Harnessing talents
Consolidation of surgical services enhances a commitment to pediatric care

For almost 80 years, Duke has pushed the envelope in developing surgical programs that rank among the top in the country. Nationally and internationally, Duke Surgery has remained a leading surgical department because of its record of accomplishment across all missions: clinical care, education, research, and administration. An ongoing initiative, Pediatric Surgical Services, seeks to continue the tradition by better coordinating pediatric surgical activities within the department and across the health system, and it promises to enhance the care of young surgical patients at Duke.

Every week, Duke pediatric surgeons perform procedures for common conditions as well as extraordinarily rare diseases that can only be managed by a few centers. Duke Surgery’s new Pediatric Surgical Services infrastructure offers tighter integration and allows closer collaboration with institutional efforts and initiatives. The goal is not only to encourage the future growth of clinical services but also provide opportunities for faculty to excel today.

Separately, Pediatric Surgical Services providers represent a small piece in each of Duke Surgery’s divisions (one or two from each division), but as a whole, these surgeons perform nearly 7,000 cases per year in the under-17 age group at Duke. From a clinical practice perspective, pediatric specialists share more in common with one another than they do with their adult specialist colleagues. By centralizing the group, important shared concerns can be addressed and decisions can be made expeditiously. Consolidation also enables better collaboration with Duke Medicine leadership for strategic planning.

Over the years, the need to further enhance pediatric surgical services at Duke was recognized by senior leadership, including Danny O. Jacobs, MD, MPH, David C. Sabiston Jr. Professor and Chair, Department of Surgery. Seizing the opportunity to significantly improve on-the-ground leadership and organization was an important first step in reaching the department’s ultimate goal of restructuring and expanding pediatric surgical services. To lead this initiative, Dr. Jacobs enlisted the help of Jeffrey R. Marcus, MD, Associate Professor, Division of Plastic, Maxillofacial, and Oral Surgery, to act as Pediatric Services Liaison in addition to his role as Surgical Director for Duke Children’s Hospital & Health Center.

“Our vision is to not only be the leading center for pediatric surgical care in North Carolina, but to be one of the top centers in the country. We can do this by fostering growth, attracting and retaining talented faculty, and by developing and supporting specialty programs that capitalize on our strengths and competitive advantages,” says Dr. Marcus.

Duke is faced with unique challenges—offering both adult and pediatric services in the same physical location requires careful, often creative, organization. This is especially true for surgical services, which is a bridge...
Among the many lessons learned in the last year is this: Opportunities exist where challenges present. We know this firsthand.

The Department of Surgery has a unique opportunity to take advantage of this time of growth and expansion at Duke University Medical Center by reaffirming our commitment to patient services, improving our services, and expanding our faculty.

The starting point was in June 2008 with the opening of the Hospital Addition for Surgery (HAFS). An eight-story, 77,684-square-foot building attached to Duke University Hospital, the HAFS building has created much needed space for operating room clinical infrastructure as well as room for our administrative offices—both of which support OR operations and other patient care activities. The renovations to the preoperative and post-anesthesia care units and the unveiling of the new surgery waiting room in April 2009 furthered our mission by providing comfort and privacy for our surgical patients and their family members. The private rooms for family visitations have been well received by patients and providers alike, as have the four core workstations among the patient rooms that facilitate patient care. The result: an enhanced experience for all parties involved.

We have set the bar high, and now it is time to look forward to a new phase of construction essential to providing adequate operating space for the more than 30,000 procedures performed annually by our surgeons. Slated for spring 2010, this next phase will add four new ORs (650 square feet each) to Duke University Hospital, and those currently in use will be expanded and renovated. Additional space for our growing faculty means better care for an ever-increasing population of patients in need of our services locally, regionally, nationally, and internationally.

Opportunities in the presence of challenges
Technology and innovation are vital to our growth, and the opening of Duke’s first hybrid OR is on the horizon. The large surgical suite will have built-in angiography imaging equipment—a feature that has formerly been exclusive to cardiac catheterization and interventional radiology labs. The hybrid OR will serve to promote our signature services for cardiac, thoracic, vascular, and other specialties. We will now be able to seamlessly transition patients from minimally invasive to open procedures without having to move the patient from one room or site to another. Scheduled for completion in March 2010, the hybrid room will also allow us to test new minimally invasive technologies for cardiac valve repair and replacement using percutaneous catheter-based technologies.

Meanwhile, at the forefront of Duke Medicine news is the recent groundbreaking for construction of our new cancer center and Duke Medicine Pavilion, which will include 16 ORs. Opening in 2012 and 2013, respectively, the additions will add more than 850,000 square feet of research and treatment space to our campus. Together these new buildings will provide multidisciplinary care to patients in a comfortable setting—a garden terrace for chemotherapy patients, a pharmacy, and a patient boutique offering specialty products and services. With multifaceted benefits, the expansion also aims to create more than 1,000 permanent jobs.

I invite you to learn more and take part in all aspects of Duke Surgery, beginning today. Please take a few minutes to read about some of our groundbreaking accomplishments and other highlights that are featured in this newsletter—the reorganization of our Pediatric Surgical Services, the unique approach to patient care taken by our colorectal surgeons, two of our pioneering female surgeons who are tearing down barriers with their recent inductions into the American Surgical Association, and the novel discovery of a rare antibody that could potentially be used in an AIDS vaccine.

While I am certainly more than satisfied with our recent happenings, I eagerly anticipate the challenges and changes ahead with you—our faculty, staff, administrative support, referring physicians, and our patients—all of whom contribute so that we continue to rank as one of the top U.S. hospitals. Give yourselves a pat on the back for a truly successful 2009, and look forward with me to all the possibilities of 2010.

Danny O. Jacobs, MD, MPH
David C. Sabiston Jr. Professor
Chair, Department of Surgery
Duke University Medical Center
service between Duke University Hospital and Duke Children’s Hospital & Health Center.

“It helps to have a formalized collaborative effort among pediatric surgical subspecialties,” says Eileen M. Raynor, MD, Assistant Professor, Division of Otolaryngology–Head and Neck Surgery. “Unlike Duke, freestanding children’s hospitals have no adult surgical specialties, so they work as a single surgical department. By improving collaboration at Duke, pediatric patient care can be positively affected and given the attention it deserves.”

In the past few years, great progress has been made at Duke in pediatric surgery. In place is not only a growing division for pediatric general surgery, but a cross-departmental leadership structure which has helped unify pediatric surgical subspecialists.

Expertise of Duke Surgery’s Pediatric Surgical Services spans eight divisions. Drs. Marcus and Raynor are joined by:

Robert D. Fitch, MD
Pediatric Orthopaedic Surgery

Herbert E. Fuchs, MD, PhD
Pediatric Neurosurgery

Gerald A. Grant, MD
Pediatric Neurosurgery

Jeff C. Hoehner, MD, PhD
Pediatric General Surgery

James Jaggers, MD
Pediatric Cardiovascular and Thoracic Surgery

Martha Ann Keels, DDS, PhD
Pediatric Dentistry

Andrew J. Lodge, MD
Pediatric Cardiovascular and Thoracic Surgery

Abigail E. Martin, MD
Pediatric General Surgery

Cynthia A. Neal, DDS
Pediatric Dentistry

Prerana N. Patel, MD
Pediatric Orthopaedic Surgery

Henry E. Rice, MD
Pediatric General Surgery

Sherry S. Ross, MD
Pediatric Urology

John S. Wiener, MD
Pediatric Urology

“The initiative to enhance pediatric surgical services is a wonderful and greatly needed institutional response to the growing number of children in North Carolina requiring surgical care,” says Henry E. Rice, MD, Paul H. Sherman, MD, Associate Professor and Chief, Division of Pediatric General Surgery. “As needs increase, institutional support is crucial to provide comprehensive services for these children.”

It has been several years since this working group was established—and it continues to serve Duke and its patients well. Dr. Marcus has subsequently assumed the role of Associate Vice Chair for Pediatric Surgical Affairs. His collaboration with Dr. Jacobs has helped provide seed funding for research projects and aided growth and development of clinical programs. Nearly $80,000 was awarded to faculty members for projects in 2009. His collaboration with Dr. Jacobs has helped provide seed funding for research projects and aided the growth and development of clinical programs.

With a leadership team up and running, Duke has been fortunate to recruit top-notch pediatric surgeons. Since 2008, Pediatric Surgical Services has seen the addition of three faculty members and a service for pediatric orthodontics. In addition, expansion of the pediatric general surgery faculty will seek to support new clinical programs, including the pediatric intestinal and abdominal transplant programs led by Debra L. Sudan, MD, Professor, Division of General Surgery.

“Duke is uniquely positioned to address pediatric patients that experience liver, kidney, and intestinal failure through expert multidisciplinary approaches to these disease processes—reserving transplantation for those without other favorable treatment options,” says Dr. Sudan. “Duke’s pediatric transplant program has established excellent results in transplantation even in the smallest children (under one year of age), which are typically considered highest risk. Over the past few months, we have been able to initiate our intestinal transplant program in adult patients and are especially excited about the expansion of the Duke intestinal transplant program to pediatric patients. This is a unique program in the state and the only one to currently offer intestinal transplantation to children in the region.”

When looking to the future, faculty members believe that overcoming challenges while working together is crucial to the growth of Pediatric Surgical Services at Duke.

“There is an unyielding pursuit of perfection here at Duke, and our goal is to make an important difference in the lives of children,” says Dr. Marcus. “The nature of what we do is such that our results must last a lifetime.”

While there is still work to be done, the groundwork has been set to develop Pediatric Surgical Services into a thriving group that lives up to the world-class standard that is Duke Surgery.
Established in 1880, the American Surgical Association (ASA) is highly esteemed among surgeons as the oldest and most prestigious surgical society in the United States. Membership is remarkably competitive and sought after by nearly every elite surgeon. The competition is so steep, in fact, that applicants commonly submit proposals for membership multiple times. Dr. Danny O. Jacobs, Chair of Duke Surgery, who is a member of the society’s nominating committee, indicates that the selection process is quite rigorous.

While it is the host of most “giants” in the field of surgery, the ASA holds few female members. Duke Surgery boasts two of its own faculty members among the newest inductees. Debra L. Sudan, MD, Professor and Chief of Abdominal Transplant Surgery, and Cynthia K. Shortell, MD, Professor and Chief of Vascular Surgery and Vice Chair of Faculty Affairs, were granted membership in early 2009. “You could almost count the females in the ASA on one hand,” Dr. Sudan says. “It’s an overwhelmingly male crowd.” Of the organization’s 1,328 members, only 54 are women.

Dr. Sudan traveled to California in April to attend her first annual meeting of the ASA. “Women have historically been scrutinized and held to a different standard,” she says. “I’ve been fortunate to have been well-respected by my mentors and colleagues. I have not suffered the blatant discrimination that other women in surgery have clearly been subjected to.” Meetings of the ASA give members the opportunity to learn from some of the best surgeons in the country. Dr. Sudan feels fortunate to have had many serve as great mentors. Granted membership after last year’s meeting, Dr. Shortell anticipates attending her first meeting in Chicago in 2010 alongside Dr. Sudan.

According to Dr. Sudan, being granted membership has been one of the highest points in her professional life. She says her experience with the ASA has reinforced the importance of mentorship for surgeons. “When people hear you’re a member of the society, it’s bigger than anything else,” Dr. Shortell says. Accepted into the ASA on her first attempt, Dr. Shortell similarly had numerous people go to bat for her during the application process, including Paul C. Kuo, MD, MBA, Professor and Chief, Division of General Surgery.

Through her membership, Dr. Sudan hopes to help other women surgeons identify their strengths and to show them new options for career development. She points out that there are creative ways for women to develop professionally as surgeons while still having children and families. “We’re losing a valuable part of the workforce when women do not choose to advance their surgical careers,” she says. As for Dr. Shortell, it is her goal to be a highly contributing member of the ASA and recruit other women to follow suit.
A patient diagnosed with colorectal cancer may need to see a medical oncologist, a radiation oncologist, and a surgeon. Juggling so many visits can add to the stress of the diagnosis. At Duke, most patients can see all these specialists in one place on one day.

“We offer a one-stop evaluation that pertains to the colon, rectum, and small bowel,” says Christopher R. Mantyh, MD, Associate Professor and Chief of Gastrointestinal and Colorectal Surgery. “Our colleagues in medical oncology, as well as radiology, are down the hallway from our clinic, so a patient with newly diagnosed colon or rectal cancer can make one trip to Duke and be seen by a surgeon, a medical oncologist, and a radiologist and receive a complete workup.”

When needed, colorectal surgeons jointly perform procedures with colleagues in urology, urogynecology, and other fields—an example of Duke’s seamless multidisciplinary care. “We do a fair number of combined procedures with the assistance of our surgical colleagues,” says Dr. Mantyh. “If there’s a tumor invading the bladder or the ureters that needs to be resected, we regularly enlist the help of our urologists.”

Duke’s colorectal surgeons offer experience that leads to better surgical outcomes following complex procedures to treat colorectal disease. Each surgeon is board-certified, meaning he or she has completed general surgical residency training, one or two years of additional fellowship training specifically for surgery of the colon and rectum, and has successfully passed the necessary examinations. The highly specialized nature of the field limits the number of available experts; only a handful of board-certified colorectal surgeons practice in North Carolina.

The surgeons’ experience comes not only from their training but also the great number of patients seen at Duke and the diverse caseload. “For very complex diseases, rectal cancer especially, you want to be at a place that performs colorectal surgery,” says John Migaly, MD, Assistant Professor, Division of General Surgery. He points to a 2005 study conducted by a Duke surgeon. It showed that patients who had rectal cancer surgery at high-volume institutions were more likely to have sphincter-sparing surgery. “Duke is an academic health center where we deal with the most complicated tertiary and quaternary forms of disease, in addition to common problems in colon and rectal surgery,” says Dr. Migaly. Adds Dr. Mantyh, “At Duke we can perform the full cadre of operations—everything from big, open cases to laparoscopic surgeries to transanal endoscopic microsurgery.”

Duke surgeons offer procedures that require a great deal of experience to master. One example is laparoscopic surgery, a minimally invasive operative approach with tiny incisions which allows shorter hospital stays and less pain for many patients. Duke surgeons perform laparoscopic colectomies for colon cancer, colon polyps, diverticulitis, Crohn’s disease, and ulcerative colitis. “Almost any procedure that could be performed with traditional open surgery can be done laparoscopically,” says Dr. Migaly.

The unique abilities of these surgeons further include resection and reconstruction of the bowel. “We perform all open and laparoscopic procedures for resection and repair of unhealthy bowels.
caused by inflammatory bowel diseases,” says Julie K. Thacker, MD, Assistant Professor, Division of General Surgery. Reconstructive surgery, such as an ileal pouch, can also be performed. After the colon and rectum are removed, the end of the small bowel, called the ileum, is used to construct a new rectum. “Our ability to perform reconstructions at the same time as the resection is very valuable to patients,” says Dr. Thacker. “It can save them an operation.”

Improving the quality of cancer care
Colorectal cancer is the second leading cause of cancer related deaths in the United States. Duke’s colorectal surgeons are working to improve outcomes for patients suffering from this disease by tracking patients to ensure that the correct steps are followed during diagnosis and management.

“We’re developing a database in which all patients are entered and tracked to ensure we are meeting quality measures,” says Dr. Mantyh. “We want to make sure patients have the appropriate workup completed.” For example, patients with rectal cancer should receive an endorectal ultrasound, and patients with stage III colon cancer should be referred to a medical oncologist for chemotherapy. These steps, which should be routine, are not being followed consistently at many hospitals and compliance is low nationwide. These are quality measures that can be looked at very quickly and checked off. “We’re trying to institute robust tracking measures at Duke and hope to get them established so they can eventually be used at other institutions,” Dr. Mantyh adds. Dr. Mantyh and colleagues reviewed the quality measures for staging, surgery, and chemotherapy, and suggested directions for future research in an article published in the December 2007 issue of Journal of Evaluation in Clinical Practice.

For patients at Duke, the surgical team systematically implements clinical protocols that have been shown to result in better outcomes. “If someone has an operation, they will go on a pathway where certain procedures are done on specific days; it’s not random. For example, the nasal gastric tube is removed at a certain time on the first day,” says Dr. Mantyh. Duke’s colorectal surgeons are researchers who follow and contribute to the literature on such procedures, so they can implement new protocols when they’re shown to improve care, says Dr. Thacker. “For example, we have a postoperative feeding protocol in which patients are fed a little sooner than would be found on the general surgery service. There have been some studies in the colorectal surgery literature showing that these protocols, which try to decrease the perioperative stress by taking out nasogastric decompression tubes and urinary bladder tubes sooner after surgery and also allow patients to drink and eat sooner, lead to improved outcomes,” she says.

To learn more about how the surgical experience and multidisciplinary approach at Duke improves care for colorectal surgery patients, contact Drs. Mantyh, Migaly, or Thacker at 919-681-3977.
Duke Surgery scientists find rare, potent antibody to HIV-1

In a research first, scientists at Duke University Medical Center have isolated an important antibody in human serum that could potentially play a key role in the design of an AIDS vaccine.

“The 2F5-like antibody is one of the gold standards for what an HIV vaccine needs to induce, but it had never been found circulating in the blood of infected patients,” says Georgia D. Tomaras, PhD, Assistant Professor, Division of Surgical Sciences.

As previous research has shown, the 2F5 antibody is especially valuable because it can successfully neutralize 80 percent of transmitted HIV viruses. Now that researchers have found the antibody in circulating blood, Dr. Tomaras says they might be able to find ways to duplicate or enhance it, thereby boosting the body’s defense system.

The 2F5-like antibodies belong to a class of immune cells called broadly neutralizing antibodies, one of the body’s most powerful responses to infection. Only a small fraction of patients with HIV make these antibodies, and they typically appear many months after initial transmission of the virus—a point when scientists feel it is too late to do much good.

Dr. Tomaras, working closely with lead author Xiaoying Shen, PhD, Research Associate, Division of Surgical Sciences, led a team that examined the antibodies in 300 patients infected with HIV-1. They found only one patient who had developed 2F5-like antibodies, supporting the notion that they are indeed very rare.

Researchers discovered that the 2F5-like antibody was potent enough to block multiple strains of HIV in the laboratory, but researchers say they are not entirely clear if it played any part in controlling the virus in the patient who carried it.

The scientists were also struck by another discovery: The 2F5-like antibodies arose concurrently with particular autoantibodies, which may be a clue as to why these antibodies developed in this patient and not in others.

“Dr. Tomaras and her team have created the opportunity for us to isolate and study the immune cells that enabled the production of this very rare antibody,” says Barton Haynes, MD, Frederic M. Hanes Professor of Medicine and Director of the Duke Human Vaccine Institute. “Our goal will be to understand how to trigger these cells to routinely make these kinds of antibodies before infection occurs.”

This study was funded by the National Institutes of Health and the Duke Center for AIDS Research.

SURGERY RESEARCH

Basic and Translational Research

Thomas A. D’Amico, MD, Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from the National Comprehensive Cancer Network for “Non-Small Cell Lung Cancer Outcomes Database.”

Gerald A. Grant, MD, Associate Professor, Division of Neurosurgery, was awarded a grant from the University of California, San Diego, for “Trauma Brain Injury/Post-Traumatic Stress Disorder Clinical Consortium Study Site.”

Matthias Gromeier, PhD, Associate Professor, Division of Neurosurgery, was awarded a grant from the Southeastern Brain Tumor Association for “Oncolytic Virotherapy of Metastatic Medulloblastoma” and from the National Institutes of Health for “Oncolytic Virotherapy of Meningeal Cancer.”

Erich S. Huang, MD, PhD, Assistant Professor, Division of General Surgery, was awarded a grant from the Sidney Kimmel Foundation for “Pathway Phenotypic Models of Colorectal Neoplasia for Developing Tumor-Specific Combination Therapies.”

Carmelo A. Milano, MD, Associate Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from the Society of Thoracic Surgeons for “Mechanical and Biological Treatments to Prevent Myocardial Apoptosis following Infarction: A Novel Biomodal Strategy to Achieve Left Ventricular Recovery.”

John A. Olson Jr., MD, PhD, Associate Professor, Division of General Surgery, was awarded a grant from WaferGen Biosystems Inc. for “Polymerase Chain Reaction-Based Assay System to Analyze Gene Expression at the Ribonucleic Acid Level.”

John H. Sampson, MD, PhD, Robert H. Wilkins and Gloria Wilkins Professor of Neurosurgery, was awarded a grant from the National Institutes of Health for “National Institute of Neurological Disorders and Stroke Research Education Programs for Residents and Fellows in Neurosurgery.”
Georgia D. Tomaras, PhD, Assistant Professor, Division of Surgical Sciences, was awarded a grant from the National Institutes of Health for “Non-Human Primate Binding Antibody Evaluation.”

Debara L. Tucci, MD, Professor, Division of Otolaryngology–Head and Neck Surgery, was awarded a grant from the Duke Clinical Research Institute for “Creating Health Care Excellence Through Education and Research Network.”

Rebekah R. White, MD, Assistant Professor, Divisions of General Surgery and Surgical Sciences, was awarded a grant from the Society of Surgical Oncology for “Validation of Gene Expression Profiles that Predict Pancreatic Cancer Response to Gemcitabine and Dasatinib.”

Clinical Trials

Christopher R. Brown, MD, Assistant Professor, Division of Orthopaedic Surgery, was awarded a grant from NuVasive Inc. for “Osteocel Plus in Anterior Cervical Discectomy and Fusion.” Contact: Matthew Roman, 919-668-1389

Abhinav Chandra, MD, Associate Professor, Division of Emergency Medicine, was awarded a grant from The Medicine Company for “A Safety and Efficacy Study of Blood Pressure Control in Acute Heart Failure: A Pilot Study.” Contact: Debra Freeman, 919-684-5036

Craig F. Donatucci, MD, Professor, Division of Urology, was awarded a grant from Eli Lilly and Company for “Efficacy and Safety of Daily Tadalafil for 12 Weeks in Men with Signs and Symptoms of Benign Prostatic Hyperplasia.” Contact: Jill Smith, 919-668-3613

Stephen J. Freedland, MD, Associate Professor, Division of Urology, was awarded a grant from Veridex LLC for “The GeneSearch Prostate Methylation Urine Assay.” Contact: Loretta Taylor, 919-684-4896. Dr. Freedland also received a grant from POM Wonderful LLC for “Effects of Pomegranate Pills in Men with Prostate Cancer.” Contact: Trish Creel, 919-668-0635

G. Chad Hughes, MD, Assistant Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from Carbometics Inc. for “Sizing, Implant Techniques, and Hemodynamic Performance Between Valves.” Contact: Terry Ainsworth, 919-681-2382. Dr. Hughes also received a grant from Medtronic Inc. for “Descending Thoracic Aortic Aneurysm Endovascular Repair Post Approval Study.” Contact: Dana Giangiacomo, 919-668-6112

Jeffrey H. Lawson, MD, PhD, Associate Professor, Division of General Surgery, was awarded a grant from Ark Therapeutics Ltd. for “Ark Trinam 103.” Contact: Suzanne Finley, 919-681-1093

David Reardon, MD, Associate Professor of Pediatrics, Division of Pediatric Neuro-Oncology, was awarded a grant from EMD Serono Inc. for “Cilengitide in Newly Diagnosed Glioblastoma Multiforme Patients with Methylated MGMT Gene Promoter” and from Genentech Inc. for “Phase II Bevacizumab Plus Inototecan and Carboplatin for Recurrent Malignant Glioma.” Contact: Selene Schmitting, 919-684-5427

Peter K. Smith, MD, Professor and Chief, Division of Cardiovascular and Thoracic Surgery, was awarded grants from Mount Sinai School of Medicine for “Cardiothoracic Surgical Trials Network Severe and Moderate Protocols” and “Atrial Fibrillation Ablation Protocol.” Contact: Stacey Welsh, 919-684-2037

Michael R. Zenn, MD, Associate Professor, Division of Plastic, Maxillofacial, and Oral Surgery, was awarded a grant from Novadaq Technologies for “Fluorescent Angiography versus 3D CT Angiography.” Contact: JoAnn Garofalo, 919-668-1685

Robert D. Zura, MD, Assistant Professor, Division of Orthopaedic Surgery, was awarded a grant from the Canadian Institutes of Health Research for “Trial to Evaluate Ultrasound in the Treatment of Tibial Fractures Study” and from the Greenville Hospital for “Fluid Lavage of Open Wounds Study.” Contact: Maria Manson, 919-681-9911

For an up-to-date listing of Duke Surgery research, visit dukesurgery.org/research.
A great contributor to Duke Surgery for more than 30 years retires

Ralph Randal Bollinger, MD, PhD, began his career at Duke in 1970 as an intern in the Division of General Surgery Residency Program. A gifted surgeon and scientist, he trained under David C. Sabiston Jr., MD, a Duke Surgery legend and Chair of the Department of Surgery from 1964 to 1994. Dr. Bollinger joined the Duke Surgery faculty as an Assistant Professor of Surgery, was promoted to Associate Professor in 1986, and received full Professor status in 1991. Additionally, he held faculty positions in the Department of Immunology, culminating with his appointment as Professor of Immunology in 1996.

Dr. Bollinger served as Chief of Surgical Transplantation from 1983 to 1999 and Chief of the Division of General Surgery from 1994 to 2004. He was the Vice Chairman of Education for Surgery from 2004 until he retired in 2008. Dr. Bollinger’s dedication to science led him to author over 200 publications—more than 150 specific to abdominal transplantation—during his career.

Through a gracious endowment, the R. Randall Bollinger Surgical Scholarship was established to support Duke University medical students during their research year. Applicants are reviewed by the Department of Surgery and, if chosen, receive funding for surgical research with faculty mentorship. Scholarship winners are expected to publish their findings in peer-reviewed journals and present their studies at regional or national scientific meetings.

Remembering James F. Glenn, MD

James F. Glenn, MD, former Professor and Chief of the Division of Urology at Duke University Medical Center, died June 10, 2009, at the University of Kentucky Hospital. Serving Duke Urology from 1963 to 1980, Dr. Glenn brought national and international acclaim to the program during his time. He set the stage for its perennial top-tier national rankings and truly endeared himself to his colleagues, support staff, and friends, all of whom he considered part of his extended family.

Dr. Glenn founded the Committee for Urologic Research, Education, and Development (CURED) in 1975. CURED consists of patients, physicians, and friends with the common interest of advancing Duke Urology. Dr. Glenn’s dedication to this project has resulted in substantial resources to sustain the division’s mission of excellence in clinical care, teaching, and research. CURED continues to be critical to the success of Duke Urology.

The James F. Glenn, MD, Professorship was recently established to honor Dr. Glenn’s legacy and support a Duke Urology faculty member in his or her scholarship, research, and excellence in patient care.

Leadership Updates

Thomas A. D’Amico, MD, Professor of Surgery, was appointed Section Chief of General Thoracic Surgery in the Division of Cardiovascular and Thoracic Surgery.

Gregory S. Georgiade, MD, Professor and Vice Chair of Financial Affairs for the Department of Surgery, has been appointed Interim Chief of the Division of Plastic, Maxillofacial, and Oral Surgery.

David H. Harpole Jr., MD, Professor of Surgery, was appointed to Vice Chief, Division of Surgical Sciences.

Cynthia K. Shortell, MD, Professor of Surgery, was appointed Vice Chair, Faculty Affairs.

Kent J. Weinhold, PhD, Joseph W. and Dorothy W. Beard Professor of Surgery, was appointed Chief, Division of Surgical Sciences.

Michael R. Zenn, MD, Associate Professor, was appointed Vice Chief, Division of Plastic, Maxillofacial, and Oral Surgery, and Director of the Duke Human Fresh Tissue Lab.
NEW FACULTY

Heatherlee Bailey, MD  
Division of Emergency Medicine  
Clinical interests include emergency medicine, trauma and critical care, and acute resuscitation. 919-684-5537

Adam M. Becker, MD  
Division of Otolaryngology–Head and Neck Surgery, Duke Otolaryngology of Raleigh  
Clinical interests include head and neck surgery with a focus on endoscopic sinus surgery and endoscopic anterior skull base surgery. 800-385-3646

Frederick E. Benedict, MD  
Division of Orthopaedic Surgery, Capital Orthopaedics and Sports Medicine  
Clinical interests include primary and revisions in hip, knee, and shoulder replacements, arthroscopic and open surgery on knee and shoulder injuries, and degenerative conditions. 919-876-8300

Mark F. Berry, MD  
Division of Cardiovascular and Thoracic Surgery  
Clinical interests include general thoracic surgery, benign and malignant diseases of the lung, esophagus, mediastinum, and chest wall, and thoracic oncology with a focus on minimally invasive treatments of lung and esophageal cancer. 919-668-5061

George M. Charron, MD  
Division of Orthopaedic Surgery, Capital Orthopaedics and Sports Medicine  
Clinical interests include general orthopaedics with a subspecialty in spine care. 919-876-8300 (Raleigh office) 919-851-5880 (Cary office)

W. Tucker Cline, MD  
Division of General Surgery, Duke General Surgery of Raleigh  
Clinical interests include all aspects of general surgery with particular interest in oncology, GI, and breast. 919-420-5000

Todd V. Brennan, MD  
Division of General Surgery  
Clinical interests include general, laparoscopic, hepatobiliary, and liver-, kidney-, and pancreas-transplantation surgery. 919-684-8245

Michael C. Comstock, MD  
Division of Orthopaedic Surgery, Duke Orthopaedics of Raleigh  
Clinical interests include orthopaedic surgery with a special interest in foot and ankle surgery, sports medicine, joint replacement, arthritis treatment, and fracture fixation. 919-862-5093

Scott L. Buckel, DO  
Division of Orthopaedic Surgery, Duke Orthopaedics of Vance County  
Clinical interests include general orthopaedics with an emphasis in sports medicine and shoulder surgery. 252-436-6571

Mitchell W. Cox, MD  
Division of General Surgery  
Clinical interests are minimally invasive and surgical treatment of peripheral arterial and venous disease, including aortic aneurysm, carotid stenosis, and lower-extremity occlusive disease, as well as arterio-venous access for hemodialysis. 919-681-2884

Lee H. Diehl, MD  
Division of Orthopaedic Surgery, Capital Orthopaedics and Sports Medicine  
With subspecialty training in orthopaedic sports medicine, clinical interests include operative and non-operative treatment of the injured athlete, and high school and intercollegiate team coverage. 919-876-8300 (Raleigh office) 919-851-5880 (Cary office)

Matthew D. Ellison, MD  
Division of Otolaryngology–Head and Neck Surgery, Duke Otolaryngology of Raleigh  
Clinical interests include care for adults and children for all ear, nose, and throat problems, and a special interest in sleep apnea, allergic rhinitis, and common pediatric problems. 800-385-3646
Sarah R. Farris, MD  
Division of Emergency Medicine  
Clinical interests include medical student and resident education, research on testing for acute coronary syndrome in the emergency department, and simulation training.  
919-684-5537

Michael Ferrandino, MD  
Division of Urology  
Clinical interests include minimally invasive treatment of benign and malignant urologic conditions and robotic, laparoscopic and endourologic approaches, as well as medical and surgical management of stone disease.  
919-684-2446

Andre C. Grant, MD  
Division of Orthopaedic Surgery, Duke Orthopaedics of Raleigh  
Clinical interests include sports medicine, joint replacement, gender-specific knee replacement, fracture care, carpal tunnel and trigger finger release, and a special interest in shoulder and knee reconstruction, including arthroscopic rotator cuff and labral repair, cartilage restoration, and all-inside ACL reconstruction.  
919-862-5093 or 919-373-1850

Ian B. Greenwald, MD  
Division of Emergency Medicine  
Clinical interests include emergency preparedness and resuscitation medicine.  
919-684-5537

Michael S. Kerzner, DPM  
Division of Orthopaedic Surgery  
Clinical interests include wound management and limb salvage.  
919-684-4656

Abigail E. Martin, MD  
Divisions of General Surgery and Pediatric General Surgery  
Clinical interests include all aspects of general pediatric transplant surgery for adults and children, pediatric transplantation, intestinal failure, and intestinal transplantation.  
919-681-6133

Fraser Leversedge, MD  
Division of Orthopaedic Surgery  
Clinical interests include hand, upper extremity, and microvascular surgery, clinical conditions affecting the upper extremity distal to the shoulder, including trauma, arthritis, nerve, and tendon repair and reconstruction, pediatric/congenital disorders, sports injuries, and post-traumatic reconstruction.  
919-613-4541

Eric Mowatt-Larssen, MD  
Division of General Surgery, Duke Vein Clinic  
Clinical interests include phlebology, endovenous laser ablation, and sclerotherpy techniques for the treatment of vein disease.  
919-681-2884

Charles E. Murphy, MD  
Division of General Surgery, Durham Regional Hospital  
Clinical interests include intensive care medicine and critical care quality measures.  
919-470-6281

Donald F. O’Malley Jr., MD  
Division of Orthopaedic Surgery, Duke Orthopaedics of Raleigh  
Clinical interests include general orthopaedics, including sports medicine, joint replacement, fracture care, and hand surgery, as well as sports medicine for baby boomers, computer-navigated and gender-specific knee replacement, and arthroscopic rotator cuff repairs.  
919-862-5093

Eric W. Ossmann, MD  
Division of Emergency Medicine  
Clinical interests include out-of-hospital care and disaster medicine with a focus on the integration of emergency medical services into a community-based health care delivery system.  
919-684-6918
Heather N. Paddock, MD  
Division of Pediatric General Surgery  
Clinical interests include all aspects of the general surgical care of children and neonates, including minimally invasive surgery; thoracic surgery; special interest in the care of patients with congenital diaphragmatic hernia and chest wall abnormalities; pediatric trauma and critical care; childhood solid tumors. 919-681-5077

Kadiyala Ravindra, MD  
Division of General Surgery  
Clinical interests include hepatobiliary and pancreatic surgery, laparoscopic liver resections, cholangiocarcinoma, surgery for chronic pancreatitis, abdominal organ transplantation: liver, kidney, pancreas. 919-613-6133

Sherry S. Ross, MD  
Division of Urology  
Clinical interests include 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 neuropathic bladders in children; general pediatric urology, consultation for fetal uropathies; and urologic neoplasms in children. 919-684-6994

Selene G. Parekh, MD, MBA  
Division of Orthopaedic Surgery, North Carolina Orthopaedic Clinic  
Clinical interests include athletic foot and ankle disorders, traumatic injuries of the foot and ankle, tendon reconstruction, and total ankle replacement/arthroplasty. 919-471-9622

Eileen M. Raynor, MD  
Division of Otolaryngology–Head and Neck Surgery, Duke  
Clinical interests include pediatric airway, neck masses, endoscopic procedures, and multidisciplinary management of complex problems. 919-684-3834

James G. Ross, MD  
Division of Otolaryngology–Head and Neck Surgery, Duke  
Clinical interests include surgical and medical management of pediatric and adult ear, nose, and throat disorders in a community setting, including endoscopic sinus surgery, hearing loss, balance disorders, allergic sinusitis, voice disorders, pediatric tonsillitis and ear infections, sleep apnea, and thyroid and salivary tumors. 919-220-2020

Sheila E. Ryan, MD  
Division of Otolaryngology–Head and Neck Surgery, Duke Otolaryngology of Durham and Person County  
Clinical interests include surgical and medical management of pediatric and adult ear, nose, and throat disorders in a community setting, treatment of sinusitis, nasal obstruction, allergies, ear infections, hearing loss, tonsillitis, hoarseness, and neck masses, including thyroid and salivary gland tumors. 336-597-9200 (Roxboro office) 919-220-2020 (Durham office)

Shalini Ramasunder, MD  
Division of Orthopaedic Surgery  
Clinical interests include the evaluation and treatment of benign and malignant soft-tissue and bone tumors involving all parts of the musculoskeletal system. 919-613-7797

Mark C. Sturdivant, MD  
Division of General Surgery, Duke General Surgery of Raleigh  
Clinical interests include minimally invasive/advanced laparoscopic surgery (upper and lower GI, spleen, hernia repair), GERD, outpatient general surgery, and oncology. 919-420-5000

Ronald A. Summers, MD  
Division of Orthopaedic Surgery, Capital Orthopaedics and Sports Medicine  
Clinical interests include orthopaedic care for a variety of injuries and problems with a special interest and expertise in the care of sports medicine. 919-876-8300 (Raleigh office) 919-851-5880 (Cary office)

Betty C. Tong, MD, MS  
Division of Cardiovascular and Thoracic Surgery  
Clinical interests include thoracic oncology, including lung cancer and mesothelioma, esophageal cancer, chest wall tumors, diseases of the mediastinum and pulmonary metastases, minimally invasive thoracic surgery (VATS), and benign conditions of the lung and chest. 919-684-6974
GRADUATING DUKE RESIDENTS 2009
Where are they now?

Cardiovascular & Thoracic Surgery
Mark F. Berry, MD
Faculty, Duke University
Jay D. Pal, MD, PhD
Faculty, University of Texas
Matthew L. Williams, MD
Faculty, University of Louisville

Emergency Medicine
Kenton Anderson, MD
Faculty, University of Pennsylvania
Brady Cox, MD
Naval Medical Center
Portsmouth, VA
Katherine A. Lewis, MD
Private Practice, Inova Fairfax Hospital, Fairfax, VA
Jennifer L. Meyer, MD
Private Practice, Banner Estrella Medical Center, Phoenix, AZ
Natasha N. Powell, MD
Faculty, George Washington University

Akhil Saraswat, MD
Private Practice, Forsyth Medical Center, Winston-Salem, NC
David J. Story, MD
Faculty, New York University/Bellevue Hospital
Jennifer Tighe de Sota, MD
Private Practice, Nash General Hospital, Rocky Mount, NC

General Surgery
Brian Lima, MD
Cardiothoracic Surgery Fellow, Cleveland Clinic
Vanessa A. Olcese, MD, PhD
Transplant Surgery Fellow, University of Wisconsin
Mayur Patel, MD
Surgical Critical Care and Acute Care Surgery Fellow, Vanderbilt University
Rebecca P. Petersen, MD
Minimally Invasive Surgery Fellow, University of Washington
Keshava Rajagopal, MD, PhD
Cardiothoracic Surgery Fellow, Duke University
Jacob N. Schoder, MD
Cardiothoracic Surgery Fellow, Duke University
Jin Yoo, MD
Minimally Invasive Fellow, Duke University

Neurosurgery
Daniel A. Clayton, MD, PhD
Neurosurgery Functional Epilepsy Fellow, Swedish Neuroscience Institute
William C. Gump, MD
Pediatric Neurosurgery Fellow, Northwestern University
Ciaran Powers, MD, PhD
Neuro-Radiology Fellow, University of Wisconsin
Lyman W. Whitlatch, MD
Private Practice, Northstate Neurosurgical Associates, Chico, CA

Orthopaedic Surgery
James A. Brown, MD
Adult Reconstruction Orthopaedic Fellow, Mayo Clinic
Robert K. Lark, MD
Pediatric Orthopaedic Fellow, Rady’s Children’s Hospital San Diego
Michael J. Morris, MD
Adult Reconstruction Orthopaedic Fellow, Joint Implant Surgeons Inc.
Diane E. Payne, MD
Hand Fellow, Duke University
Vani J. Sabesan, MD
Shoulder and Elbow Fellow, Cleveland Clinic
Jonathan R. Snyder, MD
Private Practice, Tri-County Orthopaedic & Sports Medicine, Elkin, NC
Jocelyn R. Wittstein, MD
Sports Medicine Fellow, Duke University

Otolaryngology-Head & Neck Surgery
Shawn Cicco, MD
Private Practice, ENT and Allergy Associates, Staten Island, NY
Thomas W. Pilkington, MD
Private Practice, Arlington ENT Associates, Arlington, VA
Christopher L. Tebbet, MD
Private Practice, Charlotte Eye, Ear, Nose, and Throat Associates, Charlotte, NC

Plastic & Reconstructive Surgery
Amir H. Tahernia, MD
Private Practice, Cosmetic and Reconstructive Surgery, Century City, CA
B. Jackson Taylor, MD
US Navy
Anthony W. Viol, MD
Private Practice, Lynchburg, VA

Surgical Critical Care
Charles E. Murphy, MD
Faculty, Duke University

Urology
Kristy Borawski, MD
Urology Reconstructive Fellow, Duke University
Nicholas J. Fitzsimons, MD
Private Practice, Charlotte, NC
Timothy Y. Tseng, MD
Endourology Fellow, University of California, San Francisco

Vascular Surgery
Hardeep Ahluwalia, MD
Vascular Fellow, El Camino Hospital, Mountain View, CA
Duke Surgery honors

Judd W. Moul, MD, Professor and Chief, Division of Urology, was awarded a 2009 Castle Connolly National Physician of the Year Award in the category of Clinical Excellence. He was also selected for inclusion in the “Best Doctors in America” 2009-2010 database. Dr. Moul was appointed to the American Joint Committee on Cancer representing the American Urological Association for a two-year term, effective September 2009 through September 2011. He was also named the first recipient of the James H. Semans, MD, Professorship.

Kent J. Weinhold, PhD, Professor and Chief, Division of Surgical Sciences, was named the Joseph W. and Dorothy W. Beard Professor for his work in the field of human cellular immunology.

Theodore N. Pappas, MD, Professor, Division of General Surgery, and Vice Chair of Administration, was named as the first recipient of the Duke Minimally Invasive Surgery Professorship.

Aurora D. Pryor, MD, Associate Professor, Division of General Surgery, has been named Chief of General Surgery at Durham Regional Hospital.

Lisa C. Pickett, MD, Assistant Professor, Division of General Surgery, was appointed to Chief Medical Officer for Durham Regional Hospital. Dr. Pickett previously served as Chief of Durham Regional’s Division of General Surgery.

David M. Kaylie, MD, Associate Professor, Division of Otolaryngology–Head and Neck Surgery, received the American Academy of Otolaryngology–Head and Neck Surgery Honor Award, which is presented to members in recognition of their volunteer contributions to the academy and its foundation.

Michael M. Haglund, MD, PhD, Professor, Division of Neurosurgery, was elected to the Society of Neurological Surgeons, the oldest neurological professional organization in the world. He was also elected to the Executive Committee of the Foundation for International Education for Neurosurgery and the Board of Directors for Madaktari Africa, a multi-institutional group developing neurosurgery in East Africa.

Thomas A. D’Amico, MD, Professor, Division of Cardiovascular and Thoracic Surgery, received the Leonard Palumbo Jr., MD, Faculty Achievement Award from the Duke University School of Medicine. This award honors a faculty member who displays both compassionate patient care and excellence in the teaching and mentoring of young physicians.

Bruce A. Sullenger, PhD, Joseph W. and Dorothy W. Beard Professor of Surgery, received a Research Mentoring Award in the category of Translational Research from the Duke University School of Medicine.

Danny O. Jacobs, MD, MPH, David C. Sabiston Jr. Professor and Chair of Surgery, was elected as Chair of the Private Diagnostic Clinic (PDC) Board of Managers. Dr. Jacobs previously served as Vice Chair.

Bryan M. Clary, MD, Associate Professor, Division of General Surgery, was named to the editorial board of the Annals of Surgical Oncology.

Mark L. Shapiro, MD, Associate Professor, Division of General Surgery, received Duke Medicine’s overall annual Strength, Hope, and Caring Award, which honors faculty and staff for providing extraordinary patient care.

Eileen M. Raynor, MD, Assistant Professor, Division of Otolaryngology–Head and Neck Surgery, received the American Academy of Otolaryngology–Head and Neck Surgery Honor Award, which is given to members in recognition of their volunteer contributions to the academy and its foundation.

Richard L. McCann, MD, Professor, Division of General Surgery, received a Master Clinician/Teacher Award from the Duke University School of Medicine, which recognizes superlative accomplishments and service in the areas of clinical care and teaching.

Rebekah R. White, MD, Assistant Professor, Division of General Surgery, received the Society of Surgical Oncology’s prestigious Clinical Investigator Award. This grant was designed to promote patient-oriented research through the training of surgical oncologists in clinical and translational sciences.

Henry E. Rice, MD, Associate Professor and Chief, Division of Pediatric General Surgery, has been named the first recipient of the Paul H. Sherman, MD, Associate Professorship, which was established by the late Dr. Paul H. Sherman, a Duke University School of Medicine alumnus.
MISSION

The Department of Surgery is committed to excellence, innovation, and leadership in meeting the health care needs of the people we serve and fostering the very best medical education and biomedical research.

VISION

As one of the leading national and international academic departments of surgery, we will assemble and integrate a comprehensive range of health care resources providing the very best in patient care, medical education, and clinical research. As the health care providers of choice in the region, we will improve the health of the communities we serve through the development of new and better models of health care. Through careful stewardship of our resources, we will preserve and promote our core missions of outstanding clinical care, discovery research, and improved health for the communities we serve.

Partners in Philanthropy

A gift to the Duke Department of Surgery is a gift of knowledge, discovery, and life. Every dollar is used to further our understanding of surgical medicine, to develop new techniques, technology, and treatments, and to train the surgeons and researchers of the future.

If you would like to make a philanthropic investment in Duke Surgery, visit dukesurgery.org/gift.

For Duke Surgery appointments, call:
800-MED-DUKE (for referring physicians)
888-ASK-DUKE (for patients)
DukeSurgery.org

The use of certified papers and electricity offset by NC GreenPower renewable energy has resulted in the following savings and reductions. Calculations have been based on research by the Environmental Defense Fund and other members of the Paper Task Force.

- 5,647 lb. of wood saved
- 5,859 gal. of water saved
- 969 lb. of landfill waste reduced
- 116 trees saved
- 5,860 lb. of greenhouse emissions saved
- 11,100,000 BTU of energy consumption reduced

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