

20
24

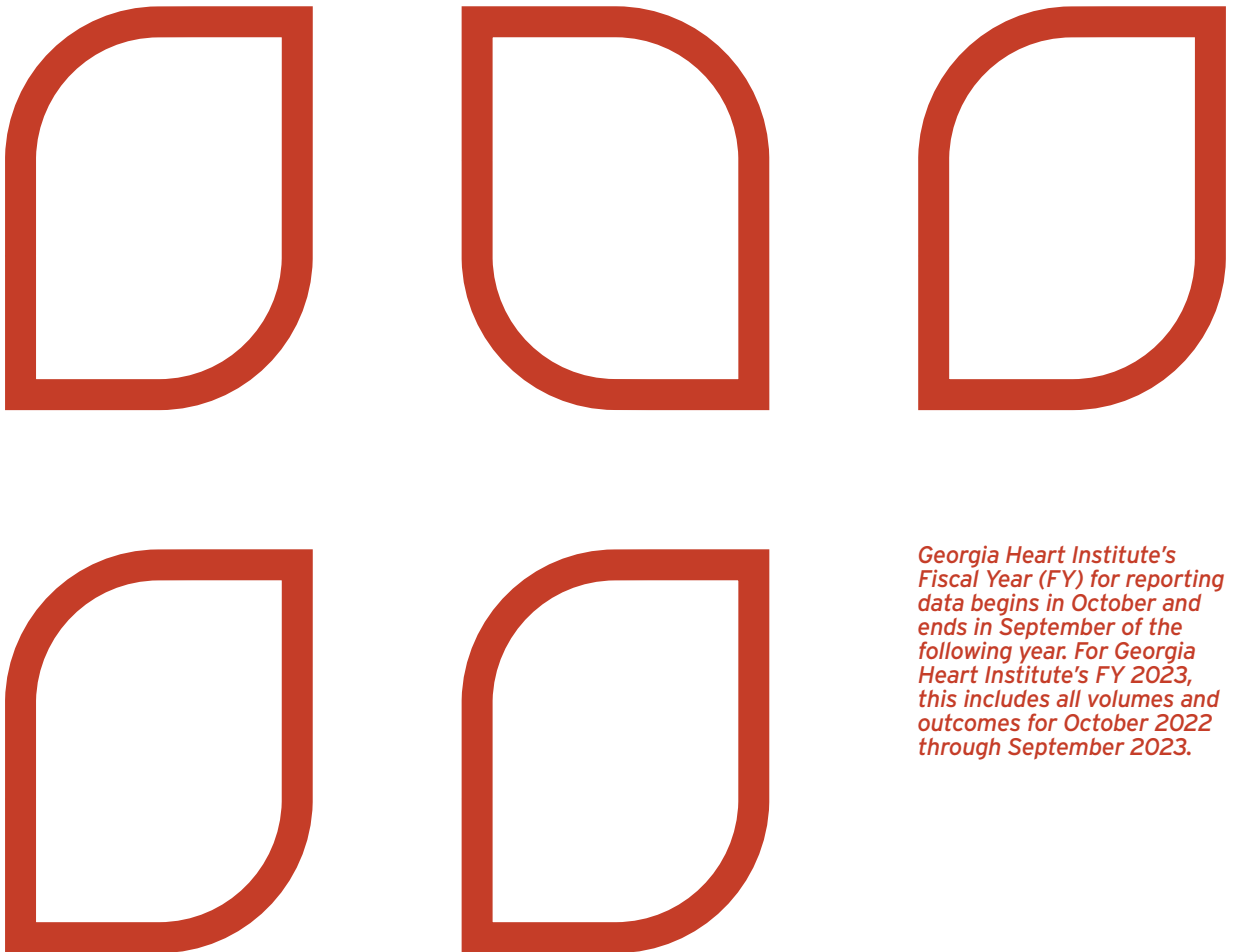
GEORGIA
HEART
INSTITUTE

Heart & Vascular Report

ABOUT GEORGIA HEART INSTITUTE

Georgia Heart Institute is the most forward-thinking heart and vascular program in the state, one of the largest cardiology practices in the region. It includes more than 80 clinicians seeing patients at more than a dozen locations. With a multi-disciplinary team of experts treating nearly every type of heart and vascular disease and participating in leading national research, we're providing advanced care that ensures lasting heart health for generations.

The experts of Georgia Heart Institute also form the core of the cardiac care team at Northeast Georgia Medical Center's five hospitals in Gainesville, Braselton, Barrow, Lumpkin and Habersham. It's all part of Northeast Georgia Health System, a non-profit which serves more than 1 million people across the region.



Georgia Heart Institute's Fiscal Year (FY) for reporting data begins in October and ends in September of the following year. For Georgia Heart Institute's FY 2023, this includes all volumes and outcomes for October 2022 through September 2023.



CONTENTS

Welcome: A Letter from Habib Samady	2
A Flight for Life	3-4
Setting the Standard for First in Care	5-16
New Faces, New Leaders	17-18
Visit with a Robot 1,400 Miles Away	19-20
Vascular Surgery: Growth & Expansion on the Rise	21-22
Leading in Clinical Trials	23-28
Grand Rounds	29-30
2nd Annual Georgia Heart & Vascular Symposium	31-32
Welcome 2nd Class of Cardiovascular Disease Fellows	33-34
Connect with Us	35-36
Directory	37-38

WELCOME TO GEORGIA HEART INSTITUTE





Georgia Heart Institute is Northeast Georgia Health System's (NGHS) cardiovascular service line, bringing together the full spectrum of cardiovascular care for patients in our community. Partnering with Northeast Georgia Physicians Group (NGPG) Cardiovascular & Thoracic Surgery and Vascular Surgery, we're able to provide a multitude of services to patients across the entire state of Georgia and beyond. In the short amount of time that has passed since the launch of Georgia Heart Institute, our team of cardiologists, surgeons and advanced practice providers (APPs) has raised the standard in clinical excellence and multi-disciplinary innovation, making it a top choice for patients to receive cardiovascular care.

Georgia Heart Institute launched in September 2021, and our clinical team and administrative leaders have strived to exceed the high standards established by The Heart Center of Northeast Georgia Medical Center (NGMC) across the previous two decades. Today, our team continues to build upon the pillars of excellence and continuous improvement in both patient care and innovative practice that define how Georgia Heart Institute clinicians care for their community.

Within the last year, NGHS has acquired a rural hospital in Habersham County, adding cardiology to its list of services, providing care to remote patients, and welcoming new doctors, surgeons and APPs to care for the growing patient population. Our clinical trials and research efforts have continued to grow in both enrollments and available novice therapies to include more options for patients and easier access to resources for their primary care physicians. Our renown in the educational space has increased with the welcoming of our second class of cardiovascular disease fellows and in July of 2025, our third class of fellows along with an impressive guest list. Finally, our clinical platforms specifically for physician audiences have acquired a robust library of online content that provides CME opportunities and developmental updates to catch up on all the innovative and educational activities taking place here at the institute.

When I walk the halls of our Georgia Heart Institute locations, I swell with pride at all the meaningful work our clinicians, nurses, technologists and administrators achieve, but perhaps what I am most proud of is the overwhelming joy that our patients express when they can return home after receiving unparalleled care from our facilities. The story of Bill—our first robotic heart surgery patient—on page 19 is just one of many success stories that Georgia Heart Institute is honored to tell. I'm so thankful for each one of our medical and administrative staff who bring their best each day so we can continue to improve the health of our community in all we do.

Sincerely,

Habib Samady, MD, FACC
President, Georgia Heart Institute

A FLIGHT FOR LIFE



Many memories of health care in 2021 are colored by the Delta variant of the COVID-19 pandemic. For Doug and Donna Towery, COVID-19 was the gloomy beginning of a miraculous story.

Donna, Doug's wife, tested positive for COVID-19 in October 2021 and was admitted to Union General Hospital in Blairsville, Ga. Doug, a grandfather of five, was visiting Donna's inpatient room when he began to feel ill himself, and he knew something was seriously wrong.

"I started to feel nauseous, weak and shaky and knew I needed to walk down to the Emergency Department to get checked out," said Doug. The triage nurse taking his vitals realized Doug was having a cardiac event.

"I was talking to the nurse with my head in my hands and my elbows on my knees," Doug recalled, "and that's the last thing I remember."

CLOSE CALL

Tara Babb, RN, emergency department nurse at Union General Hospital, remembers seeing her teammates performing CPR on Doug. "I went in to see if I could help," Tara said. "The patient was having a seizure and then lost his pulse."

The time of death was called after 25 minutes of CPR. Thankfully, Tara decided to check for a pulse one last time with her stethoscope when she heard something incredible - Doug's heart was beating again.

"Thank heaven she decided to check one last time," said Donna.

The staff at Union General Hospital called on the Air Life crew to fly Doug over the Blue Ridge Mountains to Northeast Georgia Medical Center (NGMC) Gainesville, where he was treated by the team at Georgia Heart Institute.

“That’s the whole reason we do what we do - to get the patient to definitive care,” said Tara.

EVERY MINUTE COUNTS

Union General and NGMC Gainesville are about an hour and 15 minutes apart by ambulance, but only 20 minutes apart by helicopter. In Doug’s case, every minute counted.

As the Air Life helicopter was preparing to land on the helipad at NGMC Gainesville, Doug lost his pulse again. The flight nurse and paramedic continued to work the code as Doug was being transported into the hospital.

Cumulatively, Doug was in cardiac arrest and without a pulse for over an hour.

“NGMC Gainesville offers percutaneous coronary intervention (PCI) 24 hours a day, 7 days a week, 365 days a year,” said Marlana Crews, the Air Life paramedic who flew with Doug to Gainesville. “They’re a Level I Emergency Cardiac Care Center. In my opinion, it was the best place for Doug to go to receive the care he needed.”

When Doug made it to the cardiac catheterization lab, it was discovered that he had a 100% proximal left anterior descending (LAD) lesion, which was successfully opened with a stent. Falgun Patel, MD, FACC, FSCAI, an interventional cardiologist with Georgia Heart Institute, placed an Impella device in the left ventricle and a Swan-Ganz catheter in the pulmonary artery to manage cardiogenic shock.

“For Doug to have CPR for as long as he did and survive with no neurological deficits, that’s a really rare situation, probably less than 1%,” said Dr. Patel.

A MIRACULOUS OUTCOME

If you were to meet Doug on the street, you would have no idea he was lifeless for over an hour in the fall of 2021. Since his cardiac arrest, he retired from a long career with the U.S. Department of Agriculture in the Department of Natural Resources Conservation Service. Now, he can spend more time with his family, taking care of his chickens and pigs, and volunteering with the local Future Farmers of America chapter.

Doug’s heart care continues to be managed by Vikram Raje, DO, advanced heart failure cardiologist and interim director of the Heart Failure Center at Georgia Heart Institute in Blairsville.

“We’re continuing to manage Doug’s heart care,” said Dr. Raje,” but thankfully he was discharged from the hospital a week and a half after the incident and can now enjoy the quality of life that we all hoped he would.”

ANOTHER CHANCE

Doug’s story speaks to how systems of care can come together for the life-changing benefit of the patient. From the Emergency Department team at Union General, to the nurse, paramedic and pilot with Air Life, to the cardiac catheterization lab at Georgia Heart Institute— all of these systems had to work together to ensure that Doug would be able to share his story.

“It’s a blessing to still be here with my family,” remarked Doug. “I’m not sure why God gave me another chance, but I’m determined to find out. I’m very proud I ended up at Northeast Georgia Medical Center. I owe my life to them.”

Scan to watch
Doug’s story.



Interventional Cardiology Volumes & Outcomes

**Percutaneous
Coronary
Interventions**

2,055

**Average Door
to Balloon Time**

55^{mins.}

STEMI

420

FY-23

CENTERS SET THE STANDARD FOR FIRST IN CARE

Georgia Heart Institute is a comprehensive, multi-disciplinary heart and vascular program that covers the full spectrum of cardiology specialties. Built on a foundation of expertise and innovation, our physicians, surgeons, advanced practitioners and nurses all embrace the core value of deep interdependence, not just within cardiovascular care, but among other service lines offered in our health system. It is because of this collaborative approach, across specialties and subspecialties alike, that our patients can experience a seamless patient journey, benefit from optimal outcomes, and live healthier lives.

By designating centers of excellence within Georgia Heart Institute, we can offer specialized care tailored to each patient.

Our centers include:

Center for Cardiovascular Prevention, Metabolism and Lipids

Center for Complex Coronary Disease

Heart Failure Treatment & Recovery Center

Resistant Hypertension Center

Structural Heart Center

Women's Heart Center

During this past fiscal year, (October 2022 - September 2023), Georgia Heart Institute welcomed three non-invasive cardiologists, two vascular surgeons, one electrophysiologist, and two robotic cardiothoracic surgeon (see page 17) along with many advanced practitioners (APPs) to our centers. The constant vision for Georgia Heart Institute is to continue growing, innovating and expanding as the world around us—and our patients—also grow and evolve. We believe that to bring our best to our communities, we cannot be complacent in the care we provide. After all, the world of medicine is always dynamic, never static. The clinical and administrative teams at Georgia Heart Institute are committed to the vigorous, passionate pursuit of excellence in treating cardiovascular disease.

In December 2023, Georgia Heart Institute launched its newest center, the Resistant Hypertension Center. Built by a team of non-invasive and interventional cardiologists, the Resistant Hypertension Center serves to treat patients whose high blood pressure has been unresponsive to four or more medications along with other criteria. Using in-depth diagnostics and testing for current risk factors, comorbid conditions and genetic predisposition, virtual care monitoring and care coordination, this center's goal is to identify the right therapies for each patient to bring their blood pressure back under control. Not only do the physicians at the Resistant Hypertension Center work with a patient's primary care team, but they also coordinate care with nephrologists, sleep medicine, endocrinologists and vascular surgeons.



HEART FAILURE TREATMENT & RECOVERY CENTER

FIRST BAROSTIM IMPLANT AT NORTHEAST GEORGIA MEDICAL CENTER (NGMC)

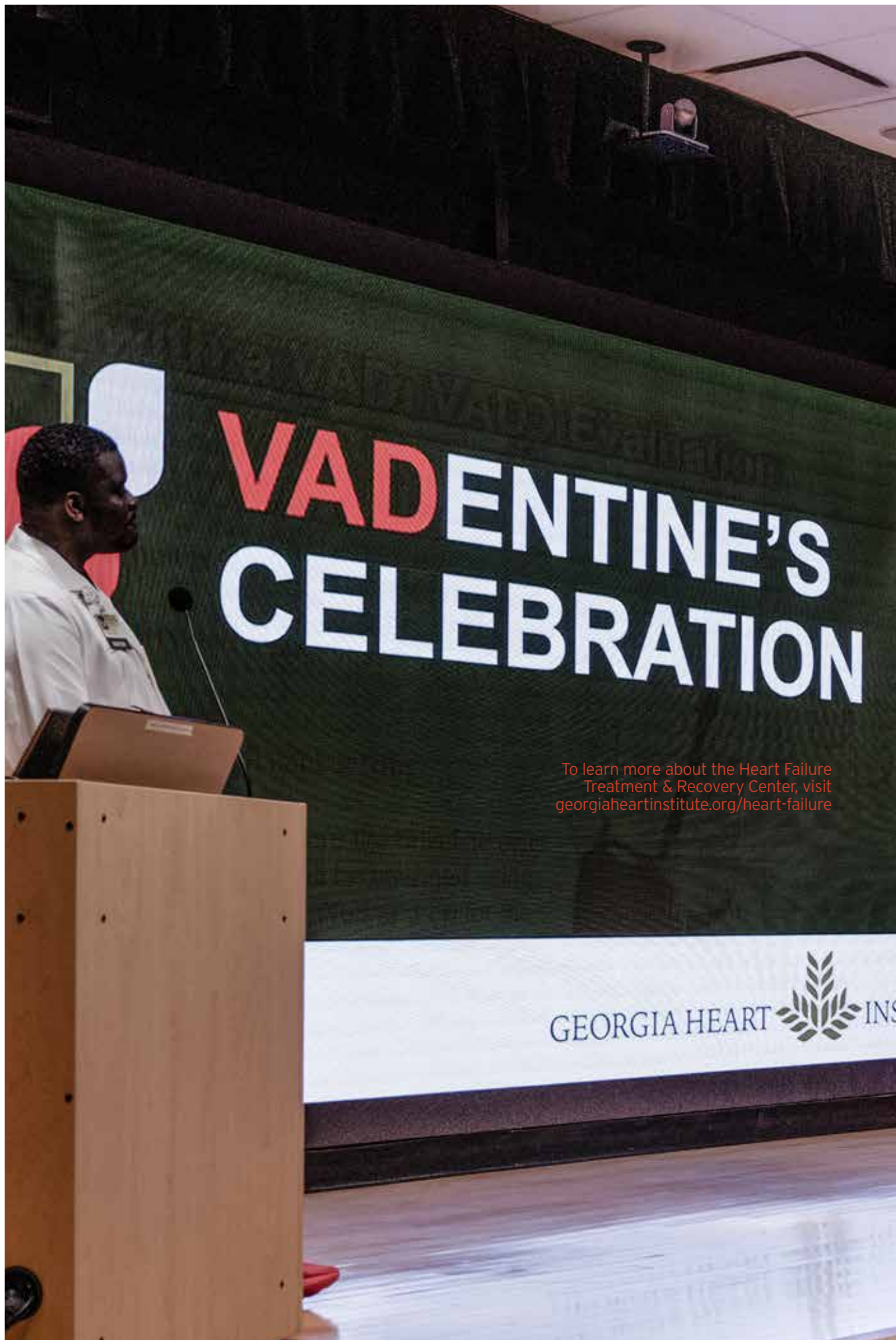
July 2023 marked a milestone for Georgia Heart Institute's heart failure team and the cardiovascular surgeons of Northeast Georgia Physicians Group (NGPG). Georgia Heart Institute's first Barostim implant surgery was performed and completed with success, further advancing the level of care and expanding options for patients living with heart failure in northeast Georgia.

Georgia Heart Institute's heart failure team – Vikram Raje, DO, Ugochukwu Egolum, MD, FACC, and Giancarlo Acosta, MD– treats patients using a comprehensive and collaborative approach. The first patient presented with typical symptoms of cardiovascular concern, including shortness of breath and fatigue while doing simple daily activities. Primary screenings, like a carotid duplex, were ordered to ensure no major blockages were reported (<50%). An echocardiogram was also ordered to confirm again that there were no causes for intervention, and that was followed by testing for valvular disease. After a final B-type natriuretic peptide (NT-proBNP) test resulting in <1,600 pg/mL, Barostim was considered.

Further criteria for this patient were met after being prescribed medication therapies with no relief of symptoms and overall feelings of unwellness. Despite all these efforts, in conjunction with this patient not being a candidate for a left ventricular assist device (LVAD) or heart transplant, a referral for a Barostim implant surgery was their best option. NGPG Cardiovascular surgeon R. Kyle Thompson, MD, Surgical Director of Advanced Heart Failure, completed the procedure and reported a successful outcome.

"We are proud to be one of a few centers in Georgia offering the Barostim implant device," Dr. Acosta said. "It is indicated in patients with HFrEF (Heart failure with reduced ejection fraction) who remain symptomatic despite medical therapy and who are not candidates for CRT (Cardiac resynchronization therapy). The results of this therapy are impressive in terms of improving exercise capacity, NYHA (New York Heart Association) class, and quality of life as well as reducing levels of NT-proBNP. It is another resource available to help our patients feel better, be more active, and alter the course of the disease."





To learn more about the Heart Failure Treatment & Recovery Center, visit georgiaheartinstitute.org/heart-failure



A GROWING LVAD PROGRAM

The team of heart failure physicians and cardiothoracic surgeons at Northeast Georgia Health System (NGHS) continue to build on the success of the Left Ventricular Assist Device (LVAD) program, which started in 2018. Like all the patient-centered heart care services at Georgia Heart Institute, the LVAD program is made up of a comprehensive team that includes doctors, surgeons, VAD coordinators and educators partnered with psychology, palliative care, physical therapy and rehab, nursing pharmacists, and the NGHS chaplain department. The entire journey a patient experiences when receiving an LVAD is curated specifically for each patient's needs from diagnosis to rehabilitation and nutrition resources post-implant.

The LVAD team even hosts a celebration for patients currently living with an LVAD. The "VADentines Day" event brings together a community group of LVAD recipients and their families to share in their recovery and their successes of returning to normal, everyday life.

"NGHS is one of the few centers in the state of Georgia that offers left ventricular assist devices," said R. Kyle Thompson, MD, the Surgical Director for Advanced Heart Failure.

"We're the only ones in this region that smaller facilities rely on when a patient is in urgent need of intervention for severe heart failure cases. We're able to provide options other places don't have."

The Heart Failure Treatment & Recovery Center has successfully implanted 60 LVADs since the program's inception in July 2018. In 2023, 13 implants were successfully placed. Based on yearly implantation volumes, NGHS is among the top fifteen non-transplant LVAD programs in the country.

Ugochukwu Egolum, MD, Medical Director of the LVAD Program at Georgia Heart Institute, believes two factors make this program stand out from other programs in the region.

"We've made leaps and bounds with our growth since the program was launched," Dr. Egolum said. "At first, we just started with two implants in our first year (2018). We're also one of the few programs that grew significantly during the COVID-19 pandemic. Our program also stands out because once patients travel north outside the Atlanta perimeter, there are no other advanced heart failure programs in north Georgia up into North Carolina, which accounts for a huge population of communities that we're able to provide care for."

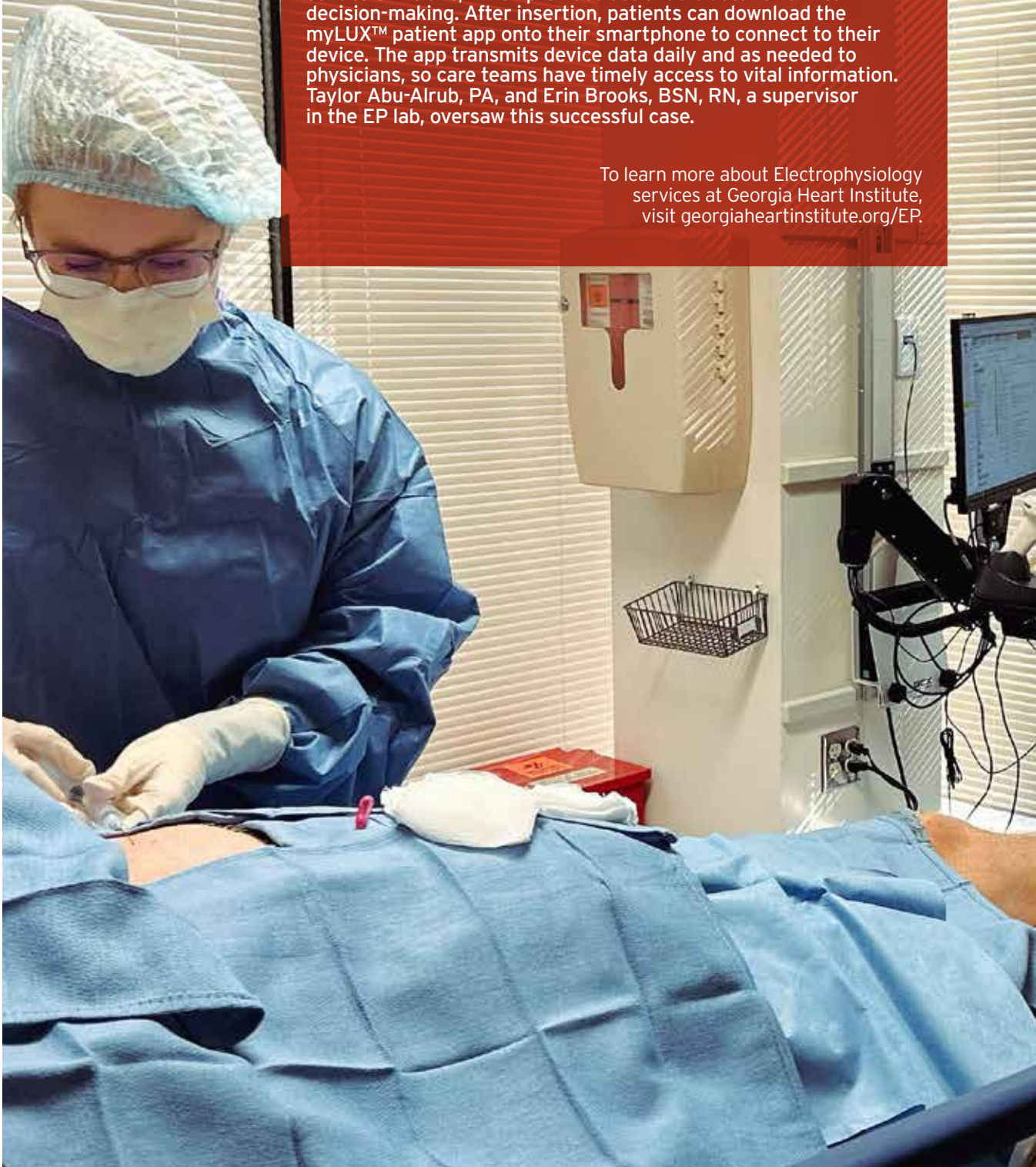


ELECTROPHYSIOLOGY

FIRST LUX DX II+ INSERTABLE CARDIAC MONITOR IMPLANT IN THE STATE OF GEORGIA

On Oct. 1, 2023, the electrophysiology (EP) team at Georgia Heart Institute celebrated the insertion of the latest insertable cardiac monitor (ICM) by Boston Scientific, the LUX Dx II+. It was the first time the new device had been implanted in the state of Georgia. The system is designed with dual-stage algorithms that detect and then verify potential arrhythmias before an alert is sent to clinicians, which provides actionable data for clinical decision-making. After insertion, patients can download the myLUX™ patient app onto their smartphone to connect to their device. The app transmits device data daily and as needed to physicians, so care teams have timely access to vital information. Taylor Abu-Alrub, PA, and Erin Brooks, BSN, RN, a supervisor in the EP lab, oversaw this successful case.

To learn more about Electrophysiology services at Georgia Heart Institute, visit georgiaheartinstitute.org/EP.





EP Diagnostic
Studies

60

EP Ablations

785

EP Implant/Explant

1,476

TOTAL
EP Procedures

2,321

FY-23

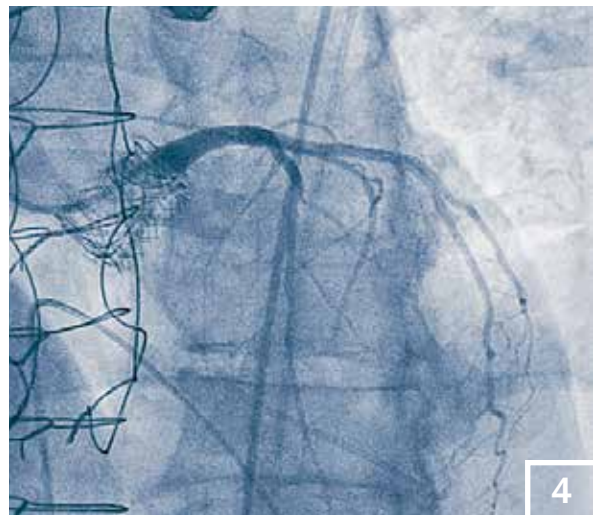
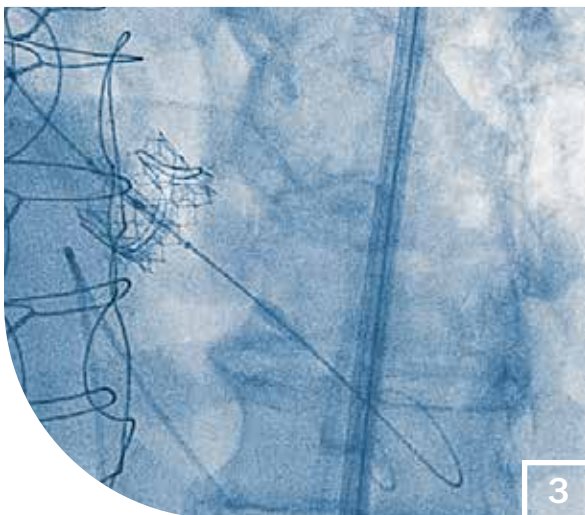
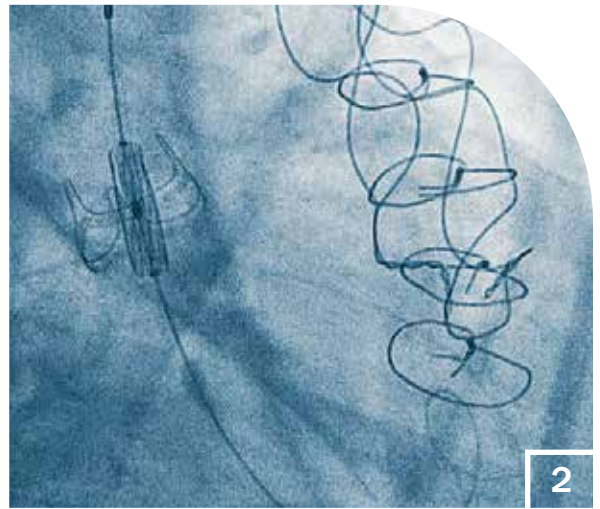
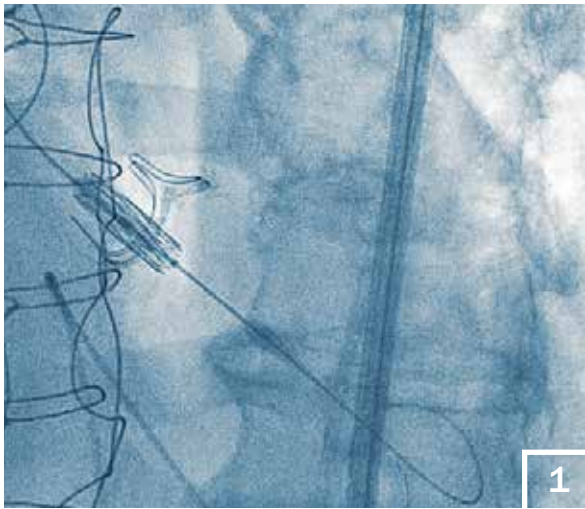
STRUCTURAL HEART CENTER

BASILICA PROCEDURE: A NORTHEAST GEORGIA HEALTH SYSTEM FIRST

The Structural Heart Center team made significant moves in April 2023 by adding the Basilica procedure to the list of structural heart treatments offered at Georgia Heart Institute. The BASILICA (Bioprosthetic Aortic Scallop Intentional Laceration to prevent Iatrogenic Coronary Artery obstruction) technique allows an alternative treatment option for high-risk patients who need heart valve procedures. This method uses transcatheter electrosurgery before a transcatheter aortic valve replacement (TAVR) to lacerate the structurally diseased

aortic leaflet and maintain coronary circulation after a TAVR procedure.

“Some patients who have had an aortic valve replacement (AVR) in the past are not always candidates for surgery, so what do you do?” said Ronnie Ramadan, MD, medical director for the Structural Heart Center at Georgia Heart Institute. “Before BASILICA, patients had no other option and were therefore faced with an inevitable obstruction. Being able to perform BASILICA on our patients who are at prohibitive risk for surgery allows our team to give back the quality of life to our patients and their families.”





FIRST IN THE STATE OF GEORGIA TO UTILIZE PASCAL CATHETER SYSTEM

The next month, the structural heart team performed a case in the cath lab using the PASCAL Precision System by Edwards Lifesciences during a mitral transcatheter

edge-to-edge repair (TEER) for a patient with degenerative mitral regurgitation (DMR). This case sealed the accomplishment of Georgia Heart Institute becoming the first health system in the state of Georgia to successfully utilize this innovative therapy implant outside of a clinical trial.



Ronnie Ramadan, MD
Structural Heart

One of three programs that offer BASILICA

LAA (Watchman/Amulet)

148

TAVR

178

MitraClip

54

**ASD/ASA/PFO/
CardioMems**

56

**Total Structural
Procedures**

436

FY-23

To learn more about the Structural Heart Center, visit georgiaheartinstitute.org/structural-heart.



WOMEN'S HEART CENTER

MATERNAL HEALTH GRANT AT WORK

Heart disease is the leading cause of death for women in the U.S., accounting for nearly one in five female deaths. Additionally, the state of Georgia has one of the worst records for pregnancy and postpartum-related deaths in the nation. Last year, Northeast Georgia Health System (NGHS) received the 5-year State Maternal Health Innovation grant, called HOPE for Georgia Moms, to achieve "Healthy Outcomes and Positive Equitable experiences" for patients giving birth in Georgia.

"One major focus of the grant is to establish the Maternal Cardiac Program at Northeast Georgia Medical Center (NGMC) and Georgia Heart Institute, which would create a strong collaboration between Obstetrics and Cardiology," said Heidi Ehrenreich, PhD, MPH, project director of the State Maternal Health Innovation Program. "Recognizing the importance of screening women for increased risk of cardiovascular disease (CVD), our team identified a validated screening tool, which was integrated into our EPIC system and went live on December 5, 2023, at the Gainesville and Braselton campuses, with go-live plans for Habersham to follow."



To learn more about Hope for Georgia Moms, scan the QR Code.

Additionally, a standard process for referral to the Women's Heart Center was established and built as a Best Practice Advisory (BPA) in EPIC for those who screened for increased risk for CVD.

The Maternal Cardiac Program team now includes an interdisciplinary team of physicians (obstetricians, cardiologists, cardiology fellows and emergency medicine), HOPE for Georgia Moms staff, and many other clinicians and leaders across nursing, pharmacy, research, and even IT who meet regularly to discuss the program's progress and make recommendations for improvement.

The Maternal Cardiac Program also forged an important partnership with the IT Department to build the CVD risk assessment tool into EPIC, as well as to create a maternal patient registry of pregnant and postpartum women with indicators for cardiac conditions and severe maternal morbidity for treatment and research purposes. Additionally, IT partnered with team members from the Maternal Cardiac Team to review and determine a vendor for Remote Patient Monitoring implementation in hospitals, physician offices and/or ambulatory settings. Consideration was given to the pregnant and postpartum patient population throughout this decision process.

Maternal Cardiac Team members have also had opportunities to disseminate the work being done at NGMC at the Sigma Theta Tau International Nursing Honor Society Biennial Conference in November 2023. Savannah Sanders, Clinical Coordinator of the Women's Heart Center; Bridgette Schulman, Clinical Outreach Specialist, and Maya Watford, Ambulatory Care Pharmacist at Georgia Heart Institute, presented on the interdisciplinary roles and coordination needed to implement the Maternal Cardiac Program.

"Our goal is to provide women in Georgia with the resources necessary to take care of themselves so they can take care of their families," said Laura Divoky, MD, Medical Director of the Women's Heart Center. "We are developing a system to identify risk factors so they do not turn into problems and keep women in Georgia healthy and strong. After we get our system up and running showing that it works, we will be spreading the information to other local hospital systems and then throughout the state."

To learn more about the Women's Heart Center, visit georgiaheartinstitute.org/womens-heart

CENTER FOR CARDIOVASCULAR PREVENTION, METABOLISM AND LIPIDS

As research has shown over the years, a huge portion of chronic illness and disease is preventable. Furthermore, simply educating patients and raising awareness of lifestyle factors can contribute greatly to patients leading a healthier lifestyle and making their health a top priority. Many patients, however, don't realize they have an underlying heart problem until it's much too late.

At Georgia Heart Institute's Center for Cardiovascular Prevention, Metabolism and Lipids, the prevention team provides educational resources and treatment for patients across northeast Georgia who have cardiovascular disease, diabetes, high blood pressure and other chronic, yet preventable, diseases.

The center's treatment model utilizes physical activity, culinary medicine, education, support groups and advanced screenings to help patients manage heart disease risk factors including lipids. This approach helps identify diseases in the earliest, most treatable stages, and aims to continuously improve patients' quality of life after a cardiac event or disease diagnosis. Patients can also receive a primary prevention screening to help identify risk factors following a cardiac calcium score, heart flow analysis, and in-depth review of a patient's family history. The prevention team is made up of non-invasive cardiologists, health and wellness coaches, exercise physiologists, dietitians and nurse facilitators, all dedicated to cardiac prevention.

The prevention team also offers patients a supportive community group that meets regularly to participate in exercises such as walking and chair aerobics, to share recipes and heart-healthy cooking tips, and study educational topics like

smoking cessation. "Our patients and their health are so important to us," said Sandra Porter, ACSM EP-C, EIM, Health & Wellness Coach, and Exercise Physiologist. "Our patients' care doesn't just end once they've seen us and are given treatment. It's a continuous form of care, and we celebrate our patients all along their healthcare journey."

This past year, Jamie Burkle, MD, FACC, FNLA, non-invasive cardiologist and medical director of the Prevention Center, was inducted into the Fellowship of the National Lipid Association (NLA) and was recognized for his excellence, innovation and leadership in clinical lipidology. Additionally, Anna Biggins, MPH, RDN, LD, cardiology dietitian, was chosen for the NLA Scholarship Program, becoming the only dietitian out of the 10 recipients to receive the award.

"There are only a few hundred board-certified lipidologists in the country," said Dr. Burkle. "Having two cardiologists who are certified in this subspecialty plus a cardiac dietitian who is furthering her clinical advancement in understanding lipidology and how it relates to cardiovascular disease here at Georgia Heart Institute, puts our team at an advantage. Our purpose is to help patients feel better, live longer, and take control of their health. With a team like this, I'd say we're fulfilling that mission!"

To learn more about the Center for Cardiovascular Prevention, Metabolism and Lipids, visit georgiaheartinstitute.org/prevention-center.



EKG

124,192

Stress Testing

9,786

**ECHO (w/ and
w/out contrasts)**

39,874

Cardioversion

1,329

**Transesophageal
ECHO**

2,422

CVC/Fistula

1,541

FY-23

**Peripheral
Diagnostic
Procedures**

2,866

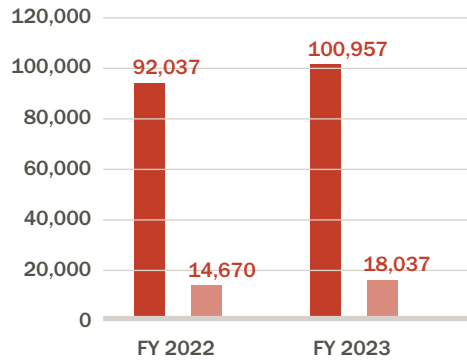
**Peripheral
Interventions**

1,457

**Total Peripheral
Procedures**

5,864

FY-23



Total Outpatients Patients Seen ●
Total New Outpatient Visits ●

NON-INVASIVE CARDIOLOGY WINS 2023 QI CHALLENGE AWARD FROM THE AMERICAN SOCIETY OF NUCLEAR CARDIOLOGY

The American Society of Nuclear Cardiology (ASNC) holds an annual competition for physicians and clinical care teams who submit quality improvement projects to enhance the quality of imaging in their labs. Submissions must identify certain metrics that are addressed in these projects, such as calcium scores from CT attenuation correction, coronary artery calcium (CAC) score scans, or myocardial blood flow measurement by PET or SPECT.

Megan Smith, DO, a non-invasive cardiologist, and Suzanne Crews, RT(N)(CT), CNMT, PET, at Georgia Heart Institute teamed up to take home the QI Award in the Private/Community Practice category. Their project addressed a communication breakdown in Epic software between results of nuclear stress tests and subsequent cardiac catheterization findings.

“The process we were using in our clinic was quite cumbersome and manual, taking up time in our workday, making our workflow inefficient,” said Mrs. Crews. “Dr. Smith and I would have to gather a report of every patient that had received a stress

test and manually cross-reference that list with a separate report of those who had also undergone a heart cath procedure. Our goal was to determine if intervention in the cath lab was making a difference in the treatment of our patients. This involved a lot of time reviewing reports, deciphering results of tests, and overall made the process time-consuming.”

Dr. Smith and Mrs. Crews met with software developers at Epic and lobbied for creation of a module that would display a report with the information in patient charts, improving data dissemination and efficiency across the entire health system. Both Dr. Smith and Mrs. Crews flew to Toronto to accept the award at ASNC2023. The success of this project not only addressed the problem of improving clinical care to patients but also highlighted the technologist-physician collaboration that Georgia Heart Institute strives to emulate in all innovative endeavors.



NEW FACES, NEW LEADERS

Georgia Heart Institute increased its clinical expertise by adding physician leaders among several subspecialties.



KAREN GERSCH, MD, FACC, FACS
ROBOTIC CARDIOTHORACIC SURGERY

Dr. Gersch is a cardiothoracic surgeon specializing in a wide range of robotic-assisted cardiac and lung surgery procedures.

"The group here really functions well as a team," Dr. Gersch said. "This entire program is focused on technology and improving the future of medicine to save lives."



SANJAY LALL, MD, FACC, MBA
NON-INVASIVE CARDIOLOGY

Dr. Lall joined Georgia Heart Institute after practicing in the Atlanta area for over 17 years.

"The team at Georgia Heart Institute prioritizes patient care, which is why I was excited to make the move to Northeast Georgia Health System (NGHS)."



ALAN OPSAHL, MD
NON-INVASIVE CARDIOLOGY

Before joining Georgia Heart Institute, Dr. Opsahl previously served in the United States Air Force as an internal medicine staff physician at Davis-Monthan AFB in Arizona.

"I decided to join Georgia Heart Institute to serve local, rural communities with high-quality healthcare, so Georgia Heart Institute was a great fit for me."



SIVA CHIRANJEEVI, MD
NON-INVASIVE CARDIOLOGY

Dr. Chiranjeevi completed his internal medicine residency at Mercer in Macon, Georgia and then moved to Mobile, Alabama to finish his cardiology fellowship at the University of South Alabama.

"I've always liked a small town, community feel, which is part of what drew me to Northeast Georgia Health System,"



**KARTHIK RAMASWAMY MD, FHRS
ELECTROPHYSIOLOGY**

Dr. Ramaswamy returned home to north Georgia and rejoined the electrophysiology program he started nearly 20 years ago. Dr. Ramaswamy was director of the electrophysiology laboratory at Georgia Heart Institute from 2004 to 2011.

“Since my previous time here, the growth in size and quality of the heart and vascular services at North-east Georgia Health System (NGHS) has been truly impressive.”



**ADEL M. EL DIN, MD, FACC, FACP
NON-INVASIVE CARDIOLOGY**

Dr. Eldin has four decades of healthcare experience with extensive training in clinical cardiology and research. “We recognize the importance of disease prevention and risk factors modification,” Dr. Eldin said. “Rather than focus on acute care, or ‘sick care,’ we try to change the mindset into early detection and prevention. That will lead to a transformation of health care, resulting in better outcomes with lower costs.”



**RAM G. PENMETSAS, MD, FACC
NON-INVASIVE CARDIOLOGY**

Before joining Georgia Heart Institute, Dr. Penmetsa spent over 20 years caring for patients all over the Southeast including South Carolina, Louisiana, and South Georgia. “With my patients, I try to be not only a doctor but also a confidant,” Dr. Penmetsa said. “I try to give them advice and lead by example. I explain to patients what their diagnosis means and the benefits and risks of treatment options, all to empower them to make the best decisions for their own care.”



**OLGA TOLEVA, MD, MPH,
CCFP, FRCP (C)
INTERVENTIONAL CARDIOLOGY**

With more than 20 years of experience, Dr. Toleva joins Georgia Heart Institute as lead interventionalist for coronary physiology. In addition to interventional cardiology patients, she specializes in the evaluation of patients with coronary microvascular disease and vasospasm.



**STEPHANE RINFRET, MD, SM,
FRCP (C), FSCAI, FACC
INTERVENTIONAL CARDIOLOGY**

Before joining Georgia Heart Institute as the director of the Complex Coronary Disease Center, Dr. Rinfret spent over 20 years serving patients and students. An internationally renowned academic and clinical physician, Dr. Rinfret has written the textbook “Percutaneous Coronary Intervention for Chronic Total Occlusion” as well as hundreds of published articles.



**ZACHARY GEORGE, MD,
FACC, FSCAI
INTERVENTIONAL CARDIOLOGY**

Dr. George is highly experienced in coronary and peripheral angiography and interventions, and he has been a pioneer in adopting new technologies. During his years practicing in South Carolina, he was the first physician in the state to use the Impella heart pump and the Diamondback system, and he has been a primary investigator for a host of other devices and procedures.



A VISIT WITH A ROBOT 1,400 MILES AWAY





With the arrival of the fall season in northeast Georgia, renowned robotic cardiac surgeon T. Sloane Guy, MD, MBA, FACS, FACC joined the Northeast Georgia Physicians Group (NGPG) Cardiovascular & Thoracic Surgery team. While the cool temperatures moved in, this also meant that a new program offered at Georgia Heart Institute was about to heat up. The minimally invasive robotic heart surgery program officially launched in November 2022, and three months later, the first patient to receive robotic heart surgery was successfully recovering.

Bill Mayfield, a patient from Minnesota, was visiting his son in Georgia when he started to fall ill. He was seen at a local urgent care where he was found to have a heart murmur. Bill was referred to Dr. Guy for a consultation. Dr. Guy told Bill he was an excellent candidate for robotic heart surgery as he would benefit from the minimal recovery time and smaller incisions. Bill considered Dr. Guy's recommendation while back home in Minnesota. After thorough research, Bill and his family decided to go back to Gainesville.

"I read that Dr. Guy was one of the best robotic heart surgeons in the country," Bill said. "It made the most sense for us to make the trip back down from Minnesota, and it was definitely worth it. Just two days after the surgery, I was leaving the hospital and feeling great. I can't believe what the

team was able to do through these tiny incisions. I remember when my brother had open heart surgery, and this is a totally different experience."

Dr. Guy was equally excited that Bill kept an open mind and proceeded with the robotic option. "The surgery went so well that Bill was able to leave the hospital just 48 hours after the surgery and fly home to Minnesota," Dr. Guy said. "It's a huge win for our patients to know they can receive quality surgical care with less downtime. It's a benefit both for them and us, as physicians, to be able to do this."

The robotic heart surgery team would go on to perform more successful robotic heart surgeries throughout the rest of the year including a patient who was back on the golf course within days after surgery and another whose surgery was live-streamed at the Second Annual Heart & Vascular Symposium (see page 31).

To refer a patient for robotic heart surgery with Dr. Guy, contact NGPG Cardiovascular & Thoracic Surgery at 770-501-7329 or by visiting georgiaheartinstitute.org/guy

To watch a robotic mitral valve live case, scan the QR code.



Volumes

ROBOTIC CARDIAC SURGERIES

(*STS does not report benchmarks for robotic cases; <2% of cardiac surgery is done using a robotic approach.)

90

CABG PROCEDURES

414

AORTIC VALVE REPAIR/REPLACEMENT

(Robotic and Open)

85

MITRAL VALVE REPAIR/REPLACEMENT

(Robotic and Open)

66

TOTAL CARDIAC SURGERY CASES

655

Outcomes

NGHS OPERATIVE MORTALITY RATE
(risk-adjusted) vs. STS Benchmark

1.74% vs 2.47%

FY-23

VASCULAR SURGERY: GROWTH & EXPANSION ON THE RISE

Northeast Georgia Physicians Group (NGPG) Vascular Surgery, an integral part of Georgia Heart Institute, experienced tremendous growth in areas of surgical expertise, locations, and new treatment options to an already extensive menu of therapies for patients living with various vascular diseases.



SAMER ALHARTHI, MD, VASCULAR SURGERY

Dr. Alharthi graduated from Taif University College of Medicine in Saudi Arabia and completed a general surgery residency while earning a master's degree in public health administration at the University of Toledo. He completed his fellowship in vascular surgery at Sentara Norfolk General Hospital before making the move to northeast Georgia. "What drew me to NGPG the most was the fact that they always put the patient first in everything they do," Dr. Alharthi said. "The group is a pillar in the community, so I'm ready to join in that and work alongside these dedicated and expert physicians."



NIZAR HARIRI, MD, VASCULAR SURGERY

Dr. Hariri graduated from Aleppo University Medical School in Syria before completing his general surgery residency at Charleston Area Medical Center in Charleston, W.Va. He trained as a vascular surgery fellow at the Jobst Vascular Institute in Toledo, Ohio. Dr. Hariri relocated to Georgia to be closer to his family, and as a family-oriented individual, he puts that same mindset into practice when treating patients. "My philosophy of patient care is to treat everyone like they are my own family," Dr. Hariri said. "I ask myself, 'What if that was my mom or dad?' and that motivates me to do my absolute best to serve them."

VASCULAR CARE EXPANSION

With the addition of two new surgeons, the clinicians at NGPG Vascular Surgery can now see and treat patients in more communities. Before, vascular services were only offered at just two of Northeast Georgia Medical Center's (NGMC) campuses in Gainesville and Braselton. In conjunction with the growing Georgia Heart Institute clinic locations, vascular services have followed suit, seeing patients in Buford, just south of the Gainesville campus, and in the more rural regions of north Georgia including Blairsville and Toccoa.

SURGICAL EXPERTISE AND PROCEDURE GROWTH

The rise of the entire vascular surgery program doesn't end with adding new surgeons and locations. New minimally invasive procedures, growing volumes, and advanced training in novel techniques are also taking an upward trend. The vascular surgery team completed their 150th Transcarotid Artery Revascularization (TCAR) procedure this year, a minimally invasive procedure to clear potential blockages and reduce the risk of stroke for patients with carotid artery disease. During this procedure, blood flow is reversed away from the brain and rerouted through other arterial pathways to protect the brain from dangerous debris while the carotid is being stented.

Additionally, the program completed its first thoracic branched endoprosthesis (TBE) procedure, a single-branch stent graft designed and initially studied for the treatment of thoracic aortic aneurysms. The first-of-its-kind FDA-approved device is designed to simplify thoracic endovascular aortic repair (TEVAR) procedures without the potential risks and complexities of revascularization.

Philip Rideout, MD, vascular surgeon with NGPG Vascular Surgery has plans to attend an upcoming training program in California to successfully implement thoracoabdominal branch endoprosthesis (TAMBE) as a regular treatment offering for patients. The device is an off-the-shelf endovascular solution for the treatment of complex aneurysmal disease involving the visceral aorta. This novel therapy is an implantable branched device designed for use in patients with thoracoabdominal aortic aneurysms and high-surgical risk patients with pararenal aortic aneurysms of the aorta. The device uses an endovascular approach with established imaging techniques to deploy the device and seal off the aneurysm, allowing blood to flow directly through the endoprosthesis. Offering TAMBE to patients who qualify will make NGPG Vascular Surgery the first and only program in Georgia to provide this procedure.



EVOR Open Procedures

172

EVOR Percutaneous Procedures

1,674

Vascular Testing

31,473

FY-23

To learn more about the Vascular Surgery Program, visit georgiaheartinstitute.com/vascular



LEADING THE WAY IN CLINICAL TRIAL RESEARCH

Northeast Georgia Health System (NGHS) has a long-standing history of providing patients with emerging therapies by participating in outcomes-based clinical trials. NGHS provides a dedicated infrastructure that supports cutting-edge research activities across specialties such as heart and vascular, oncology, Level 1 trauma and acute care surgery, as well as neuroscience. At Georgia Heart Institute, a team of more than 25 cardiologist principal investigators and sub-investigators participate in primarily Phase II-Phase IV pharmaceutical and Investigational Device Exemption (IDE) trials, all for improvement in quality, education and care of the patients they serve. In addition to physician

investigators, Georgia Heart Institute's Research and Innovation program also includes experienced research nurse coordinators and staff dedicated to moving the needle in advanced, breakthrough therapies in cardiovascular health. Our team is also proud to provide referring physicians access to advanced technology, data analysis and the clinical support resources they need to screen and enroll their patients in clinical trials. Georgia Heart Institute works with most large pharmaceutical and medical device industry sponsors as well as with other large academic centers in multicenter studies.

GEORGIA HEART INSTITUTE HAS BEEN RANKED IN OR AROUND THE TOP 10 IN 2023 FOR CLINICAL TRIAL ENROLLMENT AND/OR QUALITY OPERATIONS AMONG SITES ACROSS THE UNITED STATES IN SEVERAL ONGOING TRIALS SUCH AS:

SCALE HF
1ST
in enrollments nationally

OCEAN (a) OUTCOMES
1ST
across all activated sites in quality. 98% Quality Score for EDC entry and query resolution

LUX DX TRENDS
Recognized as first site to enroll patient in Georgia

COMPLETE TAVR
Recognized as first site to enroll patient in the Southeast

AMULET
4TH
in enrollments nationally and worldwide

PROACT Xa
4TH
in enrollments nationally

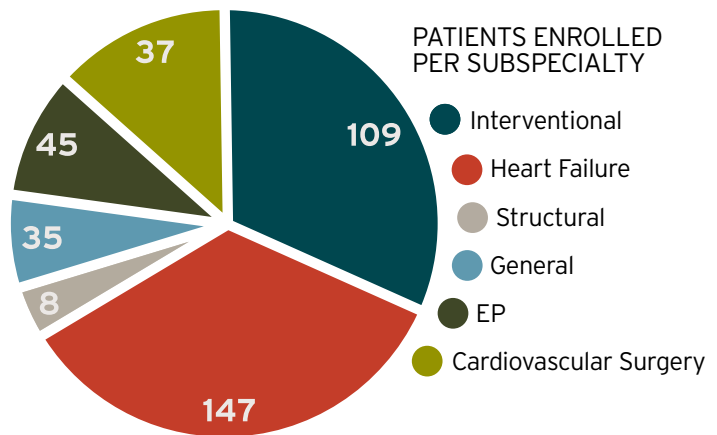
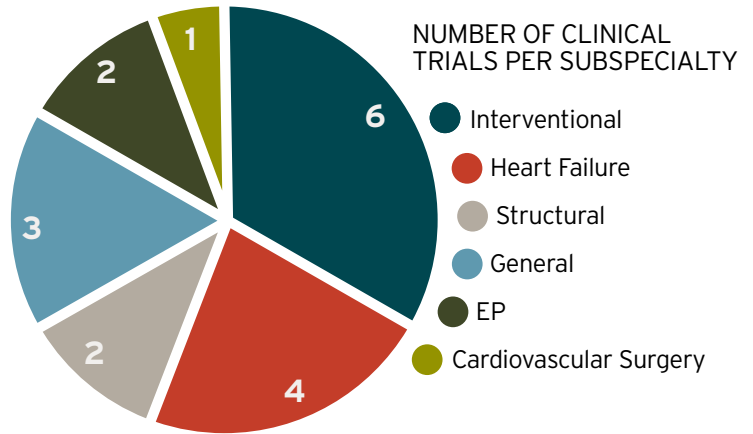
DEFINE GPS
12TH
in enrollments nationally

Georgia Heart Institute is currently participating in 41 clinical trials across active enrollment, follow-up and pipeline phases. Some 381 patients were enrolled in clinical trials while over 100 hundred were in follow-up. The current clinical trial portfolio includes interventional cardiology, heart failure, electrophysiology, structural heart and general cardiology drug and medical device treatment modalities.



“This clinical trial has dramatically improved my quality of life. For years, I lived in the hospital, unable to breathe on my own, walk outside, or drive a car. Thanks to my care team, I’m able to live a better life.”

- Thomas “Tommy” McClure, a patient enrolled in the RELIEVE-HF research study, assessing the efficacy of the V-Wave Interatrial Shunt



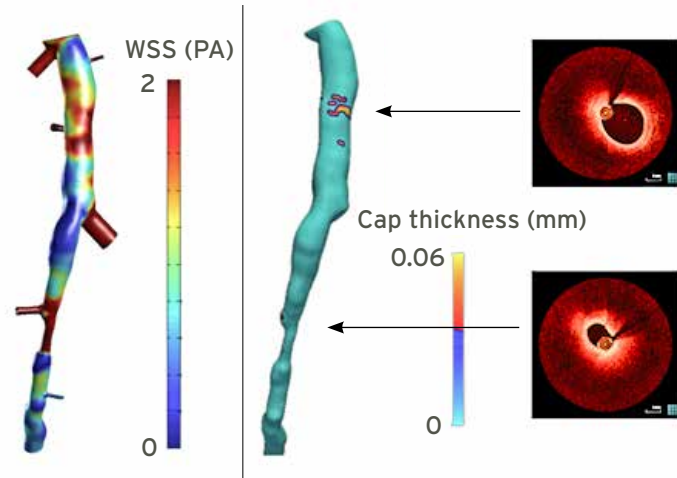
GEORGIA CENTER FOR CARDIOVASCULAR BIOMECHANICS & DATA MODELING

Georgia Heart Institute is actively contributing to three National Institute of Health (NIH) studies, all of which have received funding from the NIH. In conjunction with these studies, Georgia Heart Institute has established the Georgia Center for

Cardiovascular Biomechanics & Modeling (GCCBM), a multi-disciplinary research center focused on enhancing the understanding and treatment of cardiovascular disease. The research center brings together engineers and clinicians in a unique collaborative environment. The GCCBM focuses on 3 areas of cardiovascular research:

BIOMECHANICS OF ATHEROSCLEROSIS

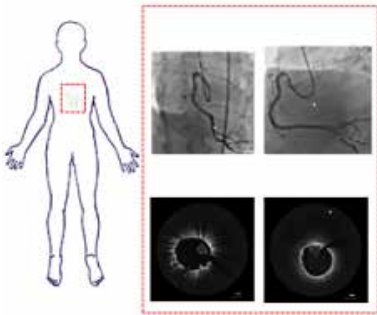
COLLABORATION ON
THREE NIH R01 STUDIES



DEVICE BIOMECHANICS

SHEAR STENT RESTORATION VALVULAR HEART DISEASE

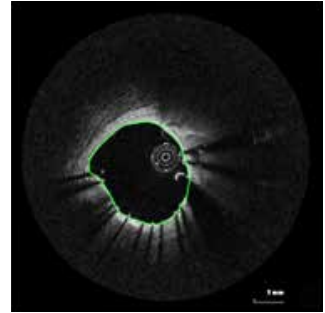
1. Acquire Imaging Data



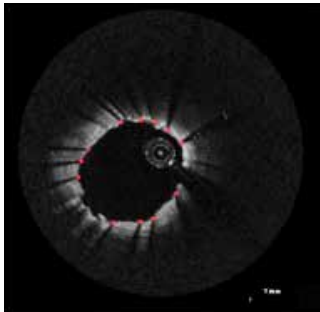
2. Acquire Undeployed Stent



3. Contour Lumen



4. Identify Status



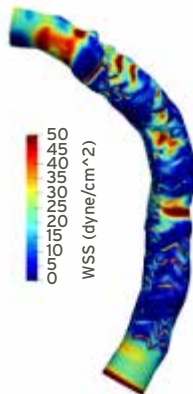
5. Deform undeplied stent



6. Remove Stent from Lumen



7. Compute WSS



Learn more about cardiovascular clinical research initiatives at georgiaheartinstitute.org/research

PRINCIPAL INVESTIGATOR TEAM



Joon Ahn, MD
Electrophysiology



Vikram Raje, DO
Heart Failure/Interventional Cardiology



Jaime Burkle, MD
Prevention



Ronnie Ramadan, MD
Structural Heart



Ugochukwu Egolum, MD
Heart Failure



Habib Samady, MD
Interventional Cardiology



Nima Ghasemzadeh, MD
Interventional Cardiology



Veerappan Subramaniam, MD
General Cardiology

To learn more about the clinical trials offered at Georgia Heart Institute, download the High Enroll app, which allows easy access to information about clinical trials including trial summaries, inclusion criteria, phase details and enrollment information. This app is free and easy to navigate. Simply download the app, search "Northeast Georgia Health System" and select any categories of interest. All of Georgia Heart Institute's cardiovascular clinical trials are located under the "Heart & Vascular" category.

High Enroll is available in the App Store.

Connect a patient with our clinical trial program by visiting georgiaheartinstitute.org/clinical-trials.



NORTHEAST GEORGIA HEALTH VENTURES FOSTERS INNOVATIVE SOLUTIONS

In October 2022, Northeast Georgia Health System (NGHS) launched an innovative program to create out-of-the-box solutions for real-world issues that afflict many front-line healthcare workers and nonprofit hospitals like NGHS. Northeast Georgia Health Ventures (NGHV) is a partnership between the 5-hospital system and early-stage startups to increase the flow of innovation into the health system and the market.

“Our goal is to solve the problems our patients, caregivers and support staff face today by creating a real-world path to innovation—not making risky investments in unproven products,” says Carol Burrell, president and CEO of Northeast Georgia Health System.

One of these strategic partnerships involves Artrya Limited, a medical technology company focused on commercializing its patented artificial intelligence platform that detects key coronary artery disease imaging markers. Clinicians will benefit from early access to Artrya’s Salix Coronary Anatomy software in a research setting to validate the detection of coronary artery disease by highlighting the presence of critical high-risk plaques, the leading cause of heart attacks.

“I’m pleased that NGHV is partnering with Artrya to develop this exceptional technology that offers the first new approach for coronary artery disease assessment and care,” said Habib Samady, MD, interventional cardiologist and president of Georgia Heart Institute. “We know that high-risk plaque is a more accurate indicator of heart disease risk than symptoms. Yet despite being the major cause of

heart attacks, it is not routinely reported in cardiac imaging and diagnostics as its difficult to detect using non-invasive contemporary techniques.” Dr. Samady, who is internationally recognized for this work in coronary physiology will, serve as a key clinical advisor for Artrya within NGHS.

Stuart Bracken, the managing director for NGHV, was equally excited about this new partnership and what it means for patients suffering from heart disease. “Heart disease is the No. 1 killer in the world, killing more people than all cancers combined. Despite the \$320 billion spent each year in America on heart disease prevention, treatment and care, one person still dies every 34 seconds from the condition. NGHV could not be more excited to partner with Artrya on the journey to revolutionize the way we treat heart disease. For patients, health systems and investors, the potential ramifications for the U.S. market are extraordinary.”

About Artrya
Based in Perth, Australia, Artrya was founded in 2018 with operations starting in early 2019. The company was listed on the Australian Securities Exchange (ASX: AYA) in 2021.

Artrya is an applied artificial intelligence healthcare company that works alongside clinicians to improve the diagnosis of coronary heart disease and develop a holistic overview of at-risk patients. The company has developed deep-learning algorithms pending regulatory submission for clearance and approval in the U.S. that will serve to predict and prevent acute coronary events.

**For more information,
visit artrya.com**

GRAND ROUNDS



Each year, Georgia Heart Institute invests in continuing medical education (CME) for our clinical staff by seeking out top leaders in cardiology from both practical and research areas. Once a month, attendees gather in Northeast Georgia Medical Center's Walters Auditorium or online via Zoom link, to hear renowned speakers from all over the country present on various topics.

After the presentation, guest speakers provide a post-lecture interview with Georgia Heart Institute leaders. These candid candid conversations shed light on the topic at hand and explore the passion for education and excellence that influences the work of the cardiovascular service line at Northeast Georgia Health System (NGHS).

"Our Grand Rounds lecture series is a huge part of our education program here at Georgia Heart Institute," said Glen Henry, MD, FACC, FSCAI, medical director of interventional cardiology and cath labs. "Our staff get to meet with and tune in to speakers who are nationally and internationally recognized in their practice and research. These events provide real-world, practical information and insight that bring into focus the continued excellence we all strive for to be better doctors, leaders and teachers for our patients."



DATE	SPEAKER	TOPIC
February 2023	C. Anwar A. Chahal BSC, MB, ChB, MRCP (UK), PhD, FACC, FESC	Cardiovascular Genomic and Precision Medicine: The Future is Today!
April 2023	Zahi A. Fayad, Ph.D	In Vivo Imaging of the Immune System for Health & Disease Assessment
May 2023	T. Sloane Guy, MD, MBA, FACS, FACC	Endoscopic Robotic Mitral Valve Repairs with Percutaneous Cannulation
May	Jeffrey Popma, MD	Role of the Clinician-Scientist in Medical Device Development: From Concept to Reality
August 2023	J. Eduardo Rame, MD, MPhil, FAHA, FESC	Comprehensive Care of the Cardiomyopathy Patient: From Pillars that Sustain to Buttresses that Assist
September 2023	Manesh R Patel, MD	Lessons Learned from DOACS and the New Factor XI Anti-Thrombotic Therapies Being Studied
October 2023 <i>Research Month</i>	Angela Taylor, MD, MS	Revolutionizing Healthcare: Employing Human-Centered Design to Become the Greatest Health System on Earth
	Alexandra Lanksy, MD	Cerebral Protection for TAVR: Evidence and Rationale
November 2023	Sanjay Lall, MD, MBA, FACC, and Glen Henry, MD	Hypertension: Focus on Resistant Hypertension and Upcoming Treatments

See past Grand Rounds lectures and stay up to date as new speakers are added at georgiaheartinstitute.org/grandrounds.

One of the most important aspects of the work being done at Georgia Heart Institute is the emphasis on educating current and future leaders in cardiology. The crown jewel of Georgia Heart Institute's continuing education program is its annual Georgia Heart & Vascular Symposium. Bringing together hundreds of cardiologists, surgeons, primary care physicians, EMS personnel, nurses and techs, this patient-centric and content-rich event celebrates the future of heart care and promotes exciting, actionable developments that attendees can take back to their cardiovascular practices and patients.

Over 500 attendees participated on-site and virtually for the three-day event that took place in June 2023 at Chateau Elan Winery & Resort in Braselton, Ga. Attendees tuned in to four live cases—three of which were live-streamed simultaneously from the cath labs and operating room at Northeast Georgia Medical Center's (NGMC) Gainesville campus. The live cases included both a robotic surgical and percutaneous mitral valve repair, a complex percutaneous coronary interventional case, and a functional cardiac cath case. The program included debates, panelist discussions, networking opportunities with peers, and exhibiting sponsors as well as an evening gala complete with dinner and entertainment.

"Our 2nd annual Georgia Heart & Vascular Symposium was a successful event, not just because of the first-rate and comprehensive educational program but also because we extended the event to our EMS professionals," said Habib Samady, MD president of Georgia Heart Institute and Symposium Course Director. "Our EMS and pre-hospital personnel are so vital to the safety and care of patients coming to our facility with major cardiac events. We believe it's so important to include the entire spectrum of physicians that patients come in contact with in our educational offerings because it takes a team of physicians to achieve the optimal outcomes our patients deserve. We were also delighted that attendance grew significantly relative to our first year."

Keynote speakers included Christopher J. White, MD, of Ochsner Health System, Dipti Itchhaporia, MD, Immediate Past President of the American College of Cardiology (ACC), and Spencer Masiewicz, DO, emergency and EMS physician at Northeast Georgia Health System.

Register now for the 2024 Georgia Heart & Vascular Symposium and view live case and lecture recordings from previous years at georgiaheartinstitute.org/symposium2024.

Interested in becoming a sponsor of the Georgia Heart & Vascular Symposium? Visit georgiaheartinstitute.org/sponsor-symposium

500+
Attendees

14.5
ABIM MOC
Credits Awarded

4
Cases Live
Streamed

FY-23

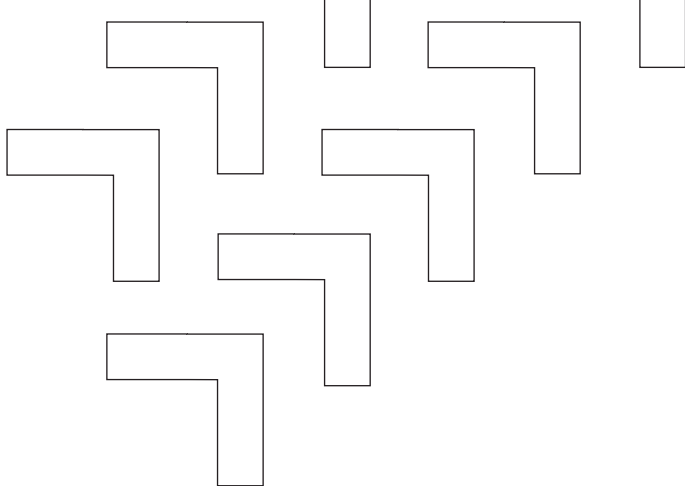


CARDIO- VASCULAR DISEASE FELLOWSHIP PROGRAM ATTRACTS LEADERS OF TOMORROW

In summer 2023, Georgia Heart Institute welcomed its second incoming class of Cardiovascular Disease Fellows—a huge addition to the already prestigious Graduate Medical Education (GME) program at Northeast Georgia Health System (NGHS). NGHS' GME program had already established residencies and fellowships across specialties such as internal medicine and general surgery. With the addition of the Cardiovascular Disease Fellowship program, the GME program continued to attract top candidates from around the country, ready to complete their medical training.

“This is an exciting time for our GME department and the Cardiovascular Disease Fellowship program,” said Ugochukwu Egolum, MD, FACC, Program Director. “Our second group of fellows is now here, making their way through the curriculum and learning from the inaugural class of fellows that came before them. The communities in northeast Georgia are growing fast, and it's exciting to be a part of the draw that brings so many candidates into our program.”

On November 29, 2023, “Match Day”, Georgia Heart Institute announced the third class of fellows, who will join the Cardiovascular Disease Fellowship program in summer 2024. Although women account for only about 37% of U.S. doctors and 15% of cardiologists, five out of the six incoming Cardiovascular Disease Fellows are women.



MEET THE PGY-4 CARDIOVASCULAR DISEASE FELLOWS



Abdullah Asreb, MD
Residency:
Northeast Georgia
Medical Center



Fardeen Faiz, MD
Residency:
ECU Health



Christine Sykalo, DO
Residency:
Northeast Georgia
Medical Center



Jeffrey Jacob, MD
Residency:
George Washington
University



Riaz Mahmood, MD
Residency:
Northeast Georgia
Medical Center

2023 MATCH CLASS STARTING IN 2024

Courtney Willis, MD
University of North Carolina

Shivani Mehta, MD
Trinity Health Oakland/Wayne
State University

Moneba Anees, MD
Emory University

Roshni Prakash, MD
University of Florida

Teja Chakrala
University of Florida

Toochukwu Okafor, MD
Hartford Healthcare/St.
Vincent's Medical Center

For more information on the Cardiovascular Disease Fellowship program, visit ngmcgme.org/programs/cardiology-fellowship.



CONNECT WITH US

Explore clinical content specifically for physicians such as live cases, webinar events, articles, and more happening across all cardiovascular specialties right here at Georgia Heart Institute!

BROADCASTMED

Georgia Heart Institute launched its newest page, powered by BroadcastMed in January 2023. A revolutionary healthcare media platform specifically for the clinician audience, BroadcastMed allows users to browse and search for videos, podcasts, educational courses, and articles from physicians and health care systems across the country.

LinkedIn

Connect with us on LinkedIn to stay up to date on Georgia Heart Institute news, events, videos, and more.

VuMedi

VuMedi is primarily a clinical video platform for physicians across all subspecialties of medicine. Find convenient and comprehensive educational content on therapies, techniques, research, and more from Georgia Heart Institute's forward thinking cardiovascular program. This platform allows users to not only view educational content but also to connect with other cardiology professionals.

WONDRA MEDICAL

Georgia Heart Institute is one of the only three healthcare systems in the United States that has partnered with Wondr Medical to create clinical content for the cardiology community. Users can watch, read, and interact with other physicians around the world and share peer-to-peer information.

For links to all Georgia Heart Institute's clinical channels, visit georgiaheartinstitute.org/connect



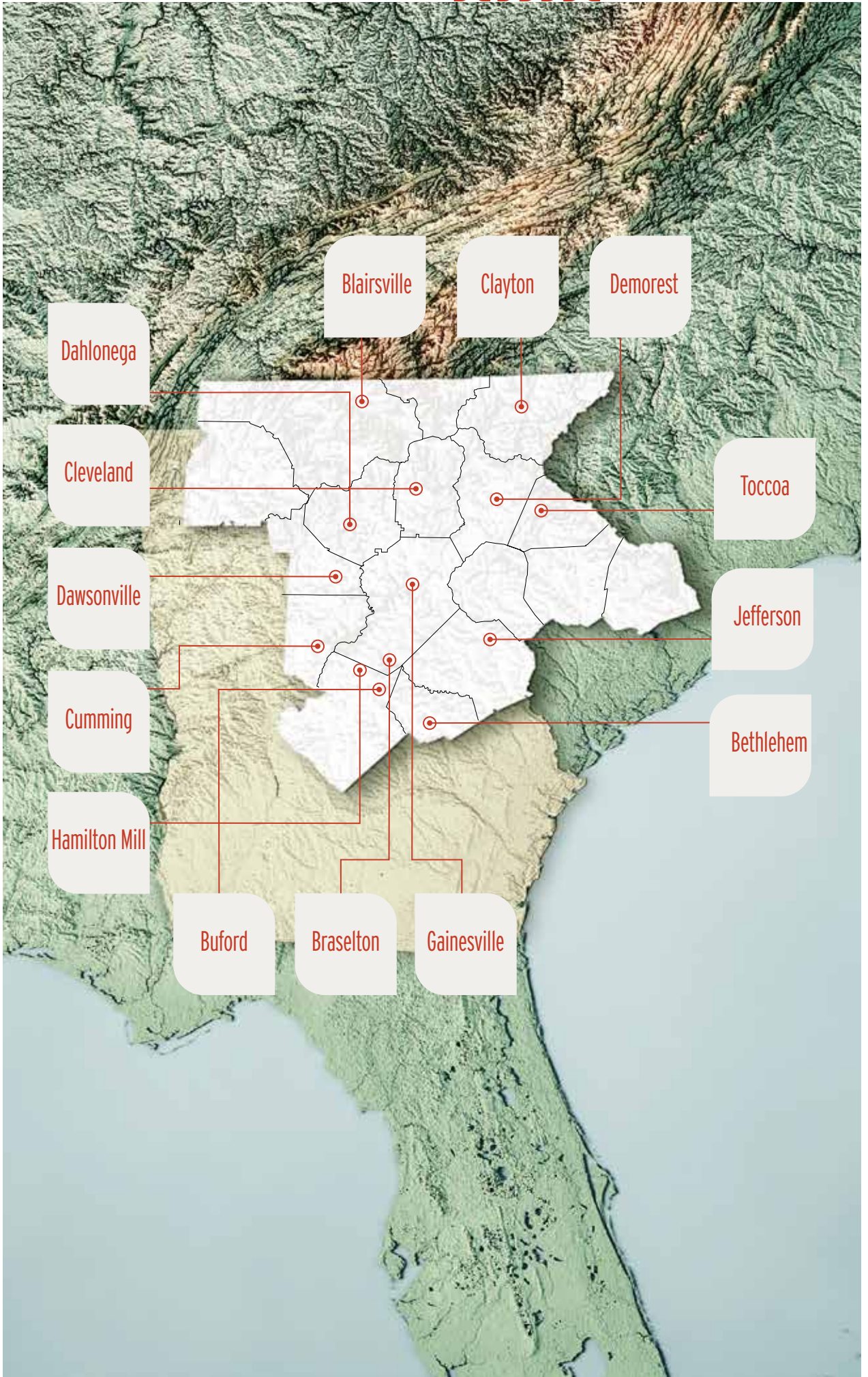
INTERESTED IN RECEIVING FUTURE EDITIONS OF GEORGIA HEART INSTITUTE'S HEART & VASCULAR ANNUAL REPORT?

Subscribe to our mailing list by completing the form on our 'Stay Connected' page.



Scan the QR code to get started.





DIRECTORY

ADVANCED HEART FAILURE

Blairsville | Braselton | Buford | Cumming
Gainesville | Jefferson
770-534-2020
georgiaheartinstitute.org/heart-failure

Giancarlo Acosta-Baez, MD

Ugochukwu Egolum, MD, FACC
Program Director for the Cardiovascular
Disease Fellowship

Vikram Raje, DO
Medical Director for the Heart Failure
Treatment and Recovery Center

Robin Brown, AGACNP

Shelley Davis, AGACNP

Ifeoma Ezeh Omoregie, PA

Kelly Harless, FNP

Rychelle Magriby, FNP

Jessy Mathews, FNP

John "Jay" Mullens, AGACNP

Emily Seaver, AGACNP

Jennifer Waite, AGACNP

ELECTROPHYSIOLOGY

Blairsville | Braselton | Buford | Cumming
Gainesville
770-848-7885
georgiaheartinstitute.org/EP

Joon Ahn, MD, FHRS
Medical Director of Electrophysiology

Shalabh Chandra, MD, MPH

Stephen Prater, MD, FACC, FHRS

Karthik Ramaswamy, MD

Taylor Abu-Alrub, PA

Keith Adkins, ANP

Shelia Bradshaw, AGACNP

Mandy Harris, FNP

Chance Perry, AGACNP

Kayla Rylee, AGACNP

INTERVENTIONAL CARDIOLOGY

Braselton | Gainesville
770-534-2020
georgiaheartinstitute.org/interventional

Raza Abbas, MD, MS

Nima Ghasemzadeh, MD, FACC

Zachary George, MD, FACC, FSCAI

Gregory R. Giugliano, MD, SM, FACC, FSCAI
Medical Director of Inpatient Cardiology

Glen Henry, MD, FACC, FSCAI
Medical Director of Interventional Cardiology
and Cath Labs

Khaja Mohammed, MD, FACC, MRCP

Falgun Patel, MD, FACC, FSCAI

Ronnie Ramadan, MD, FACC, FSCAI
Medical Director of the Structural
Heart Center

Habib Samady, MD, FACC
President of Georgia Heart Institute

Kristen Blair, AGACNP

Bonnie Brown, FNP

Keith Causey, PA

Denise Krackenberg, ACNP

R. Leigh Mansfield, AGACNP

Anela Pearson, AGACNP

Jannette Porter, AGACNP

Ansleigh Setzer, ACNP

Ashley Simpson, AGACNP

Marsha Stringer, AGACNP

Amy Trent, ANP

Jacquelyn Wheatley-Malone, ANP

Michael Wood, PA

Ryan Yenovkian, PA

NON-INVASIVE CARDIOLOGY

Bethlehem | Blairsville | Braselton | Buford
Clayton | Cleveland | Cumming | Dahlonga
Dawsonville | Demorest | Gainesville
Hamilton Mill | Jefferson | Toccoa
770-534-2020
georgiaheartinstitute.org

Elia Abboud, MD, FACC

Vedang Bhavsar, MD, FACC

Jaime Burkle, MD, FACC
Medical Director of the Center for
Cardiovascular Prevention, Metabolism & Lipids

Sudhakara Chennareddy, MD, FACC

Siva Chiranjeevi, MD, MBA

Mitchell G. Davis, MD, FACC

Laura Divoky, MD, MPH, FACC
Medical Director, Non Invasive Southern Market

Adel M. Eldin, MD, FACC, FAC

Jay H. Joseph, MD, FACC

Naga Kommuri, MD, FACC, FACP

Sanjay Lall, MD, FACC, MBA
Medical Director, Non Invasive Southern Market

Gary M. Minkiewicz, MD, FACC

Landai Nguyen, DO
Alan Opsahl, MD
Ioannis Parastatidis, MD, PhD
Ram G. Penmetsa, MD, FACC
Zaid Said, MD
Associate Program Director of Cardiovascular
Disease Fellowship
Timothy A. Scully, MD, FACC
Megan Smith, DO, FACC
Veerappan "Ramesh" Subramaniam, MD,
FACC
Manivannan Veerasamy, MD
Anu Vellanki, MD, FACC
Marc Veneziano, MD
Ryan Whitney, MD, FACC
Corey Barron, AGACNP
Brigitte Cadet, AGACNP
Zachary Clevenger, AGACNP
Paige Cocco, AGACNP
Karlye Cowart, FNP
Maxwell DeVine, PA
Veronica Eberhart, AGACNP
Nijja Flentall, PA
Ashley Gibbs, AGACNP
Regina Hardesty, AGACNP
Tracy Herring, AGACNP
Sholanda Hooper, FNP
Robert Joiner, PA
Anna Komoto, AGACNP
Christopher Leech, ACNP
Carrie Loper, PA
Teresa Mendez, AGACNP
Christine Nell-Dybdahl, FNP
Marett Panter, AGACNP
Grace Pickett, AGACNP
Andrew Porter, PA
Stephanie Royall, AGACNP
Melissa Ruark, FNP
Tseday Samuel, ACNP
Jennifer Sargent, AGPCNP
Katherine Sarrell, FNP
Laura Vogt, AGACNP
Connie Watts, AGACNP
David Willard, PA
Caroline Wolter, PA

NORTHEAST GEORGIA PHYSICIANS GROUP CARDIOVASCULAR & THORACIC SURGERY

Gainesville
770-219-7099
ngpg.org/heart-surgery
Karen Gersch, MD, FACC, FACS
T. Sloane Guy, MD, MBA, FACS, FACC
Director of Minimally Invasive & Robotic
Cardiac Surgery
J. Clifton Hastings, MD, FACS
Medical Director of Cardiovascular
& Thoracic Surgery
R. Kyle Thompson, MD
Surgical Director, Advanced Heart Failure
Tina Chaphe, AGACNP
Christopher Crumley, PA
Megan Gerrells, PA
Lacey Hook, PA
Victoria Hutson, AGACNP
Susan Kemp, FNP
Mary McCauley, PA
Sean Perry, PA

NORTHEAST GEORGIA PHYSICIANS GROUP VASCULAR SURGERY

Gainesville | Braselton
770-219-4000
ngpg.org/vascular
Samer Alharthi, MD
Nizar Hariri, MD
Niraj Parikh, MD
James Reeves, MD
Phillip Rideout, MD
Omar Abu-Alrub, AGACNP
Michelle Davis, AGACNP
Morgan Dollar, PA
Alaina Hall, PA
Megan Hull, PA
Ashley King, PA
Haley Queen, PA
Savannah Sessions, PA
Makayla "Katie Beth" Sims, PA

This list of physicians and APPs
reflect those who are currently
practicing and/or hired during
the 2023 fiscal year (FY23).
Georgia Heart Institute's FY23
begins October 1, 2022 through
September of 2023.



GEORGIA HEART
INSTITUTE

200 South Enota Dr., Suite 430
Gainesville, GA 30501

Non-Profit Organization
US POSTAGE PAID
Gainesville, Ga.
Permit 6