



# GENERAL SURGERY

Wake Forest School of Medicine  
Graduate Medical Education



# WELCOME

The General Surgery Residency Program at Wake Forest School of Medicine is a top-tier five-year residency. We provide a comprehensive training experience that prepares our graduates to become the surgical leaders of tomorrow.

Our graduates have gone on to become board-certified surgeons, obtaining highly competitive fellowships in fields such as Surgical Oncology and Pediatric Surgery.

## **ACGME ACCREDITATION**

We received continued accreditation after a site visit in January 2016. We are approved to finish five Categorical Chief Residents per year. Our program is fully compliant with resident duty-hour rules.





# Our General Surgery Residency Program

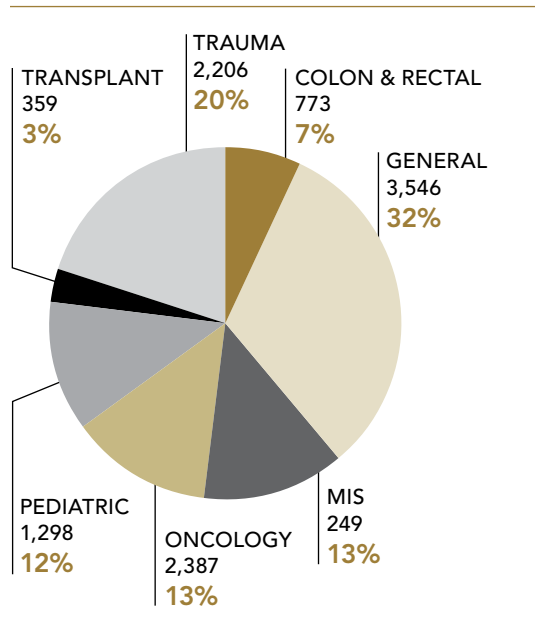
Wake Forest Baptist Medical Center performs more than 39,000 surgeries a year. As a general surgery resident, you will:

- Complete more than 1,000 cases upon graduation.
- Obtain early operative experience.
- Receive extensive, level-appropriate primary surgeon experience.
- Have a diverse operative experience, including innovative techniques, robotics and minimally invasive approaches.
- Perform complex surgical management for pediatric, trauma and surgical oncology patients.

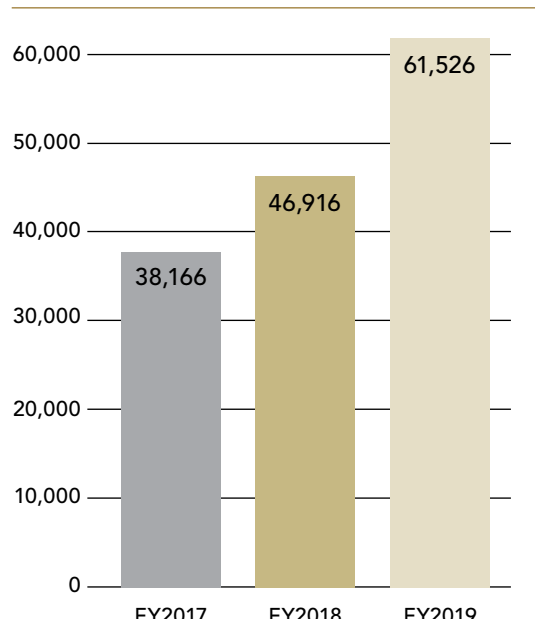
Our surgical service areas include:

- Surgical Oncology
- Colorectal Surgery
- Minimally Invasive Surgery
- Trauma
- Burns
- Transplant
- Surgical Critical Care
- Emergency General Surgery
- Pediatric Surgery
- Private practice general surgery
- Salisbury Veterans Administration Hospital
- Vascular Surgery

**FY19 GENERAL SURGERY CASES COUNT & %**



**FY19 GENERAL SURGERY ARRIVED CLINIC VISITS**







# Our General Surgery Residency Program

Training includes a wide variety of cases:

- Laparoscopic common bile duct exploration
- Bariatrics
- HIPEC/Cytoreductive Surgery
- Whipple
- Major Liver Resection
- Robotic Distal Pancreatectomy
- Biliary Reconstruction
- Component Separation
- Penetrating Trauma
- Heller Myotomy
- Esophagectomy
- Gastrectomy
- Minimal invasive and robotic colon resection
- Congenital Anomalies
- Tracheal Esophageal Fistula
- Mastectomy
- Laparoscopic Adrenalectomy

Typical day schedule:

- 5:30 am: Sign-out
- 6 am: Rounds
- 7 am: OR (8+ rooms daily)
- PGY1: Floor, Consults, OR/Secondary Surgeon
- PGY2–3: Consults, ICU, OR/Primary Surgeon, level appropriate
- PGY4–5: OR/Primary Surgeon, level appropriate
- Wednesday: Quality Conference and Grand Rounds
- Friday: Educational Conference
- Subspecialty Conferences

## PROGRAM OVERVIEW

PGY	ROTATIONS
1	Colorectal Surgery, Surgical Oncology, Minimally Invasive Surgery, Emergency General Surgery, Night Call, Critical Care, Trauma, Vascular, Pediatrics, VA
2	Surgical Oncology, Chairman Service, Critical Care, Burn, Pediatric Surgery
3	Colorectal Surgery, Minimally Invasive Surgery, Emergency General Surgery, Transplant, Vascular
4	Surgical Oncology, Minimally Invasive Surgery, Trauma, Cardiothoracic Surgery, Pediatric Surgery
5	Colorectal Surgery, Surgical Oncology, Chairman Service, Nights, Davidson General Surgery





# Wake Forest Baptist Medical Center Surgical Services



**Chair,  
Department  
of Surgery**

**Wayne Meredith,  
MD, FACS**

RESIDENCY: Wake Forest School of Medicine

FELLOWSHIP: Wake Forest School of Medicine

SPECIALTIES: Trauma, Critical Care, Cardiothoracic Surgery

LEADERSHIP: Director of Surgical Services



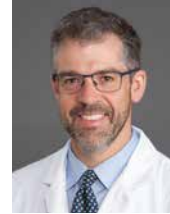
**Program  
Director,  
Department  
of Surgery**

**Amy Hildreth,  
MD, FACS**

RESIDENCY: University of Tennessee, Chattanooga

FELLOWSHIP: University of Tennessee, Chattanooga

SPECIALTIES: Emergency General Surgery, Trauma, Critical Care



**Associate  
Program  
Director,  
Department  
of Surgery**

**Clancy Clark,  
MD**

RESIDENCY: Virginia Mason Medical Center

FELLOWSHIP: Mayo Clinic School of Medicine

SPECIALTIES: Hepatobiliary Surgery, Pancreatic Cancer, Surgical Oncology, Gastrointestinal Oncology

## SURGICAL ONCOLOGY



**Edward Levine, MD FACS  
Division Chief**

Surgical Oncology is a key component of the Comprehensive Cancer Center. It is extensively involved in multimodality

consultations for the care of patients with melanoma, sarcoma, endocrine tumors and diseases of the breast, as well as the full spectrum of gastrointestinal malignancy from esophagus to anus. The service is very busy, with approximately 1,500 major operative cases and more than 8,000 outpatient visits per year.

Faculty members of Surgical Oncology are dedicated to teaching the next generation of physicians to care for those with oncologic diseases. Trainees on service are part of a team bringing considerable clinical expertise to serve patients who require cancer staging, treatment and follow-up due to primary, recurrent or metastatic malignancy.

## PEDIATRIC SURGERY



**Thomas Pranikoff, MD, FACS  
Division Chief**

We offer the largest group of pediatric general surgery experts in the western half of North Carolina, who work through Wake Forest Baptist

Health Brenner's Children Hospital and Wake Forest Baptist Medical Center.

Our pediatric surgery specialists are dedicated to excellence in surgical care for newborns to adolescents, treating a wide range of medical issues—from congenital problems to acquired disorders, life-threatening emergencies to commonplace conditions.

Since we have no pediatric surgery fellowship, residents have an unique, rewarding experience caring for surgical diseases in children.

## COLORECTAL SURGERY



**Gregory Waters, MD, FACS**  
Division Chief

The Colon and Rectal Surgeons at Wake Forest Baptist Health treat the full spectrum of diseases of the colon, rectum and anus.

These include:

- Colon, Rectal and Anal Cancer
- Hereditary Colorectal Cancer Syndromes (FAP and Lynch syndrome)
- Inflammatory Bowel Disease (Ulcerative Colitis and Crohn's Disease)
- Diverticular Disease
- Benign diseases of the anorectum (Hemorrhoids, anal fissures, anal fistulae, pilonidal cyst)

Faculty are fellowship-trained specialists who can provide the latest effective treatment methods. These include minimally invasive procedures (laparoscopy and robotic surgery), transanal microscopic endosurgery (TEM) and sphincter-preserving cancer surgery, as well as traditional open surgery. Our surgeons are board certified by the American Board of Surgery and the American Board of Colon and Rectal Surgery.

## MINIMALLY INVASIVE SURGERY



**Adolfo "Fuzz" Fernandez, MD, FACS**, Division Chief

Minimally invasive surgery at Wake Forest Baptist Health is pioneering surgical intervention for disease of the esophagus, stomach and abdominal wall.

Novel approaches including robotic, single-port and laparoscopic techniques are employed. The multidisciplinary weight management center is the busiest and most advanced in the region.

## ACUTE CARE SURGERY

**Preston Miller, MD, FACS**  
Director, Emergency General Surgery

**Jason Hoth, MD, FACS**  
Medical Director, Trauma

**James H. Holmes, IV, MD, FACS**  
Director, Burn Center

**R. Shayn Martin, MD, FACS**  
Executive Director, Adult Critical Care

Four services are included within Acute Care Surgery: Burn, Trauma, Emergency General Surgery and Critical Care Surgery.

The Medical Center first received the designation by the State of North Carolina as a Level I Trauma Center in 1982 and this distinction has been recently renewed by the State Emergency Medical Services Advisory Committee for the maximum four-year period.

In 2001, the American College of Surgeons conducted a site visit and verified the Medical Center as a Level I Adult and Pediatric Trauma Center. Wake Forest Baptist was the first trauma center in North Carolina with the pediatric distinction.

A Level I Trauma Center is a regional resource center that has the capacity of providing leadership and total care for every aspect of injury from prevention through rehabilitation.

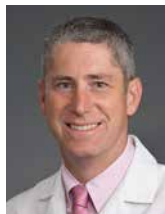
The Burn Center is the oldest in the Carolinas and has been verified by the American Burn Association as an Adult and Pediatric Burn Center. One of only 67 verified centers in the nation, the Burn Center is internationally recognized and leads the U.S. in minimally invasive burn care.







## VASCULAR SURGERY



**Matthew Edwards, MD, FACS**  
Division Chief

Wake Forest Baptist Medical Center offers a state-of-the-art program for managing every aspect of vascular disease—defined as

disorders of arteries, veins and lymph vessels outside of the heart and brain. Few centers in the nation provide such breadth of expertise and services under one umbrella, dedicated entirely to patient care, education and research in vascular diseases.

Our faculty is unique in the region, combining board-certified, fellowship-trained specialists from both vascular surgery and vascular medicine in one program. Our physicians have more than 60 years of combined experience caring for patients with vascular diseases and in training the next generation of vascular specialists. Our nurses, technicians and administrative staff are committed to facilitating assessment and care through our clinics and diagnostic services as well as in-hospital services for diagnosis, treatment and research. For patients, this translates into a comprehensive evaluation culminating in an integrated care plan including medical therapies with minimally invasive “endovascular” procedures or traditional open surgery when indicated, for the broad spectrum of vascular diseases.

## TRANSPLANT SURGERY



**Robert Stratta, MD, FACS**  
Division Chief

Wake Forest Baptist transplantation services are unique in the region and encompass kidney, pancreas, heart, corneal and marrow

transplants. We are the largest adult and pediatric kidney/kidney-pancreas center in North Carolina and are among the top 30 most active kidney and kidney/pancreas transplant centers in the country.

Highlights of our transplant program:

- Performs 130–150 adult deceased donor kidney transplants per year
- 25–30 living donor kidney transplants per year
- 10–15 pancreas transplants; 4–8 pediatric transplants/year
- Average of 1 transplant every other day
- Average daily hospital census of 5–15 patients
- 50 dialysis access procedures per year







## Medical Simulation and Training

Our general surgery residents participate in a variety of training experiences throughout their residency. Workshops range from basic skills sessions at the table to complex, immersive, multidisciplinary clinical experiences where surgical teams are challenged with real-life scenarios.

- The Wake Forest Baptist Health Center for Applied Learning is an official testing and training site for the Society of American Gastrointestinal and Endoscopic Surgery Fundamentals of Endoscopic Surgery™ and Fundamentals of Laparoscopic Surgery™ courses.
- We have over 50,000 feet of space dedicated to medical simulation and training at the medical center and 20 years of experience.
- Our general surgery curriculum and trauma curriculum are designed to develop surgeons' leadership and team-based skills. The curriculum is based upon endemic data where historic events have been reviewed and re-created. Emergency room teams and operating room teams including anesthesia, nursing, emergency medicine and technologists collaborate through transdisciplinary training to improve patient care through innovative education.
- General surgery residents participate in bi-annual didactic testing (Surgical Olympics) that promotes a positive training environment and also allows for self-assessment.
- Our general surgery and trauma curricula develop surgeons' leadership skills and enhance situational awareness using elements of crew resource management. Residents participate in innovative re-creations of actual events involving actors or high-fidelity simulators and a diverse team of providers from anesthesia, nursing, emergency medicine and surgical specialists to improve patient care.
- Our porcine and human-tissue labs advance residents' technical skill development and clinical decision making.

# Commitment to Quality Improvement

## INSTITUTIONAL COMMITMENT TO QUALITY IMPROVEMENT

At Wake Forest Baptist, our mission is to improve the health of our region, state and nation. Our goal is to be a national health care leader in quality, safety, and patient- and family-centered care by delivering excellence in everything we do.

Residents have numerous opportunities to join and be involved in Quality Improvement (QI) projects. QI is integrated into the curriculum and is a key aspect of the research enterprise.

- Residents participant in an integrated quality improvement training program including our institution’s WakeWings program, as well as the Institute for Healthcare Improvement (IHI) Academy.
- Residents with faculty support have ready access to numerous quality data sources for research and continuous quality improvement initiatives. These resources include the National Quality Surgical Improvement Program (NSQIP) and the Trauma Quality Improvement Program (TQIP).
- Selected residents may participate in a Quality Improvement Fellowship during their research year(s).
- Residents participate in weekly Quality Performance Improvement reporting (QPI).







# Research at Wake Forest Baptist Medical Center

As a General Surgery resident, you will have the opportunity for one to two years of research after PGY 3. Our research is funded by the Bradshaw Endowment.

Opportunities in this area include:

- Wake Forest Institute for Regenerative Medicine
- Population Health Sciences
- Comprehensive Cancer Center at Wake Forest Baptist Medical Center
- Virginia Tech-Wake Forest University School of Biomedical Engineering
- Clinical and Translational Science Institute
- Master's of Science in Molecular Medicine and Translational Sciences

## SURGICAL ONCOLOGY RESEARCH

Our Surgical Oncology research program has about 25 trials open. This program features:

- Cooperative group oncology trials
- Investigator-initiated trials
- Database-driven retrospective trials (HIPEC, liver, breast, esophagus, melanoma, pancreas)
- Collaborative data-sharing studies
- Tissue procurement infrastructure
- Quality of life/outcome trials

## WAKE FOREST RESEARCH INSTITUTES AND CENTERS

- Wake Forest Institute for Regenerative Medicine (WFIRM)
- Wake Forest Clinical and Translational Science Institute (CTSI)
- Center for Comparative Medicine Research
- Center on Diabetes, Obesity and Metabolism
- Center for Genomics and Personalized Medicine Research
- Center for Public Health Genomics
- Comprehensive Cancer Center
- Critical Illness, Injury, and Recovery Research Center
- Hypertension and Vascular Research Center (HVRC)
- Sticht Center for Healthy Aging and Alzheimer's Prevention
- Maya Angelou Center for Health Equity (MACHE)
- Center for Integrative Medicine
- Translational Center for Neurobehavioral Study for Alcohol (TCNSA)





Wake Forest  
Baptist Medical Center

- ↑ EMERGENCY
- ↑ Birth Center
- ↑ Main Entrance  
Valet Parking
- ← Parking  
Sticht Center

Wake Forest Baptist M



# Wake Forest Baptist Medical Center Facts

## QUICK FACTS: 2019

- Total Licensed Beds System-wide **1,535**  
Winston-Salem **885**
- Inpatient Admissions and Observation Patients **76,706**
- Emergency Department Visits **229,954**
- Other Outpatient Visits **2.24 million**
- Total Research Awards **\$223.4 million**
- School of Medicine Faculty **1,352**
- Registered Nurses **4,778**
- House Officers (residents) and Fellows **732**
- Medical Students **546**
- Total System Workforce **20,038**
- Largest employer in Forsyth County.
- Anchored by 885-bed tertiary care hospital, including 144-bed Brenner Children's Hospital and 167-bed Comprehensive Cancer Center on Winston-Salem campus.
- Five community hospitals (Alleghany Health\*, High Point, Lexington, Davie and Wilkes medical centers), three urgent care centers, more than a dozen emergency departments, more than 300 primary care and specialty clinics, and freestanding dialysis, imaging and endoscopy centers.

\* With Hugh Chatham Memorial Hospital

## OUR HISTORY

- **1902** Wake Forest College Medical School is founded as a two-year program on the campus of Wake Forest College in Wake Forest, N.C.
- **1923** North Carolina Baptist Hospital opens in Winston-Salem as an 88-bed facility with a School of Nursing.
- **1939** A trust fund of \$750,000 established in the will of Bowman Gray Sr. is pledged to relocate the Wake Forest Medical

School to Winston-Salem and expand its program to four years.

- **1941** Bowman Gray School of Medicine opens in Winston-Salem with 75 students.
- **1957** The Medical Center becomes the first in the state to use cobalt to treat cancer patients.
- **1964** The first hand reimplantation in the United States is performed at the Medical Center by Jesse Meredith, MD.
- **1969** The Medical Center is the first in the nation to use ultrasound to detect prostate cancer.
- **1977** Obstetrical services in Forsyth County are consolidated at Forsyth Memorial Hospital (now Novant Health Forsyth Medical Center).
- **2013** Piedmont Triad Research Park is renamed Wake Forest Innovation Quarter, and a new division, Wake Forest Innovations, is created to drive the commercialization of products and services developed at Wake Forest Baptist. A 282,800-square-foot addition to the Comprehensive Cancer Center opens, consolidating inpatient and outpatient services under one roof.
- **2014** The U.S. Department of Defense funds Wake Forest School of Medicine research to evaluate the effect of using brainwave balancing to reduce symptoms related to post-traumatic stress disorder (PTSD) in military personnel.
- **2015** Wake Forest Baptist cardiac surgeons are the first in the state to perform a less-invasive aortic valve replacement procedure called transcaval valve replacement. The Abdominal Organ Transplant Program at Wake Forest Baptist performs its 3,000th kidney transplant.
- **2016** Bowman Gray Center for Medical Education opens at Innovation Quarter in downtown Winston-Salem.

## Winston-Salem, North Carolina

Winston-Salem, a city of about 248,000 people according to US Census Bureau, is located in Forsyth County in the Piedmont area of North Carolina.

It has been named among America's most livable cities, and features low traffic, a low cost of living, a low crime rate and four distinct, yet temperate seasons.

The city's vibrant downtown area includes the Stevens Center for the Performing Arts, the Milton Rhodes Center for the Arts and BB&T Ballpark, home of the minor league Winston-Salem Dash baseball team, as well as a growing number of apartments, condominiums, lofts and restaurants. The Downtown Arts District, centered on Trade Street, is home to an ever-expanding lineup of unique galleries and shops.

Ten miles west, just off Interstate 40, is Forsyth County's Tanglewood Park, with its PGA championship golf courses, tennis courts, swimming pool, picnic grounds, horseback riding, paddle boats and playing fields. There are more than 30 local golf courses.

Winston-Salem is about an hour away from Hanging Rock and Pilot Mountain state parks and the Blue Ridge Parkway. Driving time to the Carolina beaches varies from four to five hours. North Carolina is home to a burgeoning number of local wineries, many of which are within short drives of Winston-Salem.

The city is home to the University of North Carolina School of the Arts, the only state-supported school for the arts in the nation. Also in the city are the Winston-Salem Symphony Orchestra, Piedmont Opera, the Southeastern Center for Contemporary Art (SECCA), Reynolda House with its gardens and American art collection, the Museum of Early Southern Decorative Arts (MESDA) and Old Salem, the site of the Moravian town founded in 1766, from which the present city grew. Old Salem has been authentically restored and is open for tours.

For more information about the region, go to [visitwinstonsalem.com](http://visitwinstonsalem.com).







**Tara M. Boyd**  
Residency Program  
Coordinator



## Wake Forest School of Medicine Graduate Medical Education