases (projected)
- Case mix index 2.22
- Xenotransplantation Institute
- World's longest Living Donor Kidney Transplant Chain – more than 50 people have been given the gift of life
- One of the busiest trauma centers in the US



UAB: Departmental Leaders

DIVISION DIRECTORS



Jeff
Kerby
Acute Care



Jamey
Davies
CT (I)



Greg
Kennedy
GI



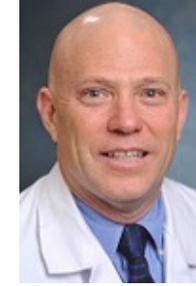
Steve
Theiss
Ortho



Mike
Chen
Pediatrics



Jorge
de la Torre
Plastics



Devin
Eckhoff
Transplant



Helen
Krontiras
Oncology



Adam
Beck
Vascular

VICE CHAIRS



Marty Heslin
Executive



James Bibb
Research



Marc Passman
Clin. Research



Marshall Urist
Education



William Holman
VA Chief



Melanie Morris
VA GS Chief

Division of Acute Care Surgery

- Provides a comprehensive multidisciplinary program of care for the severely injured multisystem trauma or burn victim
- One of the busiest trauma centers in the US
- Research interests include:
 - ◆ burn wound coverings and support techniques
 - ◆ mediators and mechanisms of the metabolic response to injury, organ system failure and host defense mechanisms
 - ◆ motor vehicle crash biomedical research
 - ◆ role of growth factors in wound healing
 - ◆ injury epidemiology
 - ◆ trauma system development



Division of Cardiothoracic Surgery

- Performs about 1,500 open heart procedures each year and has performed about 30,000 such operations since 1966
- In addition to pulmonary and mediastinal resections, the thoracic surgeons perform a significant number of esophageal resections, operations for benign esophageal disease, rigid bronchoscopy, stenting and lasering of the airway, and navigational bronchoscopy (>1500)
- Other clinical and research interests include:
 - ◆ Minimally invasive cardiac and thoracic surgery (including robotic surgery), heart and lung transplantation, surgical treatment of advanced heart failure, aortic valve disease, congenital heart disease surgical repair and treatments, cardiovascular surgery in neonates, arrhythmia research, mechanical cardiac support devices, vascular biology and transplantation immunology

Division of Gastrointestinal Surgery

- Clinical interests:

- ◆ Esophagus: hiatal hernia, esophageal reflux disease, malignancy, achalasia. Stomach/duodenum: peptic ulcer disease, malignancies. Hepatobiliary disease: gallstones, biliary obstruction, portal hypertension. Intestine: inflammatory bowel disease, malignancy, anorectal disorders, obstruction. Pancreas: pancreatitis, malignancy. Morbid Obesity. Inguinal and other types of body wall hernia

- Research interests:

- ◆ Bariatric Surgery and Metabolism, Quality improvement, Health Disparities, Surgical Post-Acute Care, Chemoprevention of Colorectal Cancer



UAB Robotics Program

- Largest Academic Robotics Program
- 5 dual console robotic systems
 - ◆ 2 Xi & 3 Si
- Dedicated console with simulator for resident teaching & development
- Over 1,000 robotic procedures performed annually since 2012



Division of Orthopaedic Surgery

- Clinical interests:
 - ◆ Trained subspecialists in trauma, joint reconstruction, oncology, pediatrics, spine, foot and ankle, shoulder, and hand
- Research interests:
 - ◆ Sarcoma imaging
 - ◆ Fracture fixation
 - ◆ Spine instrumentation and reconstruction
 - ◆ Bone healing
 - ◆ Total joint reconstruction



Division of Pediatric Surgery

- Clinical interests:
 - ◆ Comprehensive general and specialized surgical treatment of a wide range of neonatal, pediatric and adolescent conditions. Our physicians are all fellowship trained Pediatric Surgeon specialists who are solely devoted to the care of such conditions
 - ◆ Global Health
- Research interests:
 - ◆ Pediatric tumors
 - ◆ Pediatric trauma
 - ◆ Surgical instruments
 - ◆ Development of Apps

- 3rd largest pediatric medical facility in the US
- Only free-standing pediatric hospital in Alabama
- Over 10,000 operations annually
- One of the 10 busiest pediatric hospitals in the nation
- Pediatric surgery fellowship



Division of Plastic Surgery

- Clinical interests:
 - ◆ Microvascular surgery
 - ◆ Aesthetic surgery of the face
 - ◆ Body contouring
 - ◆ Breast reconstruction
 - ◆ Hand surgery
 - ◆ Craniofacial surgery
 - ◆ Reconstruction of traumatic and congenital defects
- Research interests:
 - ◆ Wound healing

Division of Surgical Oncology

■ Clinical interests:

- ◆ Complex and laparoscopic procedures for tumors and associated conditions of the upper aerodigestive tract, stomach, small intestine, colon, pancreas, spleen, retroperitoneum, biliary tree and liver including intra-arterial infusion pump (HAIP), radiofrequency and cryoablation (RFA)
- ◆ Endocrine surgery of the thyroid, parathyroid and adrenal glands
- ◆ Surgery for soft tissue and skin tumors including isolated limb perfusion therapy
- ◆ Preventative, diagnostic, therapeutic and palliative surgery of the breast and axilla

■ Research interests:

- ◆ Breast cancer outcomes, chemoprevention of breast cancer, neuroendocrine cancers, melanoma, surgeon communication and behavior, Wnt Signaling in Cancer

UAB Comprehensive Cancer Center

- One of the nation's leading cancer research and treatment centers, the UAB Comprehensive Cancer Center is the only National Cancer Institute-designated comprehensive cancer center located in a six-state area that includes Alabama, Mississippi, Louisiana, Arkansas, South Carolina and Georgia. UAB's cancer services are routinely recognized as being among the nation's best.
- The UAB Comprehensive Cancer Center is home to an outstanding faculty of more than 330 physicians and researchers, many of whom are internationally and nationally recognized for their expertise in oncology. The center treats an estimated 5,000 new patients each year.



Division of Transplantation

- Clinical interests:
 - ◆ Since 1968, UAB's transplant services have performed more than 10,000 organ transplants with more than 400 organs each year which ranks the programs among the nation's leaders in the number of transplants performed and patient outcomes

- Research interests:
 - ◆ Kidney transplant donor outcomes
 - ◆ Disparities in transplantation
 - ◆ Xenotransplantation

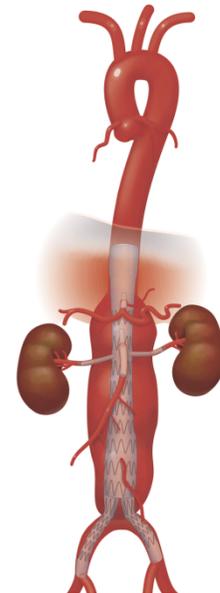
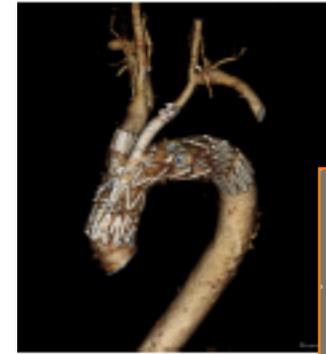
Division of Vascular Surgery and Endovascular Therapy

▪ Clinical interests:

- ◆ Open and Endovascular procedures to treat:
 - ◆ Thoracoabdominal aortic conditions
 - ◆ Extremity atherosclerosis, especially critical limb ischemia
 - ◆ Mesenteric/renal artery occlusive and aneurysm disease
 - ◆ Venous disease
- ◆ Genetic vascular conditions

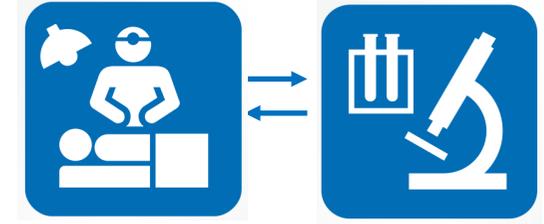
▪ Research interests:

- ◆ Arterial and venous device development
- ◆ Custom devices to treat conditions involving the branched portions of the aorta (e.g. aneurysm, dissection, transection)
- ◆ Treatment of critical limb ischemia
- ◆ Health Services, outcomes and quality improvement in vascular disease treatment



Translational and Preclinical Research Program

- Integration of clinical and basic sciences for bidirectional translation between patient care and research laboratories.
- 15,000 sq. ft. newly renovated lab space
- State of the arts technologies and capabilities
- Consolidation and expansion of research laboratories and approaches
- Advanced animal models
- Preclinical testing of treatments and direct clinical applications



- Pilot grants
 - ◆ Deadline TBD (info to be emailed to participants)
 - ◆ Projects must involve two co-Pis: one from the Department of Surgery and one from Department of BME
 - ◆ Must have a plan to submit for extramural funding at the completion of the project

