



EMORY
UNIVERSITY
SCHOOL OF
MEDICINE

Department of Surgery

EMORY

Division of Cardiothoracic Surgery

ANNUAL ALUMNI NEWSLETTER

2023 YEAR IN REVIEW



Department of Surgery

Dear Friends and Colleagues,

Welcome to our fifth annual Emory Cardiothoracic Surgery alumni newsletter, where we'll share the latest exciting updates from across our Division.

To begin, let's celebrate how our cardiothoracic training program is one of the most successful and long-standing in the country, offering several pathways into the field. We have the traditional pathway for residents completing general surgery residency programs, as well as a thoracic track option for surgeons focused on general thoracic surgery. We also have an integrated six-year pathway for medical students to directly enter into cardiothoracic residency. And finally, we just recently added the 4+3 pathway through our general surgery program. This fast-track paradigm offers a 3-year program after completion of a general surgery residency.

Next, it is my pleasure to introduce you to our graduating class of 2023. Emerging successfully from our integrated six-year program are Maureen McKiernan, MD, and John Murray, MD. McKiernan has continued her training as a congenital fellow at Children's Healthcare of Atlanta, while Murray recently joined the faculty at the University of Tennessee in Knoxville.

Also graduating were Alicia Bonanno, MD, and Jonathan Zurcher, MD, from our traditional three-year program. Bonanno has joined our thoracic surgery faculty here at Emory and Zurcher is completing an Advanced Aortic Fellowship at Emory and will be joining the faculty next year.

I would like to personally thank all of you who continue to support our efforts through your contributions to the Cardiothoracic Surgery, Research, Education, and Program Development Fund. Your generosity not only helps support our training programs and research but is vital to sustaining our division's mission.

We take great pride in our alumni and enjoy hearing from you. Please stay engaged and keep us up to date on your personal and professional success.

Sincerely,

Michael E. Halkos
Chief and Professor of Cardiothoracic Surgery
Emory University School of Medicine



NEW FACULTY



Hai Dong, PhD

Hai Dong, PhD, is an incoming assistant professor in the Division of Cardiothoracic Surgery at Emory University. His current research focuses on the biomechanics of cardiovascular tissues and cardiovascular diseases at the Georgia Institute of Technology. He received his PhD in Solid Mechanics from Peking University in 2016. Additional research interests include risk prediction of aortic aneurysm/dissection, growth modeling of aortic tissues, and constitutive models of cardiovascular tissues.

For the last two years, Dong has collaborated with Brad Leshnowar, MD, on the National Institutes of Health R01 grant. Leshnowar leads a multi-disciplinary group from Emory and Georgia Tech to use clinical and engineering analysis to create a risk stratification model for patients presenting with acute uncomplicated type B aortic dissection. The primary objective of the project is to develop a novel, personalized machine-learning model for predicting those patients with acute uncomplicated type B dissection that would most likely fail optimal medical therapy and benefit instead from endovascular treatment.

In addition to his efforts with this project, Dong will be collaborating with Leshnowar on investigating novel predictors of thoracic aortic aneurysm rupture in Marfan patients and in

future projects examining aortic stiffness and its role on adverse cardiovascular remodeling.



Alicia Bonanno, MD

Alicia Bonanno, MD, joins our faculty as an assistant professor of surgery after completing her cardiothoracic surgery fellowship here at Emory. She completed her medical degree at the University of South Carolina in Columbia, South Carolina. She then completed her general surgery residency at Oregon Health and Science University in Portland, Oregon.

Bonanno's primary clinical focus is general thoracic surgery with particular interest in thoracic oncology, esophageal surgery, and robotic thoracic surgery. She is currently an associate program director for the cardiothoracic surgery residency at Emory University. Her research interests include surgical education research and outcomes in thoracic oncology.

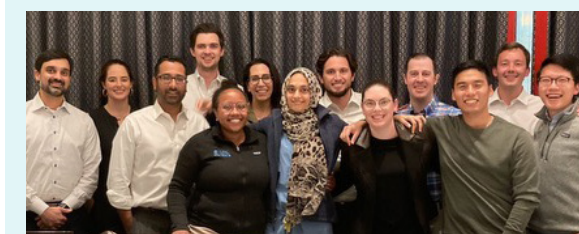
DEPARTING FACULTY



Allan Pickens, MD

Allan Pickens, MD, joined the faculty at Emory in 2008 after a four-year tenure at the University of Michigan. During his time at Emory, Pickens served as director of thoracic oncology, program director for cardiothoracic surgery, and medical director of perioperative services at Emory University Hospital Midtown (EUHM).

Pickens recently joined the faculty at Vanderbilt University in Nashville, Tennessee, where he serves as a professor of surgery.



2023 DIVISION AWARD WINNERS

Robert A. Guyton, MD Outstanding Chief Resident:
Jonathan Zurcher, MD

Outstanding Junior Resident:
Alexander Nissen, MD

Kamal Mansour, MD Teaching Award:
Brad Leshnowar, MD

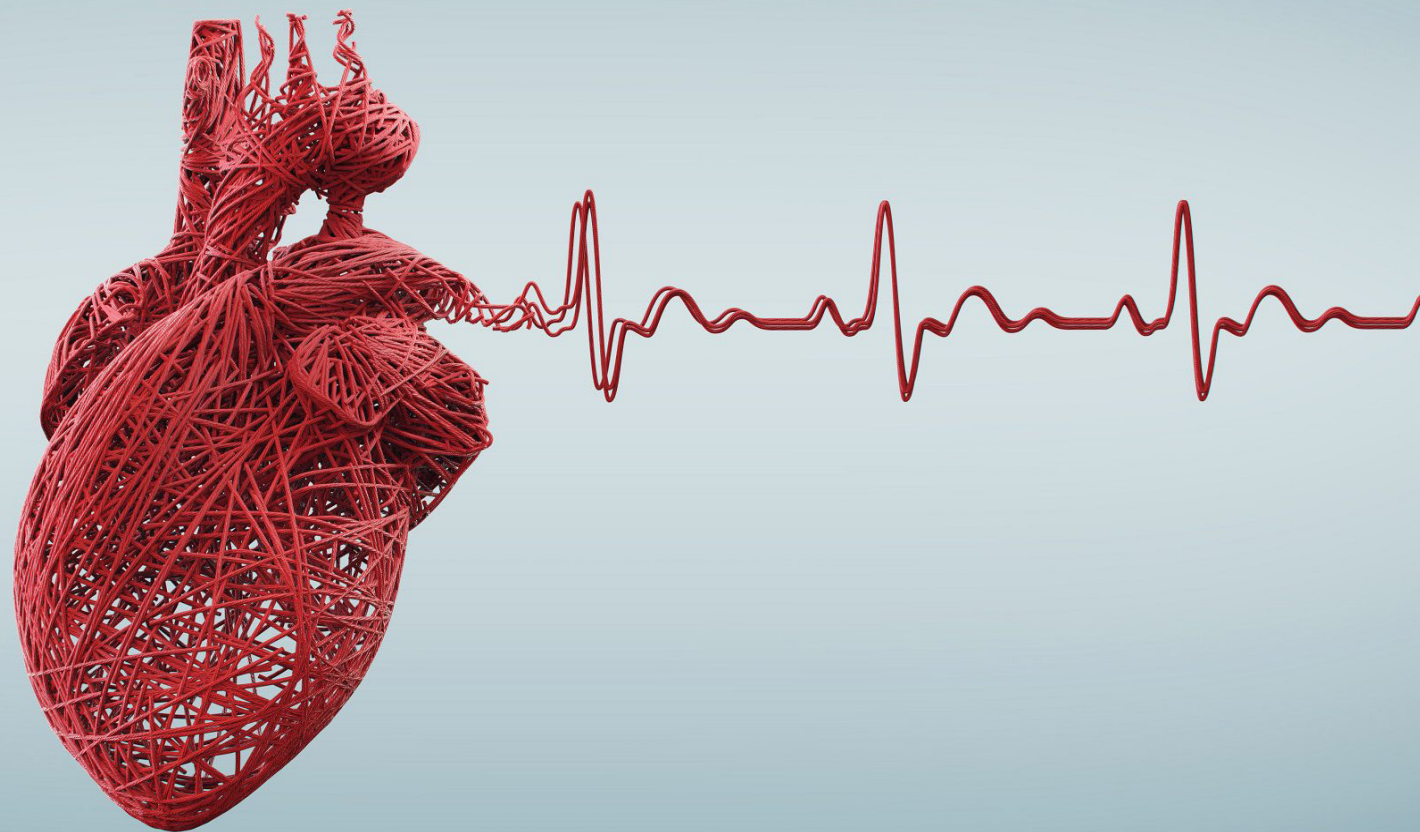
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Scan here to donate to the **Robert Guyton Resident Education Fund**



SCAN ME



Emory heart team implants 500th lifesaving left ventricular assist device

On July 29, a team from Emory's Heart and Vascular Center completed its 500th continuous flow, durable left ventricular assist device (LVAD) implantation, further affirming Emory Healthcare's status as a national leader in the life-saving procedure.

This year alone, surgeons from Emory's advanced heart failure team had implanted almost 60 devices by August, a number that has continued to climb steadily since. Currently, Emory Healthcare is the number one LVAD implanting center in the United States.

First used in the 1960s, the ventricular assist device — which has since gone through significant evolution, particularly over the last 20 years — supplies mechanical circulatory support by pumping blood from the ventricles, or lower chambers of the heart, to the rest of the body. Because the device is almost always placed on the left side of the heart, the device is frequently referred to as an LVAD, rather than VAD.

When a patient's heart has gone into end-stage failure, but they don't qualify for a transplant, or if it will take too much time to get a transplant, an LVAD provides an alternative course of action that often makes the difference between life and death.

This recent milestone signals an increased capacity to continue offering the consistent and comprehensive quality care that has long drawn heart failure patients to Emory from across the Southeast. Kris Wittersheim, ventricular assist device coordinator at Emory University Hospital, says it's not unusual for them to see patients from southern Georgia cities like Savannah or Valdosta or neighboring states South Carolina, Alabama and Tennessee.

These procedure's pace, volume and quality are also a testament to how technological innovations and critical additions to the surgical team have rapidly accelerated how many heart failure patients can receive crucial intervention.

Cardiothoracic surgeon Tamer Attia, MD, PhD, says the process of first determining that an LVAD is the patient's best option requires a collaborative effort among a wide variety of specialties and skill sets. That multidisciplinary team of 30-40 medical professionals encompasses surgeons, transplant cardiologists, VAD coordinators, pharmacists, nutritionists, social workers, infectious disease experts and palliative care specialists — all to evaluate the best course of action for an extremely sick patient.

Depending on how dire the patient's situation is, the operation, which can take 5-7 hours, may occur within days of admission to hospital with heart failure symptoms. As with any surgery, there are risks, such as the potential for stroke or infections. But around 90% of the patients are alive one year later and most do well, Attia says — and without the procedure, odds of survival are often slim.

Once the surgery has been completed successfully, the next six weeks require that the patient have a family member or friend who is committed to looking after them 24/7. Therefore, the designated caretakers also undergo extensive training with the Emory team on taking care of their loved ones.

Getting back on one's feet afterward can take some time. In general, most patients stay in the hospital two to three weeks from the day of the surgery. Recovery on the quicker side can take at least three months, though often more. Most LVAD patients may have been in the hospital for a while, so there is a reacclimating period to "regular life," says Lakshmi Sridharan, MD, a heart failure and transplant cardiologist with Emory's Heart and Vascular Center.

Sridharan has counseled many patients before, during and after the LVAD procedure. Sometimes the consultation process beforehand can be a delicate process. While the patient certainly knows this is something that will help keep them from dying, they may not yet fully understand what the device does or how it works. So, the medical team needs to take extra care to explain thoroughly how this will become a

major part of their lives moving forward.

After all, this piece of equipment — on a practical level — can change how you look, feel and move. Essentially, it's high-tech machinery that emerges below the ribs and above the belly button and needs to be plugged in at night to keep you alive.

"I always tell my patients that it takes a long time to heal from an open-heart surgery, and it takes a while to get back to yourself," Sridharan said. "It changes a lot — you can't go swimming anymore; you can't be submerged in water anymore. You have to carry the weight (around 7 pounds) around. That is a lot. We reassure them and let them know it can take some time to adjust."

Some patients have asked Sridharan whether they'll ever be able to dress up nicely to go out again. Thankfully, strides have been taken to create a sense of normalcy for LVAD recipients on a day-to-day level. Some innovations specifically designed for LVAD patients include a vest that goes under clothing or a carrier that looks like a purse.

As a result of the comprehensive and intense journey required of their patients, the advanced heart failure team often develops close relationships with those they've helped. Sridharan remembers finding ways for one patient to see their dog in the hospital "because that's what they need to be mentally strong enough to go through the surgery." She's also been in situations where they found a way for a patient to wave through a window at their family during the pandemic, a time when absolutely nothing slowed down in the VAD center.

"We say that we're advanced heart failure doctors, but in some ways, we become their primary care, friends and family. When it's a life-or-death situation, they are at their most vulnerable," Sridharan said. "It's so important to understand their support structure, who they rely on what their coping mechanisms are, and to talk to them on their terms."

Story by Alexis Hauk, Director of Communications, Emory Heart and Vascular Center- Emory News Center



EMORY SURGEONS MAKE A MARK ON PERSEVERE AMDS STUDY



The Emory Aortic Center is helping to lead the way on a clinical trial that could have lifesaving implications in the operating room. A team of Emory faculty led by Brad Leshnow, MD, and including Woody Farrington, MD, and Brent Keeling, MD, began implantation of the PERSEVERE AMDS (formerly known as the Ascyrus Medical dissection stent) devices in patients with acute DeBakey type I aortic dissections, a life-threatening condition with high mortality rates.

The first device was implanted by Farrington on May 10, 2023, followed by a second implantation on May 23 by Leshnow. As of July 2023, there have been a total of five implanted devices by the team at Emory, ranking third in enrollment across all study participants.

The PERSEVERE AMDS study stands for a ProspEctive, Single ARm, Multi-center Clinical InveStigation to EValuatE the Safety and Effectiveness of AMDS in the TREatment of Acute DeBakey Type I Dissection. The study is sponsored by Artivion, an Atlanta-based medical device company that focuses on aortic technologies.

PERSEVERE devices are fabric-less stent graft implantations that are placed during a type A dissection in patients with malperfusion, an abnormality with the blood flow to the brain or any of the abdominal organs. The device is implanted at the start of surgery, which expands the true lumen of the dissection, allowing blood to flow through its normal pathway, improving on downstream malperfusion. Implantation is fairly easy, with minimal added time to the operation, and can be lifesaving for patients experiencing malperfusion.

“Type A (dissection) is a surgical emergency from the cardiac standpoint, and the mortality of a type A dissection is about 50% if left untreated within the first 48 hours,” says Farrington.

Early results at Emory have been positive so far, although the study’s final data will not be available for several more years. However, longer-term data from studies in Europe and Canada have also been favorable.

With just 20 centers working on the study nationally, Emory is the only medical center taking part in Georgia and one of four centers across the South, with other regional centers in Florida, South Carolina, and Texas.

“It’s a fairly easy device to deploy and we’ve gotten fairly good short-term results,” says Farrington. “We haven’t had any misdeployments and patients that have come in with malperfusion have benefited. Overall, the long-term data evaluations are still very early but I think that with the success in other countries, this is going to be a study that ultimately provides benefits to a very sick group of patients.”



Emory creates new complex airway program

A new multidisciplinary team based out of EUHM now offers advanced care and treatment of complex airway issues, a first of its kind in Atlanta. This collaborative effort includes a team of thoracic surgeons led by Onkar Khullar, MD, as well as physicians from interventional pulmonary, otolaryngology in conjunction with the Emory Voice Center, and speech pathology.

This new program treats a wide variety of issues including tracheal stenosis, tumors/cancer, tracheomalacia, dynamic airway collapse, and tracheoesophageal fistulas. Treatment options include dilation and stenting, laser therapies, as well as advanced surgical options. Emory is the first and remains the only hospital in Georgia to offer robotic tracheobronchoplasty to repair and strengthen the trachea for patients with tracheobronchomalacia.

The multidisciplinary team convenes monthly to discuss difficult cases. For appropriate patients, same-day visits can be coordinated with all services.

Emory Saint Joseph’s Hospital recognized as Mitral Valve Repair Reference Center

The American Heart Association (AHA) and The Mitral Foundation have once again designated Emory Saint Joseph’s Hospital as a Mitral Valve Repair Reference Center, a recognition awarded to high volume mitral valve repair centers that have shown excellence in clinical outcomes and performance in mitral valve repairs.

In 2021 Emory Saint Joseph’s Hospital became the first hospital in the southeast to receive this designation.

“This is a well-deserved recognition from The Mitral Foundation and the American Heart Association. We have developed highly specialized teams to provide the best care possible to patients with mitral valve disease,” says Michael Halkos, MD, Chief of the Emory Division of Cardiothoracic Surgery. “Emory Saint Joseph’s has long been recognized as a premier mitral valve repair center with one of the highest volume and best quality programs in the country. Patients routinely travel from all over the United States to have their mitral valve surgery at Emory.”

In order to receive the designation, a hospital must perform at least 50 index mitral valve repair procedures per year for the most recent three years and have at least

one surgeon who has performed a minimum of 25 index mitral valve repair procedures per year for the most recent two years. More than 200 surgical repairs were performed at Emory Saint Joseph’s Hospital last year.

“This is a tribute to the teamwork of the cardiac surgical service at Emory Saint Joseph’s Hospital. Nurses, perfusionists, anesthesia team members, surgeons and clinical staff make results like these possible,” says Douglas Murphy, MD, Medical Director of surgical robotics at Emory Saint Joseph’s Hospital. Murphy has performed thousands of mitral valve repairs over the years.

The AHA and the Mitral Foundation established the designation in an effort to establish destination referral centers of excellence for patients with primary mitral regurgitation.



IN MEMORY

REMEMBERING SYLVIA CLEOPATRA
"CLEO" SIDAROS MANSOUR

Sylvia Cleopatra "Cleo" Sidaros Mansour died on January 8, 2023. She was the wife of the late Kamal Mansour, MD, an Emory Department of Surgery faculty member for 48 years, affectionately dubbed "The Professor" by generations of Emory residents.

Sylvia Mansour was born on August 15, 1932 in Teufen, Switzerland to Berta Müller and Nicolas Sidaros. Her father, educated in Birmingham, England, held a post in the Egyptian Ministry of Education, and her mother came to Egypt as a missionary. Her childhood was spent in Egypt with her parents, and then later she lived in Switzerland with her aunt Emmi Müller and grandmother, Anna Müller, attending the University of St. Gallen and the University of Zurich.

After graduating from college with a degree in medical technology, she returned to Egypt and worked for the U.S. Naval Research Medical Research Unit (NAMRU), where she was part of the team that isolated the West Nile virus.

It was in Egypt that she met and married the young doctor Kamal Mansour, who was also part of a small group of Protestant Christians that met at Gospel Hall in Cairo. She joined Kamal in his work at the Baptist Hospital in Ajloun,

Jordan and Gaza, during which time their only child, Sylvia Frederica, was born.

They moved to the U.S. in 1962, first to Baltimore, Maryland, then eventually to Atlanta, where Kamal began his general surgery residency at Georgia Baptist Hospital and Cleo began 14 years of viral research work with the Emory University Department of Pediatric Infectious Diseases.

After Delta Air Lines first began flying to and from Frankfurt, Germany in 1979, Cleo answered the call for German speakers to assist arriving passengers. Her service as a volunteer soon expanded as she joined a fledgling staff of professional language interpreters, and more airlines flew into what was then Hartsfield (now Hartsfield-Jackson) Airport from around the world.

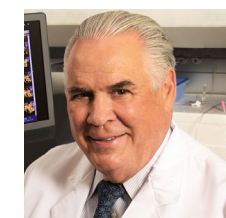
She pursued and received a certificate in translation and interpretation from Georgia State University, assisting families navigating the airport and helping reunite families. She was honored to work with immigration and customs officials, serving faithfully in a role that was not just work but a source of enjoyment and fulfillment, learning new languages and even recruiting her husband to give medical advice to ailing passengers.

We offer our deepest sympathies to the Mansour family. We look forward to honoring the legacy of both Mrs. and Dr. Mansour at our annual Kamal A. Mansour Professorship of Thoracic Surgery.



Our current group of trainees consists

of 7 (6 year) integrated residents, 8 (3 year) independent residents, 5 international/sub-specialty (1-2 year) fellows

Robert A. Guyton, MD,
Resident Education Fund

As a leading program in cardiothoracic surgery, Emory's CT surgery residency program accounts for approximately 5% of all active cardiothoracic surgeons in the country today and has produced some of the most accomplished and successful CT surgeons in the field. Robert Guyton, MD, has personally trained more than 140 resident physicians. To honor Guyton and his pioneering legacy, and to provide direct support to cardiothoracic resident education and training, the Robert A. Guyton Resident Education Fund helps Emory stay in the vanguard of medical training and patient-centered care by supporting resident research and education.

Thank you for your continued support of our cardiothoracic surgery residents through the Robert Guyton Resident Education Fund. Please click the link to contribute. [Give now](#)



NEW MATCHES

The integrated residency matched Mohsin Shah, MD, a medical student at University of North Carolina School of Medicine. Prior to medical school, Dr. Shah received his B.S. degree in Biology from UNC and his M.S. degree in Physiology and Biophysics from Georgetown University. Dr. Shah began his first year of integrated residency training in July, 2023.

The independent residency program matched three candidates, two from the cardiac track and one from the thoracic track.

Ashley Dawson, MD (cardiac surgery) is completing her general surgery residency training at McGovern Medical School at UTHealth in Houston, TX. While in residency, Dr. Dawson completed her M.S. in Clinical Research at the same institution. She graduated with her M.D. degree from Texas A&M Health Science Center College of Medicine and her undergraduate B.A. in Biochemistry from The University of Texas. She will join the training program in August, 2024.

D. Alan Herbst, MD (cardiac surgery) is currently completing his general surgery residency training at the University of Pennsylvania. Prior to his surgical training, Dr. Herbst received his M.D. degree from the Perelman School of Medicine at the University of Pennsylvania and his B.A. degrees as a double major in History and Psychology from the University of Kentucky. He will join the training program in August, 2024.

Benjamin Wadowski, MD (thoracic surgery) is currently completing his general surgery residency training at NYU Grossman School of Medicine during which he pursued a year of basic science research. He received his M.D. degree from the same institution and his undergraduate B.S. degree in Biology & Society, Communications from Cornell University. He will join the Emory training program in August, 2024.

AWARDS

Dale Deas - Recipient of 2023 AATS Honoring Our Cleveland Clinic Mentors Program Scholarship

William Qu- Society of Thoracic Surgeons Poster Presentation: First Place- Perioperative Care

Liz Norton- Southern Association of Vascular Surgery Poster Presentation: First Place



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