Duke Surgery Honors Faculty Veterans and Military Members

Although Dr. Gerald Grant is a Duke pediatric neurosurgeon, his deployment and experience with the United States Air Force as Chief of Neurosurgery at Balad Air Force Base in Iraq compelled him to study traumatic brain injury in soldiers. “Once you deploy out there in the field, you really feel like you owe it to the soldiers to try to prevent these traumatic brain injuries,” Dr. Grant says.

For many faculty in the Duke Department of Surgery, November 11—Veterans Day—is more than just another federal holiday. It is a day when they are honored for their service. In addition to faculty who are veterans of war, many members of the department served in the United States armed forces, and some continue to do so.

In 1919, President Woodrow Wilson designated November 11 as Armistice Day, in honor of the end of fighting in World War I. By 1938, the holiday was officially changed to Veterans Day and designated as a time to honor American veterans of all wars.

We thank the following Duke Surgery faculty who have served in the military.

E. Everett Anderson, MD
Professor, Division of Urology
Dr. Anderson served with the 3274th U.S. Army Hospital at Fort Bragg, North Carolina (active reserve) from 1961 to 1971. He retired with the rank of Lieutenant Colonel.

Joseph B. Borawski, MD
Assistant Professor, Division of Emergency Medicine
Dr. Borawski was commissioned as an Ensign in the U.S. Navy in 2000 and a Lieutenant in 2004. He served as a battalion medical officer with the 3rd Battalion, 2nd Marines at Camp LeJeune, North Carolina, from 2005 to 2007. During that time he deployed to Habbaniyah, Iraq, on a combat deployment from July 2006 to February 2007.

Dr. Borawski was promoted to Battalion Surgeon with the 3rd Battalion, 2nd Marines in 2007 and deployed again, to Al Qu’am, Iraq, for eight months in 2007 and 2008. Dr. Borawski was awarded a Navy and Marines Corps Commendation Medal during this deployment. He was promoted to Regimental Surgeon with the 10th Marine Regiment in Camp LeJeune in 2008. He resigned his active duty commission in July 2009 and currently serves as a Lieutenant Commander in the U.S. Navy Reserves.

Joseph B. Borawski, MD
Assistant Professor, Division of Emergency Medicine

Message from the Chair
Surgical Oncology Division Improves Patient Care
New Robotic Trainer—First in NC
Surgery Research Grant Activity
New Faculty
Duke Honors

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MESSAGE
FROM THE CHAIR

Duke Surgery Chair Takes Dean Post in Texas

After ten years as the David C. Sabiston Jr. Professor and Chair of the Duke Department of Surgery, Danny O. Jacobs, MD, MPH, has accepted the position as Executive Vice President, Provost and Dean for the University of Texas Medical Branch at Galveston.

During his tenure at Duke, Dr. Jacobs’ leadership was committed to advancing the success of the three missions within the Department of Surgery: outstanding and innovative clinical care, training world-class leaders, and providing cutting-edge research.

We thank Dr. Jacobs for his dedication and vision over the years and for laying the groundwork to continue the legacy of success that defines Duke Surgery!

Theodore N. Pappas, MD
Distinguished Professor of Surgical Innovation
Interim Chair, Department of Surgery
Duke University Medical Center
Danny O. Jacobs, MD, MPH

Over the past “Decade with Danny”…
- Successfully recruited over 100 new faculty—doubling the number of clinical faculty to 62+
- Established Duke surgeons at Duke Health Raleigh Hospital and Durham Regional Hospital (36 full time Duke surgeons now practice at these locations)
- Continuous growth in NIH and non-NIH sponsored research funding—with over $50M of sponsored research, Duke Surgery remains the #1 funded Department of Surgery in the nation
- Improved research dollar density (funding/research sq. feet) to highest levels ever
- 43 surgical faculty currently have NIH funding
- Implemented innovative program that returns indirect funding to faculty to support research
- Annual growth in faculty compensation has been twice that of national benchmarks for past decade
- Doubled the size of departmental financial reserves
- Appointed new division chiefs in 12 of 14 divisions
- Increased diversity of faculty while also retaining existing faculty (faculty turnover <3%)
- Fostered environment that espoused high clinical productivity (65th percentile)
- Championed mentoring program for junior faculty, residents, and medical students
- Created the Surgical Education and Activities Lab—one of the first accredited Education Institutes in the Southeast
- Enhanced divisional and departmental administrative infrastructure including creation of new divisions—Trauma, Critical Care, and Acute Care Surgery; Vascular Surgery; Metabolic and Weight Loss Surgery; Abdominal Transplant Surgery; Surgical Oncology; General and Advanced Gastrointestinal Surgery; Surgical Sciences, and Children’s Surgical Services

History of Duke Surgery Chairs

1930-1960  J. Deryl Hart, MD
1960-1964  Clarence E. Gardner, MD
1964-1994  David C. Sabiston Jr., MD
1994-2003  Robert W. Anderson, MD
2003-2012  Danny O. Jacobs, MD, MPH

Theodore N. Pappas, MD, Distinguished Professor of Surgical Innovation and Chief of Division of General and Advanced Gastrointestinal Surgery, was appointed Interim Chair for the Department of Surgery effective October 1, 2012. Dr. Pappas also holds the positions of Vice Dean for Medical Affairs for Duke University School of Medicine and Assistant Medical Director for the Duke Faculty Practice.

Dr. Pappas came to Duke University Medical Center in 1988 as an Assistant Professor of Surgery. His clinical interests include gastrointestinal surgery, peptic ulcer surgery, and cancer of the esophagus, stomach, pancreas, and bile duct.

A 1977 graduate of John Carroll University where he received his bachelor’s of science degree, Dr. Pappas simultaneously earned a master’s in science and his MD from Ohio State University in 1981. He completed his internship and residency in 1988 at Brigham and Women’s Hospital in Boston. Dr. Pappas received the F. D. Moore Resident Teaching Award while a Chief Resident. He served as the gastrointestinal research fellow at the University of California from 1983 to 1985 and was a clinical fellow in surgery at Harvard Medical School from 1985 to 1988.


He is a past president of the American Hepato-Pancreato-Biliary Association and serves as a director on the American Board of Surgery. Dr. Pappas is the editor of seven books and has co-authored more than 300 papers and chapters.
Mitchell W. Cox, MD
Associate Professor, Division of Vascular Surgery

Dr. Cox was on active duty in the Air Force from 1996 to 2009. A general surgeon at Wright-Patterson Air Force Base in Ohio from 2001 to 2002, he became a vascular surgeon at Walter Reed Army Medical Center in Washington, DC in 2004 and served there until 2009. Dr. Cox deployed to Iraq twice, in 2006 and 2008. Dr. Cox was stationed at Balad Air Force Base, the second-largest military hospital, and the major air evacuation hub for the theater. His service in the military ended in 2009.

Gerald A. Grant, MD
Associate Professor, Division of Neurosurgery

In 2002, Dr. Grant began fulfilling his commitment with the United States Air Force as part of a Health Professions Scholarship Program, as the Air Force neurosurgical consultant for aerospace medicine from 2003 to 2006. He deployed to Landstuhl Regional Medical Center, Germany, before deploying to Iraq for six months in 2005 and 2006.

At Iraq’s Balad Air Base, Dr. Grant served as Chief of Neurosurgery, treating injured U.S. and coalition soldiers as well as detained after the soldiers had been seen by first responders.

While deployed in Iraq, Dr. Grant developed the first prospective study in a combat zone on blast concussive injury. “I felt it would be a missed opportunity if we didn’t closely track these soldiers after their blast and concussive injury,” says Dr. Grant. He worked to identify “red flags” that indicate that a soldier with a concussive head injury is at long-term risk. “Most head injuries we saw were not invasive,” he says. “We had to make quick decisions as to whether to return these soldiers to combat next day. We didn’t have a lot of data to help us decide how to do that. The concern is that if a soldier has hidden damage, is returned to battle, and experiences another blast injury, the effects may be irreversible.”

One possible “red flag” of long-term risk is a single ear-drum injury. Conclusions from this initial study were published in the New England Journal of Medicine in 2007. Dr. Grant and colleagues plan to follow up with the soldiers to determine the long-term effects of their injuries and are working to develop other markers of serious injury, such as a blood test that detects brain proteins released into the blood.

During active duty, Dr. Grant was Chief of Neurosurgery at Wilford Hall Medical Center, Lackland Air Force Base in Texas. He attained the rank of Lieutenant Colonel and was awarded a Meritorious Service Medal prior to his separation. Dr. Grant now serves as principal investigator of a post-traumatic stress disorder consortium—INJury and TRaumatic STress (INTRuST), funded by the Department of Defense. In addition, he is principal investigator on five other traumatic brain injury trials at Duke that involve the Durham VA Medical Center and the Army base at Fort Bragg, North Carolina.

Ivan M. Greenwald, MD
Clinical Associate, Division of Emergency Medicine

Dr. Greenwald served in the U.S. Army Reserves Medical Corps from 1999 to 2011. He supported the U.S. troops during Operation Enduring Freedom in Kuwait; Iraq; Walter Reed Army Hospital; and Fort Polk, Louisiana.

Michael B. Hocker, MD
Associate Professor, Division of Emergency Medicine

Dr. Hocker completed a surgical internship at Oak Knoll Naval Hospital in Oakland, California. He later welcomed his fleet assignment as a Naval Flight Surgeon for four years and was stationed with a Marine Helicopter Squadron in Kaneohe, Hawaii. While there, he oversaw education, readiness, disaster preparedness, and helped establish advanced education modules for corpsmen. As a clinician, he was responsible for the primary health care of the crew and their families. In addition, he became qualified to fly CH-53 helicopters and flew weekly missions.

During his service, Dr. Hocker developed essential skills in combat casualty care, nuclear/biological warfare care, mass casualty and disaster preparedness, aviation medicine, and critical care transport and medevac. Dr. Hocker was awarded the 1st Marine Aircraft Wing Flight Surgeon of the Year Award in 1995. He also served as a reserve officer for three years in Portsmouth, New Hampshire. During his tenure, Dr. Hocker was stationed in Denver, Colorado; San Diego, California; Oakland, California; Pensacola, Florida; and Kaneohe, Hawaii.

Fernando A. Lopez, MD
Assistant Professor, Division of Emergency Medicine

Dr. Lopez served in active duty in the U.S. Navy from 1986 to 2000. He was a hospital corpsman and graduated at the top of his class. During his time in the Navy, Dr. Lopez also trained as an emergency medical technician and an X-ray technician. He served in the first Gulf War.

Judd W. Moul, MD
James H. Semans Professor, Division of Urology

Dr. Moul spent four years in the Army Reserve during medical school and spent 22 years on active duty, completing his service as part of the Health Professions Scholarship Program.

“I never expected to stay in the Army for my career, but I received wonderful assignments; it was one of the best times of my life,” he says.

Dr. Moul served his internship and residency at Walter Reed Army Hospital in Bethesda, Maryland, then a fellowship in neurologic oncology at Duke. Upon assignment at the Military Medical School
in Bethesda, he began his career in prostate cancer treatment and research. He helped build the research program at the Department of Defense Center for Prostate Disease Research and directed the program for more than a decade. During this time, he co-discovered several genes that are altered in prostate cancer. From 1989 to 2000, he served as a Staff Surgeon with the 28th Combat Support Hospital of the 44th Medical Brigade of the 82nd Airborne at Fort Bragg, North Carolina, and trained in preparation for possible deployments.

Dr. Moul was a Colonel when he retired from the Army in 2004. “I think military service prepares physicians well for academic medicine, especially for a complex environment like Duke,” Dr. Moul says. “The military experience gives a physician a sense of maturity and of calm under pressure.”

Andrew C. Peterson, MD
Associate Professor, Division of Urology

Dr. Peterson served in the Army for 16 years and was stationed at Fort Lewis, Washington. He deployed to Baghdad, Iraq, in 2006 where he served as the urology consultant for the theater. He treated soldiers with lower urinary trauma. The condition is common in modern warfare because soldiers wear body armor that protects the chest and abdomen but leaves the lower body exposed. Dr. Peterson is helping to improve body armor design as a member of the American Urological Association’s Task Force on Urotrauma Genitourinary Injuries. He still serves in the Army Reserves. “The Reserves offer an opportunity for me to continue to serve and still have my dream job focusing on research and patient care at Duke,” Dr. Peterson says.

Richard A. Pierce, MD, PhD
Assistant Professor, Division of General and Advanced Gastrointestinal Surgery

Dr. Pierce is an officer in the Navy Reserve and was commissioned in September 2004. “I joined out of a sense of duty to our country and the potential opportunity for travel and exciting training outside of the traditional hospital setting,” Dr. Pierce says.

He drills monthly at the Raleigh Reserve Center and participates in two weeks of training each year. His duties include performing history and physicals for sailors. He was recently promoted to the rank of Commander and plans to serve in the same capacity for the foreseeable future. “I have met lots of great people, many of whom are doctors and nurses, who also hold great pride in our country and are willing to sacrifice time and effort to keep our sailors and soldiers healthy,” Dr. Pierce says.

Hilliard F. Seigler, MD
Professor, Division of Surgical Oncology

Dr. Seigler rose to the rank of Colonel in the U.S. Army and is now retired, having served as a reserve medical officer from 1962 to 1980. Reserve medical officers practice in their community and serve when needed. Dr. Seigler began and ended his armed forces career as a reserve medical officer with the 3274th U.S. Army Hospital at Fort Bragg, North Carolina, and was a Commander upon retirement.

Mark Cooper Sturdivant, MD
Clinical Associate, Division of General and Advanced Gastrointestinal Surgery

Dr. Sturdivant was a Major in the U.S. Air Force, on active duty from 1994 to 1998 and was stationed at Andrews Air Force Base, Maryland, where he served on the surgical staff. He also taught residents at Walter Reed Army Hospital and the Military Medical School in Bethesda, Maryland.

Thomas J. Weber Jr., DO
Assistant Professor, Division of Neurosurgery

From August 2003 to February 2004, Dr. Weber served as Chief of Anesthesia Services for the 28th Combat Support Hospital in Baghdad, Iraq, the busiest wartime combat hospital since Vietnam. He established the first pain-management service in Iraq.

Dr. Weber served at Womack Army Medical Center in Fort Bragg, North Carolina, from 2004 to 2008, beginning as Staff Anesthesiologist and Medical Director of the Pain Clinic, then moving up to Chief of Anesthesia/Pain Services in 2007, and later to Chief of Pain Medicine in 2008.

Thank you to all our veterans—including faculty, residents, fellows, allied health and all our staff in the Department of Surgery!
Duke is consistently ranked as one of the nation’s top cancer hospitals and the top in the Southeast by U.S. News and World Report. More than 50,000 people with cancer were seen at Duke University Hospital in the last year. Now, a newly created division in the Department of Surgery is building upon this long history of excellence in cancer care.

The Division of Surgical Oncology, previously a section of the Division of General Surgery, was formed to better serve patients. “As the surgical field continues to become more and more specialized, a divisional structure optimizes the efficiency and effectiveness across our triad of co-dependent missions of teaching, research, and clinical care,” says David Anderson, MBA, MHA, Executive Director of the Department of Surgery.

Increasing Specialization of Care

The Division of Surgical Oncology provides comprehensive cancer care in hepatobiliary, colorectal, breast, and endocrine/soft tissue. Its creation follows close on the heels of the new Duke Cancer Institute, which represents a major investment in cancer care by the part of the Duke health system. “The creation of the new division aligns surgical oncology’s program growth needs with the new cancer center and the institutional priority of investing in cancer care,” says Douglas S. Tyler, MD, Professor and Chief, Division of Surgical Oncology and Associate Medical Director of Oncology Services with the Duke Cancer Institute. “It is helping us improve patient care, improve the quality of our programs, and make resources available for us to expand and grow. As care becomes more specialized and complex, forming our own division was the best way to optimize our growth.”

Expanding Education

The new division continues to offer a two-year Surgical Oncology Fellowship and has plans to expand its education efforts. Directed by Brian M. Clary, MD, Associate Professor, Division of Surgical Oncology, the fellowship is structured according to guidelines established by the Society of Surgical Oncology and incorporates a broad clinical experience with options for specialization during the second-year electives. Future efforts will include adding components to the fellowship to meet requirements that will be instituted by the Accreditation Council for Graduate Medical Education for board certification in surgical oncology. The division is also developing fellowships in colorectal, breast, and endocrine cancers. “We are striving to be one of the top cancer surgery programs in the country and excellence in educating future leaders goes along with that,” Dr. Tyler says.

The new divisional status will help attract faculty who can continue to advance excellence in Duke’s clinical and research enterprises. “Our new alliance with the health system helps us attract top faculty who can not only care for individuals better because they are very focused and specialized clinically, but who also bring to Duke their research excellence and some very creative clinical trials and research in various areas of cancer,” Dr. Tyler says.

Excellence in Research

Continuing research efforts in the division include novel approaches to treating melanoma, pancreatic cancer, and breast cancer. For instance, Dr. Tyler’s research focuses on novel approaches to overcoming melanoma’s resistance to chemotherapy in the setting of advanced regional disease using compounds that preferentially target tumor cells over normal cells. In addition to the preclinical studies, his laboratory performs with targeted agents that make tumors more susceptible to concurrently administered chemotherapy. Dr. Tyler also oversees the clinical trials program in melanoma for the Duke Cancer Institute. He has initiated several regional therapy clinical trials in melanoma, including a phase I trial using the chemotherapy temozolomide. Results of a phase II trial targeting a protein called N-cadherin was published in the Journal of Clinical Oncology.

Rebekah R. White, MD, Assistant Professor, Division of Surgical Oncology, treats and conducts research to find novel treatments and biomarkers for pancreatic cancer. Dr. White focuses mostly on a novel class of nucleic acid molecules known as aptamers. Aptamers that target pancreatic cancer cells may be used as drugs, similar to antibodies, or they may be used to deliver toxic substances specifically to pancreatic cancer cells. In addition to aptamers as therapeutics agents, Dr. White’s laboratory has also identified an aptamer that appears to be a novel biomarker for pancreatic cancer.
Outstanding Patient Care

Improving the quality of patient care is a priority for the new division. “We strive for the best outcomes possible for patients,” says Dr. Tyler. An example of those efforts include the hiring of a dedicated nurse practitioner to monitor and create a care plan for pancreatic cancer patients who have had the Whipple procedure, which involves removal of part of the stomach, the gall bladder, and the head of the pancreas. Among seven patients who have been on the care plan for one full month, the team has reduced the length of stay from 18 days to 8.5 days. The new length of stay is shorter than the national average of 10 to 11 days. For a major procedure such as the Whipple, after which patients have to adjust to tube feeding and then progress to normal eating and digestion, that is a substantial feat.

Kara Penne, the nurse practitioner dedicated to patients who have undergone the Whipple procedure, helps patients from the time they are first referred to Duke, to when they are admitted and beyond, ensuring they follow the care plan she created based on evidence-based medicine journal articles. The practice can prevent unnecessary re-admissions to the hospital or trips to the emergency room, which can happen if patients have a problem but aren’t sure how serious it is and don’t have a dedicated person to ask. “My wife had a couple of questions after I was discharged about my prescriptions and my diet, and Kara has been so available to us,” says George Payne, MD, of High Point, North Carolina, who had a Whipple procedure at Duke. Payne is doing well, he says, and easing back into light exercise such as walking.

“This is an example of how prioritizing these dedicated partnerships can not only have a benefit for patients but is also financially viable across the board,” says Dr. Tyler. “We will continue to optimize our growth and improve patient care in this way.”

The division also offers patient services in convenient satellite locations. Currently colorectal, breast, and gastrointestinal oncology services are offered at Duke Raleigh Hospital and Durham Regional Hospital. Surgical Oncology services are also offered in Alamance County.

For more information about the Division of Surgical Oncology, please contact Douglas S. Tyler, MD, at 919-684-6858 or doug.tyler@duke.edu.

Duke Division of Surgical Oncology Faculty
Christina Webb Augustine, PhD
Dan G. “Trey” Blazer III, MD
Bryan M. Clary, MD – Section Chief of Hepatobiliary/Pancreatic Surgery
Nancy J. Crowley, MD
Jens O. Dannull, PhD
Gayle A. DiLalla, MD
Linda M. Farkas, MD
Rachel A. Greenup, MD, MPH
M. Benjamin Hopkins, MD
Shelley Hwang, MD, MPH – Section Chief of Breast Surgery
George Leight Jr., MD
Aimee M. Mackey, MD
Christopher Mantyh, MD – Section Chief of Colorectal Surgery
John Migaly, MD
Paul J. Mosca, MD, PhD, MBA
David M. Ota, MD
Scott K. Pruitt, MD, PhD
Sanziana A. Roman, MD
Randall P. Scheri, MD
Hilliard Foster Seigler, MD
Julie A. Sosa, MD – Section Chief of Endocrine/Soft Tissue Surgery
Lisa Al Tolnitch, MD
Julie K. Marosky Thacker, MD
Douglas S. Tyler, MD – Division Chief
Rebekah R. White, MD
Sabino Zani Jr., MD

"As the surgical field continues to become more and more specialized, a divisional structure optimizes the efficiency and effectiveness across our triad of co-dependent missions of teaching, research, and clinical care."

—David Anderson, MBA, MHA
Mission to Guatemala Heals Kids, Opens Doors

A 14-member team of Duke Medicine volunteers traveled to Guatemala this year to perform surgery on dozens of children suffering from hernias, vascular malformations, urological problems, and other potentially life-threatening conditions.

The week-long mission was a success, despite the challenges of a new working environment, different equipment, and an unfamiliar language. Working closely with Guatemalan surgeons, the group performed 48 surgeries, all with optimal outcomes.

Treating children was just one part of the trip’s goal, which also included educational and research components.

“We provided clinical services in the educationally directed fashion of an academic medical center, by partnering with local surgeons not only to take care of children but also to build long-lasting educational collaborations that enhance local health care systems,” says Henry E. Rice, MD, Associate Professor and Chief, Division of Pediatric General Surgery, who organized and led the Duke team.

That approach aligns with Duke’s overall global health mission and has the support of Victor J. Dzau, MD, Duke Chancellor for Health Affairs and President and CEO of Duke University Health System, as well as School of Medicine leadership.

The Guatemalan care providers welcomed Duke with open arms. “They were thrilled to have a Duke medical team work there,” says Dr. Rice. “And they were thrilled to have the Duke School of Medicine want to partner with them. Our involvement invigorated the health community there and made them want to work harder and improve their skill set.”

The Duke team also was part of a pilot project to determine if three groups with distinct missions to benefit the children of Guatemala could collaborate successfully. The others were the Shalom Foundation of Franklin, Tennessee, and Mending Kids International of Burbank, California.

As the success of this year’s visit and pilot collaboration is being assessed, another trip to Guatemala already is being planned for 2013.

The Duke Guatemalan Team included:

**Surgeons/Physicians**
- Henry Rice, MD, Associate Professor of Surgery
- Sherry Ross, MD, Assistant Professor of Surgery
- Brad Taicher, DO, MBA, Assistant Professor of Anesthesiology
- Syamal Bhattacharya, MD, Surgery Resident

**Nursing and Allied Health Professionals**
- Carrie Kaylos, CRNA
- Emily Funk, CRNA
- Megan Maloney, CPNP-AC
- Pamela Ilagan, RN
- Suzette Bernabe, RN
- Adam Sturkey, RN
- Casey Vera, RN
- Crystal McGhee, RN
- Luz Helena Aguilar, Surgical Technologist
- Sydney Crocker, Surgical Technologist
Duke Surgical Education and Activities Laboratory Gets New Robotic Trainer – First in NC

The Duke Surgical Education and Activities Laboratory (SEAL), a state-of-the-art surgical simulation center designed to provide advanced and innovative training for physicians, residents, fellows, physician assistants, nurses, and medical students in a risk-free environment, now has a new robotic trainer—the first in North Carolina. The dV Trainer, developed by Mimic Technologies, will provide simulation training for Duke’s four da Vinci robotic systems. The trainer is designed to replicate the robotic console and contains 40 virtual reality exercises intended to teach the basic skills required to perform robotic surgery.

The da Vinci system provides surgeons with an alternative to both traditional open surgery and conventional laparoscopy by enabling surgeons to perform complex surgeries through small incisions. Patient benefits include less postoperative pain, less blood loss, a shorter hospital stay, a quicker recovery, and a more rapid return to daily activities. Robotic surgery is commonly performed in urology, gynecological surgery, and general surgery.

In the last fiscal year, the Surgical Education and Activities Lab provided 5,764 learner hours of training to learners in Surgery, Emergency Medicine, Gastrointestinal Medicine, Interventional Radiology, Trauma, Nursing, and Allied Health. In January 2013, the Surgical Education and Activities Lab will expand its footprint into the new Duke School of Medicine’s Trent-Semens Center for Health Education. The new center which includes a 15,000-square-foot space dedicated to simulation training, will provide expansive learning space for medical students and residents at Duke. In addition to the Duke Surgery Surgical Education and Activities Lab, the School of Medicine’s Clinical Skills Lab and Anesthesiology’s Human Patient Simulation Center will also be part of the new center. The SEAL lab will be dedicated to training in Trauma and Emergency Medicine.

For more information on SEAL, visit surgery.duke.edu/seal.

Comprehensive Education Institute
In 2008, the Surgical Education and Activities Lab was accredited as a Level I Comprehensive Education Institute by the American College of Surgeons. This is the highest level accreditation and is only awarded to those institutions that meet strict criteria and offer state-of-the-art surgical education.
Using an endoscope to guide the removal of leg veins used in heart surgery is as safe as using large, ankle-to-groin incisions, according to a study by Duke researchers.

The data published in the *Journal of the American Medical Association* show the two procedures have similar mortality rates after three years. The endoscopic method has lower rates of infection and wound complications. The study refutes previous findings linking the endoscopic method to higher rates of vein bypass graft failure, heart attack, and death.

“Our study affirms the efficacy of endoscopic vein harvesting,” says Peter K. Smith, MD, Professor and Chief, Division of Cardiovascular and Thoracic Surgery and the paper’s senior author. “It allays the concerns of patients who have undergone endoscopic vein harvesting during coronary artery bypass, as well as the concerns of surgeons who prefer endoscopic vein harvesting for their patients.”

Since the mid-1990s, surgeons have used endoscopes and tiny incisions at the ankle, knee, and groin to remove leg veins during coronary artery bypass surgery (CABG). The minimally invasive approach caught on quickly because it resulted in shorter hospital stays, less perioperative discomfort, fewer incision-site complications, and less scarring than open vein harvesting, which requires an incision that runs the length of the leg.

“Coronary bypass is among the most commonly performed procedures worldwide,” says Judson Williams, MD, MHS, the study’s first author and a Cardiothoracic Surgical Trials Network Scholar and Duke Surgery resident. “This procedure is designed not only to prolong a patient’s life, but to also improve their quality of life. Because of the importance of this operation, ensuring it can be done with the best vascular grafts is critically important.”

Three years ago, an observational study of 3,000 patients called into question the safety of endoscopic vein harvesting. The U.S. Food and Drug Administration then commissioned the Duke researchers to study the long-term outcomes of endoscopic (EVH) versus open vein harvesting (OVH).

This FDA-sponsored observational study followed 235,394 Medicare patients undergoing CABG from 2003-2008 in 934 surgical centers participating in the Society of Thoracic Surgeons’ national database. About half (52%) were endoscopic cases. Baseline patient characteristics were balanced across both groups including age, body mass index, prevalence of vascular disease, and other risk factors such as smoking, diabetes, and urgent care status. After three years of follow-up, there were no significant differences in mortality between the two groups (13.2% for EVH vs 13.4% for OVH).

There were also no statistical differences in heart attacks or revascularization (19.5% for EVH vs 19.7% for OVH). There was a significant difference in the 30-day rate for wound complication favoring endoscopic harvesting (3.0% for EVH vs. 3.6% for OVH). While several studies have questioned its safety, Dr. Smith says, “Our study was done in a very large population, and was conducted in a diverse group of large and small community programs, as well as university and non-university affiliated centers. It’s unlikely another result would occur if more patients were studied.”

In addition to providing insight into this critically important clinical question, the study represented an important collaboration, said Dr. Williams. “This is an exciting example of an opportunity to achieve post-market medical device surveillance through collaboration between the FDA, the Society of Thoracic Surgeons, the Duke Clinical Research Institute, and the NIH-supported Cardiothoracic Surgery Clinical Trials Network. It demonstrates a new and powerful method to answer important clinical questions in the future.”
**SURGERY RESEARCH GRANT ACTIVITY**

**Basic and Translational Research**

Hardean E. Achneck, MD, Assistant Professor, Division of Surgical Sciences, was awarded a grant from the American Heart Association for “Role of Endogenous Toll-Like Receptor Ligands in Allospecific T Cell Activation.”

Todd V. Brennan, MD, MS, Assistant Professor, Division of Thoracic Surgery, was awarded a grant from Thoratec Corporation for “Adhesion and Functionality of Endothelial Progenitor Cells (EPCs) on Sintered Titanium Under Fluid Shear Stress.”

Dawn E. Bowles, PhD, Assistant Professor, Division of Surgical Sciences, was awarded a grant from the National Aeronautics and Space Administration for “Proteomic Profiling of Human Heart Tissue Exposed to Microgravity.”

Todd V. Brennan, MD, MS, Assistant Professor, Division of Abdominal Transplant Surgery, was awarded a grant from the National Institutes of Health for “Role of Endogenous Toll-Like Receptor Ligands in Allospecific T Cell Activation.”

Paul C. Dolber, PhD, Associate Professor, Division of Urology, was awarded a grant from the National Institutes of Health for “Intrathecal Therapy for Autonomic Dysreflexia.”

Walter T. Lee, MD, Associate Professor, Division of Otolaryngology – Head and Neck Surgery, was awarded a grant from the American Academy of Otolaryngology – Head and Neck Surgery for “Prognostic Value of Regulatory T Cells in Sentinel Lymph Nodes in Head and Neck Melanoma.”

Carmelo A. Milano, MD, Associate Professor, Division of Cardiovascular and Thoracic Surgery, was awarded a grant from the American Heart Association for “Using Aptamer Coated Nanoparticles Encapsulating Prostate Tumor Antigen Encoding mRNA to Target Dendritic Cells in Vivo.”

**Clinical Trials**

John H. Sampson, MD, PhD, MHSc, Professor, Division of Neurosurgery, was awarded a grant from the National Institutes of Health for “Targeting Immunosuppression Pathways to Enhance Brain Tumor Immunotherapy.”

Bruce A. Sullenger, PhD, Joseph and Dorothy Beard Professor, Division of Surgical Sciences, was awarded a grant from the Department of Defense for “Using Aptamer Coated Nanoparticles Encapsulating Prostate Tumor Antigen Encoding mRNA to Target Dendritic Cells in Vivo.”

Kelli R. Brooks, MD, Assistant Professor, Division of Trauma and Critical Care Surgery, was awarded a grant from GlaxoSmithKline for “A Two-Part Study to Investigate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of GSK2586881 in Patient with Acute Lung Injury.”

Mitchell W. Cox, MD, Associate Professor, Division of Vascular Surgery, was awarded a grant from Aptus Endosystems, Inc. for “Anchor: Aneurysm Treatment using the HellFX Aortic Securement System Global Registry.”

Kerry L. Gerardo, MD, Associate Professor, Emergency Medicine, was awarded a grant from BTG International, Inc. for “Observational Study of Recovery from Copperhead Snake Envenomation.”

Gerald A. Grant, MD, Associate Professor, Division of Orthopaedic Surgery, was awarded a grant from the Department of Defense for “Outcomes in Patients Undergoing Surgical Intervention for Chiari Type I Malformation with Syringomyelia.”

For an up-to-date listing of Duke Surgery research, visit [surgery.duke.edu/research](http://surgery.duke.edu/research).
FACULTY NEWS

Thomas A. D’Amico, MD, Professor, Division of Cardiovascular and Thoracic Surgery, Chief, Section of Thoracic Surgery; and Chief of the Duke Endosurgery Center, has been appointed Clinical Director of the Duke Cancer Institute.

Robert H. Honea, MD, Clinical Associate, Division of General and Advanced GI Surgery, has been appointed Medical Director of the Piedmont Surgery Clinic in Danville, Virginia (a Duke Private Diagnostic Clinic affiliate).

Shelley Hwang, MD, MPH, Professor, Division of Surgical Oncology, has been appointed to serve on the Duke School of Medicine’s Curriculum Committee for a two-year appointment commencing September 2012.

Kadiyala V. Ravindra, MBBS, Associate Professor, Division of Abdominal Transplant Surgery, has been appointed Program Director of the Abdominal Transplant Surgery Fellowship Program effective August 1, 2012.

Richard L. Scher, MD, Professor, Division of Otolaryngology and Neck Surgery, was appointed Associate Vice Chair of Clinical Operations and Patient Services for Ambulatory Services. In this role, he will develop and implement policies and procedures for the clinical enterprise components of health care delivery in the outpatient environment. This will include practice efficiency, resource and environmental management, patient satisfaction, utilization management, process management, and facilitation of the department’s efforts in quality improvement and performance.

David C. White, MD, Assistant Professor, Division of Cardiovascular and Thoracic Surgery, has been appointed to the Medical Executive Committee of Duke Raleigh Hospital as Chairman Elect, Department of Surgery effective July 1, 2012.

Ola Bamimore, MD
Division of Emergency Medicine
Clinical interests include emergency medicine.
919-684-5536

Scott J. Banuelos, MD
Division of Cardiovascular and Thoracic Surgery, Duke Cardiothoracic Surgery of Danville
Clinical interests include adult cardiac surgery (including coronary bypass and valvular surgery), adult pulmonary surgery (including thoracoscopic surgery), peripheral vascular and endovascular surgery, and dialysis access surgery.
434-971-3009

Joseph B. Borawski, MD
Division of Emergency Medicine
Clinical interests include emergency medicine.
919-684-5337

Kerry A. Dove, DMD, MS
Division of Pediatric Dentistry
Clinical interests include general pediatric dentistry, preventive dental care, early interceptive orthodontics, oral pathology, dental trauma, dental needs of medically compromised children and those with special health care needs, and children requiring general anesthesia for dental care.
919-220-1416

Rose J. Eapen, MD
Division of Otolaryngology – Head and Neck Surgery
Clinical interests include pediatric otolaryngology including hearing loss, hearing rehabilitation, head and neck masses, sinusitis, airway, and sleep disorders.
919-684-3834

Rachel A. Greenup, MD, MPH
Division of Surgical Oncology
Clinical interests include surgical treatment of breast disease, nipple-sparing mastectomies, clinical outcomes in young women with breast cancer, and quality of life after breast cancer treatment.
919-668-6688
Surgery; Duke General Surgery of Danville
Clinical interests include advanced laparoscopic and minimally invasive surgery.
434-792-5964

Zachary Hartman, PhD
Division of Surgical Sciences
Research interests include cancer immunology, inflammation, immunotherapy for cancer, carcinogenesis, tumor metastasis and recurrence, innate immunity, infection disease, and vaccine development.
919-684-3346

Shelley Hwang, MD, MPH
Division of Surgical Oncology
Clinical interests include diagnosis and treatment of early-stage breast cancer, management of patients at high risk for breast cancer, and surgical treatment of patients with breast disease.
919-688-6688

Amy S. Kumar, MD
Division of Emergency Medicine
Clinical interests include emergency medicine and medical student education.
919-684-5537

Ngoc-Bich (Nikki) Le, MD
Division of Urology
Clinical interests include pelvic floor reconstruction, pelvic floor prolapse, male and female incontinence, and voiding dysfunction.
919-684-2446

Aimee Mackey, MD
Division of Surgical Oncology
Clinical interests include breast surgical oncology – excisional biopsy, lumpectomy, mastectomy, skin-sparing mastectomy, nipple-sparing mastectomy, oncoplastic surgery, sentinel lymph node biopsy and mapping, axillary lymph node dissection; ultrasound-guided biopsies; benign breast disease; and high-risk breast cancer patients.
919-660-2324

Suhail K. Mithani, MD
Division of Plastic, Maxillofacial, and Oral Surgery
Clinical interests include hand and upper extremity surgery, reconstructive surgery, and microsurgical management of lymphedema.
919-471-9622

Mara A. Monoski, MD
Division of Urology
Clinical interests include general adult urology – hematuria, urinary tract infections, voiding dysfunction, incontinence, OAB, female urology, and BPH.
919-684-2446

Carrie R. Muh, MD, MS
Division of Neurosurgery
Clinical interests include evaluation and treatment of neurosurgical disorders of childhood, including pediatric brain and spine tumors; posterior-fossa tumors; genetic tumor syndromes; Chiari malformations; craniosynostosis and craniofacial surgery; tethered cord syndrome and spina bifida; hydrocephalus; spasticity; and vagal nerve stimulators for epilepsy.
919-684-5013

Chan Park, MD
Division of Metabolic and Weight Loss Surgery
Clinical interests include minimally invasive and advanced laparoscopic, robotic, single incision, and endoscopic approaches to diseases of the esophagus, stomach, small bowel, colon, solid organs, hialtal and abdominal wall hernias; benign and malignant gastrointestinal tumors; metabolic and weight loss surgery - sleeve gastrectomy, adjustable gastric banding, Roux-en-Y gastric bypass; and revisional bariatric surgery.
919-862-2715

Deyanira J. Prastein, MD
Division of Cardiovascular and Thoracic Surgery
Clinical interests include adult cardiac surgery, valvular heart disease, ischemic heart disease, cardiac transplantation, and ventricular assist devices.
919-668-1817

Edward N. Rampersaud Jr., MD
Division of Urology
Clinical interests include kidney cancer (including all facets of care for both localized and advanced pathology: minimally-invasive techniques, renal-preservation surgeries, and advanced vascular/caval reconstruction as needed); testicular cancer (including the advanced upper-retroperitoneal and vascular techniques required to address post-chemotherapy pathology); bladder cancer (including bladder-sparing protocols, creation of neobladders, and robotic/minimally-invasive techniques); prostate cancer (including robotic prostatectomy and multimodal management of locally advanced pathology); penile cancer (including penile-sparing techniques); and advanced genitourinary cancer surgery; diagnosis and treatment of rare/unusual genitourinary and retroperitoneal tumors.
919-668-8108

Jacob N. Schroeder, MD
Division of Cardiovascular and Thoracic Surgery
Clinical interests include cardiac transplantation, mechanical circulatory support devices and heart failure surgery, adult cardiac surgery, and cardiothoracic surgical education.
919-681-7861

Thomas J. Weber Jr., DO
Division of Neurosurgery
Clinical interests include chronic pain management, interventional pain management, complex regional pain syndrome, spinal cord stimulator implant, radiofrequency ablation, cancer pain management, low back pain, headache, neuropathic pain, spasticity, sports medicine, failed back, whiplash injury, medically refractory pain, and veteran’s care initiatives.
919-862-5367

Sabino Zani Jr., MD
Division of Surgical Oncology
Clinical interests include surgical oncology; benign and malignant hepatobiliary, pancreatic, and gastrointestinal disease; and advanced laparoscopic surgery.
919-660-2324
HONORS

Duke Surgery Contributes to Duke University Hospital Honors

For the 23rd year in a row, U.S. News & World Report has ranked Duke University Medical Center as one of the top ten hospitals in the nation. In this year's edition of the best hospitals list, Duke ranked eighth overall and first in North Carolina. The magazine assesses 16 medical specialties at each of the 5,000 hospitals in the U.S. that are evaluated. Eight of the specialty areas at Duke made the top 10 in this year’s list and four others placed highly in their respective honor roles. Duke Surgery specialty areas ranked as follows:

#7 Cardiology & Heart Surgery
#7 Urology
#13 Cancer
#13 Nephrology
#14 Neurology & Neurosurgery

Michael M. Haglund, MD, PhD, Professor, Division of Neurosurgery, has been awarded the Duke Surgery Professor of Neurosurgery in the School of Medicine. The distinguished professorship chair was activated July 1, 2012.

Howard Levinson, MD, Assistant Professor, Division of Plastic, Maxillofacial, and Oral Surgery, has been appointed Secretary-Treasurer for a three-year term by the Plastic Surgery Research Council. Dr. Levinson is also Co-Chair of the Membership Committee. The society, organized in 1955, stimulates fundamental research in plastic surgery.

Judd W. Moul, MD, James H. Semans, MD, Professor of Surgery, Division of Urology, and Director of the Duke Prostate Center, was featured in the November 2012 issue of Men’s Health magazine, a national lifestyle publication that covers issues relating to men’s physical and mental health issues.

Andrew C. Peterson, MD, Associate Professor, Division of Urology, has been appointed to a three-year term to the Board of the Society of Genitourinary Reconstructive Surgeons. As a board member, Dr. Peterson will be part of the annual board of directors meeting and the annual scientific session in conjunction with the American Urological Association meeting.

Glenn M. Preminger, MD, James F. Glenn Professor and Chief, Division of Urology, has been appointed Director of Education by the Endourological Society. The Society, founded in 1983, facilitates scientific dialogue among endourologists worldwide. In addition, Dr. Preminger was the recipient of the Journal of Urology’s Best Reviewer Award for a second year in a row. Dr. Preminger was honored at a reception during the annual meeting of the American Urological Association in Atlanta for this award.

John E. Scarborough, MD, Associate Professor, Division of Trauma and Critical Care Surgery, received the 2012 David C. Sabiston Jr., Teaching Award, an award for excellence in resident education.

Ranjan Sudan, MD, Associate Professor, Division of Metabolic and Weight Loss Surgery and Vice Chair of Education for Surgery, has been appointed Associate Editor of Surgery for Obesity and Related Diseases, the official journal of the American Society for Metabolic and Bariatric Surgery.
July 18, 2012 was a historic day for Duke Medicine as Duke Maestro Care, a single, integrated electronic health record was implemented. The new system’s goal – to create one patient, one record, one system – began as 33 primary care and urgent care clinics were the first to go live with the system-wide project.

To launch the Maestro Care system, historical patient data was entered into the system for 32.6 million encounters, 4.4 million vitals, 3.8 million patients, 2.9 million radiology reports, 333,000 future appointments and 220,000 providers.

Duke’s implementation of the state-of-the-art technology comes on the heels of the Supreme Court’s ruling to uphold the Affordable Care Act. The commitment to the project and expedited implementation a year ago reflects the determination to be optimally prepared for a future in which population health management would be dependent on sophisticated health record technology. It also reflects the ongoing commitment to providing the highest quality and evidence-based health care services to our patients.

This is the first of four waves of implementation across of Duke’s ambulatory clinics that will take place over the next year. Maestro Care will be introduced throughout Duke University Hospital in July of 2013 followed by implementations at Durham Regional Hospital and Duke Raleigh Hospital in 2014.
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 surgery.duke.edu/gift.

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

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.