Message from the Chair

Message from the Residency Program Director

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Durham, North Carolina
Welcome to Duke! That you have chosen to dedicate your time to visit Duke and consider our program for your residency training indicates you are seeking a high-caliber experience that will prepare you for a rewarding career in academic surgery. That you have been selected for an interview should provide affirmation you have the capacity to excel in surgery, and both derive benefit from and contribute to the field. I am thus very glad that you are here, and hope that your visit will help you determine whether Duke is the best fit for you. Your choice of training program will define your career, and indeed, our choice of residents defines our institution. As such, this is an important decision for us both.

During your visit to Duke, you will have an opportunity to meet our residents and faculty, tour our facilities, and gain insights into our training philosophy. You will no doubt find both breadth and depth in the resources available to you; including state-of-the-art clinical operating and patient care facilities, comprehensive training and simulation venues; a well-organized, enthusiastic and dedicated educational faculty engaged in a comprehensive didactic curriculum; and an exceptionally developed and well-funded surgical research enterprise embedded within the larger environment of a world-class research university. The comprehensive offering of clinical, educational, and research platforms organized within a single institution makes Duke among the few institutions that can deliver on the promise to create future leaders in surgery, and it is my personal commitment to offer each trainee the opportunity to go beyond mere assimilation of the current standard, and aspire to define future paradigms.

I genuinely look forward to meeting each of you, learning what contribution you hope to make to the field of surgery, and determining how I can help you reach your career goals.

Sincerely,

Allan D. Kirk, MD, PhD, FACS
David C. Sabiston, Jr. Distinguished Professor and Chairman
Department of Surgery
Duke University School of Medicine
Surgeon-in-Chief
Duke University Health System
Message from the Residency Program Director

I would like to welcome you on behalf of the Duke Department of Surgery and Division of Urology!

The decision on where to train in surgery represents the most important decision of your career. Formal clinical training as well as research into basic or translational medicine will predict success in obtaining competitive fellowships and academic positions.

The goal of the Urology Residency Program at Duke is to provide a balance between patient care, teaching, and research in the areas of oncology, male infertility and sexual dysfunction, urolithiasis, reconstructive urology, female urology and urodynamics, pediatric urology, and minimally invasive surgery.

The clinical program in urology is dedicated to providing comprehensive training in patient care and operative surgery. These experiences are offered within diverse clinical settings including operative experiences at Duke University Hospital, Duke Raleigh Hospital, and the Asheville and Durham Veteran's Administration Hospitals.

The cornerstone of the Urology Residency Program at Duke is the one-year dedicated research fellowship, the Surgeon Scientist Research Fellowship. During this year, urology residents begin a dedicated investigative experience designed to give each an opportunity to develop granular expertise in an area of their choosing. These can include basic or translational science projects, experiences in health services or clinical outcomes research, or indeed any thoughtfully conceived knowledge creation endeavor. Innumerable basic science opportunities exist not only in the Division of Urology but the Department of Surgery and across both the graduate and undergraduate campuses. The goal of this research experience is to create thought leaders in academic urology at both an institutional and national level and to provide each Duke resident with a concentrated expertise in their chosen field.

You should consider a number of factors when choosing a residency program, and clearly one of the most important is the track record of the recent graduates. Our training program is intentionally broad-based and has produced graduates with a wide variety of clinical and research interests. We are proud of our program and achievements, and we are honored that accomplished medical students like you have expressed interest in our residency. I hope that over the course of your interview experience you come away as excited as I am about our programs.

We encourage questions and hope you enjoy your visit.

Sincerely yours,

Andrew C. Peterson, MD, FACS
Associate Professor of Surgery Program Director, Urology Residency
About the Duke Department of Surgery

As one of the top surgery programs in the world, the Duke Department of Surgery is dedicated to providing unparalleled clinical care, conducting pioneering research, and training the next generation of leaders in clinical and academic surgery. Patients from all over the world seek treatment from its team of experts, who have access to the clinical standard in all surgical domains, as well as experimental procedures and specialized care that extends beyond the current offerings of most hospitals. This provides the best opportunity for each patient to gain their best clinical outcome, and as such attracts a patient population representing an exceptionally broad clinical spectrum from which the trainee can learn.

Since the 1930s, Duke Surgery has led the way in medical innovations. It established the nation's first brain tumor program in 1937 and was one of the first U.S. institutions to successfully perform a kidney transplant nearly 30 years later. Duke surgeons were the first to treat avascular necrosis of the femoral head with a free vascularized fibular graft. More recently, in 2013, surgeons implanted a bioengineered vascular graft in a patient — a first-of-its-kind operation in the United States.

The Department of Surgery's internationally recognized faculty is focused on making gains in basic, clinical, and translational research, and it has traditionally received more NIH funding than any other surgery department in the world. The faculty is also deeply committed to preparing tomorrow's leaders for careers in surgery with the highest level of training and access to unique research and leadership training opportunities.

The Department currently provides attending surgical coverage at Duke University Hospital, Duke Regional Hospital, Duke Raleigh Hospital, and two VA hospitals: Asheville VA and Durham VA hospitals. The faculty maintains an exceptionally busy practice, conducting over 30,000 operative procedures per year. As the Triangle area is perennially one of the fastest growing communities in the United States, Duke continues to expand with new operative platforms and a growing clinical and research faculty. This robust clinical volume combined with remarkably competitive faculty members adept in acquiring grant funding has led to a fiscally solvent department. It is this solvency that allows the Department to continue its unwavering dedication to residency training both on the wards and in the laboratory.
About the Division of Urology

The Duke Division of Urology is dedicated to providing compassionate, state-of-the-art medical and surgical patient care, comprehensive medical education, and innovative research in all areas of adult and pediatric urology.

Our clinical faculty is recognized worldwide for expertise in the areas of:

- General urology
- Prostate cancer and prostatic diseases
- Male sexual health
- Urinary tract stone management through the Duke Comprehensive Kidney Stone Program
- Minimally invasive surgery and robotics
- Reconstructive urology
- Urinary incontinence
- Testicular cancer
- Bladder cancer
- Kidney cancer
- Pediatric urology

Duke University Medical Center is recognized as one of the nation’s most respected hospitals. In keeping with this tradition of excellence, the Division of Urology annually receives an outstanding “top 10” ranking by U.S. News & World Report as a leader in urologic care.

We are extremely proud of this recognition and will continue to strive for excellence as clinicians, researchers, and educators with the ultimate goal of providing exceptional patient care.
About the Program

Over eight decades of experience in caring for patients with urologic diseases has established Duke’s Division of Urology as a world leader in urologic care, research, and education.

Under the direction of Dr. Andrew Peterson, the Duke Urology Residency Program offers exceptional training for dedicated students who are interested in an experience that will prepare them for either academic or independent practice. Our program meets all the requirements of the American Board of Urology (ABU) and is fully accredited by the American Medical Association’s Accreditation Council for Graduate Medical Education (ACGME).

The goal of Duke’s urologic surgery residency program is to provide a balance between patient care, teaching, and research in the areas of oncology, male infertility and sexual dysfunction, urolithiasis, reconstructive urology, female urology and urodynamics, pediatric urology, and minimally invasive surgery. Thorough training in these urologic subspecialties is made possible by the tremendous volume and variety of cases that are presented at this nationally acclaimed university medical center and its affiliated institutions. Training consists of teaching, independent responsibility, and learning through observation, direct supervision, and hands-on experience.

Clinical urologic training and research

After successfully completing one year of PGY1 general surgery training, the resident enters our program, which consists of four years of clinical urologic training and one year of research. The entire third year is dedicated to urologic research with a few weeks of night float thrown in for good measure.

Under the direction of Dr. Matthew Fraser, the ultimate goal of the research fellowship is for the trainee to learn the basics of research by performing high-quality research, presenting it at regional and national meetings, and submitting it to scientific publications. The trainee is also encouraged to submit grant proposals. Completion of the year includes:

- Continuation/completion of research projects
- Presentations at regional and national meetings
- Preparation of a peer-reviewed manuscript(s) for publication and to gain greater insight into the field of research

In addition to clinical training and research training, residents participate in regular conferences, including Grand Rounds, Pathology, Journal Club, Morbidity and Mortality, Radiology, Pediatric Uroradiology, Core Curriculum, Urodynamics, and AUA updates.
## 2015–2016 Rotation Schedule

### Chief Year—Urology Year 4

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<thead>
<tr>
<th>Rotation Name</th>
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*Actual time and schedule to be individualized per resident and program needs.*

### Urology Year 3

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*Actual time and schedule to be individualized per resident and program needs.*
### 2015–2016 Rotation Schedule (continued)

**Urology Year 2**

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*Actual time and schedule to be individualized per resident and program needs.*
Conferences

Didactic Training

Monday
Pediatric Uroradiology Conference (1st Monday) 5:30 p.m. – 6:30 p.m.
Urodynamics Conference (2nd Monday) 5:30 p.m. – 6:30 p.m.
Radiology Conference (4th Monday) 5:30 p.m. – 6:30 p.m.

Tuesday
AUA Updates 7:00 a.m. – 8:00 a.m.

Wednesday
Core Curriculum Conference 6:30 a.m. – 7:30 a.m.
Urology Grand Rounds (1st, 2nd and 3rd Wednesday) 7:30 a.m. – 8:30 a.m.
QI/PI Conference (4th Wednesday) 7:30 a.m. – 8:30 a.m.

Thursday
Journal Club (1st Thursday of every other month) 6:30 p.m. – 7:30 p.m.
Salaries

2016–2017 GME Trainee Stipends

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<th>Level</th>
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## Alumni

### 2016

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<th>Name</th>
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<tr>
<td>Ramiro Madden-Fuentes</td>
<td>Duke University</td>
<td>Fellow, Reconstructive Urology</td>
</tr>
<tr>
<td>Nickolas Kuntz</td>
<td>Landstuhl, Germany</td>
<td>Military Urology Practice</td>
</tr>
<tr>
<td>Jessica Lloyd</td>
<td>Cleveland Clinic</td>
<td>Fellow, Female Pelvic Medicine and Reconstructive Urology</td>
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### 2015

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<th>Name</th>
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<th>Current Position</th>
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<tr>
<td>Dr. Rajeev Chaudhry</td>
<td>Children’s Hospital of Pittsburgh</td>
<td>Fellow</td>
</tr>
<tr>
<td>Dr. Zachariah Goldsmith</td>
<td>St. Luke’s University Health Center for Urology</td>
<td>Faculty</td>
</tr>
<tr>
<td>Dr. Abhay Singh</td>
<td>Martin Army Hospital, Ft. Benning, GA</td>
<td>Military Urology Practice</td>
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### 2014

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<tr>
<th>Name</th>
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<tr>
<td>Dr. David Chu</td>
<td>Children’s Hospital of Philadelphia</td>
<td>Fellow, Pediatric Urology</td>
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<tr>
<td>Dr. Zarine Balsara</td>
<td>Boston Children's Hospital</td>
<td>Fellow, Pediatric Urology</td>
</tr>
<tr>
<td>Dr. Mark Anderson</td>
<td>Darnell Army Medical Center, Ft. Hood, TX</td>
<td>Military Urology Practice</td>
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### 2013

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<tr>
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<tr>
<td>Dr. John Mancini</td>
<td>Evans Army Hospital, Ft. Carson, CO</td>
<td>Military Urology Practice</td>
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### Alumni (continued)

#### 2013

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<tr>
<td>Dr. Suzanne Merrill</td>
<td>Mayo Clinic</td>
<td>Milton Hershey Medical Center, Faculty</td>
</tr>
<tr>
<td>Dr. Brian Whitley</td>
<td>Sanford, NC</td>
<td>Duke University, Faculty</td>
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#### 2012

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<tbody>
<tr>
<td>Dr. Erin McNamara</td>
<td>Boston Children’s Hospital</td>
<td>Pediatrics Research Fellow</td>
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<tr>
<td>Dr. Jodi Antonelli</td>
<td>UTSW, Dallas Kidney Stone Disease</td>
<td>Faculty</td>
</tr>
<tr>
<td>Dr. Danielle Stackhouse</td>
<td>Tripler Army Medical Center, HI</td>
<td>General Urology</td>
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#### 2011

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<tr>
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<tbody>
<tr>
<td>Dr. Joseph Klink</td>
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<td>Urology Oncology Practice</td>
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<tr>
<td>Dr. Chuck Scales</td>
<td>Duke University Medical Center</td>
<td>Faculty</td>
</tr>
<tr>
<td>Dr. Florian Schroeck</td>
<td>The Dartmouth Institute</td>
<td>Faculty</td>
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#### 2010

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<tbody>
<tr>
<td>Dr. Cooper Buschmeyer III</td>
<td>East Texas Urology Specialists Fufkin, TX</td>
<td>Staff Urologist</td>
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<tr>
<td>Dr. Marnie Robinson</td>
<td>Chesapeake Urology</td>
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<tr>
<td>Dr. Edward Rampersaud</td>
<td>Duke University Medical Center</td>
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Current Residents

Divya Ajay, MD
Medical school: Duke-NUS Medical School
College/university: Washington and Lee University

Bryce Allio, MD
Medical school: University of Rochester Medical Center
College/university: University of Rochester

Gregory Barton, MD
Medical school: Loyola University Chicago Stritch School of Medicine
College/university: Loyola University Chicago Stritch School of Medicine

Kohldon Boydston, MD
Medical school: Rush Medical College
College/university: University of Wisconsin–Madison

Steven Brousell, MD
Medical school: Robert Wood Johnson Medical School of Rutgers University
College/university: Lehigh University
Current Residents (continued)

Evan Carlos, MD
Medical school:
Loyola University Chicago
College/university:
University of Washington

Jason Chandrapal, MD
Medical school:
Texas Tech Health Science Center
College/university:
University of Texas in Austin

Andrew Chang, MD
Medical School:
Stony Brook University School of Medicine
College/university:
Harvard University

Eugene Cone, MD
Medical school:
Alpert Medical School of Brown University
College/university:
Harvard University

Joseph Fantony, MD
Medical school:
University of Massachusetts
College/university:
Norwich University
Current Residents (continued)

Michael Granieri, MD
Medical school:
Northwestern University
College/university:
Northwestern University

Brian Inouye, MD
Medical school:
Stony Brook University School of Medicine
College/university:
Stanford University

Rui Yang Jiang, MD
Medical school:
UT Southwestern Medical Center
College/university:
Texas Tech University

Ghalib Jibara, MBChB
Medical school:
University of Baghdad
College/university:
University of Baghdad

Patrick Leidig, MD
Medical school:
George Washington School of Medicine and Health Sciences
College/university:
Villanova University
Current Residents (continued)

Melissa Mendez, MD
Medical school:
University of Maryland School of Medicine
College/university:
George Washington University

Tara Ortiz, MD
Medical school:
University of Pittsburgh
College/university:
Emory University

Stephanie Sexton, MD
Medical school:
George Washington University
College/university:
University of Florida

Richard Shin, MD
Medical school:
Duke University School of Medicine
College/university:
Columbia University

Matvey Tsivian, MD
Medical school:
University of Bologna
College/university:
University of Bologna
Current Residents (continued)

Hsin-Hsiao Scott Wang
Medical school:
National Yang-Ming University
College/university:
National Yang-Ming University

Ashley Wietsma, MD
Medical school:
University of Maryland
College/university:
Johns Hopkins University

Brian Young, MD
Medical school:
University at Buffalo School of Medicine
College/university:
Rutgers University–New Brunswick
Research

The acclaim that has been received by Duke Urology in understanding, diagnosing, and treating urologic diseases is the result of combined excellence in patient care with superior clinical and laboratory research.

Research Education

The Division of Urology offers a Urology Surgeon Scientist Research Year during PGY3 that is dedicated both to research experiences and learning.

The research experiences are under the guidance of experienced primary and secondary mentors and includes clinical and/or basic science research projects, applications for funding, and meeting abstract and paper submissions.

Mentor selection officially begins during PGY2 and is aided by a Mentor Fair event, during which available mentors present the research opportunities that they offer. Together with the Research Year Director, Dr. Matthew O. Fraser, the residents and their mentor(s) design a research year plan, including a research year proposal and Gantt chart creation to ensure feasibility for the proposed activities. Progress is monitored by quarterly meetings with the residents and their mentors with the Research Year Director. Adjustments can be made along the way, depending on progress and interest. This oversight ensures a rewarding and successful experience for each resident. Metrics for success include project funding application submission, meeting abstract submissions and presentations, and paper writing, submission, and publications.

In addition, we have a year-long lecture/interactive course for the urology research residents and research fellows, and research year medical students in Urology. The course has been developed and refined over the past years by eight faculty instructors, and has even attracted attendance from outside of Urology, including urogynecology fellows and biomedical engineering post-doctoral fellows. The curriculum covers a range of topics pertinent to understanding and performing clinical and basic science research. The course also includes group review of meeting abstracts prior to submission, which is invaluable not only as an exercise but also because it dramatically improves the likelihood of abstract acceptance.

Finally, the urology residents during the research year attend the monthly meeting of the Pelvic Medicine Research Consortium, which includes basic science and clinical research presentations covering topics of interest in pelvic medicine (e.g., urology, urogynecology, sexual medicine, therapeutic development, and biomedical engineering).
Research (continued)

Basic and Translational Research
Our researchers are involved in multidisciplinary research backed by state-of-the-art research facilities and dedicated faculty, fellows, students, residents, and staff. Daily basic research activities cover a range of specialty areas within the field of urology:

- **Bladder cancer**: Our laboratory is interested in understanding the immunology of urothelial carcinomas and is examining how these tumors may be manipulating the immune system into a state of paralysis.
- **Kidney cancer**: Kidney cancer research at Duke places an emphasis on translational programs that can have direct consequences on improving patient care and surgical therapy.
- **Pediatric urology**: Our goals include increasing our knowledge concerning urinary tract infections in patients with neurogenic bladder and develop non-antibiotic therapy to prevent or attenuate urinary infections in this population.
- **Prostate cancer**: Duke Urology translational teams are committed to discovering and improving upon therapies and outcomes for men with prostate cancer.
- **Urinary dysfunction**: The Duke University Urinary Dysfunction Laboratory focuses on projects that have direct relevance to disorders that are regularly encountered by practicing urologists in the clinic.

Clinical Research
The Division of Urology is actively involved in clinical research that translates to advances and improvements in clinical care. Our clinician-scientists are currently involved in research in the following areas:

**Non-oncology**

- Bladder and kidney stones
- Pediatric urology
- Reconstructive urology

**Oncology**

- Prostate cancer
- Bladder cancer
- Kidney cancer
Research (continued)

Urology Clinical Trials

Our extensive research programs give our patients access to groundbreaking developments in patient care through carefully designed clinical trials. Research is ongoing related to the following conditions:

- Prostate cancer
- Cancer and leukemia group B

Additional trials related to genitourinary cancers (prostate cancer and cancers of the kidney, bladder, and male organs) are listed on the Duke Cancer Institute Web site.
Duke University Urinary Dysfunction Laboratory

Principal Investigator
J Todd Purves, MD, AB, PhD

Our lab focuses on projects that have direct relevance to disorders that are regularly encountered by practicing urologists in the clinic. We are particularly interested in benign urologic disease caused by inflammation in the bladder. Inflammasome formation/activation during bladder outlet obstruction (such as during benign prostatic hyperplasia or BPH) and diabetes appears to be a major contributor to urinary dysfunction in those patient populations. Consequently, these two disorders are intensely under study in our lab. A thorough understanding of the inflammasome system in the bladder, while learning to manipulate this system for therapeutic advantage, is the main pillar of our lab.

Website
https://surgery.duke.edu/divisions/urology/research/research-laboratories/urinary-dysfunction-laboratory

Recent Publications

Laboratory of Neurourology

Principal Investigator
Matthew Oliver Fraser, PhD

Led by a classically trained physiologist and a neuroscientist (dual degree PhD), the Laboratory of Neurourology focuses on pelvic visceral function and dysfunction. In addition to further elucidating the physiology of pelvic viscera, we are heavily involved in therapeutic development efforts, including pharmacological, medical devices, cell therapy, and tissue engineering approaches. Current research includes cell therapy for neurogenic bladder; pelvic visceral cross-sensitization under normal conditions and following spinal cord injury; and the evolution of lower urinary tract dysfunction in diabetes mellitus.

Website
https://surgery.duke.edu/divisions/urology/research/research-laboratories/neurourology-laboratory

Recent Publications
Dieter, AA, Wu, JM, Siddiqui, NY, Degoski, DJ, Brooks, JM, Dolber, PC, and Fraser, MO. “Characterizing the bladder’s response to onabotulinum toxin type A using a rat model.” Female pelvic medicine & reconstructive surgery (September 16, 2016).


Potts, BA, Degoski, DJ, Brooks, JM, Peterson, AC, Nelson, DE, Brink, TS, and Fraser, MO. “Late intermittent sacral neurostimulation significantly increases bladder capacity.” (February 2016).
Minimally Invasive Technologies for the Management and Diagnosis of Prostate and Kidney Cancer

Principal Investigator
Thomas James Polascik, MD

The Polascik laboratory focuses on imaging (patient selection, staging, tumor characterization), surgical outcomes, and new or minimally invasive technologies for prostate and kidney cancer therapy. Our research group has a special interest in image-targeted biopsy and focal therapy for early prostate cancer, as well as studying outcomes of active surveillance (disease monitoring without treatment). We had an early leadership role in the study and clinical implementation of multi-parametric magnetic resonance imaging (mpMRI) for the detection and staging of prostate cancer as well as integration of MRI-US fusion software to improve biopsy performance.

Website

Recent Publications


Polascik, TJ, and Tay, KJ. “Editorial comment.” The Journal of urology 196, no. 3 (September 2016): 889-. 
Urologic Oncology Laboratory

**Principal Investigator**
Brant Allen Inman, MD, MS

We are a clinical and translational research team working on cancers of the genitourinary tract. While our group does research pertaining to several different urological cancers, we are particularly interested in bladder and prostate cancer. Our approach to research is highly disease focused, which means that we use a wide variety of research methodologies to investigate a single cancer. Current projects include animal models of bladder cancer; tumor immunology and immunotherapy; hyperthermia and heat-activated cancer therapies; diagnostic test development; and clinical trials.

**Website**
[https://surgery.duke.edu/divisions/urology/research/research-laboratories/urologic-oncology-laboratory](https://surgery.duke.edu/divisions/urology/research/research-laboratories/urologic-oncology-laboratory)

**Recent Publications**


E. Everett Anderson, MD  
Professor of Surgery  
**Training:**  
MD, Duke University, 1958  
**Residency:**  
Chief Resident, Urology, Duke University 1963–1964  
Assistant Resident, Urology, Duke University 1961–1963  
Assistant Resident, Surgery, Duke University 1960–1961  
**Fellowship:**  
Urology, Duke University, 1965–1966  
Surgery, Harvard University, 1964–1965  

Samuel Hamilton Eaton, MD  
Assistant Professor of Surgery  
**Training:**  
MD, Columbia University College of Physicians and Surgeons (New York), 2003  
**Residency:**  
General Surgery, Boston University Medical Center (Massachusetts), 2005–2007  
Urology, Boston University Medical Center (Massachusetts), 2007–2011 (Chief Resident, 2010–2011)  
**Fellowship:**  
Endourology (Minimally Invasive Surgery, Kidney Stones, Robotic Surgery), Northwestern University (Illinois), 2011–2013  
**Clinical Interests:**  
Comprehensive medical and surgical management of kidney stones, renal cancer, prostate cancer, minimally invasive surgery, laparoscopic and robotic surgery, minimally invasive management of urinary obstruction, general urology
Michael Nicolo Ferrandino, MD
Associate Professor of Surgery

**Training:**
MD, New York University School of Medicine, 2001

**Residency:**
Urology, State University of New York Downstate Medical Center, 2007

**Fellowship:**
Laparoscopy, Robotics, and Endourology, Duke University Medical Center, 2009

**Clinical Interests:**
Minimally invasive treatment of benign and malignant urologic conditions; robotic, laparoscopic and endourologic approaches and medical and surgical management of stone disease

Matthew Oliver Fraser, PhD
Associate Professor of Surgery

**Title:**
Director, Urology Surgeon Scientist Program

**Training:**
PhD, Physiology/Neuroscience, University of Pittsburgh School of Medicine (Pennsylvania), 2001

**Other Training:**
BA, Biology/Anthropology, University of Pittsburgh College of Arts and Sciences (Pennsylvania), 1981
Brant Allen Inman, MD, MS
Associate Professor of Surgery

Training:
MD, University of Alberta (Canada), 2000

Residency:
Urology, Laval University (Canada), 2001–2005

Fellowship:
Urologic Oncology, Mayo Clinic College of Medicine (Minnesota), 2005–2008

Other Training:
BS, Medical Science, University of Alberta (Canada), 1999
Fellow, Royal College of Surgeons of Canada, 2005
MS, Clinical and Translational Science, Mayo Clinic Graduate School of Medicine (Minnesota), 2011

Clinical Interests:
Bladder cancer (including bladder-sparing options, robotic cystectomy, neobladders, hyperthermia); penile cancer (including penis-sparing options and inguinal lymphadenectomy); kidney cancer (including minimally invasive surgery, partial nephrectomy and vena caval thrombectomy); testicular cancer; urachal cancer; cancers of the ureter and renal pelvis; advanced genitourinary cancer surgery (including masses invading multiple organs and treatment-refractory tumors)

Research Interests:
Clinical research interests: Clinical trials of novel diagnostic tests and therapies for genitourinary malignancies, with a strong focus on bladder cancer. Basic science research interests: Immune therapies for cancer, molecular biology of bladder cancer, novel therapies—including hyperthermia—for bladder cancer.
Aaron Claude Lentz, MD
Associate Professor of Surgery

**Training:**
MD, University of North Carolina–Chapel Hill School of Medicine, 2005

**Residency:**
Surgery, UNC Hospitals, 2005–2006
Urologic Surgery, UNC Hospitals, 2006–2010

**Fellowship:**
Genitourinary Reconstructive Surgery, Duke University Medical Center, 2010–2011

**Clinical Interests:**
Genitourinary reconstructive surgery with focus on complex urethral stricture disease utilizing anastomotic and substitution urethroplasty; management of upper urinary tract obstruction; urinary fistula repair; prosthetic urology including penile implants for erectile dysfunction as well as artificial urinary sphincters and minimally invasive slings for male stress urinary incontinence; penile reconstruction for Peyronie's disease, corporal fibrosis, peno-scrotal lymphedema

Michael Eric Lipkin, MD
Associate Professor of Surgery

**Title:**
Chief of the Clinic

**Training:**
MD, University of Medicine and Dentistry of New Jersey–New Jersey Medical School, 2003

**Residency:**
Urology, New York University Medical Center, 2009

**Fellowship:**
Endourology (Kidney Stones), Laparoscopy, and Robotics, Duke University Medical Center, 2011

**Clinical Interests:**
Medical and surgical management of kidney stone disease, minimally invasive urologic surgery, endoscopic management of urinary tract obstruction, robotic and laparoscopic urologic surgery
Judd Wendell Moul, MD
Professor of Surgery

Training:
MD, Jefferson Medical College of Thomas Jefferson University (Pennsylvania), 1982

Residency:
Surgery, Walter Reed Army Medical Center (Washington, DC), 1982–1983
Urology, Walter Reed Army Medical Center (Washington, DC), 1983–1987

Fellowship:
Urologic Oncology, Duke University Medical Center, 1988–1989

Other Training:
BS, The Pennsylvania State University, 1979
Fellow, American College of Surgeons

Clinical Interests:
Minimally invasive nerve-sparing radical prostatectomy, treatment of PSA-only or biochemical recurrence of prostate cancer, prostate cancer in African Americans, multidisciplinary management of prostate cancer, clinical trials in prostate disease, elevated PSA and screening, prostate cancer and outcomes/database research, elevated PSA and prostate cancer screening issues, active surveillance in early stage prostate cancer
Andrew Charles Peterson, MD
Professor of Surgery

Title:
Director, Urology Residency Program
Director, Reconstructive Urology and Genitourinary Cancer Survivorship Fellowship

Training:
MD, Dartmouth Medical School (New Hampshire), 1995
Residency:
Urology, Madigan Army Medical Center (Washington), 2002
Fellowship:
Reconstructive Urology, Female Urology, and Urodynamics, Duke University Medical Center, 2003

Other Training:
Fellow, American College of Surgeons

Clinical Interests:
Female urology with emphasis on urinary incontinence and vaginal prolapse (combined urology and gynecologic approach); reconstructive urology and bladder dysfunction in men and women; urinary incontinence in men; reconstruction for urethral stricture and trauma; new bladder construction and urinary diversion; video urodynamic study, of particular value to patients with bladder-emptying problems and bladder-outlet symptoms; care of prostate cancer survivors with respect to sexual function and urinary continence, including penile prosthesis
Thomas James Polascik, MD
Professor of Surgery

Title:
Director, Urologic Oncology Fellowship

Training:
MD, University of Chicago Pritzker School of Medicine (Illinois), 1991

Residency:
General Surgery, Johns Hopkins Hospital (Maryland), 1991–1993
Urology, James Buchanan Brady Urological Institute, Johns Hopkins Hospital (Maryland), 1993–1997

Fellowship:
Urologic Oncology, Johns Hopkins Hospital (Maryland), 1997–1998

Other Training:
Fellow, American College of Surgeons

Clinical Interests:
Robotic nerve-sparing prostate surgery; nerve-sparing focal therapy (cryosurgery, laser, hemiablation) for prostate cancer; minimally invasive (robotic, laparoscopic, cryotherapy) surgery for kidney tumors; urologic oncology

Research Interests:
Prostate cancer imaging; focal therapy of prostate cancer; prostate cancer outcomes; kidney cancer outcomes; minimally invasive surgery; nerve-sparing cryotherapy
Glenn Michael Preminger, MD
Professor of Surgery

**Title:**
Chief, Division of Urology
Director, Endourology, Metabolic Stone Disease, Laparoscopic and Robotic Surgery Fellowship

**Training:**
MD, New York Medical College, 1977
Residency:
General Surgery, University of North Carolina Hospitals, 1977–1979
Urology, University of North Carolina Hospitals, 1979–1983
Fellowship:
Mineral Metabolism, University of Texas Southwestern Medical Center, 1983–1985

**Clinical Interests:**
Medical and surgical management of kidney-stone disease; shock wave lithotripsy; minimally invasive management of benign prostatic hyperplasia; endoscopic management of urinary tract obstruction

**Research Interests:**
Minimally invasive management of urologic diseases; minimally invasive management of renal and ureteral stones; medical management of nephrolithiasis; bioeffects of shock wave lithotripsy; basic physics of shock wave lithotripsy; intracorporeal lithotripsy for stone fragmentation; minimally invasive management of urinary tract obstruction, including ureteropelvic junction obstruction and ureteral strictures; enhanced imaging modalities for minimally invasive surgery; digital video imaging during endoscopic surgery; 3-D imaging modalities for minimally invasive surgery; holmium laser applications in urology
J. Todd Purves, MD, AB, PhD
Associate Professor of Surgery

Training:
MD, University of Illinois College of Medicine, 2000
PhD, University of Illinois–Urbana-Champaign, 1998

Residency:
Urology, University of Arizona College of Medicine, 2002–2006
General Surgery, University of Arizona College of Medicine, 2000–2002

Fellowship:
Pediatric Urology, Johns Hopkins Hospital (Maryland), 2006–2008

Edward N Rampersaud, MD
Assistant Professor of Surgery

Training:
MD, Duke University School of Medicine, 2004

Residency:
Internship, General Surgery, Duke University Medical Center, 2004–2005
General Surgery, Duke University Medical Center, 2005–2006

Fellowship:
Urologic Surgery Research, Duke University Medical Center, 2006–2007
SUO Urologic Oncology, Institute of Urologic Oncology, University of California–Los Angeles (UCLA), 2010–2012

Clinical Interests:
Kidney cancer (including all facets of care for both localized and advanced pathology; minimally invasive techniques, renalpreservation surgeries, and advanced vascular/caval reconstruction as needed); testicular cancer (including the advanced upper-retroperitoneal and vascular techniques required to address post-chemotherapy pathology); bladder cancer (including bladder-sparing protocols, creation of neobladders, and robotic/minimally invasive techniques); prostate cancer (including robotic prostatectomy and multimodal management of locally advanced pathology); penile cancer (including penile-sparing techniques); advanced genitourinary cancer surgery; diagnosis and treatment of rare/unusual genitourinary and retroperitoneal tumors
Cary Nobles Robertson, MD
Associate Professor of Surgery

Training:
MD, Tulane University School of Medicine (Louisiana), 1977

Residency:
Surgery, University of Oregon Health Center, 1977–1978
Surgery, Duke University Medical Center, 1980–1981
Urologic Surgery, Duke University Medical Center, 1981–1985

Fellowship:
Urologic Oncology (Fellow), Surgery Branch, National Cancer Institute (Maryland), 1985–1987
Urologic Oncology (Senior Investigator), Surgery Branch, National Cancer Institute (Maryland), 1987–1988

Clinical Interests:
Urologic oncology, robot-assisted laparoscopic radial prostatectomy, high-intensity focused ultrasound therapy of prostate cancer, renal-cell cancer, partial nephrectomy, benign prostatic hyperplasia

Research Interests:
High-intensity focused ultrasound therapy of prostate cancer; surgical technique improvement in prostate cancer; clinical predictors of outcome in prostate cancer; molecular imaging and genomics of genitourinary malignancies; quality of life measures in genitourinary malignancies
Jonathan Charles Routh, MD
Associate Professor of Surgery

Training:
MD, University of North Carolina–Chapel Hill School of Medicine, 2002
MPH, Harvard School of Public Health (Massachusetts), 2010

Residency:
Urology, Mayo Clinic (Minnesota), 2008

Fellowship:
Pediatric Urology, Children's Hospital Boston (Massachusetts), 2011
Pediatric Robotic Surgery, Children's Hospital Boston (Massachusetts), 2011
Pediatric Health Services Research, Harvard Medical School (Massachusetts), 2010

Clinical Interests:
Robotic and laparoscopic kidney and bladder surgery in children; urologic neoplasms in children; reconstructive surgery of congenital anomalies of the genitourinary tract (hypospadias, cryptorchidism, intersex, obstructive uropathies [hydronephrosis], vesicoureteral reflux, exstrophy); management of urinary-tract infections, incontinence, and enuresis in children; management of neurogenic bladders in children; general pediatric urology; consultation for fetal uropathies
Charles Douglas Scales, MD
Assistant Professor of Surgery

Training:
MD, Duke University School of Medicine, 2004

Residency:
Internship, General Surgery, Duke University Medical Center, 2005–2006
Urology, Duke University Medical Center, 2006–2011

Fellowship:
Endourology Research, Duke University Medical Center, 2004–2005
Robert Wood Johnson Foundation Clinical Scholar, University of California, Los Angeles, 2011–2013

Other Training:
MSHS, Fielding School of Public Health, University of California–Los Angeles, 2012

Clinical Interests:
Medical and surgical management of kidney stone disease, shock wave lithotripsy, medical and minimally invasive management of benign prostatic hyperplasia, endoscopic management of urinary-tract obstruction
Philip John Walther, MD, PhD, MBA
Professor of Surgery

Training:
MD, PhD, Duke University School of Medicine, 1975

Residency:
Surgery, Duke University Medical Center, 1975–1976
Surgery, UCLA Medical Center (California), 1976–1977
Urologic Surgery, UCLA Medical Center (California), 1977–1981

Fellowship:
Clinical Fellow, American Cancer Society, 1983–1984

Clinical Interests:
Urologic oncology, including prostate cancer surgery (such as robotic prostatectomy and nerve-sparing prostatectomy); surgery for testis cancer (such as nerve-sparing retroperitoneal lymph-node dissection), bladder cancer (including continent reservoirs or neo-bladders), and kidney cancer (including tumor thrombectomy); laparoscopic robotic nephrectomy, prostate cancer staging; chemotherapy for bladder and prostate cancer; clinical trials in bladder, kidney, and prostate cancer, including neoadjuvant treatment for high-risk prostate cancer; prostate cancer chemoprevention

Research Interests:
Developmental therapeutics of systemic urologic cancer; p53 mutations in prostate cancer; association of oncogenic types of human papillomavirus with urologic malignancy; treatment of renal cancer with gamma-interferon; androgen receptor-mediated transcriptional regulation in androgen-dependent human prostate cancer xenograft

Dane Alan Weil, MD
Assistant Consulting Professor in the Department of Surgery

Training:
MD, University of Oklahoma, 1992
**Brian Michael Whitley, MD, MPH**
Assistant Professor of Surgery

**Training:**
- MD, University of Alabama School of Medicine, 2007
- MPH, University of Alabama at Birmingham, 1999

**Residency:**
- Urology, Duke University Medical Center, 2008–2013
- General Surgery, University of North Carolina at Chapel Hill, 2007–2008

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**John Samuel Wiener, MD**
Professor of Surgery

**Title:**
- Section Head, Pediatric Urology

**Training:**
- MD, Tulane University School of Medicine (Louisiana), 1988

**Residency:**
- General Surgery, Duke University Medical Center, 1988–1990
- Urology, Duke University Medical Center, 1991–1995

**Fellowship:**
- Urology (Research), Duke University Medical Center, 1990–1991
- Pediatric Urology, Baylor College of Medicine (Texas), 1995–1997

**Clinical Interests:**
- Reconstructive surgery of congenital anomalies of the genitourinary tract (hypospadias, cryptorchidism, intersex, obstructive uropathies [hydronephrosis], vesicoureteral reflux, exstrophy);
- management of urinary-tract infections, incontinence, and enuresis in children;
- management of neurogenic bladders in children;
- urologic care of spina bifida patients;
- general pediatric urology;
- consultation for fetal uropathies;
- urologic neoplasms in children

**Research Interests:**
- Fetal and neonatal hydronephrosis;
- molecular biology of urogenital development;
- neurogenic bladder;
- voiding dysfunction;
- hypospadias
Duke University Medical Center History

1891
Trinity College President John Franklin Crowell makes public a plan for starting a medical college with a teaching hospital at Trinity College.

1924
James B. Duke establishes The Duke Endowment and allocates part of his $40 million gift to transform Durham's Trinity College into Duke University.

1925
James B. Duke makes an additional bequest to establish the Duke School of Medicine, Duke School of Nursing, and Duke Hospital, with the goal of improving health care in the Carolinas and nationwide.

1927
Construction begins on the medical school and Duke Hospital.

1929
Three thousand applicants apply to the new medical school. Seventy first- and third-year students are selected, including four women.
Duke University Medical Center History (continued)

1930
Duke Hospital opens July 20, 1930, attracting 25,000 visitors.
Classes begin in hospital administration, dietetics, and medical technology on August 15.
Eighteen third-year and 30 first-year medical students begin classes on October 2.

1931
The Duke School of Nursing’s first class of 24 undergraduate students begin classes on January 2.
The dedication ceremony for Duke Medical School and Duke Hospital is held on April 20.
The Private Diagnostic Clinic, Duke’s physician practice organization, is organized September 15.

1940
The first wing is added to Duke Hospital.
The 65th General Hospital is authorized as an affiliated unit of the Duke University School of Medicine on October 17.

1957
The Outpatient Clinic and Private Diagnostic Clinic as well as the Hanes and Reed private floors and operating rooms are opened.
The original medical school and hospital are renamed Duke University Medical Center.
Duke University Medical Center History (continued)

1966
A new hospital entrance, the Woodhall Building, opens.

1980
The new $94.5 million, 616-bed Duke Hospital opens, bringing the total number of patient beds to more than 1,000.

1998
The Duke University Health System (DUHS)—an integrated academic health care system serving a broad area of central North Carolina—is officially created as Duke establishes partnerships with Duke Regional Hospital, Raleigh Community Hospital, and other regional health care providers. DUHS today includes three hospitals, ambulatory care and surgery clinics, primary care medical practice clinics, home health services, hospice services, physician practice affiliations, managed care providers, and other related facilities and services.

2007
Future DUHS expansion includes the development of the Hospital Addition for Surgery (HAFS) building.

The Emergency Department (ED) Expansion project provides 71 treatment spaces accommodating over 60,000 annual visits, including a full Pediatric ED, 4 trauma resuscitation rooms, CT scanner, X-ray, decontamination area, ambulance garage, a daylit waiting area, and a linear exam area arrangement for increased efficiency.

2009
DUHS moves forward with the construction of a dedicated, state-of-the-art cancer center and the new Duke Medicine Pavilion, a major expansion of surgery and critical care services at Duke University Hospital.
Duke University Medical Center History (continued)

2012
On February 27, a new landmark opens its doors on Duke's medical center campus—the seven-story, 267,000-square-foot Duke Cancer Center. More than just a modern space, it's an environment designed to transform the experience of every patient welcomed inside. The center consolidates outpatient cancer services and clinical research from across the campus into a patient-centered, multidisciplinary facility. The building adjoins the current Morris Cancer Clinic and is equipped with, among other features, 140 examination rooms, 75 infusion stations, a pharmacy, and an outdoor garden terrace where chemotherapy patients can go while receiving their infusions.

2013
The Mary Duke Biddle Trent Semans Center for Health Education opens in January. The six-floor, 104,000-square foot building houses a meeting hall, a team-based learning auditorium, teaching labs, and clinical skills and medical simulation space, including the Surgical Education and Activities Lab (SEAL).
The Duke Medicine Pavilion at Duke University Hospital opens in June. The eight-floor, 608,000-square foot pavilion includes 160 critical care rooms, 18 operating rooms, and an imaging suite. The operating suites feature the latest in surgical technologies, as well as intraoperative magnetic resonance and computed tomography (CT) imaging capabilities that enable greater real-time precision and safety in complex procedures. With Duke University Hospital having to turn more than 900 patients away the previous year due to lack of space, the newly created critical care beds were urgently needed. Also, the 64 new intermediate care beds allow for optimal transition of patients from intensive care beds to standard hospital rooms.

The expanded Duke clinical facilities also provide state-of-the-art training and education for the nearly 900 residents and fellows at Duke—one of the largest training programs in the United States.

This major expansion project follows several recent significant capital projects throughout Duke Medicine, including renovations at Duke Raleigh Hospital and Duke Regional Hospital, and the opening of several new clinics in Wake County (Brier Creek, Morrisville, Knightdale, and North Raleigh).

2016
Duke University begins construction of a third Medical Sciences Research Building (MSRB). The $103 million, 155,000-square-foot building will exclusively house bench lab research.
Facilities

The Department of Surgery’s residency program gives students the opportunity to gain hands-on experience providing care for diverse populations and treating a wide range of conditions. With five world-class facilities, surgical residents can take advantage of valuable training opportunities, from pediatric through geriatric procedures, including comprehensive experiences in hepatobiliary surgery, transplantation, vascular surgery, and advanced laparoscopic procedures. The program includes experience in community and VA-based care, which is crucial for surgeons interested in academic careers. Residents become equipped with the knowledge and skills needed to be competitive in the workforce.

**Duke University Hospital (DUH)**

Consistently ranked as one of the top ten hospitals by *U.S. News & World Report*, the 989-bed Duke University Hospital is a tertiary and quaternary care hospital and Level I trauma center. On its 210 acres, it houses comprehensive diagnostic and therapeutic facilities that serve a multistate region, drawing patients routinely from the Carolinas, eastern Tennessee, southern Virginia, Georgia, and Florida. Many of its programs also attract patients from other national and international sites. The main hospital is complemented by a state-of-the-art ambulatory surgery center situated two blocks away. Recent additions to Duke Hospital continue to add operative capacity and the patient volume continues to grow, consistent with the booming population moving to the Triangle area.

**Duke Medicine Pavilion**

The Duke Medical Pavilion, a major expansion of Duke University Hospital, opened in 2014. The eight-floor, 608,000-square-foot pavilion includes 160 critical care rooms, 18 operating rooms, and an imaging suite. The building advances Duke’s surgical and intensive care capabilities by providing surgical faculty and staff with the capacity to meet the growing demand for Duke’s innovative procedures and recognized quality of care. The building’s spacious, light-filled waiting rooms and larger patient rooms ensure privacy and comfort. Its environmentally friendly design earned it a LEED silver certification.
Duke Clinic
Duke Clinic houses many of Duke’s specialty outpatient clinics, as well as medical school classrooms, laboratories, administrative offices, and a small number of inpatient units.

Duke Cancer Center
The Duke Cancer Center, which opened in February 2012, is a state-of-the-art facility that provides patients access to a more streamlined approach to cancer care. The 267,000-square-foot building epitomizes the Duke Cancer Institute model, fully integrating care and research. The synergy fostered by the cancer facility and DCI accelerates the translation of research discoveries into the most advanced clinical care for patients.

Duke Regional Hospital (DRH)
Duke Regional Hospital is a 369-bed acute care hospital that has been serving the community’s health care needs since 1976. A comprehensive facility, it offers Duke surgical residents experience in inpatient, outpatient, surgical, and emergency care. The medical facility also features a level II intensive care nursery, the 30-bed Durham Regional Rehabilitation Institute, and the Davis Ambulatory Surgical Center. It also has a nine-bed coronary care unit and a 17-bed intensive care unit. Other training opportunities include the highly acclaimed Duke Bariatric Surgery and Advanced Laparoscopic programs.
Durham Veterans Administration Hospital (DVAMC)
This 274-bed general medical and surgical facility is located just across the street from Duke Hospital. The DVAMC provides general and specialty medical, surgical, psychiatric inpatient, and ambulatory services and is a major referral center for veterans in North Carolina, southern Virginia, northern South Carolina, and eastern Tennessee. In this capacity, the DVAMC accommodates veterans from these regions with complex general, vascular, and cardiothoracic needs and, in addition, serves local veterans requiring care for common general surgical disorders.

Asheville Veterans Administration Hospital (AVAH)
The Asheville VA Medical Center is a tertiary care, 112-bed acute care facility located in western North Carolina. Asheville VA operates a separate 120-bed Extended Care and Rehabilitation Center, serving the western North Carolina area and portions of South Carolina, Tennessee, and Georgia. General surgical residents rotating through AVAH gain additional experience in vascular surgery, general surgery, cardiac surgery, and endoscopy.

Duke Raleigh Hospital (DRaH)
This is a 148-bed general medical and surgical hospital in Raleigh. The Duke Raleigh rotation provides residents with a community-based general surgery experience that includes what would be considered “bread and butter” general surgery, such as cholecystectomy, hernia, breast biopsy, mastectomy, and colectomy. It is currently expanding to include a comprehensive weight management program and enhanced general surgical oncology.
Duke Medicine and Duke University

With a top-ranked medical school, health system, and university, Duke University is a hub for academic excellence and innovation. Located in Durham, N.C. — one of the fastest growing areas in the country and a center of biomedical research — it produces leaders in fields ranging from business to engineering to public policy. Duke Medicine, which comprises Duke University Health System, Duke University School of Medicine, and Duke University School of Nursing, consistently ranks as one of *U.S. News & World Report’s* best medical centers.

Duke Medicine is an international leader in health care, research, and training. Its state-of-the-art facilities include the flagship Duke Hospital and two community hospitals, Durham Regional and Duke Raleigh. It’s also affiliated with other health care facilities, including local hospitals, community-based primary care physician practices, and hospice care. The School of Medicine has 31 departments, centers, and institutes, and employs more than 2,000 faculty members. Duke logs more than 61,000 inpatient stays and 1.8 million outpatient visits each year.

Duke Medicine offers world-class education for some of the brightest minds in medicine. Programs promote multidisciplinary collaboration between basic science, translational, and clinical faculty. Trainees are encouraged to pursue research in their area of interest and, upon graduation, are uniquely positioned for sought-after clinical or research positions.
Durham, North Carolina

Located halfway between the stunning Blue Ridge Mountains and the spotless beaches of the Outer Banks, Durham is the fourth largest municipality in North Carolina. Visitors come to Durham for its sports teams, eclectic restaurants, and diverse culture; residents live here for its reasonable cost of living, strong sense of community, and agreeable weather. From Forbes to USA Today, the Raleigh-Durham area consistently lands on the major top 10 lists of best places in the country to visit, live, and do business.

Durham has the charm of a Southern college town with the amenities of a larger city. The nearby Research Triangle Park, the largest research park in the country, is a wellspring of advancements and career opportunities in biotechnology, environmental sciences, and pharmaceuticals. The annual Full Frame Documentary Film Festival brings together people from all over the world to showcase the work of new and established filmmakers. With more than 60 parks, an extensive network of running and biking trails, and several major waterways, the city offers abundant activities for outdoors enthusiasts. Access to and from Durham is convenient, as the RDU airport just 12 miles outside the city.