Abdominal Transplant
Expanded program, new milestones, unmatched expertise

Some babies are born with short bowel syndrome, but in adults it is more often the result of a bowel resection that was performed due to an obstruction or inflammatory disease such as Crohn’s disease. Patients who have extensive resections often can’t absorb enough nutrients and must receive intravenous nutrition—total parenteral nutrition (TPN). Over time, TPN can contribute to serious life-threatening complications such as blood stream infections, clotting of veins where catheters are inserted, or liver damage.

In 2008, Duke’s novel research programs and collaborative atmosphere attracted Debra L. Sudan, MD, FACS, Professor of Surgery (pictured above), to join Duke Surgery as Chief of Abdominal Transplant Surgery after 14 years as a faculty member at University of Nebraska Medical Center. Now, two years later, Dr. Sudan’s expertise in intestinal lengthening and bowel transplant has helped Duke become a regional referral center for these procedures. Duke began offering intestinal lengthening in January 2009, shortly after Dr. Sudan came on board. In July 2009, Dr. Sudan launched the program’s intestinal (small bowel) transplant service.

“Compared to the age-matched general population, mortality is higher in patients who are dependent on TPN,” says Dr. Sudan. “Intestinal lengthening or small bowel transplantation can reduce or eliminate the need for TPN.”

The natural adaptive mechanism in patients with foreshortened bowel length is dilation, which increases the surface area that can absorb nutrients. “Initially, this is beneficial and promotes increased absorption, but once you get beyond a small degree of bowel dilation, further dilation actually decreases function,” says Dr. Sudan. “The markedly dilated bowel is no longer able to push the fluid forward when it contracts, leading to stasis, which causes mucosal irritation and bacterial overgrowth. The natural adaptive mechanism improves things for a while, but then in some patients, it goes too far and becomes problematic.”

A very novel solution to the problem of bowel dilation is surgical lengthening via serial transverse enteroplasty (STEP), which narrows the lumen to a more normal caliber and simultaneously increases the overall length of the remnant bowel. Dr. Sudan has the most extensive experience in the STEP procedure in the world.

In patients with liver disease or inadequate bowel length or dilation for STEP, small bowel transplantation is the treatment of choice. Small bowel transplantation is performed infrequently compared to other types of transplantation; about 200 small bowel transplants are performed in the United States each year. “Given the 50 percent mortality on the wait list for small bowel transplant candidates nationally, we are very pleased that all five patients admitted at Duke so far have received transplantation (no mortality from waiting). In addition, to date we have 100 percent post-transplant patient survival for all five of these patients transplanted within the past year,” says Dr. Sudan. Both of these rare surgical procedures—intestinal lengthening and bowel transplantation—can allow patients to discontinue TPN.

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MESSAGE
FROM THE CHAIR

Everyday Heroes

“Few of us will do the spectacular deeds of heroism that spread themselves across the pages of our newspapers in big, black headlines. But, we can all be heroic in the little things of everyday life. We can do the helpful things, say the kind words, meet our difficulties with courage and high hearts, stand up for the right when the cost is high, keep our word even though it means sacrifice, be a giver instead of a destroyer. Often this quiet, humble heroism is the greatest heroism of all.”

—Wilferd A. Peterson, 1900–1995

Peterson was an American author who for 25 years wrote a monthly column for Science of Mind magazine. He published nine books, including his bestselling work The Art of Living.

I am grateful to and very appreciative of people who make an impact, who exhibit generosity and kindness with fortitude and perseverance—those who choose to do the right thing because they want to, not because they have to. It’s your neighbor who takes your trash can to the curb on pickup day when you forget, your support staff who volunteer to come in early and stay late to help you meet a deadline, your co-worker who buys you lunch just because you’re having a bad day. These are examples of everyday folks who make a difference in our lives without glory and too often without sufficient appreciation. Here is my chance to splash the names of just a few of our unsung heroes across the front page—to put their names in big, black headlines.

Jose and Eduarda Resendes are a husband-and-wife team who work in Environmental Services at Duke. They come to work every day with a smile and a kind word for anyone who crosses their path. To Jose, it doesn’t matter if you know his name or not. Always pleasant and eager to help, he is very thorough, takes pride in his work, and his positive, generous spirit is quite contagious. Once, a staff assistant lost her credit...
card and Jose helped her sort through bags of trash to find it. There are many stories like this one that several of us have about Jose and Eduarda. I remember when they were out for an extended period, and it was like an empty hole waiting to be filled as staff lamented their absence. Sure, the job was done, but it just wasn’t the same. While I value the physical comfort their work brings to our Hospital Addition for Surgery (HAFS) offices, I am most appreciative of them for showing me what a difference a smile can make.

Darryl Williams usually can be found working by himself on the bottom floor of the HAFS building. His impact probably goes mostly unnoticed, but his role makes our lives easier and better. He quietly manages the large volume of equipment that is constantly revolving in our operating rooms. Darryl is behind the scenes helping to coordinate half a million dollars’ worth of medical equipment a week. His accuracy and attention to detail are worthy of notice, and while he would probably rather blend into the background, I want to recognize him for consistently going the extra mile to ensure we always have what we need to care for our patients. Darryl doesn’t expect our gratitude, however; he says he knows when he wakes up every morning that what he does helps people, even if they never know the role he played.

Thomas Purefoy knows the importance of finding satisfaction. After 25 years at Duke, he has worked his way up to his current position as a courier and makes five trips a day. You most likely have seen him carrying his yellow bag to Pathology. I am often struck by his good-natured willingness and can-do attitude. He treats the question of why he does what he does seemingly with such pleasure as a rather dumb question. “I’m satisfied. I enjoy everything about my job. If you don’t feel like you’re in the right place, well, find something else. Don’t complain; just be happy with what you’re doing,” he states.

“In everyone’s life, at some time our inner fire goes out. It is then burst into flame by an encounter with another human being. We should all be thankful for those people who rekindle the inner spirit.” — Albert Schweitzer, 1875–1965

Schweitzer was a Franco-German theologian, philosopher, and physician who received the 1952 Nobel Peace Prize for his philosophy of “Reverence for Life.”

We often get so busy that we either don’t take the time to notice small acts of kindness or we forget to acknowledge someone’s extra efforts. Or perhaps we just take for granted what we’ve always had, but today is a good day during the holiday season to take note and recognize those around you who deserve appreciation. Maybe in turn you will make someone else’s day a little brighter.

Danny O. Jacobs, MD, MPH
David C. Sabiston Jr. Professor
Chair, Department of Surgery
Duke University Medical Center
The small bowel transplant program is another in a long line of firsts for Duke’s abdominal transplant surgery program. In 1965, Duke became one of the first institutions in the country to successfully establish a kidney transplant program. In 1984, Duke performed the first successful liver transplant in North Carolina, performed by R. Randal Bollinger, MD, PhD, MBA, Professor Emeritus of Surgery, Richard L. McCann, MD, Professor of Surgery, and William Meyers, MD, Consulting Professor of Surgery. In 1997, the program implemented a living related liver transplant program for children and young adults. In an earlier milestone, in 1989, Duke began a kidney and pancreas transplant program; now led by Bradley H. Collins, MD, Associate Professor, Division of General Surgery, it is the leading program in the Carolinas and Virginia. Dr. Collins performs a high volume of kidney transplants and is also a leader in dialysis access.

Today, more than 30 percent of kidney transplant patients at Duke receive a kidney from a living donor. The procedure to remove the kidney has been accomplished with a laparoscope rather than an open flank incision in all of Duke’s living kidney donors since 2001. “Donors are able to leave the next day with very little morbidity. The program really has the best outcomes I’ve seen for living kidney donors. Paul C. Kuo, MD, has done a phenomenal job advancing that program,” Dr. Sudan says. Kuo, who had been the Division Chief of General Surgery since 2004, recently left Duke to become Chair of the Department of Surgery at Loyola University.

Most recently, the Duke Surgery team has utilized the single-incision laparoscopic (SILS) approach to living kidney donation for selected donors. In this technique, all of the donor surgery is performed through a single two-inch incision, rather than the standard laparoscopic approach, which involves a two-inch incision with three or four additional quarter-inch incisions. The advantages of this approach are being recognized.

On the horizon for kidney transplantation at Duke is a paired donor exchange program to expand the number of patients receiving kidneys from live donors. Two potential partner arrangements are currently being pursued including Johns Hopkins and other North Carolina kidney transplant programs, with the hope of having the partnership in place this year. This would create a potential to increase the number of live kidney transplants by eight to ten patients per year and improve survival by transplanting earlier rather than having patients remain on dialysis.

Liver transplantation outcomes have also improved with greater than 90 percent patient survival over the past 22 months. “This is impressive considering that since Dr. Sudan’s arrival, the number of liver transplants has increased to greater than 50 per year. This number is an important benchmark as it allows Duke to train fellows in liver transplantation,” states Dr. Kuo.

With Dr. Sudan’s leadership, the pediatric abdominal transplant program is also continuing to grow. “There aren’t a lot of pediatric abdominal transplant programs in the country, so it’s an area where gaining access can be difficult. We’re excited to have expanded the pediatric program dramatically since I arrived, which has been aided with the recruitment of Dr. Abigail Martin,” says Dr. Sudan. Abigail E. Martin, MD, Assistant Professor, Division of Pediatric Surgery, brings to the program dual fellowship training in pediatric general surgery and transplant surgery.

Rounding out an impressive team of surgeons and scientists are more new additions to Duke Surgery: Kadiyala V. Ravindra, MBBS, Associate Professor,
Division of General Surgery, a highly trained laparoscopic hepatobiliary surgeon; Todd V. Brennan, MD, MS, Assistant Professor, Division of General Surgery, whose basic science research on the mechanisms of acute rejection has been honored by three nationally recognized competitive awards; and Deepak Vikraman, MD, Assistant Professor, Division of General Surgery, a former Del Stickel Abdominal Transplant Fellow who has a proven record of excellence in kidney transplantation and clinical research.

Dr. Ravindra was a key team member in the Composite Tissue Allograft Program at the University of Louisville and has assumed a leadership role in the initiation of a composite tissue allograft program at Duke. The first composite tissue transplant at Duke was performed in May 2010 with the transplantation of components of the donor abdominal wall, along with the liver, small bowel, and pancreas, in a child with prune belly syndrome and intestinal failure.

Another benefit for transplant patients at Duke is the ability to access novel treatments by enrolling in clinical trials. “Our clinical trials program is very vibrant, and we are continuing to collaborate with pharmaceutical companies to test new and potentially better immunosuppressive medications,” says Dr. Sudan.

“In addition to our excellent surgeons and physicians, we have a very experienced group of transplant coordinators, dieticians, social workers, financial advisors, and administrators, all who are focused on helping to provide the best patient care possible,” Dr. Sudan adds.

For more information about Duke’s Abdominal Transplant Program, contact Dr. Sudan at 919-668-2279.

Training the next generation of transplant surgeons

Duke’s experienced surgeons train the next generation through the Del Stickel Abdominal Transplant Fellowship Program, a two-year American Society of Transplant Surgeons (ASTS) surgical fellowship program approved for liver, kidney, and pancreas. Fellows finish with experience meeting UNOS standards in the three organs. The program, which accepts one fellow every two years, includes living-related liver (adult/adult and adult/pediatric) and laparoscopic nephrectomy for kidney donation.
Douglas Lackey felt fine, but one of his students at truck-driving school told him he must be having seizures. “He said I would black out for about 15 or 20 seconds and wouldn’t know what was going on,” Lackey says. A CAT scan showed that he had a giant brain aneurysm—a bulge on a blood vessel in his brain, caused by weakening of the vessel wall.

This was serious. Aneurysms are in danger of bleeding, which can cause brain damage or death. To remove the aneurysm from the normal circulation of blood while preserving blood flow in the normal vessels, Gavin W. Britz, MB BCh, MPH, Associate Professor, Division of Neurosurgery, and Director of Duke’s Cerebrovascular Center, bypassed the bulging vessel in Lackey’s brain with a piece of vessel removed from Lackey’s leg by Jeffrey H. Lawson, MD, PhD, Associate Professor, Division of General Surgery. If surgery had not been performed in time or had not been successful, Lackey could have ended up paralyzed or worse. But about nine months later, he is doing well. “I’m going to a speech therapist since I sometimes get words mixed up. But other than that, I’m doing really great. I thank the Lord I’m alive,” Lackey says.

Because of the Duke Cerebrovascular Center’s extensive experience with such surgeries, patient outcomes at the center are some of the best in the nation, states Allan H. Friedman, MD, Guy L. Odom Professor of Neurosurgery and Chief, Division of Neurosurgery. “The mortality rate for patients treated at Duke for an acute aneurysm rupture is 5 percent compared to upward of 10 percent for most hospitals,” he says. “Duke neurosurgeons Drs. Britz and Zomorodi are pushing the envelope in the treatment of cerebrovascular disease. They are at the forefront of the field treating patients with the latest surgical and endovascular techniques.”

Dr. Britz adds that even those with complex aneurysms can do well. “We have extensive experience in performing a wide range of bypasses to treat many different conditions, including aneurysms and moyamoya disease,” he says. “As with all surgical procedures, the more you perform, the better the patient outcomes.” Moyamoya disease is an inherited condition in which certain arteries in the brain are constricted.

The Duke Cerebrovascular Center treats patients suffering from all manners of conditions that interfere with the blood vessels in the brain and spinal cord. Few other programs in the country offer treatment for these conditions with as wide a range of approaches—microsurgery, minimally invasive endovascular procedures, and radiosurgery. Treatments include clippings and coilings of aneurysms; embolizations of tumors and arteriovenous malformations (AVM), which are abnormal collections of blood vessels that are at risk for bleeding; microsurgical resection of AVMs; and bypasses for complicated aneurysms.
“Duke neurosurgeons Drs. Britz and Zomorodi are pushing the envelope in the treatment of cerebrovascular disease. They are at the forefront of the field treating patients with the latest surgical and endovascular techniques.”

—Allan H. Friedman, MD

and cerebrovascular insufficiency. “We’re doing very complex aneurysm repair work, both in the operating room and in the endovascular suite,” says Ali R. Zomorodi, MD, Assistant Professor, Division of Neurosurgery. “The minimally invasive procedures we perform with stents and coils are much more advanced than procedures available anywhere else in the state. We are in the rare position of not having to turn away any case that has to do with cerebrovascular disease.”

Dr. Zomorodi also attributes the center’s good outcomes to the team’s ability to get new patients into the hospital quickly, as well as the skill of surgeons and staff in neuroanesthesia and neuro intensive care services. Dr. Zomorodi performs many procedures at Duke Raleigh Hospital, including surgical and minimally invasive endovascular treatment for aneurysms, AVMs, and stroke.

The center’s physicians continually work to improve surgical methods, which translates to better patient outcomes. In a report to be published in the journal Neurosurgery, Dr. Britz, Dr. Zomorodi, and colleagues describe a safer way to stop the heart during surgery to treat anterior circulation aneurysms. Particularly with large aneurysms, Dr. Britz explains, surgeons must first collapse the aneurysm in order to see the important branches and avoid the patient having a stroke during the procedure.

“What neurosurgeons have done traditionally is to team up with a cardiac surgeon, place the patient on a full circulation bypass machine, then stop the heart and decompress the aneurysm so they can secure it safely,” Dr. Zomorodi says. “But that’s a very high mortality procedure.” The report describes the use of the drug adenosine to induce stoppage of the heart during that surgery. This method enables surgeons to stop the heart for only a short period of time and to adjust the duration according to patient response. “This procedure gives surgeons the benefit of a collapsed aneurysm without the complications associated with a traditional circulation arrest,” Dr. Britz says. Dr. Zomorodi adds, “With this technique, stopping the heart becomes a procedure with a lower chance of morbidity.” The method has previously been described in treatment of other types of aneurysms, but not for those in the anterior circulation.

For more information, physicians should call 800-MED-DUKE (633-3853). Patients should call 919-668-0650.
Men who use statins to lower their cholesterol are 30 percent less likely to see their prostate cancer come back after surgery compared to men who do not use the drugs, according to researchers at Duke University Medical Center. Researchers also found that higher doses of the drugs were associated with lower risk of recurrence.

The findings have been published in the journal Cancer.

“The findings add another layer of evidence suggesting that statins may have an important role in slowing the growth and progression of prostate cancer,” says Stephen J. Freedland, MD, Associate Professor, Division of Urology, and senior author of the study.

“Previous studies have shown that statins have anti-cancer properties, but it’s not entirely clear when it’s best to use them—or even how they work.”

Researchers examined the Shared Equal Access Regional Cancer Hospital (SEARCH) database’s records of 1,319 men who underwent radical prostatectomy. They found that 18 percent of the men—236—were taking statins at the time of surgery.

Researchers followed the patients after surgery to evaluate recurrence rates, measured by slight increases in PSA levels after surgery, a development known as “biochemical recurrence.” Time to biochemical recurrence is viewed as an important clinical factor because it is correlated with the risk of disease progression and death.

“Statins may have an important role in slowing the growth and progression of prostate cancer.”

—Stephen J. Freedland, MD

The authors found that 304 men had a rising PSA, including 37 of the statin users and 267 of the non-users. Taking into account various clinical and pathological features that differed between the two groups, the data showed that overall, statin use reduced the risk of biochemical recurrence by 30 percent.

Among men taking statins equivalent to 20 mg of simvastatin a day, the risk of recurrence was reduced 43 percent, and among the men taking the equivalent of more than 20 mg of simvastatin a day, the risk of recurrence was reduced 50 percent. Men who took a statin dose the equivalent of less than 20 mg of simvastatin daily saw no benefit.

There were significant differences between those who took the drugs and those who did not. Statin users tended to be white, older, and heavier than non-users. They also had lower clinical stages at diagnosis but higher Gleason scores, a measure of tumor aggressiveness.

“These findings are intriguing, but we do need to approach them with some caution,” says Robert Hamilton, MD, a urologist at the University of Toronto and the lead author of the study. “For example, we don’t know the diet, exercise, or smoking habits of these men. So it’s not entirely clear if the lower risk we detected is related to the statins alone—it could be due to other factors we were not able to measure. We do feel, however, that based on these findings and those from other studies, the time is ripe to perform a well-controlled randomized trial to test whether statins do indeed slow prostate cancer progression.”

The study was funded by the Department of Defense, Prostate Cancer Research Program; the Department of Veterans Affairs; the National Institutes of Health; the Georgia Cancer Coalition; and the American Urological Association Foundation/Astellas Rising Star in Urology Award.
Surgery Research Grant Activity

Basic and Translational Research

Todd V. Brennan, MD, MS, Assistant Professor, Division of General Surgery, was awarded a grant from the American Association for the Study of Liver Diseases for “Regulation of Alloreactive T Lymphocytes by the Innate Immune System.” He also was awarded a grant from the American Society of Transplantation for “The Innate Immune System in the Regulation of Allospecific T Lymphocytes, Research.”

R. Duane Davis, MD, Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from the University of North Carolina at Chapel Hill for “CTRIP Ex Vivo Perfusion and Ventilation of Lungs to Assess Transplant Suitability.”

Gayathri R. Devi, PhD, Assistant Professor, Division of Surgical Sciences, was awarded a grant from TetraLogic Pharmaceuticals for “Inflammatory Breast Cancer.”

Guido Ferrari, MD, Assistant Professor, Division of Surgical Sciences, was awarded a grant from the Bill and Melinda Gates Foundation for “Antibody-Dependent Cellular Cytotoxicity (ADCC) Laboratory for RV144.”

Stephen J. Freedland, MD, Associate Professor, Division of Urology, was awarded a grant from Aureon Biosciences for the “Evaluation of Aureon Prostate Px Plus on an External Patient Cohort Treated with Radical Prostatectomy.”

Henry S. Friedman, MD, James B. Powell Jr. Professor of Pediatric Oncology, Divisions of Neuro-Oncology and Neurosurgery, was awarded a grant from Voices Against Brain Cancer for “Stem Cell Approaches to Stimulate Neuro-Regeneration Following Whole-Brain Radiation Therapy in a Mouse Model of Maligna.”

Stephen T. Keir, PhD, Associate Professor, Division of Neuro-Oncology, was awarded a grant from Array BioPharma Inc. for “Effect of a Specific Kinase Inhibitor Alone and in Combination with Temozolomide in the Growth of an Intracranial Tumor.”

Howard Levinson, MD, Assistant Professor, Division of Plastic, Maxillofacial, and Oral Surgery, was awarded a grant from the Plastic Surgery Educational Foundation for “Preventing Scar Contracture Formation by Inhibiting ROCK.”

Hui-Wen Lo, PhD, Assistant Professor, Division of Surgical Sciences, was awarded a grant from the Beez Foundation for “Probing Molecular Pathways Driving Invasiveness of Pediatric Glioblastoma.”

Jeffrey R. Marks, PhD, Associate Professor, Division of Surgical Sciences, was awarded a grant from the National Institutes of Health for “The Cancer Genome Atlas (TCGA)–Breast Cancer Tissue Acquisition.”

David C. Montefiori, PhD, Professor, Division of Surgical Sciences, was awarded grants from the Bill and Melinda Gates Foundation for “Immunological and Virological Assessment in RV144” and “Central Reference Lab-RV144.”

John A. Olson Jr., MD, PhD, Associate Professor, Division of General Surgery, was awarded a grant from the National Institutes of Health for “Molecular Mechanisms of Altered Calcium Sensing in Human Parathyroid Disease.”

Takuya Osada, MD, PhD, Assistant Professor, Division of General Surgery, was awarded a grant from MedImmune for “Resistance to Antitumor Activity of MEDI-565 (CEA BiT-E) Against Autologous Colorectal Tumor.”

Ricardo Pietrobon, MD, PhD, MBA, Associate Professor, Division of Surgical Sciences, was awarded a grant from the University of Texas Health Science Center at Houston for “USA–Brazil Consortium for Education in Biomedical Informatics.”

Georgia D. Tomaras, PhD, Assistant Professor, Division of Surgical Sciences, was awarded a grant from the Bill and Melinda Gates Foundation for “Binding Antibody in RV144.”

Clinical Trials

Mark F. Berry, MD, Assistant Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from the University of Arizona for “A Multi-Institutional Registry to Evaluate the Effect of Thoracoscopic Lobectomy on the Delivery of Adjuvant Chemotherapy.” Contact: Terry Ainsworth, 919-684-4607

Kevin M. Caves, Clinical Associate, Division of Speech Pathology and Audiology, was awarded a grant from Vortant Technologies LLC for the “Evaluation of a Lip Tracking Device.” Contact: Jessica House, 919-681-9983

Abhinav Chandra, MD, Associate Professor, Division of Emergency Medicine, was awarded a grant from Sanofi-Aventis U.S. for “Prophylaxis Against Thromboembolism Initiated in the Emergency Department for High-Risk Medical Patients: A National Quality Improvement Initiative for Hospitals, Begun in the ED (POTENT).” Contact: Gisselle Mani, 919-684-5035
Stephen J. Freedland, MD, Associate Professor, Division of Urology, was awarded a grant from Abbott Laboratories for a “Randomized Controlled Clinical Trial of Carbohydrate Restriction Among Men Initiating Androgen Deprivation Therapy for Prostate Cancer.”
Contact: Loretta Taylor, 919-684-4896

Gerald A. Grant, MD, Associate Professor, Division of Neurosurgery, was awarded a grant from the University of California, San Francisco, for a “Post-Traumatic Stress Disorder (PTSD) Clinical Consortium Study.”
Contact: Joanna Stoner, 919-668-5275

Alexander T. Limkakeng Jr., MD

Duane A. Mitchell, MD, Assistant Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from the Department of Defense for “Recurrent Medulloblastoma and Primitive Neuroectodermal Tumor Adoptive T Cell Therapy During Recovery from Myeloablative Chemotherapy and Hematopoietic Stem Cell Transplantation.”
Contact: Beth Perry, 919-684-9291

Robert E. Isaacs, MD, Assistant Professor, Division of Neurosurgery, was awarded a grant from NuVasive Inc. for “A Prospective Multi-Center Randomized Evaluation of the Clinical and Radiographic Outcomes of XLIF Compared with MAS TLIF for the Treatment of Symptomatic Lumbar Degenerative Spondylolisthesis with or without Central Stenosis.”
Contact: Kara Penne, 919-668-3367

Walter T. Lee, MD, Assistant Professor, Division of Otolaryngology–Head and Neck Surgery, was awarded a grant from Neoprobe Corporation for “A Phase 3 Prospective Open-Label Multicenter Study of Lymphoseek-Identified Sentinel Lymph Nodes (SLNs) Relative to the Pathological Status of Non-Sentinel Lymph Nodes in an Elective Neck Dissection (END) in Cutaneous Head and Neck and Intraoral Squamous Cell Carcinoma.”
Contact: Stacy Whitehurst, 919-684-1732

Alexander T. Limkakeng Jr., MD, Assistant Professor, Division of Emergency Medicine, was awarded a grant from the University of Pittsburgh for “Protociled Care for Early Septic Shock (ProCESS).”
Contact: Debra Freeman, 919-684-5036

Carmelo A. Milano, MD, Associate Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from Levitronix for “Levitronix CentriMag VAS Failure-to-Wean from Cardiopulmonary Bypass Trial.”
Contact: Laura Blue, 919-681-1779

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Contact: Beth Perry, 919-684-9291

Judd W. Moul, MD, James H. Semans Professor and Chief, Division of Urology, was awarded a grant from Ferring Pharmaceuticals for “A Dose-Finding Multicenter Double-Blind Randomized Parallel Placebo-Controlled Trial to Investigate Efficacy and Safety of Degarelix in Men with Lower Urinary Tract Symptoms (LUTS) Associated with Benign Prostatic Hyperplasia (BPH).”
Contact: Jill Smith, 919-668-3613

Scott K. Pruitt, MD, PhD, Associate Professor, Division of General Surgery, was awarded a grant from GlaxoSmithKline for “Protocolized Care for Early Septic Shock (ProCESS).”
Contact: Alise Brickhouse, 919-684-3107

David A. Reardon, MD, Associate Professor, Department of Pediatrics, was awarded a grant from Amgen Inc. for “Phase 2 Study of Panitumumab in Combination with Irinotecan for Malignant Gliomas.”
Contact: Julie Norfleet, 919-668-0673

For an up-to-date listing of Duke Surgery research, visit dukesurgery.org/research.
NEW FACULTY

Hardean E. Achneck, MD  
Division of Surgical Sciences  
Research interests include the biology of blood-derived endothelial progenitor cells (EPCs) and development of a technology to coat cardiovascular devices, such as Nitinol stents and mechanical circulatory assist devices, with autologous blood-derived EPCs in order to increase the devices’ biocompatibility by inhibiting inflammation and thrombosis.

Matthew D. Bitner, MD  
Division of Emergency Medicine  
Clinical interests include prehospital/out-of-hospital medicine, emergency preparedness, medical education with a focus on curriculum development and adult-learning strategies, and emergency medical response planning/event medicine.

Albert S. Y. Chang, MD  
Division of Cardiovascular and Thoracic Surgery  
Duke Thoracic Surgery of Raleigh  
Clinical interests include lung and esophageal cancer; esophageal, pulmonary, mediastinal chest wall, and diaphragm surgery; minimally invasive thoracoscopic and laparoscopic surgery; airway surgery; gastroesophageal reflux disease; hyperhidrosis; and achalasia.

Linda M. Farkas, MD  
Division of General Surgery  
Duke General Surgery of Raleigh  
Clinical interests include open and laparoscopic colon and rectal surgery, including sphincter-preserving procedures for benign disease, cancers, and recurrent cancers; surgical treatment of Crohn’s disease, ulcerative colitis, diverticulitis, rectal prolapse, presacral tumors, benign anorectal disease, and anal cancer; ileal-pouch procedures; transanal hemorrhoidal dearterialization; transanal endoscopic microsurgery; fecal incontinence surgery; assessment, detection, and treatment of hereditary colon cancer syndromes.

Caroline E. Freiermuth, MD (née Eady)  
Division of Emergency Medicine  
Clinical interests include medical student and resident education, acute pain control, and end-of-life decisions.

Oren N. Gottfried, MD  
Division of Neurosurgery  
Clinical interests include management of all spine diseases, including degenerative spinal disease of the cervical, thoracic, and lumbar spine; spinal deformities; spinal oncology, including surgical treatment of primary and metastatic tumors; and spinal trauma.

Scott T. Hollenbeck, MD  
Division of Plastic, Maxillofacial, and Oral Surgery  
Clinical interests include reconstructive surgery, microsurgery, breast reconstruction, extremity reconstruction, abdominal wall reconstruction, vascular anomalies, fat grafting, cosmetic surgery, breast implant surgery, breast lift surgery, body contouring, and abdominoplasty.

Michael Benjamin Hopkins, MD  
Division of General Surgery  
Duke General Surgery of Raleigh  
Clinical interests include colorectal surgery, laparoscopic colorectal surgery, surgery for inflammatory bowel disease, endorectal ultrasound, benign anorectal disease, sphincter-saving procedures, ileal-pouch procedures, rectal prolapse repair, fecal incontinence, diverticulitis, presacral tumors, and anal cancer.

Robert D. B. Jaquiss, MD  
Division of Cardiovascular & Thoracic Surgery  
Clinical interests include surgical treatment of congenital and acquired heart disease in children and surgical treatment of congenital heart disease in adults, neonatal heart surgery, mechanical circulatory support, and pediatric cardiac transplantation.
Carolyn E. Keeler, DO
Division of Neurosurgery
Clinical interests include assessment, diagnosis, and nonsurgical treatment of spine disorders, lumbar spine and peripheral joint injections, musculoskeletal medicine, medical acupuncture, performing arts and dance medicine, osteoporosis, pregnancy-related back pain, electrodiagnosis, and spine wellness. 919-684-7861

Celia C. LaBranche, PhD
Division of Surgical Sciences
Research interests include antibody-mediated neutralization of HIV and mechanisms of viral escape, vaccine design and testing, correlates of immune protection, and HIV envelope glycoprotein structure/function as it relates to viral biology and pathogenesis. 919-684-9986

Andrew C. Peterson, MD
Division of Urology
Clinical interests include 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; and care of prostate cancer survivors with respect to sexual function and urinary continence including penile prosthesis. 919-684-2446

Donna E. Sharpe, MD
Division of Otolaryngology–Head and Neck Surgery
Duke Otalaryngology of Durham
Clinical interests include surgical and medical management of pediatric and adult ear, nose, and throat disorders; treatment of nasal and sinus chronic infection and chronic allergy; balloon sinuplasty; nasal allergy testing and immunotherapy; endoscopic procedures; ear infections; hearing loss; hoarseness; and neck masses including thyroid and salivary gland tumors. 919-220-2020

Deepak Vikraman, MD
Division of General Surgery
Clinical interests include abdominal solid organ transplantation, including pediatric/adult liver and pancreas; kidney and small intestine transplantation; general surgery; and laparoscopic and hepatobiliary surgery. 919-668-3424

Christopher R. Watters, MD
Division of General Surgery
Duke General Surgery of Raleigh–Cedarhurst
Duke General Surgery of Raleigh–Knightdale
Clinical interests include general surgery with an emphasis on pancreatic and biliary disease, gastrointestinal diseases/malignancies, gastroesophageal reflux, and venous disease. 919-431-9911

Jin S. Yoo, MD
Division of General Surgery
Duke General Surgery of Durham
Duke General Surgery of Raleigh
Clinical interests include advanced laparoscopic and bariatric surgery, including surgical management of GERD, achalasia, benign/malignant gastric tumors, pancreatic and adrenal disease, splenectomy, Roux-en-Y gastric bypass, adjustable gastric banding, sleeve gastrectomy, and single-incision laparoscopic procedures. 919-470-7018 (Durham) 919-420-5000 (Raleigh)
Transplant Program Celebrates 100th Lung Transplant in 2010

In October the Duke Lung Transplant program performed its 100th lung transplant of the year (surpassing 93 total in 2009) and 990th lung transplant since the inception of the program in 1992. A lung transplant adds approximately eight years of life for the recipient, and waiting times at Duke are significantly lower than other programs throughout the country.

In addition to the number of increased transplants, outcomes have continued to improve as well; at Duke, the 89 percent survival rate at the one-year mark surpasses the national average of 76 percent. Duke is one of only a few programs in the world to achieve this level of success, due to the dedicated efforts of an exceptional multidisciplinary team of faculty and staff throughout the health system.

Duke Honors

Duke Surgery Contributes to Duke University Hospital Honors

For the 21st year in a row, U.S. News & World Report has ranked Duke University Medical Center as one of the top 10 hospitals in the nation. In this year’s edition of the best hospitals list, Duke ranked 10th overall and was in the top 10 in seven of the 16 specialties measured. Duke Surgery specialties were ranked as follows:

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<th>Orthopaedics</th>
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<td>Urology</td>
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<td>Kidney Disorders</td>
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<td>#9</td>
<td>Heart &amp; Heart Surgery</td>
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<td>Gastroenterology</td>
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<td>#11</td>
<td>Neurology and Neurosurgery</td>
<td>#24</td>
<td>Ear, Nose &amp; Throat</td>
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Duke Surgery Honors and Association Announcements

**Bryan M. Clary, MD,** Associate Professor, Division of General Surgery, was elected to the American Surgical Association. Its members include the nation’s most prominent surgeons from the country’s leading academic medical institutions.

**Stephen J. Freedland, MD,** Associate Professor, Division of Urology, has been appointed as the new editor of *Prostate Cancer and Prostatic Diseases*. The journal covers all aspects of prostatic diseases, in particular prostate cancer, and reports on new developments being made in diagnosis, surgery, radiotherapy, drug discovery, and medical management.

**Allan H. Friedman, MD,** Guy L. Odom Professor of Neurosurgery and Chief, Division of Neurosurgery, received a Master Clinician/Teacher award, which honors individuals with superlative accomplishment and service in the areas of clinical care and teaching.

**Danny O. Jacobs, MD, MPH,** David C. Sabiston Jr. Professor and Chair, Department of Surgery, was selected to receive the 2010 Julius A. Mackie Distinguished Graduate Award from the University of Pennsylvania, where he completed his general surgery residency in 1986. As part of his award, Dr. Jacobs presented “Management of Complex Enterocutaneous Fistulas” as the Mackie Lecturer at Penn Medicine’s Surgery Grand Rounds on May 20. In addition, Dr. Jacobs was elected President-Elect of the Society of Black Academic Surgeons commencing April 2011.

**Aurora D. Pryor, MD,** Associate Professor, Division of General Surgery, and Chief, General Surgery at Durham Regional Hospital, has been appointed as a consultant to the American Board of Surgery.

**Cynthia E. K. Shortell, MD,** Professor, Division of General Surgery, has been selected to serve on the Society of Vascular Surgery Education Council.

**Julie K. Thacker, MD,** Assistant Professor, Division of General Surgery, was named a fellow of the American Society of Colon and Rectal Surgeons, the premier society for colorectal surgeons.

**Steven N. Vaslef, MD, PhD,** Associate Professor, Division of General Surgery, received the honor of the David C. Sabiston Jr., MD, Teaching Award for 2010. Dr. Sabiston distinguished himself in the field of cardiovascular disease, but he will perhaps be remembered most for his profound effect on surgical education both nationally and internationally and as Chair of Duke Surgery for 30 years.
Duke Surgery in Wake County

Duke Medicine Plaza
3480 Wake Forest Road
Raleigh, NC 27609

Duke Otolaryngology of Raleigh  919-862-5730
Duke Neurosurgery of Raleigh  919-862-5650
Duke General Surgery of Raleigh  919-420-5000
COLORECTAL, WEIGHT LOSS SURGERY, VASCULAR,
MINIMALLY INVASIVE SURGERY
Duke Thoracic Surgery of Raleigh  919-862-5970
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.

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.