



EMORY | WOODRUFF HEALTH SCIENCES CENTER

# COMBINING OUR STRENGTHS 2019 *Community Benefits Report*



# QUICK STATS

**11**  
hospital campuses

**250**  
outpatient locations

**2,691**  
inpatient beds

**2,800**  
physicians

**33,000**  
employees

**5,800**  
students and trainees

**\$688 m**  
annual community benefit

**\$10.8 b**  
annual economic impact

For more details, see pages 3, 18, 19, 20

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**On the cover:** Oncology nurse Anita Germaneso tends to a patient in the Winship infusion center.

*Patient stories throughout this book are real, but patients' names and identities have been changed to protect their privacy.*

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**"No one can whistle a symphony.  
It takes a whole orchestra to play it."** – H.E. LUCOCK

## Combining our Strengths

The extraordinary strength of the Woodruff Health Sciences Center (WHSC) lies not only in the passionate and talented individuals who

*Jonathan S. Lewin*



compose our team, but even more so in the places where those individuals intersect and combine their strengths to positively influence the people we serve.

This report celebrates both the WHSC teams who provide help and hope to people in need and the people themselves, who face illness and adversity with courage and grace. In the stories that follow, you'll meet them both, and

I hope you'll be as inspired by them as I am.

From gifted medical professionals who work together to ensure equal access to the sick and injured regardless of their ability to pay, to compassionate students who understand that sometimes doing the most good means meeting people at their point of need, to brilliant and dedicated scientists who are working to prevent disease before it even starts, the Woodruff Health Sciences Center has an immeasurable impact on our community and its people when we combine our strengths in service to others.

### **Jonathan S. Lewin, MD**

Executive Vice President for Health Affairs, Emory University  
Executive Director, Woodruff Health Sciences Center  
President, CEO, and Chairman of the Board, Emory Healthcare



# Charity care in Emory Healthcare

EMORY HEALTHCARE PROVIDED A TOTAL OF \$151.5 MILLION IN CHARITY CARE IN FISCAL YEAR 2018-2019. The term "charity care" includes two categories: (1) indigent care for patients with no health insurance, not even Medicaid or Medicare, and no resources of their own and (2) catastrophic care for patients who may have some coverage but for whom health care bills are so large that paying them would be permanently life-shattering.

The box below details the charity care provided at individual Emory Healthcare facilities. Included elsewhere in this book is information about uncompensated care provided by Emory physicians who practice at Grady Memorial Hospital and at other facilities.

In addition to charity care, Emory Healthcare provides many other services to help improve access to care, advance medical knowledge, and relieve or reduce dependence on taxpayer-funded community efforts. This total for Emory Healthcare was \$132.1 million in fiscal year 2018-2019. Examples of what this total includes:

- \$78.5 million shortfall between Emory Healthcare's cost to provide care to Medicaid patients and Medicaid reimbursement
- \$37 million in costs to Emory Healthcare for the Georgia provider tax, which supports the state's Medicaid budget and helps maintain payment levels for all Medicaid providers
- \$16.7 million for activities such as discounted/free prescription drug programs; programs and contracted services for indigent patients; in-kind donations to organizations such as MedShare; transportation services; flu shots; blood drives; subsidized continuing care, nursing home care, and home care; sponsorship of selected charity health awareness events; and educational programs for the public, future health professionals, and patients.

## Charity care totals

Fiscal year 2018-2019

	(millions)
Emory University Hospital and Emory University Orthopaedics & Spine Hospital	\$43.7
Emory University Hospital Midtown	32.2
Emory Rehabilitation Hospital	2.3
Emory Decatur Hospital	17.0
Emory Hillandale Hospital	10.0
Emory Long-Term Acute Care	0.1
Emory Saint Joseph's Hospital	14.1
Saint Joseph's Medical Group	0.7
Emory Johns Creek Hospital	5.0
Emory Clinic and Emory Specialty Associates	26.0
Budd Terrace skilled nursing facility	0.4
<b>Total</b>	<b>\$151.5</b>

Social services manager Jeanelle Jenkins (right) and hospitalist Sarah Decaro are part of the hospital's "Tiger Team," named for its aggressive approach to finding resources in difficult cases.

## Emory was his only support. . .

**EVERYTHING HINGED ON A MISSING GREEN CARD.** Social services manager **Jeanelle Jenkins** was told that "hypothetically" someone with her patient's name and address had paid into the system and was eligible for benefits like Medicare or Medicaid. But—the sticking point—he would have to apply personally to replace the card before eligibility could be determined and any benefits applied for. Jenkins got permission to take him by ambulance to the immigration office. There, despite his waning memory and halting English, he answered the required questions and was approved for a temporary green card. The card would take months to arrive, however. In the meantime, medically, emotionally, and financially, Emory was his only support.

In mid 2018, Julian Diaz, 72, fell where he worked, and an ambulance brought him to Emory University Hospital's emergency room. Diagnosed with subdural hematoma and brain swelling, he was stabilized in the ICU and then moved to the neurology floor.

After almost five months there, Diaz was stable enough to leave the hospital but not live alone. The friends who had visited had long since disappeared, leaving him on his own. Except for Emory. The hospital already had declared accumulated costs of roughly \$300,000 as charity care. Over the next three months, Emory paid for him to live in a nursing home. When Diaz's mental status deteriorated further, resulting in inappropriate behaviors, the home sent him back, and no other nursing facility would accept him.

He then went to Emory's skilled nursing facility, Budd Terrace, for which Emory Hospital also paid, pushing the hospital's total costs to \$500,000 and counting. Diaz now has a state guardian and conservator. When his green card does arrive, he will be able to pay for care going forward. But not retroactively. His benefits may have hinged on the missing green card—but the excellent care he continues to receive at Emory did not.

## Caring during and after hospitalization

**THANDA'S BLOOD PRESSURE ROSE ALARMINGLY DURING HER LAST MONTH OF PREGNANCY, CAUSING HEADACHE AND SEIZURES.** After four weeks in Emory University Hospital Midtown's ICU, she gave birth to a healthy baby boy, which her parents carried back to an apartment already crowded with relatives. A devastating stroke had left Thanda unmoving and only minimally responsive.

Over the next few weeks, Thanda's husband took a bus after work each day to be at her side. When four months produced little improvement, the medical team recommended a nursing home. Her husband refused. Speaking through the hospital's translation service, he said the extended family had survived eight years in a refugee camp after fleeing Myanmar. Then, switching to English for emphasis, he said, "Now roof, job, water, can do this."

It would not be easy, for him or the hospital. Peachcare paid for hospitalization during pregnancy, but coverage ended 30 days after delivery. The hospital covered the remaining four months. Two weeks before discharge, social workers **Lauren Greer** and **Daryl Morgan** brought members of Thanda's family in to learn the complex management of her tracheotomy and feeding tubes, paying for directions to be translated. The hospital also paid for home health nurses—and an interpreter to accompany them. They helped the mother apply for Medicaid (her baby already receives it) and provided suction tubes, adult diapers, a hospital bed, and other supplies before Medicaid took effect. Today Thanda is followed by an Emory outpatient clinic, where a case manager watches over her care, tracks appointments, and connects the family with transportation and other services. The continued care is helping the family carry on in a difficult situation.

Social workers Lauren Greer and Daryl Morgan say finding the resources for struggling patients is a complex jigsaw puzzle, different for every case.



## Adding faith to patient care

**THE FAITH COMMUNITY NURSE NAVIGATOR PROGRAM SPONSORED BY EMORY SAINT JOSEPH'S HOSPITAL OFFERS PATIENTS SUPPORT TO MAKE APPOINTMENTS, TRACK MEDICATIONS, MANAGE SYMPTOMS, AND CONNECT WITH COMMUNITY RESOURCES.**

What's different is that it also offers emotional and spiritual support to patients who wish it, matching them with a nurse from their own faith or culture.

Coordinator **Terri Burnham** says the program currently involves more than 30 Emory nurses, including Protestants, Catholics, Buddhists, Hindus, and Muslims, with other faiths being added as more nurses go through the hospital's national curriculum training program. For most, it's an act of devotion, performed without additional pay.

It seems to be working. One of the program's first patients, 65-year-old Peter Thompson, had been in the emergency room 10 times and hospitalized six times over the previous year for his congestive heart failure.

Burnham began navigation by meeting with him and addressing duplicates or conflicts among almost 20 prescriptions from doctors in three different sys-



**Like others in Emory Healthcare's Faith Community Nurse Navigator Program, Terri Burnham offers participating patients prayers and the chance to talk about whatever is on their heart.**

tems. She bought big plastic pill boxes, marking them with hour and dosage. She engaged home health nurses to make sure he took them correctly and weighed himself daily, notifying his doctors if he gained more than two pounds overnight, indicating he was retaining fluid. (The hospital bought the scale.) With his permission, she switched two of his physicians—he wasn't even sure of their names—to counterparts at Emory so everyone would be in direct communication.

With her encouragement, Thompson moved out of his moldy apartment into low-income senior housing. His cough improved. Sometimes, he asked for her prayers, and he always appreciated her help.

After a year, he needs less support. And with no admissions in the past eight months, he is contributing to some pretty amazing statistics. The 31 high utilizers

among the almost 40 patients now in the program have had a 74% reduction in readmissions 30 days or less after discharge and a 52.6% reduction in total readmissions.

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## From homelessness to dream come true

**JACK JOHNSON HAD A LONG BEARD, MATTED HAIR, AND WORN, DIRTY CLOTHES AND LIVED IN THE WOODS SOMEWHERE NEAR EMORY JOHNS CREEK HOSPITAL. He had a leg wound from an animal bite, and he was admitted to the hospital.**

At first, says case manager **Barbara Farrell** (top left), he was withdrawn and angry, especially when social workers asked about identification or offered to help get him a place in a homeless shelter. After his fourth visit to the ER to get his bandages changed, doctors finally persuaded him to go to Emory Healthcare's wound clinic for more intensive care. Since he refused to reveal where he lived, he walked to the hospital once a week. Farrell and patient advocate **Maria Fernandez** (top right) called Uber to take him to the wound clinic.

Over the next eight weeks, Johnson's mood changed. He talked more openly and became friendly with the security guards. Once hospital volunteers learned he was a voracious reader, they started bringing

him books, which he read in the lobby.

As winter approached, Farrell told him he could not live in the woods—or the lobby. Did he have family somewhere? Friends? If he refused to go to a homeless shelter, the hospital could provide him a bus ticket. He brightened. He wanted to go to Seattle. On the appointed day he came with a backpack, boots, and heavy winter coat, a gift from security guard Kelvin Peterson.

As he left, many staff turned out to say goodbye. The guards had packed food, and they gave him cash for the trip. Johnson refused to cut his beard or hair, but he did agree to take a hot shower, change into clean clothes from the hospital's charity closet, and accept the toiletries Fernandez urged on him. As for his plans once he arrived in Seattle, all he would say was, "I've been dreaming of this since the day my grandmother died." He proudly flashed his new ID—the plastic name bracelet from Emory Johns Creek.

## Made to feel loved and accepted...

**MARGARET PARKER FELT AN INTENSE "AIR HUNGER" THAT LEFT HER GASPING FOR BREATH.** Her lips turned bluish, and she felt confused and panicked.

Rightly so. For years the 60-year-old had suffered from chronic obstructive pulmonary disease. Now she was in acute respiratory failure, a medical emergency. Liquid built up in the air sacs of her lungs left them unable to release enough of the oxygen her heart, brain, and other organs so urgently needed. At Emory Decatur Hospital, the team stabilized her respiratory status and blood pressure, preventing further decline and the need for a ventilator.

When Parker no longer needed acute care, her care team worried that she could not manage on her own. Her home had way too many stairs. Just walking across the room, caused Parker's oxygen levels to plummet and her heart rate to rise. A nursing home offered security but limited chance for improvement, and Parker wanted desperately to get back to her life and her cashier job. The acute care therapists appealed to **Tammy Poulcott**, program director for



**Tammy Poulcott, program director for inpatient rehabilitation, was part of a team who helped turn Parker's acute care admission into rehabilitation, giving the woman her life back and decreasing the chances of readmission.**

inpatient rehabilitation, and her rehabilitation care colleagues: please accept her as an inpatient until she

grows less weak and her lungs improve. Parker's strong motivation increased the likelihood that rehab would help. She was in.

Over the next 10 days, Parker grew strong enough to negotiate stairs. She exchanged her oxygen tank for a nebulizer. Since she had no insurance and no resources, the hospital classified her as an "Emory pay" patient. The hospital paid for seven days of acute care, seven days of rehabilitation, her medications and walker, and then home health care visits. Social workers also made follow-up physician appointments and helped with her Medicaid application.

In the hospital, Parker had smiled but spoke very little. After she left, the team was surprised to receive a letter in which she thanked them for treating her with respect and being made to feel

loved and accepted. For Emory Decatur, the unreimbursed costs felt like money well spent.

## When "avoidable" days are unavoidable

**MEDICARE CLASSIFIED JAMES THORNTON'S MOTHER'S DAYS IN THE HOSPITAL AS "AVOIDABLE," MEANING THEY WERE MEDICALLY UNNECESSARY AND THEREFORE INELIGIBLE FOR COVERAGE.** Emory Hillandale Hospital, however, considered the days "socially necessary," even if the hospital itself had to cover the costs.

Thornton was more concerned about his mother's condition than his own congestive heart failure. Bed-bound for more than five years, the 88-year-old woman didn't speak and didn't always recognize the man feeding her, changing her diapers, and singing her melodies she remembered singing to her own little boy.

He was her only caregiver. So when his legs and feet became so swollen he could no longer move, he always called an ambulance to take them both to the hospital. Each time the two arrived at the Emory Hillandale emergency entrance, Medicare covered "medically necessary" hospitalization for Thornton. But since his mother had no place to go, she also stayed in the hospital. Her last stay of three weeks had cost the hospital \$15,750.

As Thornton's condition worsened, medical social worker **Jekia Holt** and her colleagues realized that the two needed more help. Thornton simply could not continue what he was doing. Holt was able to enroll the mother in a hospice personal care home, for which Emory Hillandale paid more than \$1,500 per month. Thornton's initial resistance melted as he watched his mother interact with staff, who called her "grandma."

With the help of home health nurses (arranged for by Holt to make sure he took his medicines and followed through on therapy), Thornton began to sleep through the night for the first time in years. He believes the hospital's generosity made the last months of his mother's life happy ones and allowed him to focus on his own health. His edema is much better, and hospital readmission has not been necessary.

**When the patient again arrived at the hospital by ambulance with his aged mother at his side, medical social worker Jekia Holt immediately began discharge planning that would provide long-term answers to the duo's ongoing health and financial challenges.**





Emory faculty and residents provide 80% of the care at the publicly funded Grady Hospital, leading programs focused on problems experienced disproportionately by indigent, underserved populations. In 2018-2019, Emory faculty provided \$34.1 million in uncompensated care at Grady. All payments for Emory services for patients who have coverage go to the Emory Medical Care Foundation, which uses this revenue—\$59.7 million last year—to support Emory's mission at Grady.

In 2003, average length of stay in the Grady emergency room was 14 hours. Last year, thanks in large part to processes put in place by emergency medicine physician Hany Atallah and his team, it was five hours, despite a 50% increase in patient volume.

## Pulling out all the stops

**ONLY LATER WOULD DR. HANY ATALLAH LEARN THE EVENTS THAT BROUGHT TOM TO GRADY'S EMERGENCY ROOM, UNCONSCIOUS AND BLEEDING FROM THE MOUTH.** At the moment, the chief of emergency medicine's only concern was saving his life. He gave it everything he—and Grady—had.

It took help from a trauma surgeon to insert a breathing tube. Atallah then called for an ear, nose, and throat specialist to join them. Then a vascular surgeon. Then a neurosurgeon. Within minutes, five of Emory's best, most experienced physicians were leaning over the young man. After seven hours, Atallah was faced with the thing he most hated. He had to go tell the family that he had done everything possible, but the young man had died. The parents appeared too stunned to speak. The girlfriend began to sob silently.

She and Tom had been picnicking in a park, when they were approached by two nervous young men, one waving a gun. Tom calmly handed over his wallet, but when one of the men grabbed for his girlfriend, he reacted instinctively. So did the gunman, pushing Tom to the ground, firing as Tom fell.

Gunshots, stabbings, auto crashes—Atallah has seen them all. From the moment patients arrive, he thinks only of how to care for them as quickly as possible. Sometimes, concerned even when tests come back normal, he gives them his cell number. What he never asks, never thinks about—whether it's the CEO who fell from a ladder or the immigrant with the chainsaw wound afraid to give his name to the translator—is if they have medical insurance.

## Racing against superbugs

**DISCOVERY OF ANTIBIOTICS LIKE PENICILLIN TRANSFORMED MODERN MEDICINE AND SAVED THE LIVES OF MILLIONS, BEGINNING WITH SOLDIERS IN WORLD WAR II.** But rapid emergence of antibiotic-resistant bacteria is endangering the efficacy of these once miraculous drugs. The CDC reports that every year at least 2 million people are infected with antibiotic-resistant bacteria, and at least 23,000 die as a result. Some infections already have no effective antibiotics.

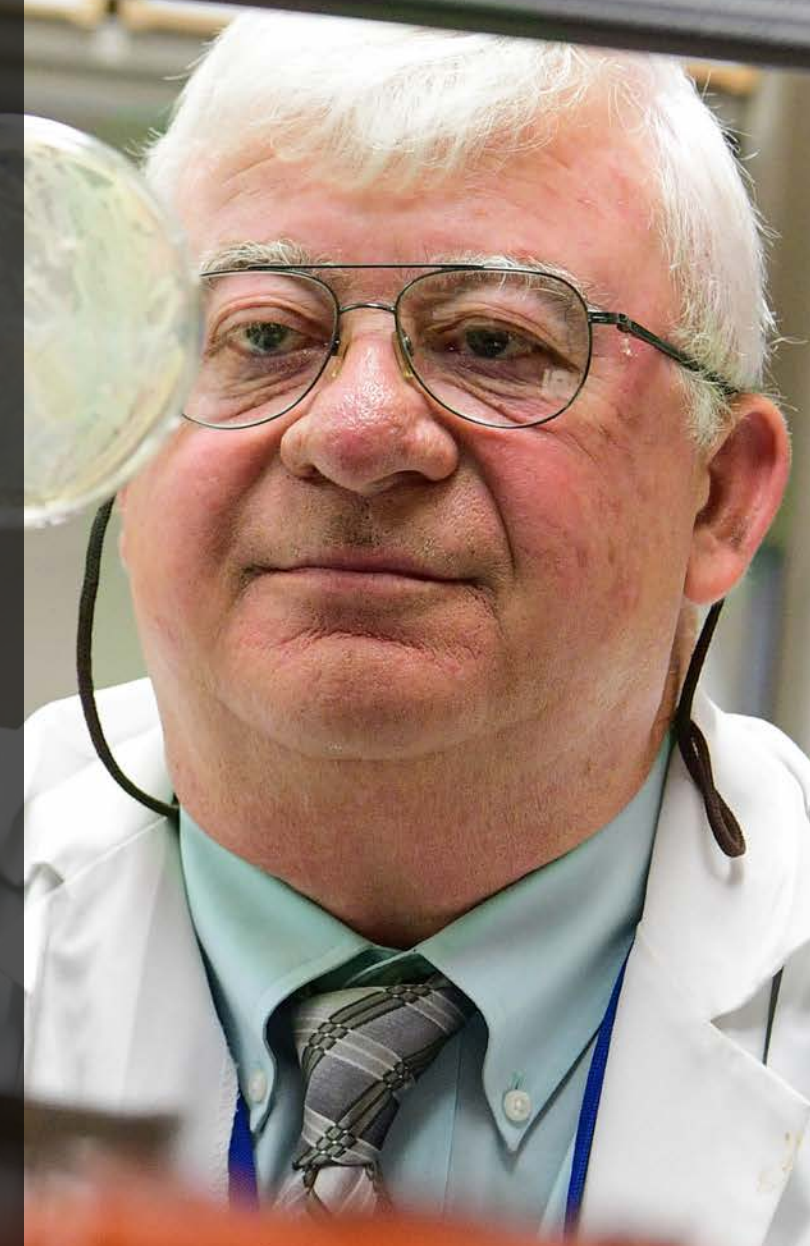
Emory scientist **William Shafer** is working to change that. His work has far-reaching implications. Without the ability to fight infections, many medical advances will stop in their tracks: organ transplants, chemotherapy, and surgeries like joint replacements.

Shafer focuses on a system called drug efflux, through which bacteria use pumps to expel unwanted environmental toxins (which for bacteria, include antibiotics). Shafer and colleagues discovered mutations that cause these pumps to increase in number. Such over-expression provides a target for new drugs to cripple the efflux pumps and allow antibiotics to remain in the bacteria long enough to do their intended damage.

Early efforts to inhibit these pumps proved toxic, affecting other pumps in the body's cells (another important aspect of Shafer's research). Today, his lab uses state-of-the-art molecular techniques to silence genes that encode for pump expression. His lab is working to validate that approach, while long-time collaborator Ann Jerse in the Uniformed Services University in Bethesda moves toward animal studies.

"We're optimistic," says Shafer, "that silencing specific genes in the bacteria, thus reducing the presence of pumps, will counteract antibiotic resistance to many previously effective antibiotics such as penicillin." That's bad news for bad bacteria and good news for patients.

Microbiology and immunology researcher **William Shafer** co-directs the Emory Antibiotic Resistance Center, which has a strong VAMC component, including Shafer's lab.



Emory and the Atlanta VA Medical Center have been partners since 1946. Emory provides physician care at the facility and has made it one of the nation's most successful VA centers for research to improve care for veterans. Emory investigators attracted more than \$12 million in VA funding and \$12 million in non-VA funding for such research last year.

# Georgia on our minds

The Woodruff Health Sciences Center is working in varied ways to promote and protect the health of Georgia's citizens.

## Tracking cancer for state and federal registries

The Georgia Center for Cancer Statistics (GCCS), in Emory's Rollins School of Public Health, collects and edits cancer data for the state Public Health Department's Georgia Comprehensive Cancer Registry. The GCCS also operates the Georgia registry for the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program.

## Maximizing availability of cancer clinical trials

Emory's Winship Cancer Institute works with the Georgia Center for Oncology Research and Education to partner with community-based physicians to make more clinical trials of new cancer treatments available to patients throughout the state.

## Treating newborns with genetic disorders



Emory partners with the state's Department of Public Health to provide follow-up and care when Georgia newborns test positive for metabolic, endocrine, or other genetic disorders.

## Fostering clinical research

Emory is the lead partner in the Georgia Clinical & Translational Science Alliance (CTSA), an NIH-funded consortium created to translate laboratory discoveries

into treatments, engage communities in clinical research, and train the next generation of clinical investigators. Other Georgia CTSA academic partners include Morehouse School of Medicine, Georgia Institute of Technology, and University of Georgia.



## Monitoring Georgia's nursing workforce

The Georgia Nursing Workforce Initiative, housed in Emory's nursing school's Center for Data Science, is analyzing not just nursing shortages in the state but the need for more nurse practitioners in rural areas, the untapped resource of clinical nurse specialists, and the shortage of nursing faculty to train more nurses for the future.

## Helping nurses serve in the midst of crisis

The Academic Clinical Partnership Committee (ACPC) at Emory's nursing school recently produced online videos to train nurses in Georgia's Department of Public Health (DPH) to ensure they have the skills needed during a deployment to a disaster shelter. The ACPC includes Emory nursing faculty and staff as well as nursing leaders from DPH, Emory Healthcare, Grady Health System, the Atlanta VA Medical Center, Children's Healthcare of Atlanta, Northside Hospital, and Mercy Care. More videos are planned, based on priorities to be identified by DPH.

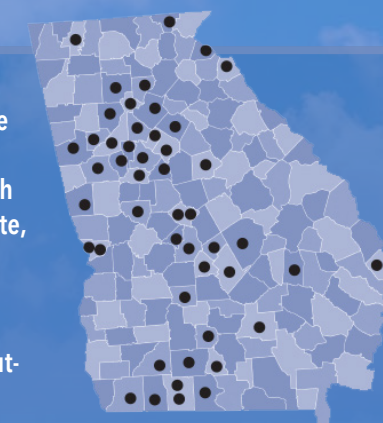
## Addressing the diabetes epidemic

The Georgia Diabetes Translation Research Center, a partnership of Emory's schools of medicine, nursing, public health, and business as well as Georgia Institute of Technology and Morehouse School of Medicine, is working to aggressively address factors that have led to growth in diabetes prevalence that has far exceeded statistical projections.

## Attracting eminent researchers

The Georgia Research Alliance (GRA) is a partnership of business, research universities, and state government that fosters economic development and funds eminent scholars at Georgia universities. At Emory, the GRA invests in research in nanotechnology, cancer, pediatrics, screening for new drugs, vaccines, AIDS and other infectious diseases,

Emory Healthcare is the most comprehensive health system in the state, with locations all over Georgia, including 11 hospitals, 250 outpatient locations including affiliates, 19 regional affiliate hospitals in 17 counties, and Winship Cancer Network locations in three counties outside metro Atlanta. It also has more than 2,800 Emory and private practice physicians and expertise in more than 70 specialties.



immunology, transplantation, clinical trials, bioinformatics, autism, imaging, cystic fibrosis, addiction, obesity, and Alzheimer's disease.

## Bolstering Georgia's physician workforce

Emory's medical school provides more than half of the residency training positions in Georgia; 53 of the medical school's 106 residency programs are the only such programs in the state. Such programs provide a critical recruiting base for Georgia's physician workforce.





# Serving the community, nearby and far away

From their first hours here, students and trainees learn that service is a vital part of the DNA of Emory's Woodruff Health Sciences Center.



**YERKES NATIONAL PRIMATE RESEARCH CENTER** Yerkes offered an interactive educational booth at the 2019 Atlanta Science Festival Expo. Yerkes works with the Emory Vaccine Center and Emory graduate students in Immunology and Molecular Pathogenesis to help Expo participants learn about the importance of vaccines.

**WINSHIP CANCER INSTITUTE** Each year Winship hosts a group of high school seniors and recent graduates to participate in a six-week oncology research immersion experience, after which they present research they have conducted to an audience of Winship oncologists.



**EMORY GLOBAL HEALTH INSTITUTE** Working with local partners, the Emory Global Health Institute recently established the Refugee and Immigrant Health and Wellness Alliance of Atlanta, which seeks to improve the health and social services available to Atlanta's refugee and immigrant community.



**SCHOOL OF NURSING** Nursing faculty member Brenda Baker volunteers with Motherhood Behind Bars, meeting with incarcerated moms and moms-to-be from all over Georgia to help improve their physical and mental health and that of their babies.

**SCHOOL OF MEDICINE** Yolanda Hood leads the Health Careers Opportunity Program, a partnership of several organizations, to provide mentors, college readiness education, health profession exposure, and scholarships for disadvantaged high school students in Atlanta.



**EMORY SAINT JOSEPH'S HOSPITAL** Each spring, ESJH leads an initiative throughout Emory Healthcare to collect toiletry items for Mercy Care that are given out to the homeless and underserved in Atlanta.



**EMORY DECATUR HOSPITAL** EDH spices up community events like the Decatur Book Festival and concerts on the square with health education activities, including blood pressure screenings and nutrition demonstrations. This Zumba dance was part of EDH's annual community cancer survivor's celebration.



**EMORY JOHNS CREEK HOSPITAL** Radiologist David Prologo and other EJCH physicians travel periodically to Tanzania to train doctors there in minimally invasive interventional radiology procedures.



**WOODRUFF HEALTH SCIENCES CENTER** Each December, health sciences staff look forward to the annual tradition of visiting residents at Branan Towers, a low-income retirement community in east Atlanta, and presenting them with grocery gift cards along with \$200 to the facility manager to be used for building-wide events or common area improvements.



**ROLLINS SCHOOL OF PUBLIC HEALTH** Members of the Rollins Center for Global Safe WASH work to improve water safety in hospitals. Here staff at a Cambodian hospital get training in mixing proper cleaning solutions for sanitizing the facility.



**SCHOOL OF NURSING** Nursing faculty member Sharron Close (center) and Emory pediatrician Amy Talboy (left) run Emory's "eXtraordinary" for children affected by X and Y chromosome variations.



**SCHOOL OF MEDICINE** Stephen Yeh and other Emory ophthalmologists travel to the Democratic Republic of Congo to provide eye care for survivors of Ebola virus disease.



## Preparing health professionals

Learning as part of an interprofessional team helps prepare our students to think creatively, interact more effectively with each other, and serve patients better.

**Emory University School of Medicine**

- 582 medical students, including 92 MD/PhD students
- 1,322 residents and fellows
- 522 students in allied health training, such as physical therapy and physician assistant programs

**Rollins School of Public Health**

- 1,203 master's and 179 PhD students

**Nell Hodgson Woodruff School of Nursing**

- 553 bachelor's, 318 master's, 27 PhD students, 100 DNP students

The Woodruff Health Sciences Center invested 23.7% of its tuition income last year in financial aid for its students, an amount totaling \$29.2 million.

Emory Healthcare provided \$104.6 million to support teaching and research missions in the Woodruff Health Sciences Center in fiscal year 2018-2019.

**INTERPROFESSIONAL EDUCATION AND COLLABORATIVE PRACTICE (IPE/CP) IS A KEY GOAL OF THE WOODRUFF HEALTH SCIENCES CENTER (WHSC), A REFLECTION OF IPE/CP'S GROWING IMPORTANCE NATIONWIDE TO HELP DEAL WITH STRUGGLES IN POPULATION HEALTH, AN AGING POPULATION, AND A SHORTAGE OF PROVIDERS.** Following are examples of how IPE/CP is changing teaching and practice.

The WHSC has been holding annual interprofessional team training days for first-year medical and nursing students since 2007, but last year the event was expanded to include students in public health and in the physician assistant, physical therapist, anesthesia assistant, and genetic counseling programs, raising attendance from 500 to 1,200 students. A team of nurses, residents, respiratory therapists, pharmacists, and others practiced different scenarios on a simulation mannequin. In one case, team members were devastated when they lost the "patient" to hemorrhagic shock but then got the chance to review the case and improve the outcome as they worked better in concert with one another.

The expanded team training day came on the heels of the first-ever symposium of the Woodruff Health Educators Academy (WHEA), also initiated last year. The WHEA offers an annual teaching fellowship for WHSC educators, a monthly journal club, a "teaching hack" speaker series, and an educators "salon," all to enhance teaching skills of faculty.

Also new is the recently established IPE/CP Synergy Award, offered to expand innovations that foster relationships across WHSC schools and programs, with focus on curricula and/or student experience, models of care and/or clinical practice, simulation, and community-based care.

Perhaps the best indication of IPE/CP's potential for improving education in the health professions can be seen in efforts of students themselves. Students from medicine, nursing, public health, and law recently tried to curb health care costs by creating the Interprofessional Student Hotspotting Learning Collaborative, the Atlanta affiliate of a national initiative. Student teams target medically and socially complex patients who constitute 5% of Grady Hospital's patients but account for 50% of its health care costs—the "hot spots." The teams help these patients manage their conditions to keep them out of the ER and the hospital.

## Covering the costs of research

**IN FISCAL YEAR 2018-2019, RESEARCHERS IN THE HEALTH SCIENCES WERE AWARDED \$637.7 MILLION IN GRANTS FROM THE NIH AND OTHER ORGANIZATIONS.** This includes funds to use gene modulation to protect against flu pandemic, study new approaches for treating lung cancer, improve health outcomes for older adults and training for health care workers who care for them, fund a residency program for primary care nurse practitioners working in Federally Qualified Health Centers, and help identify causes of child mortality in places where it is highest.

Research grants are critically important for obvious reasons, but they are not without cost. Conducting research involves substantial coinvestment from institutions like Emory to provide building space, heating and air-conditioning, lights, custodial services, administrative management, and more. Each year, Emory covers a large portion of the infrastructure costs for research conducted here. Last year, for example, the Woodruff Health Sciences Center invested \$176.8 million in such support for costs unrecovered from research sponsors.

The Woodruff Health Sciences Center invested **\$176.8 million** in research costs unrecovered from sponsors in fiscal year 2018-2019.





Based on expenditures of \$5.5 billion in FY 19, the WHSC has an estimated economic impact on the metro area of \$10.8 billion.

## Stimulating the economy

**THREE MAJOR NEW BUILDINGS IN THE WOODRUFF HEALTH SCIENCES CENTER (WHSC) ARE UNDER WAY OR SOON TO BE:** a Winship Cancer Institute building at Emory University Hospital Midtown, a second Health Sciences Research Building on Emory's campus, and the R. Randall Rollins Building at Rollins School of Public Health, adding 935,000 square feet for patient care, teaching, and research.

The WHSC's annual \$10.8 billion economic impact on the local economy derives from projects like these as well as from jobs, innovations, discoveries, and more. With 33,000-plus employees, the WHSC helps make Emory the largest employer both in metro Atlanta and in DeKalb County.

Granted 50 patents in 2018, Emory is ranked 47th in the world among universities granted U.S. utility patents, according to the National Academy of Inventors

and Intellectual Property Owners Association. These patents covered potential new drugs, imaging software, adjuvants to improve vaccine effectiveness, and surgical instruments. Another boost to prospects for innovation is a recent \$10 million gift to support Emory's Morningside Center for Innovative and Affordable Medicine, which focuses on inexpensive, new, life-saving treatments that often remain unexplored because of lack of financial incentives.

In other efforts, Emory Healthcare and the Atlanta Falcons recently broke ground on a new musculoskeletal and sports medicine clinic, located at the IBM Performance Fields, the Falcon's home in Flowery Branch, Georgia. The clinic will provide a new location for patients, while also being an access point for Falcons who need to be seen by a sports medicine expert.



### Community benefit

EMORY'S WOODRUFF HEALTH SCIENCES CENTER BENEFITED THE COMMUNITY IN A VARIETY OF WAYS IN FISCAL YEAR 2018-2019

	(millions)
Cost of charity care provided by Emory Healthcare (page 3)	\$151.5*
Financial aid provided to students from tuition income (page 16)	29.2
Emory Healthcare investment in WHSC teaching and research (page 16)	104.6
WHSC investment in research unrecovered from sponsors (page 17)	176.8
Unreimbursed care provided at Grady Hospital (page 10)	34.1
Investment of Emory Medical Care Foundation in services at Grady Hospital (page 10)	59.7
Other community benefits (page 3)	132.1†
<b>Total (millions)</b>	<b>\$688.0</b>

\* In addition to providing charity care, Emory Healthcare conducts ongoing community health needs assessments (CHNAs) for its hospitals as part of its continued commitment to the health and well-being of community members. The reports assess the needs of the communities served by the hospitals using quantitative data and input from individuals representing the broad interest of the communities it serves. Using the CHNAs, Emory Healthcare develops strategies to outline plans to address the identified health needs of the communities it serves. Through these strategies, Emory Healthcare strives to improve the overall health of communities, while providing the best possible care to its patients.

† This includes the following:

- Shortfall between Emory Healthcare's cost to provide care to Medicaid patients and reimbursement from Medicaid **\$78.5 million**
- Costs to Emory Healthcare for the Georgia provider tax, which supports the Medicaid budget and helps maintain payment levels for all Medicaid providers **\$37 million**
- Discounted/free prescription drug programs, programs and contracted services for indigent patients; in-kind donations to organizations such as MedShare; transportation services; flu shots; blood drives; subsidized continuing care, nursing home care, and home care; sponsorship of selected charity health awareness events; and educational programs for the public, future health professionals, and patients **\$16.7 million**

## Woodruff Health Sciences Center of Emory University

Office of the Executive Vice President for Health Affairs

Emory University School of Medicine

Nell Hodgson Woodruff School of Nursing

Rollins School of Public Health

Yerkes National Primate Research Center

Winship Cancer Institute of Emory University

Emory Global Health Institute

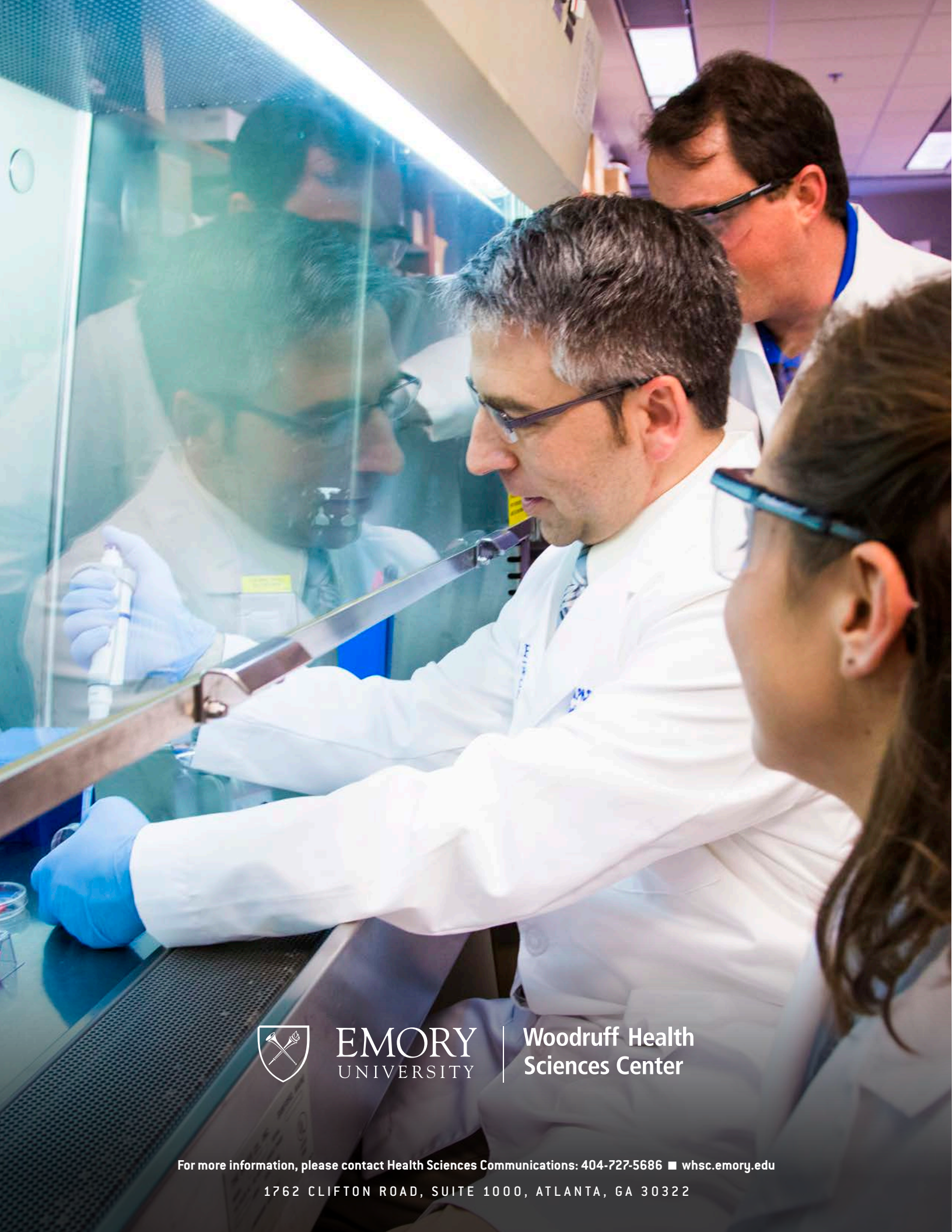
Emory Healthcare, the most comprehensive health care system in Georgia

- Emory University Hospital, 751 beds, including 82 at Wesley Woods
- Emory University Hospital Midtown, 529 beds
- Emory University Orthopaedics & Spine Hospital, 120 beds
- Emory Rehabilitation Hospital, in partnership with Select Medical, 56 beds
- Emory Saint Joseph's Hospital, 410 beds
- Emory Johns Creek Hospital, 110 beds
- Emory Decatur Hospital, 451 beds
- Emory Hillandale Hospital, 100 beds
- Emory Long Term Acute Care, 76 beds
- Emory University Hospital Smyrna, 88 beds
- Emory Clinic, 2,300 physicians, nurse practitioners, physician assistants, and other providers, with offices throughout the city and state
- Emory Specialty Associates, outreach physician group practice organization with locations throughout the city and state
- Emory Wesley Woods Campus (includes Emory University Hospital at Wesley Woods, Wesley Woods Towers residential and personal care apartments, and Budd Terrace, a 250-bed skilled nursing care facility)
- Emory Healthcare Network, network of physicians and hospitals formed to improve care coordination and quality outcomes and to control costs for patients and the community

### HOSPITAL AFFILIATES

- Grady Memorial Hospital, 640 licensed beds, staffed by 774 Emory faculty and 368 residents and fellows, in collaboration with Morehouse School of Medicine, with Emory providing 80% of care
- Children's Healthcare of Atlanta
  - Children's at Egleston, 278 beds, Emory campus, staffed by Emory and private practice physicians
  - Children's at Hughes Spalding, 24 beds, Grady Hospital campus, staffed by Emory, Morehouse, and private practice physicians
  - Children's at Scottish Rite, 319 beds, staffed by Emory and private practice physicians
- Atlanta Veterans Affairs Medical Center, 466 hospital beds, including a 120-bed community living center, 61-bed domiciliary, and 12-bed psychosocial residential rehabilitation program. Staffed by 328 Emory physicians.





EMORY  
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Woodruff Health  
Sciences Center

For more information, please contact Health Sciences Communications: 404-727-5686 ■ [whsc.emory.edu](http://whsc.emory.edu)

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