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THE UNIVERSITY OF FLORIDA DEPARTMENT OF SURGERY

COVER STORY

UF Health Opens Hybrid
OR for Trauma Patients

- 2 | SRTR Report Shows Favorable Outcomes for UF Health's Kidney Transplant Program
- 2 | From the Chair
- 3 | UF Department of Surgery Offers Specialized Training for Physician Assistants
- 4 | Burn Survivor Resumes Life as an Active Teenager
- 5 | George J. Arnaoutakis, MD, Joins Division of Thoracic and Cardiovascular Surgery
- 5 | Martin R. Back, MD, Joins Division of Thoracic and Cardiovascular Surgery
- 6 | UF Health Advanced Heart Failure and Heart Transplant Program: Outcomes Report FY16



UF Health Opens Hybrid OR for Trauma Patients

University of Florida Health Shands Hospital recently opened a new hybrid OR suite dedicated to trauma cases. The room integrates a standard operating room with interventional radiology equipment to allow for faster assessment and treatment of trauma patients.

“This is a highly unique resource. Very few trauma centers have a hybrid OR,” said Frederick A. Moore, MD, a professor and chief of acute care surgery in the University of Florida College of Medicine’s department of surgery.

In the hybrid OR, the trauma team can perform interventional radiology procedures like resuscitative endovascular balloon occlusion of the aorta, as well as angiographic embolization for pelvic bleeding and liver and spleen injuries.

“In one room, we can care for a complicated patient with

multisystem trauma who may require multiple procedures,” said R. Stephen Smith, MD, RDMS, FACS, a professor of acute care surgery in the UF College of Medicine. “It can be risky to move a patient who is that injured or ill from one location to another — even if the rooms are very close.”

The team can also obtain radiographic images of the patient’s brain to “rule out or rule in a traumatic brain injury to more quickly route the patient to the appropriate level of care,” said Chasen Croft, MD, an assistant professor of acute care surgery.

“We already have an excellent trauma program. We want to be at the leading edge and offer the best care to patients. Having the hybrid trauma OR is one step in that process,” Smith said.

Moore added that trauma staff will work together to optimize the integration of multiple specialists who treat patients in the hybrid OR. The new OR will also serve as a resource for “young trauma surgeons to learn and participate in new interventions as they emerge,” he said.

Smith and Croft said they are researching methods to study the impact of hybrid trauma ORs on patient outcomes.

“We expect that will come in the next year or two,” Smith said.



SRTR Report Shows Favorable Outcomes for UF Health's Kidney Transplant Program

UF Health's kidney transplant program has demonstrated favorable outcomes, according to a recent report from the Scientific Registry of Transplant Recipients, or SRTR.

The results, released in January by SRTR, a database operated by the Minneapolis Medical Research Foundation that analyzes organ transplantation nationwide, measured transplant outcomes over a 30-month period. According to SRTR's Program-Specific Report, 179 adult patients received kidney transplants between July 1, 2013, and Dec. 31, 2015, at UF Health Shands Hospital. The analysis showed 97.8 percent of those patients were alive with a functioning transplant at the one-year mark; the expected rate for UF Health was 95.2 percent.

At UF Health, kidney transplant rates are higher than the national average — 19 out of 100 people per year, compared to 17.4 people out of 100 nationally. Patients here also spent less time on the waiting list than the nationwide average. Within three years, 38.5 percent of UF Health patients received a kidney transplant, compared with 22.6 percent of patients nationally, according to the SRTR report.

The registry releases its program-specific reports every six months. In January, a five-tier system was released for the first time by the SRTR. UF Health's kidney transplant program was one of the top programs in the country at tier five. The standard evaluation system by SRTR looks only at actual compared to expected patient and graft survival. In those traditional measurements, UF Health's kidney program was numerically better, but statistically as expected.

"Close care of patients as they both await transplant and after transplant is paramount for good patient outcomes. The

transplant surgical event also needs to be as complication-free as possible to give both the patients and their new organs the best start possible," said Kenneth Andreoni, MD, an associate professor and chief of the division of transplantation surgery at the UF College of Medicine. Andreoni oversees the division's kidney, liver and pancreas transplantation program.

"We have emphasized very close yearly examination of patients on the waiting list for transplant. These patients have many medical diseases and need to be ready at any moment for a transplant offer," Andreoni said. "We also stress close follow-up after surgery to help with patient medication understanding and compliance."

Over the past five years, UF Health's solid organ transplant programs — including kidney — have aggressively undergone quality improvement, noted Andreoni and Karl Womer, MD, the medical director of UF's adult kidney transplant program.

Among the improvements is the establishment of a solid organ transplant core quality committee that oversees each of UF's individual organ-specific committees, or OSCs.

"Our kidney and pancreas OSC is composed of adult and pediatric transplant specialists and truly encompasses the wide range of health care professionals involved in this complex patient care service," Andreoni said.

Strong outcomes reflect a multidisciplinary approach to patient care that draws on the combined experience of transplant physicians, transplant surgeons, nurse coordinators, transplant assistants, social workers, financial counselors, transplant pharmacists, immunogeneticists, anesthesiologists, intensivists and psychologists, noted Womer, who is also a professor in the UF College of Medicine's division of nephrology, hypertension and renal transplantation.

"This multidisciplinary approach ensures that several team members with complementary skills work together to provide the best care possible for our patients. Furthermore, other centers may follow a kidney transplant patient only for a number of months. At UF Health, we follow our patients for life," Womer said.

UF Health just celebrated its 50th anniversary of kidney transplantation, having established its transplant program in 1966. Since then, surgeons at the UF Health Shands Transplant Center have performed more than 4,500 kidney transplants, including 800 from living donors.

SRTR introduced its five-tier outcome assessments in December 2016. In February, however, the Human Resources and Services Administration, or HRSA, requested that the agency revert to its original three-tier system to allow time for feedback and comments.

"In response to feedback received from members of the transplant community regarding the lack of adequate time to review the new five-tier rating system prior to implementation, HRSA requested that SRTR transfer the five-tier rating to an alternate, publicly available beta site (beta.srtr.org) to undergo further review and identification of areas for improvement," SRTR stated.

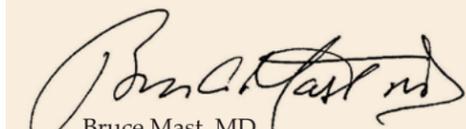
What's happening within the UF Department of Surgery? The short answer is, "a lot."

On Feb. 17, 2017, the department celebrated its 60th anniversary, as one of the oldest in the University of Florida College of Medicine. A lovely gala was held, during which memorabilia from the department's history were displayed, and photos and slides of past and present faculty, staff and residents were projected. Invited speakers discussed the values and legacy of the department: innovative patient care, high-level education and leading-edge research. More than 200 staff, colleagues, faculty, residents and friends attended the celebration. It was a wonderful event commemorating the accomplishments of a large number of dedicated people.

The search for a chair of the Department of Surgery continues, under the direction of Timothy C. Flynn, MD, the senior associate dean for clinical affairs at the UF College of Medicine. Approximately 50 applications were received for the position, from which 15 candidates are being interviewed. These individuals come from all over the country and represent a variety of experiences, accomplishments and skills. A second round of interviews will begin for those candidates attracting the greatest consideration. The search committee is looking for a candidate who has the right skills and experiences and the correct "fit" for the department and the UF College of Medicine.

In the meantime, the department continues to forge ahead. Faculty remain busy taking care of patients who come to us from throughout the state and the country. All quality metrics remain high, despite taking care of complex patients with difficult problems. Research continues, in the lab and at bedside, with hopes for findings that will impact the care of patients in the future. Faculty recruitment continues, aiming to bring the brightest and most talented surgeons to our department. To that end, we have made many significant hires in the past few months.

The department of surgery continues to be vibrant, strong and dedicated to the health of those in our community and beyond, while educating the next generation of doctors and surgeons, and engaging in impactful research.


Bruce Mast, MD
Interim Chair



Click here to view photos and videos of the **department of surgery's 60th anniversary celebration.**

UF Department of Surgery Offers Specialized Training for Physician Assistants

The University of Florida is among a handful of educational institutions nationwide offering a specialized surgery residency for physician assistants, or PAs.

“Students may graduate from physician assistant school and want to practice in surgery, but it’s a daunting prospect. They might have done a six-week surgical rotation during their entire training as a physician assistant,” said Steven J. Hughes, MD, a professor of surgery and chief of the division of general surgery at the UF College of Medicine.

UF’s PA surgical residency is an intensive 12-month program that accepts four physician assistants each year. Residents complete six- to seven-week clinical rotations through several divisions — acute care, cardiothoracic, general, pediatric, transplant and vascular surgery, as well as an elective rotation in any division within the department of surgery or

neurosurgery, otolaryngology or urology. Clinical teaching is augmented with an intensive didactic and simulation curriculum.

“There is a challenge in bringing PAs on board in surgery. Many are still in need of training, and it can take at least six months to gain on-the-job experience,” said

George Sarosi, MD, the Robert H. Hux Professor in the UF College of Medicine’s division of general surgery. “Graduates from a PA surgical residency come on board with the crucial training and skills.”

PA programs successfully train physician assistants, but the students receive a generalist education, said Ralph Rice, DHSc, PA-C, director of the UF School of Physician Assistant Studies. “UF’s PA surgical residency affords interested students an opportunity to learn the art and science behind the surgery,” he said.

“I gained the confidence, skill set and knowledge base to succeed as a PA in the surgical ICU.”

— CHRISTA CAMPBELL, PA-C



Students gain exposure assisting in the operating room and treating patients in the hospital and outpatient practices. “They become an integral part of our surgical teams,” said Atif Iqbal, MD, an assistant professor of acute care surgery in the UF College of Medicine and the program director of the UF PA residency.

PA residents are inserted “shoulder to shoulder” with first-year surgical residents, Hughes noted. “Both handle a significant amount of day-to-day patient management — minute-to-minute assessment of patient well-being and disposition and care planning. They play vital roles in treatment consistency,” he said.

Christa Campbell, PA-C, who completed her residency in March 2016, now works on the surgical critical care unit at UF Health Shands Hospital.

“I liked that I was able to independently perform procedures and participate in the interdisciplinary collaboration with all of the teams in order to take care of these complex patients,” she said. “I gained the confidence, skill set and knowledge base to succeed as a PA in the surgical ICU.”

Additionally, PAs — and their nurse practitioner, or NP, colleagues — can help fill a crucial gap in patient care, Iqbal said. He hopes that UF will expand the PA residency program to accommodate the increasing number of applicants.

“Residents have growing restrictions on their work hours, but their responsibilities and training requirements are increasing. Faculty are also working harder, but are limited by the number of hours in a day. Increasing focus on health care expenditures and decreasing resources and reimbursements nationally means that everyone has to work more each year to maintain productivity,” Iqbal noted.

“With that crunch, we need more clinicians to fill the widening gap. We want to ensure that they are well-positioned, educated and poised to be an integral part of the team.”

Burn Survivor Resumes Life as an Active Teenager

Tyrone Crawford Jr. loves sports. Coming from an athletic family, the Tallahassee teenager played his first football game at age 6. It was a passion that would continue through his middle and high school years.



But after a serious car accident left him with burns across 45 percent of his body, he feared he would never play his favorite sport again.

Tyrone, then 14, was returning from a day of crab fishing in the Gulf of Mexico on May 19, 2013, when the car he was riding in slammed into a utility pole, causing downed electrical wires to drape over the vehicle, according to his father, Tyrone Crawford Sr. As the teen got out of the vehicle, he brushed up against a live wire.

Tyrone Sr. said his son was rushed via ambulance to a local hospital. Given the extent of his injuries from the electric shock, the teen was brought to UF Health Shands Hospital by helicopter for specialized pediatric trauma care.

“His injuries were very severe. He had third-degree flame and electrical burns across his chest, abdomen and both legs,” said pediatric surgeon Shawn Larson, MD, an assistant professor of surgery in the UF College of Medicine. Eventually, the teen’s left leg below the knee was amputated because of the burn injury.

Tyrone Jr. underwent numerous surgeries, including skin grafts and wound debridement. Because of the extent and size of the burns, surgeons had to take numerous grafts of skin from his back.

“He had months of healing ahead of him,” Larson said.

Larson obtained special approval to use a technique that would speed Tyrone Jr.’s healing time. A lab in New England essentially “grew” skin from samples of the teenager’s own tissue to use as skin grafts across the burned areas. Larson estimated the specialized technique decreased Tyrone Jr.’s healing time by three to four months.

Four months, nine days and numerous surgeries later, Tyrone Jr. was finally discharged from the hospital, including two weeks at UF Health Shands Rehab Hospital, where he underwent occupational, recreational and physical therapy.

Larson said Tyrone Sr. played a large role in his son’s recovery. He slept by his son’s bedside every night, only leaving for an hour or two at a time to shower and change clothes. He made sure his son was up and out of bed, ready for each therapy session.

“The nurses and doctors took very good care of me. I had my bad days, but they were good people who treated me well,” Tyrone Jr. said.

His father agreed. “All of the staff on the burn unit were so patient with my son. They really did everything they could to get him better.”

Approximately one year after Tyrone Jr. was discharged from the hospital, he got a specialized high-impact sports prosthesis and he was back to his normal routine.

“Football was a little bit of a challenge at first,” he said. “It was just great being back out on the field and playing again.”

He has since graduated from high school and is now attending a three-year educational program in Georgia.

“I am happy that my son is back on his feet and off on his own,” Tyrone Sr. said



Tyrone Crawford Sr. (left) and Tyrone Crawford Jr.

George J. Arnaoutakis, MD, Joins Division of Thoracic and Cardiovascular Surgery

George J. Arnaoutakis, MD, has joined the division of thoracic and cardiovascular surgery in the University of Florida College of Medicine. He is an assistant professor.



Arnaoutakis earned his undergraduate degree from Columbia University and his medical degree from the UF College of Medicine. He completed his general surgery residency and a postdoctoral research fellowship in cardiac surgery at The Johns Hopkins University School of Medicine, where he also served as an administrative chief resident. Additionally, he completed fellowships in cardiothoracic surgery and advanced aortic procedures at the Perelman School of Medicine at the University of Pennsylvania in Philadelphia.

Arnaoutakis' clinical interests include coronary artery bypass graft, aortic valve repair, bicuspid aortic valve syndrome, valve-sparing root replacement, aortic arch disease, thoracoabdominal aortic aneurysm and aortic dissection. His research interests include cardiac surgery-related acute kidney injury, cerebral protection in aortic arch reconstruction, biomarkers for organ injury after cardiac surgery, national databases in cardiothoracic surgery, and bicuspid aortic valve repair.

Arnaoutakis is a member of the American College of Surgeons; the American Medical Association; the International Society for Heart and Lung Transplantation; the Society of Thoracic Surgeons, or STS; and the STS Database Task Force on Longitudinal Follow-up and External Linkages.

Additionally, Arnaoutakis has presented at national meetings, and authored more than 70 peer-reviewed articles and several book chapters.

Martin R. Back, MD, Joins Division of Thoracic and Cardiovascular Surgery

Martin R. Back, MD, MS, RVT, PVI, has joined the University of Florida Department of Surgery as a professor in the division of vascular surgery and endovascular therapy.



Back was previously a professor of surgery at the University of South Florida Morsani College of Medicine. He also served as the chief of vascular surgery at James A. Haley Veterans Hospital, as well as the co-director of the noninvasive vascular laboratories at the James Haley VA and the USF division of vascular and endovascular surgery.

Back earned his medical degree from the University of California, Los Angeles. He completed his general surgery residency at Harbor-UCLA Medical Center and a peripheral vascular surgery fellowship at the University of Florida College of Medicine.

Back is a fellow of the American College of Surgeons. He is also a member of several professional societies and associations, including the Society for Vascular Surgery, Southern Association for Vascular Surgery, Society of University Surgeons and Association of VA Surgeons. He has served as president of the Peripheral Vascular Surgery Society, now nationally known as the Vascular and Endovascular Surgery Society, and the Florida Vascular Society.

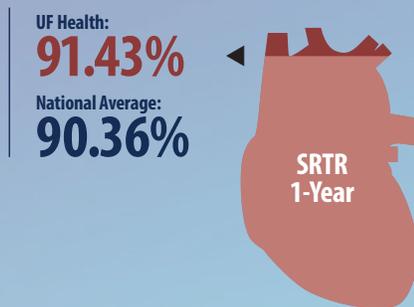
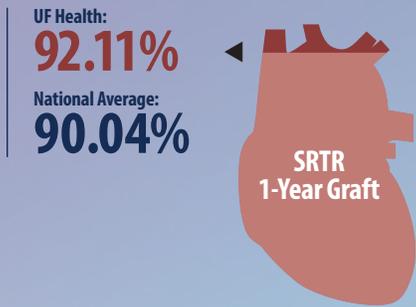
Additionally, Back serves on the board of directors and executive committee of the Society for Vascular Surgery and on the editorial board of the journal *Vascular and Endovascular Surgery*.

His clinical and research interests include aortic disease (complex endovascular and open surgical interventions for abdominal and thoracic aortic pathologies); lower limb ischemia and peripheral vascular disease (open and endovascular procedures for limb salvage); cerebrovascular disease (complex open and endovascular management of occlusive lesions); renal and mesenteric vascular diseases (open and endovascular interventions); complex nonatherosclerotic vascular disorders (thoracic outlet syndrome, arteritis and hemodialysis access complications); and the expanded role for duplex ultrasonography in vascular intervention planning, intraprocedural assessment and post-intervention surveillance.

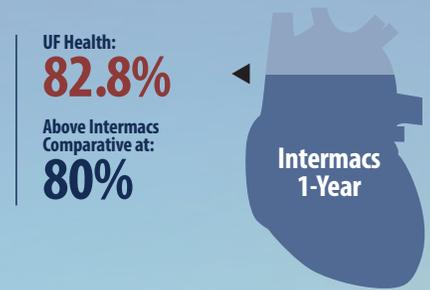
Back has more than 100 publications in peer-reviewed vascular journals and more than 20 chapters in vascular textbooks.

UF Health Advanced Heart Failure and Heart Transplant Program Receives Excellent Outcomes for FY 2016

Transplant Survival Rates:

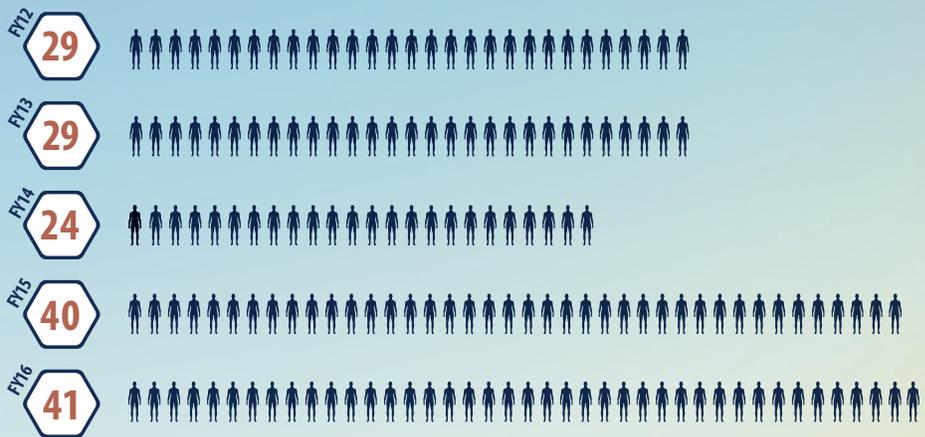


VAD Survival Rates:



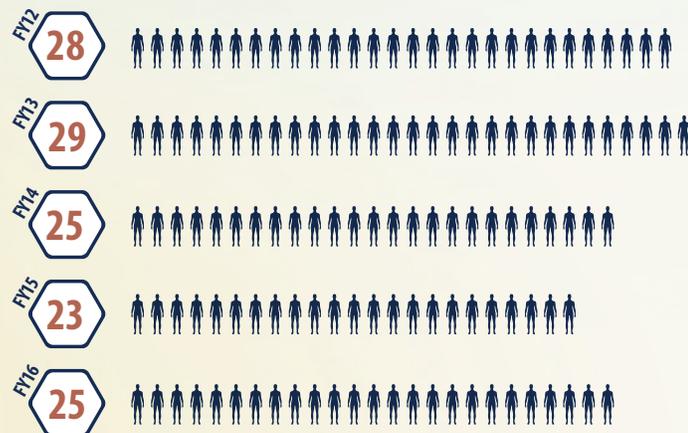
Heart Transplants:

The UF Health heart transplant team performed its first heart transplant in 1985. Since then, we have completed more than 1,000 transplants. Our comprehensive heart failure program includes cardiologists, surgeons and program coordinators all working together to improve the lives of patients with heart failure. We offer advanced medical treatments in an efficient and compassionate setting. We also act as a resource to physicians and other health care providers when caring for heart failure patients and promote improvements in the science and caring for patients with a failing heart.



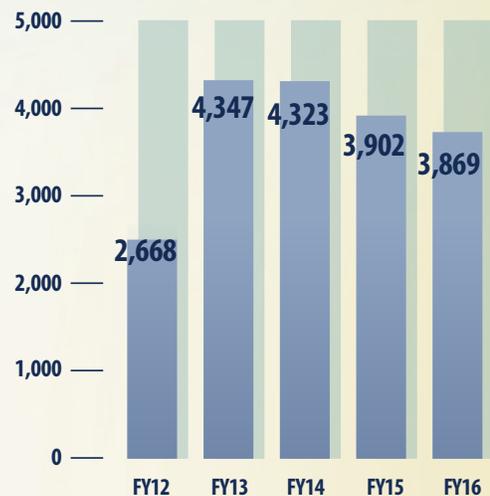
VAD Procedures:

The UF Health ventricular assist program brings together an expert team of cardiologists, cardiovascular surgeons and program coordinators dedicated to helping advanced heart failure patients. We currently implant several types of VADs, each with its own specific clinical indication, either as a bridge to transplant or destination therapy. We offer a comfortable, convenient, patient-focused evaluation process to determine whether each patient is a candidate for VAD placement and which therapy will be most successful.



Heart Failure Outpatient Visits:

The UF Health heart failure team offers a multidisciplinary approach for the management of advanced heart failure and individualized care plans that best meet the needs of our patients. We offer state-of-the-art therapies, including transplantation, mechanical circulatory support devices, advanced therapies for elderly patients and investigational therapies, such as stem cell and gene therapies.



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surgery.med.ufl.edu

WRITER/EDITOR

Karin Lillis | 352.273.6387

EDITOR

Katrina McAfee | 352.265.0646

PHOTOGRAPHY

Jesse S. Jones

Mindy Miller

DESIGN

Indigo Design

UF DEPARTMENT OF SURGERY

Bruce Mast, MD, Interim Chair

Administrative Offices:

352.265.0646

Patient Appointments/Referrals:

352.265.0535

Research Office:

352.265.0494

GENERAL SURGERY

Steven Hughes, MD, Chief

- Acute Care Surgery
Frederick Moore, MD, Chief
- Gastrointestinal Surgery
Steven Hughes, MD, Chief
- Surgical Oncology
Steven Hughes, MD, Interim Chief

PEDIATRIC SURGERY

Saleem Islam, MD, MPH, Chief

PLASTIC AND RECONSTRUCTIVE SURGERY

Bruce Mast, MD, Chief

THORACIC AND CARDIOVASCULAR SURGERY

Thomas Beaver, MD, MPH, Chief

TRANSPLANTATION SURGERY

Kenneth Andreoni, MD, Chief

VASCULAR SURGERY AND ENDOVASCULAR THERAPY

Thomas Huber, MD, PhD, Chief

RESEARCH LABORATORIES

Lyle Moldawer, PhD, Vice Chair