

# Trauma Patients Benefit From Top-Notch Facilities, Expert Care at UF&Shands

In 2010 and 2011, UF acute care surgeons performed 2,512 trauma surgical procedures on 714 patients.

With top-of-the-line trauma facilities and a skillful team of surgeons with diverse expertise, UF&Shands' trauma program provides some of the best care in the state for severe injuries. The hospital earned its designation as a level 1 trauma center in July 2005. The program's burn center is one of three in the state verified by the American Burn Association. It offers burn care for both adults and children and unique care for severe, non-burn skin and soft-tissue infections. The center provided care for 530 burns in 2011.

In keeping with state requirements for a level 1 trauma center, an attending trauma surgeon is working at UF&Shands at all times. Trauma surgeons serve alongside pediatric surgeons, anesthesiologists, orthopaedic surgeons, oral surgeons, neurosurgeons, emergency medicine physicians, nurses, nurse practitioners, physician assistants and other providers to treat trauma and acute care patients.

**With top-of-the-line trauma facilities and a skillful team of surgeons with diverse expertise, UF&Shands' trauma program provides some of the best care in the state for severe injuries.**

UF&Shands' trauma facilities moved in 2009 from Shands at UF to the newly built Shands Cancer Hospital at UF, located just across the street from the original hospital building. The new facilities include a modern adult emergency department and adjacent resuscitation area that's close to the helipad elevators and just steps away from CT scanners.

This area holds six rooms, four dedicated to trauma patients. Each room features

X-ray machinery built into the ceiling, computers for reading X-ray films, monitoring equipment, a blanket warmer to combat dropping body temperature and a focused abdominal sonogram for trauma (FAST) machine, used to detect internal bleeding. Just a few steps outside the rooms, providers have access to a refrigerator stocked with blood ready to administer to patients. Shands' blood bank supplies additional blood products on demand if providers run through that supply.



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*UF's acute care surgery team poses for a group photo.*

The pediatric emergency department is inside Shands at UF and includes equipment, rooms and design features made just for kids. All trauma patients, regardless of age, first go to the emergency department at the new cancer hospital. Pediatric surgeons respond to pediatric trauma cases on a timely basis to provide specialized care, and UF trauma surgeons provide backup.

Shands at UF and Shands Cancer Hospital at UF each has its own helipad to accommodate patients arriving via helicopter. UF&Shands' emergency flight program, ShandsCair, uses these helipads and has operated for 30 years.

Two new surgeons joined UF's trauma/acute care surgery group this summer: **Linda Atteberry, MD**, an associate professor of surgery; and **Janeen Jordan, MD**, an assistant professor of surgery.

Atteberry works primarily at the Malcom Randall VA Medical Center, also just across the street from Shands at UF. She provides backup trauma care at Shands at UF.

Other trauma/acute care surgeons on the team include **Frederick Moore, MD**, chief and a professor of acute care surgery; **Lawrence Lottenberg, MD**, an associate professor of surgery and anesthesiology; **Fitzgerald Casimir, MD**, an assistant professor of surgery and anesthesiology; **Chasen Croft, MD**, an assistant professor of surgery; **Philip Efron, MD**, an assistant professor of surgery and anesthesiology and associate medical director of the trauma intensive care unit; **David Mozingo, MD**, a professor of surgery and anesthesiology and director of Shands Burn Center; and **Winston Richards, MD**, a clinical assistant professor.

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# UF TCV Surgeons Specialize in Aortic Valve Procedures

UF thoracic and cardiovascular surgeons offer one of the most extensive slates of aortic valve procedures in the state.

“When it comes to aortic valve procedures, we offer as much as any other program in the world,” said **Tomas Martin, MD**, “including everything from routine aortic valve replacement and repair all the way up to the most complex aortic valve reconstructions to a transcatheter valve replacement.”

Martin is a professor in the division of thoracic and cardiovascular surgery and part of UF’s aortic valve surgical team.

In addition to traditional, fully open surgical procedures, UF thoracic and cardiovascular surgeons also offer procedures that are less invasive and allow for smaller incisions in the chest or even access to the heart through the vascular system without major incisions. Each procedure has different benefits, degrees of risk and requirements for patients who undergo it, and our surgeons help

*Dr. Tomas Martin (right) and Dr. Thomas Caranasos, a thoracic and cardiovascular surgery resident, put their heads together to get just the right perspective during an operation.*

patients determine which is right for them.

The minimally invasive aortic valve replacement, commonly called a mini AVR, is much like a fully open aortic valve replacement. Both procedures require open access to the heart and removal of the faulty valve leaflets. However, surgeons perform this procedure through a smaller opening in the breastbone — about four to five inches long — rather than one that extends the length of the breastbone. The rest of a minimally invasive AVR is performed in the same manner as a regular AVR. A heart-lung machine takes over the function of those organs for the patient, and the surgeon cuts open the aorta and removes the malfunctioning valve leaflets. He or she then attaches a new valve and stitches it into place. Lastly, the surgeon removes the patient from the heart-lung machine and closes the incision.

UF surgeons began performing another form of valve replacement — transcatheter aortic valve replacement — in March 2012, just a few months after the U.S. Food and Drug Administration approved the procedure for use in patients who cannot undergo open heart surgery. Transcatheter aortic valve replacement, called TAVR for short, is a treatment for symptomatic, severe aortic stenosis, a condition in which the aortic valve is narrowed. UF&Shands was one of the initial facilities authorized to perform the procedure by the manufacturer of a new type of replacement valve. The valve is designed to travel through the body attached to a catheter, making this form of surgery possible. TAVR requires surgeons to guide a tool carrying the replacement valve through an artery in the leg and up to the heart. Patients undergoing TAVR do not require a heart-lung machine.

The treatment is another option for patients unable to undergo more extensive surgery and who previously had to depend on medication alone. To be a candidate for TAVR, a patient also must be free of other health problems that would negate the benefit of a valve replacement. Open replacement remains the gold standard for this procedure and should be performed on patients who can tolerate it.

UF surgeons also specialize in procedures that allow patients to keep their own healthy valves in cases where valve replacement has been the customary treatment.

“We perform a variety of valve salvage procedures, where we repair or replace the aorta but leave the valve intact,” Martin said.

Surgeons at most facilities replace the valve instead of repairing it. At UF, patients with healthy valves may undergo the Florida Sleeve procedure, created by surgeons at UF, or a “David” procedure.

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# UF&Shands Reactivates Pancreas Transplant Program

The pancreas transplant program at UF&Shands is again open and accepting patients.

The United Network for Organ Sharing approved the reactivation on Oct. 22, 2012.

UF&Shands voluntarily suspended its adult and pediatric liver transplant programs and pancreas transplant program in August 2011 after several key surgeons were recruited by medical centers in larger cities. The institution's other organ transplant programs were not affected and remained operational. The liver transplant programs became active again in April 2012.

The pancreas transplant programs' reactivation follows the hiring this summer of two surgeons: **Kenneth Andreoni, MD**, the pancreas transplant program's lead surgeon and an associate professor; and **Brendan Boland, MD**, an assistant professor. [Learn more about the new surgeons on page 6.](#)

"We are delighted to reactivate our pancreas transplant program," said **Kevin Behrns, MD**, department chairman. "We look forward to providing high-quality care to patients that need this service. We appreciate the support of our patients and the dedication of our staff and colleagues who have made this transition possible."

**Timothy Goldfarb**, chief executive officer of Shands, praised employees who continued working with patients during the break.

"Our Shands abdominal transplant coordinators worked tirelessly to make sure our patients and their families experienced a seamless transition and received great personal support and care throughout this hiatus," Goldfarb said. "As a result, many of the patients still awaiting pancreas and pancreas-kidney transplants have communicated their wishes to return to Shands for transplant care now that we have reactivated the program."

UF&Shands continued to provide post-transplant care for patients while the program was inactive.

**Jeffrey Fair, MD**, chief of the department of surgery's division of transplantation, highlighted the program's



MARIA FARIAS/UF&SHANDS COMMUNICATIONS

(l-r) Drs. Ivan Zendejas, Kenneth Andreoni, Jeffrey Fair and Brendan Boland are UF's abdominal transplant surgeons.

collaboration with providers from varied areas of health care as one of its greatest strengths.

"It dovetails with the kidney transplant program, as well as diabetes management programs," he said. "That's just a strength of a solid, committed academic health care system with transplant programs within it."

Fair, a nationally renowned liver, kidney and pancreas transplant surgeon, joined UF&Shands in March 2012 from Cedars-Sinai Medical center in Los Angeles. His leadership has been essential to restarting the liver and pancreas transplant programs. In addition to Fair, Andreoni and Boland, **Ivan Zendejas, MD**, an assistant professor of surgery, also performs abdominal organ transplants. **Shehzad Rehman, MD**, an assistant professor of medicine in the division of nephrology, hypertension and renal transplantation, is medical director of kidney and pancreas-kidney transplantation.

**David Guzick, MD, PhD**, UF's senior vice president for health affairs and president of UF&Shands, emphasized that everyone involved in making transplantation possible — as a patient or a health professional — plays a vital role.

"Transplant teams comprise expert interdisciplinary medical and surgical faculty and staff, along with non-clinical coordinators and staff who are dedicated to supporting patients through the transplant journey," he said. "On behalf of our heroic organ donors and their families, we are honored to help give patients the gift of life."



Dear Friends:

I have had the privilege of visiting many referring community practices with which we share patients. As I travel across the state, I ask these practitioners how we can maximize our relationship to care for patients. Nearly universally, they seek rapid access to specialty surgical care. Clearly, these groups of excellent physicians want to be secure in the knowledge that they have backup surgical care.

I am delighted to tell these groups that we offer a broad range of specialty surgical care that is designed to care for patients with unique or critical illnesses. Over the past four years, we have expanded our capacity to provide specialty surgical care for patients of all ages. Importantly, we offer minimally invasive approaches to the treatment of many of these diseases, including endovascular surgery for patients with thoracic aortic diseases and minimally invasive surgery for esophageal, pancreatic and colon cancers. In addition, we have dedicated teams of surgical critical care doctors who have developed innovative approaches to the care of patients with sepsis.

For example, computerized clinical decision support analysis has standardized algorithms that assist the critical care physician with patient management. In addition, in the intensive care units we are increasingly enrolling patients in clinical translational studies that further define the nature of critical illnesses and permit pioneering therapies.

In this issue, we highlight the use of extracorporeal membrane oxygenation (ECMO) in treatment of neonates with congenital diaphragmatic hernia and respiratory failure. Our program is a national leader in success rates with ECMO and was duly recognized by the Extracorporeal Life Support Organization as a center of excellence. We congratulate our pediatric surgeons on achieving such a high honor! We also thank our colleagues, because this effort, and all of our specialty care represent multidisciplinary care both within the department and across our health care center.

Our department serves as a statewide and regional resource to provide high-quality care to critically ill patients. We are eager to participate in the care of these patients and seek to establish smooth transitions of care to the patients and our referring colleagues.

Kevin E. Behrns, MD  
Chairman

### Trauma Patients *continued from page 1*

**Bruce McKinley, PhD**, a professor of surgery and director of program improvement and translational research for acute care surgery and intensive care, focuses on developing and implementing protocols and technology to improve care of trauma and surgical intensive care patients.

In addition to expertise in the fundamentals of trauma surgery, surgical critical care and acute care, our surgeons have specialized knowledge of and experience treating the most challenging problems facing trauma and acute care patients today. Procedures such as extracorporeal membrane oxygenation (ECMO) and intraosseous injection, both employed by UF trauma surgeons, sometimes can help patients for whom traditional therapies are not effective. Rib plating is a relatively new procedure that relieves much of the

pain and may prevent some complications for a patient suffering from multiple broken ribs. It is especially helpful for patients whose broken ribs may cause other problems, such as pneumonia.

The team has developed an innovative strategy of screening for sepsis and then rapidly implementing evidence-based care using computerized clinical decision support, allowing more patients than ever before to beat this life-threatening and notoriously stubborn condition.

Moore, the chief of acute care surgery, led the strategy's implementation starting in January 2012. In two of the intensive care units using the strategy, just 16 percent of severe sepsis and septic shock patients in January 2012 through September 2012 died of sepsis, according to data collected by UF&Shands personnel. The national average is 30 percent.

# UF&Shands Program that Oxygenates Blood Outside the Body Named a Center of Excellence

An international group focused on treatment for patients with organ system failure has bestowed its Award for Excellence in Life Support to the extracorporeal membrane oxygenation program at UF&Shands, the University of Florida Academic Health Center.

The award, given by the Extracorporeal Life Support Organization, designates UF&Shands as an Extracorporeal Life Support Center of Excellence and “signifies to patients and families a commitment to exceptional patient care,” according to the organization’s website.

Extracorporeal membrane oxygenation, called ECMO for short, involves pumping a person’s blood out of the body and through an artificial lung that fills it with oxygen and returns it to the body.

This procedure is mostly used for babies and children with life-threatening but reversible respiratory failure that is unresponsive to other ventilation and support techniques, said **David Kays, MD**, medical director of UF&Shands’ ECMO program. The program has been in place since 1989. Kays also is an associate professor and chief of pediatric surgery in UF’s department of surgery.

“The award puts us among the top quality programs in the country with regard to ECMO policies, procedures and outcomes, and it’s just another statement about the quality of treatment here at UF&Shands,” said Kays. “It’s not a children’s

hospital designation, but ECMO is a modality that really matured in the pediatric population, so it reflects very well on the Shands Hospital for Children at UF.”

**David Burchfield, MD**, a professor in the department of pediatrics and chief of the division of neonatology, plays an integral role in the program as director of the neonatal intensive care unit, Kays said. Most of UF&Shands’ ECMO patients receive treatment in this unit.

Despite its history as a procedure used primarily for children, doctors also are using ECMO for adults. At UF&Shands, acute care and cardiothoracic surgeons have employed ECMO to treat adults with trauma injuries.

Kays; **Karla Stringfellow, RRT**, ECMO coordinator and coordinator of pediatric respiratory care; and **Joy Perkins, RN, RRT**, a member of the program, accepted the award at the 23rd annual ELSO Conference, held in September 2012 in Seattle.



MARIA FARIAS/UF&SHANDS COMMUNICATIONS

Dr. David Kays with a patient.

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## TCV Surgeons continued from page 2

A David procedure, which is performed at many major institutions nationwide, involves removing the diseased or damaged portion of the aorta, including the aorta around the coronary arteries. In most cases, a surgeon will re-implant the valve into a graft made of Dacron, a synthetic material used to replace human tissue. The surgeon takes great care to make sure the patient’s own valve is suspended properly within the graft, because improper suspension will lead to severe valve leakage. Once this is accomplished, the coronary arteries must be re-implanted into the Dacron.

The Florida Sleeve procedure leaves the aortic tissue around the valve and coronary arteries entirely intact. The surgeon places a sleeve of Dacron tubing around the root of the aorta, completely encasing the aorta and valve inside the

tubing. The tubing returns the aortic root to relatively normal size and stabilizes the valve’s suspension mechanism and annulus, a collagen ring that provides structure and support.

Martin said he believes the Florida Sleeve procedure is easier to perform than the David procedure and should give more consistent results for most surgeons.

Whichever aortic procedure a patient undergoes at UF&Shands, he or she can be sure the surgeons performing it are highly skilled in that operation.

“We have a lot of experience with valve operations, valve reconstructions, and particularly, the complex patient,” he said. “Probably half of our referrals come from other surgeons for complex patients.”

# New Surgeons Join Department

UF's department of surgery has welcomed eight new faculty members.

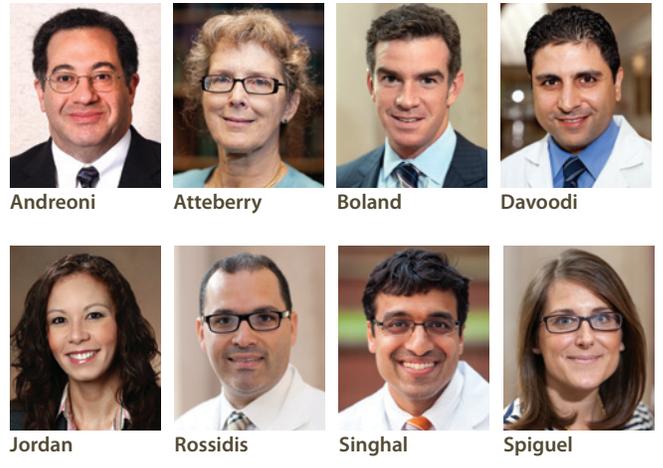
The acute care surgery team has added **Linda Atteberry, MD**, as an associate professor and **Janeen Jordan, MD**, as an assistant professor. **Kenneth Andreoni, MD**, an associate professor; and **Brendan Boland, MD**, an assistant professor, have joined the division of transplantation.

**Georgios Rossidis, MD**, is a new assistant professor in the division of general surgery's minimally invasive surgery and bariatric surgery service and **Lisa Spiguel, MD**, is an assistant professor in the division's surgical oncology service. **Puya Davoodi, MD**, is a clinical lecturer in the division of plastic and reconstructive surgery and **Dhruv Singhal, MD**, is an assistant professor in the division.

Atteberry most recently worked as an assistant professor of surgery at Georgia Health Sciences University's Medical College of Georgia. She also has served as a general surgeon at three U.S. Army hospitals. Atteberry earned her medical degree at Wake Forest University and completed her residency and a fellowship in surgical critical care at the University of Florida College of Medicine-Jacksonville. Her clinical interests include thoracic trauma and management of the open abdomen. Her research interests include surgical nutrition and evaluation of gut perfusion. She primarily will work at the Malcom Randall VA Medical Center as chief of the surgical critical care service.

Jordan comes to UF after completing a fellowship in trauma acute care surgery and surgical critical care at the University of Colorado Denver and Denver Health Medical Center. She also received her residency training there, and earned her medical degree at the University of Texas Health Science Center at San Antonio. Her research interests include inflammation and hemorrhagic shock, and her clinical interests include trauma, acute care surgery and surgical critical care.

Boland previously worked as an assistant professor at Cedars-Sinai Medical Center in Los Angeles. He attended medical school at the University of Medicine & Dentistry of New Jersey and completed his residency at Los Angeles County & University of Southern California Medical Center. His research interests are organ allocation and treatment of hepatobiliary malignancy, including resection, ablation and transplant. His clinical interests include treatment of hepatobiliary malignancy, including resection, ablation and transplant.



Andreoni most recently was director of liver transplantation at The Ohio State University Medical Center's Comprehensive Transplant Center and an associate professor of surgery. His research interests include immunosuppressive protocols, pediatric transitional health care, antibody-mediated rejection in liver transplant recipients, indications for simultaneous liver and kidney transplantation and computational methods for predicting positive crossmatches in highly sensitized kidney transplant candidates. His clinical interests involve transplant of sensitized patients, kidney paired donation and organ allocation issues.

Davoodi completed a three-year plastic surgery fellowship at UF this year. He attended medical school at Emory Medical School and completed residency training at the Medical University of South Carolina. His clinical interests are general plastic and reconstructive surgery, nerve decompression, facial aesthetics, body contouring, mommy make-overs, breast reconstruction and aesthetic breast and abdominal surgery. His research interest is surgical correction of migraines.

Rossidis recently completed a fellowship in minimally invasive and bariatric surgery at UF. He earned his medical degree at Semmelweis University in Budapest and completed his residency at UF. His clinical interests include minimally invasive surgery for benign and malignant disease of the foregut; laparoscopic repair of abdominal, inguinal and sports hernias; bariatric surgery and robotic surgery. His research interest is clinical outcomes in management of esophageal cancer. He also is interested in resident education and surgical simulation.

Before joining UF, Spiguel completed the Lynn Sage Breast Surgery Fellowship at Northwestern Memorial Hospital. She trained in general surgery at the University of Chicago Medical Center and earned her medical degree at Wayne State University.

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# Newly Recognized Syndrome Keeps Patients from Full Recovery

UF researchers have identified a medical condition they say keeps many intensive care, heart surgery and burn patients from recovering fully.

Called persistent inflammation, immunosuppression and catabolism syndrome (PICS), it defies existing treatments and leaves patients weak and unable to breathe or move properly. Patients generally recover enough from their original illnesses or injuries to be discharged from the hospital, but not enough to resume normal life.

“Hospital mortality is progressively decreasing, but more people are being sent to long-term acute care facilities,” said **Frederick Moore, MD**, a professor and chief of acute care surgery in UF’s department of surgery.

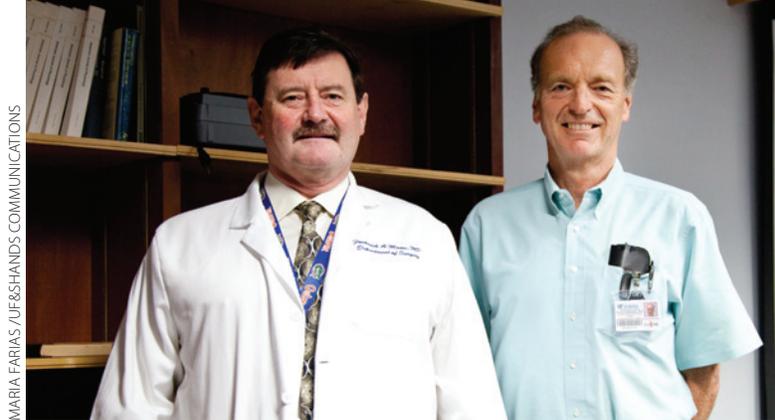
Moore and colleagues, including **Lyle Moldawer, PhD**, a professor and vice chairman of research in the department; **Bruce McKinley, PhD**, a professor of surgery; UF surgical residents **Lori Gentile, MD**, and **Alex Cuenca, MD, PhD**; **Philip Efron, MD**, an assistant professor of surgery and anesthesiology; and **Darwin Ang, MD, PhD, MPH**, a former assistant professor of surgery and anesthesiology, defined PICS in a June 2012 edition of the *Journal of Trauma and Acute Care Surgery*.

In the past, many intensive care patients succumbed to complications such as shock or multiple-organ failure after major illness or injury and related surgery. Treatment advances now allow most patients to survive those once overwhelming conditions. Still, for many of those patients, PICS impedes their full recovery.

About 250,000 U.S. patients develop PICS each year as a result of severe sepsis, a systemic infection that overwhelms the immune system, the UF researchers estimate. In addition, PICS may occur in non-septic trauma patients and in patients with perforated intestines, so the actual number of cases is likely much higher. Extra medical costs associated with PICS could reach \$100 billion per year — a conservative estimate — the researchers said.

Moore and colleagues identified the syndrome by analyzing and comparing clinical observations and decades’ worth of immunology research they and others conducted.

The work, funded in part by the National Institute of General Medical Sciences, is the first step toward establishing PICS as a widely recognized condition.



Dr. Frederick Moore (left) and Bruce McKinley, PhD, were part of the team that identified PICS.

“Further research will be needed to confirm its epidemiology and immune system profile and to identify early predictors so that we can design and study new ways to prevent and treat it,” Moore said.

PICS occurs when the immune system “panics” in response to multiple health threats and releases large numbers of immature immune cells from bone marrow. These cells cause inflammation and do not protect the body as well as their mature counterparts.

“You have a big surgery that goes fine,” Moore said. “But if you have a complication, and say you develop pneumonia, or an infection at the surgical site, then you have the second hit. It’s this repeated stimulation that causes the bone marrow to release these immature cells.”

Health care providers can’t stop patients’ immune systems from flooding the body with immature immune cells. Full recovery eludes PICS patients because the syndrome drains the body’s last-resort energy reserve.

“The immune system and all the immune cells require protein and energy and both are coming from structural proteins in the body, such as skeletal muscle,” McKinley said.

Widespread muscle depletion leaves patients increasingly weak, unable to move and breathe well. Existing nutritional therapies don’t stop the consumption of muscle.

Medical providers don’t yet know how to treat PICS effectively, but initial attempts to develop successful treatments will build on existing basic therapies and could include special exercises and muscle-saving medications. New nutritional therapies that support wound healing and proper hormone and immune system function also might help halt PICS.

While researchers seek ways to prevent or effectively treat PICS, it continues to inhibit patients’ recovery, with far-reaching negative effects.

“The amount of resources and medical care that’s required by these patients is enormous,” said **Ronald Maier, MD**, vice chairman of surgery at the University of Washington. Maier did not contribute to the UF research. “If we can better understand it, we could then develop therapeutic interventions to minimize it or hopefully help it resolve more quickly.”

## Vascular Study Group Founded at UF Grows to Include Georgia Medical Centers

The Florida Vascular Study Group has joined with medical centers in Georgia to become the Florida-Georgia Vascular Study Group, a regional group under the auspices of the Society for Vascular Surgery's Vascular Quality Initiative (SVS VQI). The national group fosters regional collaboration among physicians and hospitals to collect and analyze clinical data from patients undergoing vascular procedures.

Led by **Adam Beck, MD**, a UF assistant professor of surgery, the Florida-Georgia group's focus is to improve the care of vascular patients throughout the region. The group's second annual meeting took place in October 2012 at Shands at UF.

More than 50 physicians from 10 medical centers across Florida and Georgia are members of the group, and more centers are in the process of joining. Together, the group has collected quality improvement data on more than 2,400 procedures, providing a tremendous resource for developing quality improvement initiatives across the region.

With oversight by the national society's quality initiative and its associated Patient Safety Organization, regional groups collect procedural data and information about pre- and post-operative care. This allows benchmarking of outcome variables so physicians can identify best practices and areas for quality improvement. The current SVS VQI web-based data-entry system allows real-time benchmarking of outcomes after vascular procedures on a per-surgeon or per-center basis. Such data can inform discussions regarding quality improvement at a local level, such as with morbidity and mortality conferences.

The national Vascular Quality Initiative is expanding rapidly across the country. It now consists of eight regional groups, including more than 160 participating medical centers. The centers have accrued data on more than 50,000 procedures to date — nearly 2,500 every month. UF vascular surgeons are excited to be a part of this effort, and are proud to be leaders in improving surgical quality in the region.

## Tenure and Promotion News

Congratulations to **Steven Hughes, MD**, an associate professor and chief of the department of surgery's division of general surgery, on earning tenure; and to **Thomas Beaver, MD, MPH**, with the division of thoracic and cardiovascular surgery, on being promoted to professor.

## UF Surgeons, Alumni Become Fellows in American College of Surgeons

Eight UF surgeons and three graduates of UF's surgical residency program were initiated in September 2012 as fellows in the American College of Surgeons. The convocation took place in Chicago following the college's annual meeting.

UF faculty who are new fellows include:

- **Adam Beck, MD**, assistant professor of vascular surgery
- **Brendan Boland, MD**, assistant professor of transplantation surgery
- **Catherine Chang, MD**, assistant professor of vascular surgery
- **Philip Efron, MD**, assistant professor of surgery and anesthesiology
- **Atif Iqbal, MD**, assistant professor of surgery
- **Ashley Lentz, MD**, clinical assistant professor of plastic and reconstructive surgery
- **Salvatore Scali, MD**, assistant professor of vascular surgery
- **Christiana Shaw, MD, MS**, assistant professor of surgery

## New Surgeons Join Department *continued from page 2*

Spiguel's clinical focus is on the surgical care of breast cancer and benign breast disease, the assessment of high risk breast cancer patients and overall breast health.

Her current research interests focus on clinical outcomes for breast cancer treatment to promote advances in surgical care.

Singhal received his medical degree from the University of Pittsburgh and completed his general surgery and plastic surgery training at Brigham and Women's Hospital and Harvard University. He also was the Noordhoff Craniofacial Foundation Fellow at Taiwan's renowned Chang Gung Memorial Hospital. Immediately before starting at UF, Singhal spent a summer at the China Medical University Hospital focusing on complex microsurgical reconstruction. He specializes in adult craniofacial surgery and microsurgical reconstruction, especially breast reconstruction.

Singhal's clinical research focuses on oncoplastic breast surgery in the United States, facial trauma management, optimal procedures for sleep apnea management, lymph-node transfers in lymphedema and optimal surgical management of craniofacial neurofibromatosis.

# UF Researchers Receive \$1.5 Million from NIH to Study Protein's Role in Colon Cancer

UF researchers have received a \$1.5 million, five-year grant from the National Institutes of Health's National Cancer Institute to examine the role of an inflammation-causing protein in colon cancer development.

Scientists suspect abnormally high levels of the protein, called interleukin-8 or IL-8, may be partly to blame for increased rates of colon cancer among people with ulcerative colitis, a condition that causes inflammation and bleeding in the lining of the colon and rectum.

If IL-8 is a culprit in cancer formation, scientists would focus on finding ways to disrupt its function and, hopefully, halt the growth of colon cancer, said principal investigator **Emina Huang, MD**, a colorectal surgeon and an associate professor in the department of surgery.

"We have known for a long time there is a clear relationship between cancer development and chronic inflammation in humans," said **Weiping Zou, MD, PhD**, a professor of surgery, immunology and biology and director for translational research at the University of Michigan. Zou is not involved in the UF research. "This is important, but not really very informative, because we really don't know what's going on. This project is trying to address this question by

uncovering the cellular and the molecular mechanisms to explain why we have (that association)."

The work will focus on the role of IL-8 in cells lining the inside of the colon. IL-8 is known to exist in fibroblasts, a type of connective tissue cell recently found to contribute to tumor development in the colon.

In previous research, Huang and her team tested a different kind of tumor-initiating cell from the the colon lining to see if those cells also contain the protein.

"To our surprise, they also made quite a bit of IL-8," Huang said. "Researchers are trying to learn which cells are making IL-8 and why. Once this is determined, then it may be a therapeutic target."

With the new grant, Huang and her collaborators will test the protein's effect on those tumor-initiating cells and examine the influence of focal adhesion kinase, a protein involved in cell binding, movement and death. They will also study whether higher levels of IL-8 are linked to a mutation that hinders the activity of a yet another protein, one that kills unhealthy cells. Left unchecked, such cells may create tumors.



Huang

## Ten UF Surgeons Named "Top Doctors"

Physician rankings on U.S. News & World Reports' website show 10 UF surgeons are among the nation's "top doctors," as determined by Castle Connolly Medical Ltd., a well-known organization that rates health care providers.

UF surgeons ranked in the top 10 percent of physicians in their specialties include **Thomas Huber, MD, PhD**, a professor and chief of UF's division of vascular surgery; **David Kays, MD**, an associate professor and chief of UF's division of pediatric surgery; **Scott Berceci, MD, PhD**, a professor in the division of vascular surgery and a surgeon at the Malcom Randall Veterans Affairs Medical Center; and **David Mozingo, MD**, a professor of acute care surgery and anesthesiology and director of Shands Burn Center.

Those ranked in the top one percent of physicians in their specialties include **Kevin Behrns, MD**, chairman of the department of surgery and the Edward R. Woodward professor of surgery; **Timothy Flynn, MD**, a professor in the division of vascular surgery and an associate dean for the College of Medicine; **Tomas Martin, MD**, a professor in the division of thoracic and cardiovascular surgery; **Bruce Mast, MD**, chief of the division of plastic and reconstructive surgery; **Kenneth Andreoni, MD**, an associate professor in the division of transplantation surgery; and **Edward Staples, MD**, an associate professor in the division of thoracic and cardiovascular surgery.

The division of plastic and reconstructive surgery is starting a new residency program.  
Read about it and other department news at [surgery.med.ufl.edu/about-us/news-archive/](http://surgery.med.ufl.edu/about-us/news-archive/)

# Shands at UF Ranked Nationally in Seven Specialties

By April Frawley Birdwell

Seven medical specialty programs at Shands at UF are recognized among the nation's best in the 2012-2013 U.S. News & World Report's Best Hospitals rankings, which were released in July 2012.

Overall, Shands at UF was recognized as one of the top hospitals in the state and had the state's highest ranking in neurology and neurosurgery (32nd nationally).

The medical center's highest ranking came in urology (20th nationally). Other specialty programs that received national recognition include: pulmonology (31st), cancer (36th), nephrology (37th), gastroenterology (41st), and cardiology and heart surgery (47th nationally).

"Our focus is always on putting our patients first and providing them with the highest quality, safest health care," said **David Guzick, MD, PhD**, senior vice president for health affairs and president of the UF&Shands Health System. "This recognition by U.S. News exemplifies the unwavering commitment of our faculty, staff and students to answering this call and to meeting the needs of the patients who entrust us with their medical care. It's also a reflection of the strong collaboration that exists between our faculty physicians and our hospital."

Programs at Shands at UF are staffed by interdisciplinary teams including UF College of Medicine faculty physicians and Shands nursing, clinical and support staff.

"Our UF&Shands faculty and staff provide an exceptionally high level of care and are continually seeking ways to improve quality and the patient experience as well as discover new ways to diagnose and treat the conditions our patients face. This honor demonstrates that we are achieving these goals," said **Michael Good, MD**, dean of the UF College of Medicine.

Out of approximately 5,000 facilities considered for inclusion in the 2012-13 Best Hospitals rankings,

only 148 hospitals were nationally ranked in any of the 16 specialties. The rankings take into consideration the reputation of each hospital, its death rate and a set of care-related factors such as nursing and patient services. Medical centers also are assessed for competence providing complex care for patients who are high risk.

For the third year in a row, urology was Shands at UF's highest-ranked program.

"We are honored by this recognition. It pays tribute to the commitment of our faculty and staff, whose mission every day is to deliver individualized, high-quality and safe urologic care to our patients," said **Johannes Vieweg, MD**, UF College of Medicine urology chairman.

Additionally, Shands at UF was recognized in five specialties — diabetes and endocrinology; ear, nose and throat; geriatrics; gynecology; and orthopedics — as "high-performing," meaning they are in the top 25 percent of hospitals evaluated.

"Our physicians, nurses and team members provide outstanding patient care and these rankings validate the devotion and expertise we witness every day," said **Timothy Goldfarb**, Shands HealthCare CEO.

Earlier this year, Shands Hospital for Children was recognized in seven medical specialties in the 2012-13 U.S. News Best Children's Hospitals rankings: diabetes and endocrinology (13th), cardiology and heart surgery (25th), nephrology (27th), gastroenterology (27th), pulmonology (37th), neonatology (37th), and neurology and neurosurgery (49th). The diabetes and endocrinology and gastroenterology programs were ranked highest in the state.

U.S. News & World Report's 2012-13 Best Hospitals listings are available online at [www.usnews.com/besthospitals](http://www.usnews.com/besthospitals).

# An Early Start

At most medical schools, students don't get a chance to learn surgery skills firsthand.

But future doctors at UF's College of Medicine can try out a few of the basics, thanks to a surgical simulation lab spearheaded by **Sanda Tan, MD, PhD**, and **Christiana Shaw, MD, MS**, both assistant professors of surgery.

The skills the students learn are "just like what we expect our residents to know prior to doing it in the human body," Tan said. "Usually, these kinds of labs are for residents. We're really stepping up the teaching of our medical students — trying to entice them, maybe make the surgery rotation more enjoyable for them, more memorable."

As part of their eight-week surgical clerkship, third-year medical students now participate in two labs that introduce them to simple surgical techniques. Shaw and Tan introduced the labs in January 2012. Since June 2012, students' grades for the clerkship have been based in part on performance in the labs. The UF College of Medicine recently gave Shaw and Tan a \$5,000 grant to buy additional equipment for the lab sessions.

In the first surgical simulation lab, students must use three basic stitches they've learned in the lab and a surgical stapler to sew a cut piece of bowel. The idea is to simulate the task of connecting two ends of bowel after cutting out a middle portion, perhaps to remove cancer. Students must fill the sewn piece of bowel with water to test their work.

The second lab requires students to perform simple surgical tasks at seven different stations. Each station is set up with tools, including a laparoscope — a long, thin tube inserted through a small incision during minimally invasive surgery. A small camera on the end of the laparoscope allows surgeons to see inside the body without creating a large incision. Students will use the laparoscopes to view their work as they cut a rope, make a cut in the shape of a circle and complete other tasks inside simulation dummies.

Ultimately, the goal is to draw more students into surgical careers, Tan said. UF medical students also can learn about the field of surgery through the Surgical Interest Group, a club that meets regularly and includes lessons on suturing and other aspects of a surgical career.



MARIA FARIAS/UF&SHANDS COMMUNICATIONS

Dr. Sanda Tan (center) works with medical students in a surgical simulation lab.

## Tablet Computers Simplify Residents' Resource Access

UF surgical residents have gone high-tech with their studies.

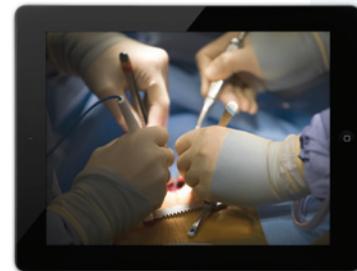
**Christiana Shaw, MD, MS**, and **Sanda Tan, MD, PhD**, both assistant professors in the department of surgery's division of general surgery, are using a professional development grant from the department to provide residents in their second through fifth years of clinical training with Apple iPads. The tablets are meant to make it easier for residents to access a wide variety of educational materials that will enhance their training, Tan said.

The devices should help residents make better use of study materials while they are on the go with very busy schedules.

Now, in addition to watching surgeons perform a procedure and then reading about it in a textbook, residents also can view videos with supplemental information. The tablets will have electronic versions of journal articles pertinent to residents' training, as well as textbooks.

Before receiving the tablets, each participating resident completed a questionnaire. Residents will complete a second questionnaire when they graduate from the program. Shaw and Tan plan to use the survey results to evaluate the tablets' effect on residents' educational experiences.

Tan said a website where faculty can post content specifically for residents to view using their tablets is a work-in-progress, and should make the tablets even more helpful once it is more fully developed.



# The Stitch

[surgery.med.ufl.edu](http://surgery.med.ufl.edu)

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