Here and now



Emory in the community



COMMUNITY BENEFITS REPORT 2007 WOODRUFF HEALTH SCIENCES CENTER





Woodruff Health Sciences Center of Emory University

- **■** Emory University School of Medicine
- Nell Hodgson Woodruff School of Nursing
- Rollins School of Public Health
- Yerkes National Primate Research Center
- Emory Healthcare, the largest, most comprehensive health care system in Georgia, which provides millions of dollars in charity care each year and includes
 - The Emory Clinic, with facilities on the Emory campus and throughout metro Atlanta
 - Emory Children's Center
 - **■** Emory University Hospital
 - **■** Emory Crawford Long Hospital
 - Wesley Woods Center of Emory University
 - Wesley Woods Hospital (inpatient geriatric care and hospice service)
 - Wesley Woods Clinic (outpatient primary care for geriatric patients)
 - **Budd Terrace** (skilled nursing care facility)
 - Wesley Woods Towers (residential retirement and personal care facility)
 - **Emory-Adventist Hospital**, jointly owned
 - EHCA, LLC, created in collaboration with the Hospital Corporation of America
 - Emory Eastside Medical Center
 - **Emory Johns Creek Hospital**

Emory Healthcare also has a community-based health care affiliate network of hospitals and physicians throughout Georgia, Alabama, North Carolina, and South Carolina, with whom Emory shares its resources as an academic medical center and enhances the provision of health care services.

Community Benefits Report 2007

- 3 Here and now
- 4 Charity care: A vital mission in Emory Healthcare
- 10 Caring for the elderly
- 14 Caring for the young
- 16 Emory lifelines at Grady Hospital
- 20 Emory and the Atlanta VA Medical Center
- 24 In the neighborhood: Protecting and improving lives
- **30** Emory in the global community
- 34 Investing in discovery
- 35 Investing in the next generation
- 36 Investing in the economy







Here and now

n institutions like ours, we focus considerable energy on our plans and vision for the future—as we must. Make no mistake, though. We understand that our greatest impact always is here and now, whether we are responding to those injured in a deadly bus crash, applying a newfound treatment for brain injury, or teaching and showing our students that our primary purpose for being here is to serve others when they need help.

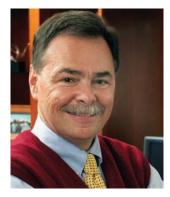
Indeed, the Woodruff Health Sciences Center of Emory University is working very hard to serve those who need us most, in our own neighborhood, city, and nation and in countries where those we help have never heard of us but know that their lives are being changed by people from Emory.

This third in a series of collected stories about our contributions to the community focuses on the impact of our programs, faculty, staff, and students on those difficult moments in which the individuals we help sometimes find themselves. For those who need health care the most and who are able to afford it the least, Emory is here. For the most vulnerable in local and distant communities, our faculty in medicine, nursing, and public health reach out—and teach their students to do the same.

For those in need, the here and now can't wait. But we would not be Emory if we failed to combine efforts to solve one person's problems with a commitment to address factors that underlie and cause those problems, locally and globally. That's when the here and now also becomes the future tense—as it must.

As leadership in the health sciences transitioned this fall, our commitment to the community remains front and center to our mission, here and now. We hope the stories herein will be a source of inspiration and pride to you, as they are to us.

Back to table of contents



Fred Sanfilippo, MD, PhD
Executive Vice President for Health
Affairs, Emory University
CEO, Woodruff Health Sciences Center
Chairman, Emory Healthcare



Fred Var Jolyce

Michael M.E. Johns, MD Chancellor, Emory University (Dr. Sanfilippo's immediate predecessor as leader of the Woodruff Health Sciences Center, 1996-2007)

Muchael M & John

Back to table of contents

Charity care: A vital mission in Emory Healthcare

n 2007, Emory Healthcare physicians provided \$53.6 million in charity care, a figure that may well increase as fewer and fewer companies provide employees health insurance and rising costs place private insurance out of their reach. The elderly are at special risk—but so are the young. A recent report from the Commonwealth Fund notes that

young adults, ages 19 to 29, are now

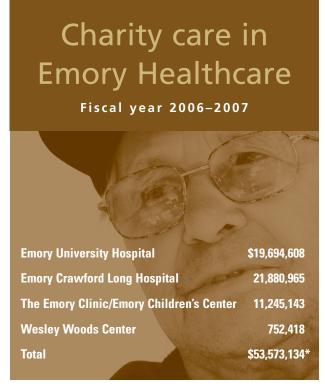
one of the largest segments of the

U.S. population without
health insurance. Out
of a total population
of more than 9 million
Georgians, 18.9%—almost one

in five—do not have health insur-

ance of any kind.

The uninsured often skip basic health care and show up only when they are experiencing serious problems. Almost all hospitals find themselves bearing some of the costs of this growing problem, but a disproportionate share of patients with the most complex (and therefore most expensive) health problems arrive at or are referred to Emory Healthcare facilities. There they are treated like any patient: compassionately, and with appropriate care, regardless of whether the institution will be reimbursed adequately or at all. In fact, it is rare for Emory physicians, nurses, and other health care providers to be aware of a patient's insurance status.



Under Emory Healthcare policies, "charity care" refers to indigent care (that provided to patients with no health insurance, not even Medicare or Medicaid) and catastrophic care (that provided without charge to patients who have some coverage but whose medical bills are so enormous that to pay them would be permanently life-shattering). Charity care does not include unreimbursed care: the difference between the charge for a life-saving, life-changing procedure versus what Emory Healthcare receives in payment for that service. If the charity care totals did include unreimbursed care, the totals listed in the box above would be many, many times higher. These figures also do not include charity care provided by Emory physicians practicing at partner institutions such as Grady Memorial Hospital.

*Total after charges have been discounted, as is standard in charity care

In addition to its mission in patient care, Emory Healthcare invested \$78 million last year alone in the Woodruff Health Sciences Center's teaching and research missions.



Bringing a grandmother back



aterina Lampedusa had waited five months to be able to come to the United States from Sicily to visit her new grandson, and she had no time to waste on the slight nausea she felt or the headache just behind her eye.

"Vai, vai, go run your errand," she said in Italian to her daughter, "your mother is here now." Five minutes later, when she was alone in the house, the headache cut through her head like a knife.

When her daughter returned, juggling bags of food, the baby was sleeping peacefully, and her 70-year-old mother lay sprawled, unconscious, on the floor. The paramedics listened to this story and headed for the ER at Emory University Hospital, where they knew a neurosurgeon was on duty.

The medical director of the neuro-ICU examined her carefully: an aneurysm in the wall of a blood vessel was bleeding into the area surrounding the brain. She was lucky to have had some warning. Unless it was repaired quickly, Katerina

could die. She needed surgery right away.

After the operation, Katerina spent a week in the hospital and then another week in the hospital's rehab center. Her daughter filled out the forms to indicate her mother's eligibility for charity care. That meant Emory would never see any of the more than \$200,000 in charges that had accumulated for her care.

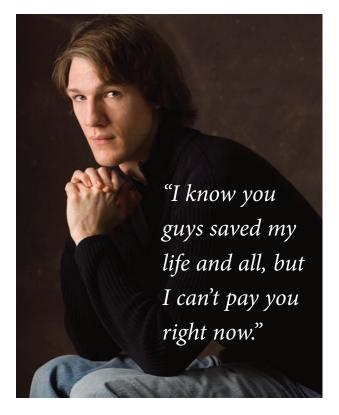
What the clinicians and staff did see, however—and why they come to work everyday—even as the health care environment gets tougher and tougher, was Katerina, bandaged but smiling, try-

ing to thank them with the few words of English she had learned from her daughter and returning home to the apartment to resume getting to know that new grandson, cooing in his crib.

Unexpected offers

Judd Williams' telephone call took everyone in the billing office by surprise, and the manager who talked to him was close to tears. Working in a hospital known for its complex, sophisticated care, she was accustomed to handling large bills, especially when expensive medicines were involved. The bill the 24-year-old man had received totaled \$25,000, some of it for a bone marrow biopsy to diagnose his Hodgkin's disease, the bulk for his weekly chemotherapy.

When Judd received the bill, he called his father's insurance company and was told he was no longer covered under the family policy, even though he was still a college student, still living at home to keep costs low. He immediately called Emory Crawford Long Hospital. "I know you guys saved my life and all, but I can't pay you right now," Judd said apologetically. "But don't worry. Since I feel better now, I've taken a part-time job until I finish school, when I will earn more. I'd like to work out a payment plan, for this bill and the ones I know are coming as my chemotherapy continues."



Offers like this don't happen often. A meeting with hospital representatives took place shortly, but the outcome was not what the hard-working young

man expected. Hospital administrators reviewed his financial situation with him, including the fact that his job did not cover his college expenses, he had \$15,000 in student loans, and he was likely to need chemotherapy for months to come. Billing office staff were smiling when Judd was declared eligible for charity care. Emory Crawford Long would write off the costs of his care and pay the pharmaceutical company thousands of dollars per month for the chemotherapy drugs. It was an offer the young man could not refuse.



Filling the gap in coverage

Since her kidney transplant half a lifetime ago when she was only 11, Kimberly had packed her days with the kind of things any bright, happy young person does: friends and flirtations, high school sports, obtaining a driver's license, baby-sitting, and part-time jobs. Sure, being a transplant recipient meant she would always need expensive immunosuppressant medications and regular medical care, but she never let that interfere with her joy of life or her plans for the future.

Her 21st birthday was both proud and a little nerve-wracking. Now she was an adult. She knew that once she completed her demanding technical school degree, she would be ineligible for coverage through her father's insurance policy. She assumed that by then she would have found a job with her own insurance coverage. But it didn't happen, despite her good grades and diligent search. When her classmates complained about their student

loans coming due after graduation, she tried not to yell at them that the few thousand dollars they were fretting over wouldn't cover her medical costs for even one month.

With assistance from Emory transplant social workers, Kimberly gritted her teeth and was classified as a charity care patient. Emory University Hospital provided her continuing care, at a cost of approximately \$10,000 to the hospital, none to the struggling young woman. The social workers also helped Kimberly find financial help for her medications through a community agency and medication patient-assistance program. Finding a job that would offer insurance took her two years—plus a month before she was eligible for the company plan. "I finally feel like an adult," she says. And thanks to Emory, she is one who is healthy, well, and ready to move ahead and give back.



Saving one saves many



Preast cancer affects not just individual women but also those who love and depend on them. For Isabelah Robi, the lump in her left breast threatened 640 orphans in the rural community of Nakuru, Kenya.

Some years ago Robi had taken six children into her home and then had begun a makeshift school under a

large banyan tree for those and other kids. When a church in Lilburn, Georgia, heard this story, members began traveling to Kenya to build a proper school for the children. Within a year, the number of orphans appearing from the surround-

ing countryside for classes and

for twice-daily meals
had almost doubled.
Church members built
an orphanage, drilled
a well, and turned what
had been an annual
pay-your-own-way mission
trip into a nonprofit organization to expand resources
and services.

Earlier this year, however, Robi reluctantly told one Atlantaarea volunteer, Mike Bloomfield, that a long-time lump in her breast had become painful and swollen. Bloomfield, the pharmacy manager at Emory's Winship Cancer Institute, knew what that meant. If Robi didn't get treatment soon, hundreds of children would be orphaned for a second time.

Back at Emory, he took this story right to the top: to the heads of the Woodruff Health Sciences Center, Emory Healthcare, Emory Clinic, and the hematology/oncology division. Their answer was

In Atlanta, the 69-year-old Robi received care from a host of Emory cancer physicians, including oncologist Ruth O'Regan and surgeon Charles Staley. Robi's medical care and stay at Emory University Hospital added up to more than \$28,000. The only payment to Emory Healthcare was

quick and unanimous: of course Emory would help.

some photographs, collected by Bloomfield, of the orphans welcoming their "grandmama" back home.

Ruth O'Regan (above, right) is one of many Emory specialists who treated "Mama" Robi, enabling her to return to the orphanage and school she runs in Nakuru, Kenya, for 640 children.



Caring for the elderly

aring for the elderly is immensely rewarding, say the physicians and other health care providers who work at Wesley Woods Center, a complex for geriatric patients that includes a clinic, a 100-bed hospital, an inpatient hospice service, a skilled nursing care facility, and a residential retirement and personal care facility. But Emory Healthcare administrators know those rewards are virtually never financial. Wesley Woods serves 30,000 older adults and chronically ill patients each year who have complex, overlapping health problems. Emory Healthcare's commitment to excellent care for those who need it most, regardless of their ability to pay, meant that during fiscal year 2006-2007 Wesley Woods provided \$3.4 million in unreimbursed or charity care to this patient population. Following are stories of a few who benefited from care at Wesley Woods.

Back to table of contents





A turn in the road

Yes, the mosquitoes had been a nuisance as Fiona Johnson and her husband were leaving Mississippi, headed for a small town in North Georgia to collect their grandchildren for a camping trip. But Fiona never thought to blame a few mosquito welts for her fatigue and worsening headache. By the time the family RV crossed into

Alabama, however, she had a fever. A

few miles later, she felt weak and confused but insisted they keep going. When they arrived in Atlanta, paralysis was moving up her body so swiftly that her husband had to carry her into the emergency room at Emory

University Hospital. Doctors made the diagnosis quickly —West Nile meningitis—but by then Fiona was already unconscious, unable to breath on her own. She spent the next month in Emory's ICU, attached to a ventilator and a tangle of tubes.

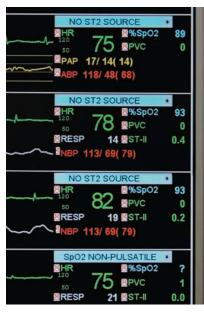
By the time Fiona was well enough to be transferred up the street from intensive care to a long-term acute care unit at Wesley Woods Center, the Johnsons' health insurance had reached its lifetime



payout limit. They feared they were on their own, but Fiona's care continued without interruption. It took a month for her to be weaned from the ventilator, two months before she could sip water on her own. Six months after she had collapsed in the Emory emergency room, she still had a tracheotomy tube and urinary catheter, but she was able to stand on her own. She told her husband it was time to go home. Wesley Woods social workers arranged

her transfer to a facility in Mississippi. There were tears in the Johnsons' eyes when they said goodbye.

West Nile changed the course of their family camping trip and their lives, but the Emory team had been there for them, providing \$300,000 worth of medical care for which the hospital would never be reimbursed and helping with living arrangements, clothes, meals, and emotional support.





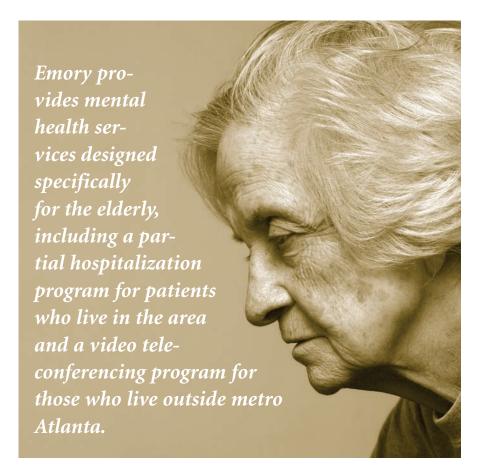


s people age, they tend to deal with more issues associated with depression, grief, anger, and frustration. Partial hospitalization programs—which combine group sessions during weekdays but allow people to return home for evenings and weekends—usually mix elderly patients in with the general population, for example, with younger patients being treated for addiction.

Now, however, a partial hospitalization program at Wesley Woods Center is structured solely for seniors. The Wesley Woods Transitions Partial Hospitalization Program runs between two and six weeks, depending on individual needs and issues. A full interdisciplinary team of physicians, social workers, therapists, psychiatric/mental health nurses, and others develop a treatment plan that is reviewed every week. That team, and the ability to

share experiences in a group setting of peers who understand what they are going through, makes a big difference, say patients.

Older adults living in medically under-served rural communities often are too far away to take advantage of programs like the one described above. Too many discontinue treatment rather than arrange and face a long drive. Now Emory's Fuqua Center for Late-Life Depression is reaching out to these seniors through video conferencing technology. The new endeavor is part of the telemedicine network announced in 2004 by Insurance and Fire Safety Commissioner John W. Oxendine and is one of a number of telemedicine services Emory is putting into place to better serve patients across Georgia. When patients call to make an appointment for psychiatric counseling services, they are given the option to come to Emory—or to go to one of more than 30 sites at various locations throughout Georgia that are designated and equipped for telemedicine. Most patients drive less than 30 minutes to "see" their doctor—literally. After an on-site nurse checks vital signs, the doctor and patient meet by means of a computer monitor and camera. Family members and the patient's general practitioner also can be present during the session, if desired. Emory psychiatrists have been pleased with how even the most elderly patients have embraced the video conferencing technology.













Caring for the young

aring for the youngest—newborns, toddlers, adolescents—means caring for the future.

Often, especially with the serious illnesses and injuries seen most often by Emory pediatric specialists, caring for the next generation also means absorbing

heavy costs to assure these vulner-

able patients receive the care they need. The relationship between the health care partners who provide the majority of such uncompensated care in Georgia became stronger this year. The

Emory Children's Center (ECC), the largest pediatric multi-specialty group practice in Georgia, entered into a joint venture with Children's Healthcare of Atlanta, the hospital system affiliated with Emory's medical school and staffed primarily by Emory pediatricians throughout its history. This

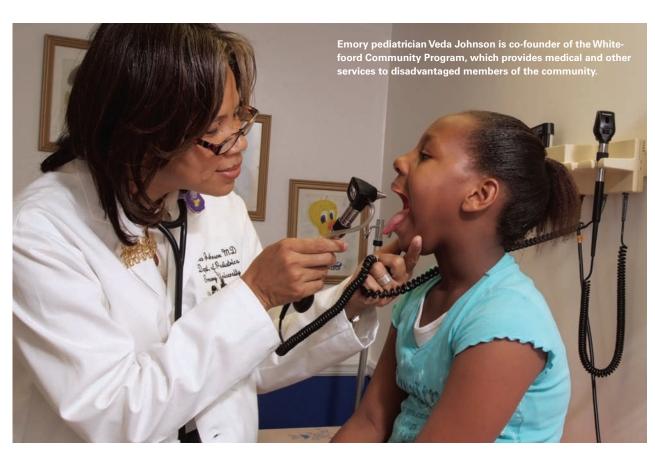
Back to table of contents

relationship was further enhanced when Children's assumed operation of the pediatric hospital on the Grady Hospital campus where Emory pediatricians have long provided care. Emory physicians also provide uncom-



Psychologist Edward Craighead heads a new Emory program in child and adolescent mood disorders.

pensated care to other infants and children in Emory Crawford Long Hospital's neonatal ICU as well as outpatient care in the beautiful new ECC building on the main university campus.



Sometimes it takes some cheerleading

hen you are 12, the hardest thing about endstage renal disease may not be the medica-

tions, doctor visits, or knowledge that you could die if you don't get a transplant. Sometimes, the hardest thing is not being allowed to play soccer. Gina Simpson knew she would be great at the sport, but her parents wouldn't hear of it. The doctors had said Gina could do nothing to risk damaging her kidneys.

Now, however, thanks to a new medication regimen designed by the kidney team at Emory Children's

Center (ECC), Gina no longer has to spend three mornings a week hooked to dialysis machines, and her energy level and cheerfulness have shot up accordingly. She remains on the transplant list at Emory and Children's Healthcare of Atlanta, the

physician-hospital team ranked third in the nation in volume of pediatric kidney transplants performed.

Although both her parents work, the family has no insurance. The ECC wrote off roughly \$30,000 in Gina's medical costs this year alone before they were successful in getting her enrolled in Medicaid. Moreover, ECC nurses and social workers talked the athlete-wanna-be out of soccer but encouraged her to take up

swimming and other low-impact sports. At her last monthly appointment, she was pleased and proud to show off her new cheerleading outfit.



Small things that matter most

or much of his 15 years, Andy Franklin dealt with type 1 diabetes and a malfunctioning immune system, caused by a genetic defect. He got taller but couldn't put on weight. He was painfully thin—only 70 pounds—when his leukemia was diagnosed. Could it get worse? Yes. Faulty wiring led to a fire that destroyed the house where he lived with his mother and younger sister. And worse yet. Focused on taking care of her son, his mother lost her job, and her health insurance also went up in smoke. Medicaid and PeachCare eventually would kick in, but it would take time that the critically ill boy did not have. Although his leukemia was in remission, he was weak from radiation and chemo, and he needed to be followed by a number of specialists. He also needed daily insulin injections and frequent infusions to control his immune-deficiency disorder.

Then, things began to look up for the belea-

guered family. During the four months they had no insurance, the Emory Children's Center (ECC) simply wrote off the costs of the services of the



specialists overseeing Andy's care. When he required hospitalization, Children's Healthcare of Atlanta did the same. ECC nurses and social workers talked pharmaceutical companies into donating medications. The roughly \$6,000 in unreimbursed costs to ECC for Andy's care doesn't include the time they spent coordinating nutritional and other consultants and support services, such as helping the family find affordable housing. What Andy remembers most, however, is the day the nurses and social workers took up a collection from their own pockets and presented him the Xbox he had always wanted.

Emory lifelines at Grady

Back to table of contents

he past year has been a hard one for Grady Hospital, Georgia's largest publicly funded hospital. The hospital operated in the red for the seventh consecutive year, while state, county, and community leaders debated how to avoid the frightening possibility of an Atlanta and a Georgia without a Grady.

Throughout this difficult year and indeed throughout Grady's entire lifespan, Emory doctors have been there, providing essential lifelines, just as their forebears did when Grady was founded 115 years ago.

Each year, Emory medical faculty and residents, along with colleagues from Morehouse School of Medicine, provide care for some 30,000 inpatients, 225,000 urgent or emergency patient visits, and some 750,000 routine outpatient visits. A large portion of these patients are indigent, but

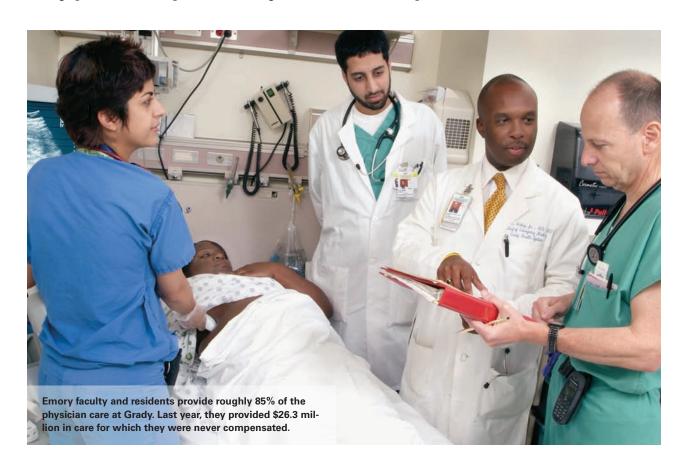
paying or nonpaying, they receive the care they need, including some of the most complex care provided anywhere in Georgia—care that is unavailable elsewhere in the city or in this part of the state. In addition to making Grady renowned in services



Emergency medicine physicians like Debra Houry serve some 350 patients at Grady each day.

in sickle cell disease, HIV/AIDS, neonatal care, diabetes, stroke, burns, and poison control, among others, Emory physicians working at Grady provided roughly \$26.3 million in

care in fiscal year 2006–2007 for which they were never compensated.



A sad story told with pride

t 4:00 AM, two children were brought to Grady by ambulance, barely breathing, in cardiac arrest from smoke inhalation. Ordinarily young trauma victims are rushed to Children's Healthcare of Atlanta, with its specially designed pediatric trauma unit. But when paramedics on the scene at the still-blazing house fire saw the first- and seconddegree burns on the children's bodies, they headed for the hospital with Atlanta's only burn center. The little boy was wheeled directly into the Grady emergency department's red zone, already at capacity with other patients. There, Emory physician Lisa Mack began the rapid-fire, highly choreographed process of placing a breathing tube and IV lines in the child and starting medications to restart his flagging heart and get oxygen to his other organs.

With two patients simultaneously in need of resuscitation and with more expected shortly, doctors told paramedics to wheel the little girl into the blue zone, where less critical patients are usually seen. Both zones are headed by emergency medicine physicians and both resuscitate heart attack patients almost daily, but both zones work almost exclusively with adult patients. Nonetheless, in the few minutes between the paramedics' frantic calls and the children's arrival, the medical teams in both zones had assembled the equipment needed to intu-



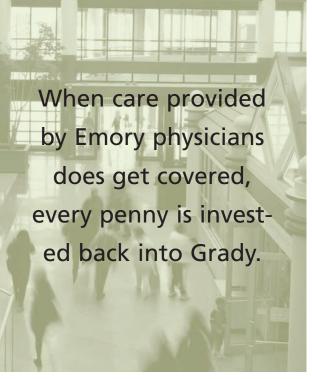


bate children and determine the precise amount of medication needed for their specific size. In the blue zone, Emory physician Joshua Wallenstein oversaw the team that flawlessly placed tubes and lines into the motionless little girl and started oxygen and medication. Accustomed to adult trauma, the doctors and nurses were determined that the emotion of working with such small victims not distract from the task at hand. When neither child could be resuscitated—they had inhaled too much smoke for too long—there was no time to grieve. Other burn victims kept arriving, in an already crowded ER.

The physicians and nurses were amazing, says Wallenstein, in their skill and in the kindness and respect with which they helped frantic family members. The following day he sent out an email of thanks: While the outcome was heartbreaking, the care provided to the victims and their families was extraordinary. Did the doctors receive compensation for this extraordinary care? "We didn't ask, we don't know, and frankly we never thought about it," says Wallenstein. "They were brought to us, and we took care of them. That is how it should work, and it does."

Additional investments in Grady

come patients at Grady do pay for their care. When possible, hospital registration clerks obtain information about any public or private medical coverage. Payment for hospital services goes to the hospital, while payment for physician services goes to the medical schools. When care provided by Emory physicians is reimbursed, payment actually averages only \$2 for every \$10 billed. Even so, every penny received is invested back into Grady, via the Emory Medical Care Foundation (EMCF). For fiscal year 2006-2007, the EMCF provided \$32.6 million to buy new equipment, provide salary support for vital patient services, and otherwise support the work of Emory medical faculty at Grady. This figure does not include additional support provided by clinical departments in the medical school, which are committed to maintaining the high quality and level of care at the struggling hospital.





If it had to happen, I'm glad it was here

ast March, a charter bus carrying an Ohio college baseball team crashed over an overpass, sailing into the air, plunging onto the interstate below. When Emory emergency medicine physician Eric Ossmann rushed to the scene to triage the injured, he found passengers who had been ejected when the bus hit the overpass barrier, others who were thrown when the bus landed on the highway below, others wounded inside the crumpled vehicle. Four young athletes and the bus driver and his wife were dead, another student dying. Nineteen others were seriously injured.

At Grady, the emergency medicine and trauma units ramped up, with attending physicians, residents, and nursing staff returning to work or ignoring the end of shifts. The ER was already full with a typical load of victims of car wrecks, gunshot wounds, and heart attacks, so the medical team turned a radiology waiting room into a place where the group from Bluffton University could stay together, supporting each other as clinicians exam-



ined and began treating each of the injured.

Over the next frenzied hours, students and clinicians began to bond, each group impressed by the comportment and compassion of the other. Weeks later, when the Bluffton baseball team returned to the field, Dr. Jeffrey Salomone, the trauma surgeon who treated 17 of the 19 injured patients, traveled 900 miles to attend their first game. "They touched our hearts," he explained.

And soon thereafter, Bluffton University president James Harder traveled to Atlanta to thank Grady's physicians, nurses, EMS, and other clinicians for the care and kindness they had shown the students and their families.

"If we had to have this type of accident," he said, "I'm glad it happened where it did. Without Grady, I'm sure the human toll would have been even greater."



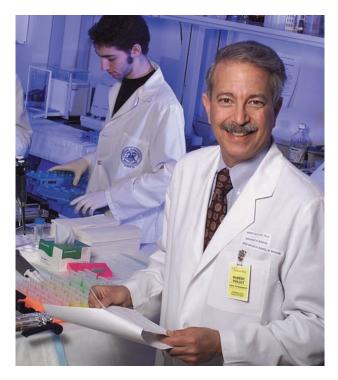


Back to table of contents

Emory and the Atlanta VA Medical Center

S ix years into combat in Iraq and Afghanistan, the number of returning wounded soldiers continues to rise, even as veterans of earlier wars struggle with health problems from their own service or from unrelated illnesses and aging. In a long-standing partnership, Emory medical faculty comprise virtually all the medical staff at the Atlanta Veterans Affairs Medical Center. These faculty head nationally recognized clinical programs there, and they bring in research dollars that place the Atlanta facility among the nation's top VA centers. Their goal is simple: to serve the nation's heroes today and improve health care for past, present, and future veterans.

Robert Pollet (right) directs a multidisciplinary, biomedical research program at the Atlanta VAMC, including one of 12 centers of excellence in rehabilitation research in the nation.





Access to clinical studies means cutting-edge care

The diagnosis caught Hank Bishop completely by surprise. The tall, lanky carpenter had never had a homosexual encounter, he was pushing 60, and except for four years in the Army, he had spent his entire life in the same peaceful south Georgia town. But when Hank arrived at the HIV/

AIDS clinic at Atlanta VA Medical

Center (VAMC), director David
Rimland was not surprised.
Almost half the veterans
now seen in the clinic have
been infected through heterosexual transmission. Like
Bishop, roughly two-thirds have
advanced disease at the time of diag-

nosis. And like Bishop, many also have substance abuse, depression, and/or other mental health problems.

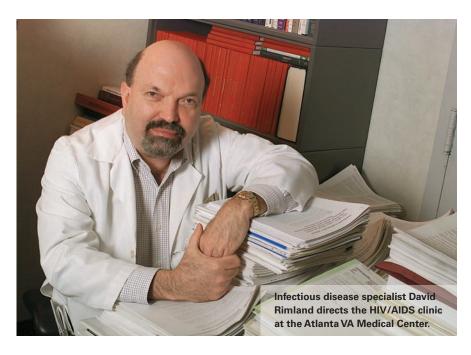
Rimland, an Emory medical professor specializing in infectious disease, established the clinic in 1982, the year a mysterious new epidemic was first given the name AIDS, three years before the first test would be available for HIV, and four years



before the first anti-viral medicine would appear. The clinic grew rapidly, along with the epidemic. Last year, Rimland and a couple of Emory colleagues, plus a number of CDC volunteer physicians, followed more than 1,200 HIV-positive patients, all veterans, from throughout Georgia, South Carolina, and parts of Alabama. The clinic is

the largest in any VA hospital in the country and certainly one of the most sophisticated.

Bishop participates in clinical trials headed by Emory physicians working at the VAMC, including one involving a new antiviral drug. Thanks to the Atlanta VAMC and his Emory physicians, Bishop is back home, working, spending Sunday afternoons with his grand-children, and feeling better physically and emotionally than he has in years.



Going to lung school

mory lung specialist Rafael Perez founded and directs the pulmonary rehab program at the Atlanta VA Medical Center (VAMC). The only such VA program in north Georgia, it meets a big need. Veterans are about three times more likely to suffer from tobacco-related lung disease than non-veterans, perhaps in part because soldiers like Rich Kessler were once given cigarettes along with their rations.



Lung specialist Rafael Perez

Forty years and almost half a million cigarettes after serving in Vietnam, the 62-year-old man was so short of breath from emphysema that he seldom left home. As his overall health declined, his local doctor referred him to the VAMC.

Perez expects

a lot from his patients. Four days a week for four weeks, Kessler underwent endurance training and "lung school." His medications were reformulated and supplemented with oxygen. He met his first treadmill in a cramped on-site "gym" and started



conditioning his body to work better within the limits of his lung impairment. He quit smoking after participating in a smoking-cessation program.

Lung school included techniques for how to breathe better during specific activities, advice on lung-related nutrition and medication, and tricks to lower oxygen demand (rearranging furniture to avoid having to walk around it, for example). Since chronic lung disease can't be cured, the goal of pulmonary rehab is to improve function and quality of life and slow disease progression, says Perez. He warns patients, "I can't work miracles." Kessler disagrees. Driving downtown to meet his buddies for coffee, laughing at their jokes without wheezing, seems pretty miraculous to him.





Like cigarettes, alcohol takes a heavy toll on the lungs, says pulmonologist David Guidot, who directs the Emory Alcohol and Lung Biology Center at the Atlanta VA Medical Center. He is studying the relationship between alcohol abuse and low lung levels of glutathione, an antioxidant compound.

Back to table of contents

In the neighborhood: Protecting, improving lives

mory was one of the first universities in the nation to receive the Carnegie Foundation's new Community Engagement designation, announced in December 2006. Carnegie described Emory as demonstrating "excellent alignment between mission, culture, leadership, resources, and practices that support dynamic and noteworthy community engagement." The endorsement comes in part because of the work of the Office of University Community Partnerships, which has sent Emory students and faculty into Atlanta neighborhoods to work on tangible solutions to issues from affordable housing to AIDS. On this and following pages are examples of Emory's community engagement in action.

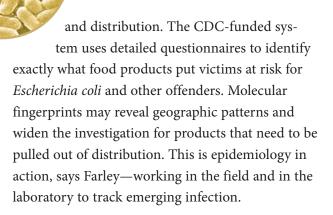


Emory Healthcare was an enthusiastic supporter of Emory's recent Bike-to-Campus Day, part of a long-term partnership with the community to help reduce traffic that includes funding a large network of free public shuttles on various routes to and from campus.

Helping the CDC trace foodborne illness

E. coli

t's a wonder that Emory infectious disease specialist Monica Farley can eat anything without worrying. One of her jobs is overseeing the CDC's FoodNet surveillance system that documents every case of foodborne illness seen in all hospitals in the greater metro Atlanta area. With 4.9 million people, that makes for a lot of upset stomachs, a lot of "fingerprinting" of organisms in the laboratory to help trace their origin



Jobs for the disabled—a model for employers

dministrators at Emory Crawford Long Hospital decided last year to give a "Project Search" candidate a chance to work in the ICU, despite the cerebral palsy that confined him to a wheelchair and sometimes made his speech hard to understand. The decision was a good one. Since October 2006, when "Bo" began transporting supplies and stocking shelves, the beaming young man has never missed a day or been late to work. In fact, his responsibilities have expanded, and he is the employee most likely, say his supervisors, to announce that he has finished his assigned tasks and would be happy to help other employees with theirs. The Emory midtown hospital was the first in Atlanta, along with North Fulton Regional Hospital, to embrace the on-the-job training program that leads to employment for people with disabilities.

This fall, the hospital's fourth new group of special education students began classes and unpaid internships, with the goal being employment in Emory Healthcare. So far, more than 30 "graduates" have found jobs at Emory, and other Atlanta hospitals have begun their own Project Search programs, in collaboration with Briggs & Associate



Project Search employee Shakera (left) with Vicki Green, Emergency Department charge nurse, Emory Crawford Long Hospital

employment, Fulton County Schools, Georgia Department of Human Resources, and the Georgia Department of Vocational Rehabilitation. This fall, Emory Crawford Long was one of only five institutions in the country to be honored by the Equal Employment Opportunity Commission for its innovative employer program. The award cited the hospital's work with Project Search, calling it a model for employers across the nation.



Preparing for a crisis

ast year, as governments and institutions across the world shuddered at the possibility of an avian flu or other pandemic, Emory created a task force to examine its own readiness. How would the university respond to a catastrophic event? How would it

Avian flu virus

protect its own students, faculty, and

tion when ordinary behaviors and resources could not be counted on, would Emory continue to serve the community that depends on it for health care and other services?

As word got out about Emory's

planning process, universities across the country called for advice about their own plans or lack thereof. The task force here recommended creating a new Office of Critical Event Preparedness and Response (CEPAR) to improve Emory's ability to deliver a



coordinated and effective response to catastrophic events, whatever they might be. CEPAR is directed by Alex Isakov, who has considerable experience in dealing with disaster and crisis. He is co-founder and co-director of the Emory emergency medicine section that provides medical oversight and command

for the 911 ambulance responders in Atlanta and Fulton counties. He is also founding medical director of Emory Flight, associate medical director for Grady Hospital Emergency Medical Systems, and developer of the biosafety transport program that supports Emory's clinical programs, the CDC, and Hartsfield-Jackson Atlanta International Airport. When it comes, Emory will be as ready as possible, and both the university and the greater community will be better off for it.



Epidemiologist Bruce Ribner (left) directs a special containment unit at Emory Hospital for CDC officers who themselves may get sick when investigating disease outbreaks.

Reducing deaths from cardiac arrest

ardiac arrest can make a heart attack or stroke look good by comparison. Both heart and brain "attacks" can begin and build gradually, often allowing time for life-saving care that can help prevent or minimize damage. Cardiac arrest is a sudden, abrupt, often completely unanticipated loss

of heart function, breathing, and consciousness. Brain death starts to occur in just four to six minutes, and one's chances of survival are reduced by 7% to 10% with every minute that passes without CPR and defibrillation.

Through a nationwide program created in collaboration with the CDC, Emory is taking the lead in making sure that Atlanta and other communities across the country have the infor-

mation they need to increase the odds of a favorable outcome for those who suffer cardiac arrest. The program, called Cardiac Arrest Registry to Enhance Survival (CARES), is a national registry designed to help communities identify when and where cardiac arrest occurs, which elements of their emergency medical services (EMS) system are



In response to data compiled by Emory, Atlanta mayor Shirley Franklin ordered that all 8,000 city employees be trained in CPR.

functioning properly and which are not, and what changes are needed to improve outcomes. Emory researchers are compiling and analyzing these data from 911 centers, paramedic run reports, hospital discharge records, and other sources.

The information is already driving improvements in treatment in Atlanta—for example, Atlanta Mayor Shirley Franklin read it and ordered that all 8,000 city employees, including herself, be trained in CPR—and other American cities are jumping on board to track how their own emergency services are doing and following through with change.



Emergency medicine physician Bryan McNally leads the CARES program (Cardiac Arrest Registry to Enhance Survival) and has seen its impact. Since 2005, the survival rate of Atlantans suffering cardiac arrest has increased from less than 3% to 15%, well above the 6% to 10% survival rate for most cities that was identified by USA Today in an analysis conducted in 2003.

Turning kids on to science

he Rollins School of Public Health recently acquired some 200 new researchers. Of course, being 9th and 10th graders, they first need some training to get started on their work. The Rollins program to interest kids in science is part of a project to help raise student achievement at the New Schools at Carver, the new name for George Washington Carver High School, historically one of Atlanta's lowest performing secondary schools.

To change its track record, the school is implementing rigorous college-prep curricula and strong community partnerships that include

Emory and other Atlanta-area universities. Emory's role is to integrate individual and community health into the science and math curriculum, teaching Carver students how to apply thinking skills to science and understand how it is relevant to their everyday lives.

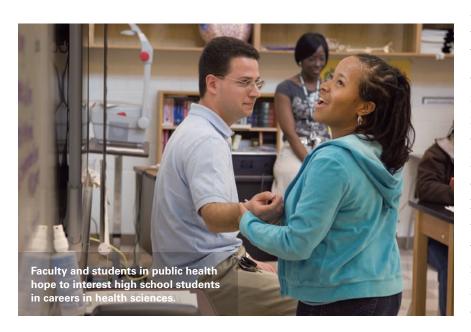
Earlier this year, students participated in a health risk appraisal based on what they indi-

Working with Carver is a win-win, say faculty in public health, adding new perspec-"Rollins-teer" day. tive on the power of

In addition to their work with New Schools at Carver, Rollins School of Public Health faculty and students participated in other activities to help Atlantans in need during the annual

science to create cated was important to them. For example, information gathered about eating behavior, exercise, and weight is intended to give new significance to the study of metabolism in biology class. Learning the risk factors for high blood pressure

> adds new punch to the study of what causes hypertension as a biologic process. Carver teachers also are receiving training in research and research ethics, and Carver students and teachers are partnering with Emory faculty to design their own research program to study health and health disparities in their communities. Working with Carver is a win-win, say faculty in public health, adding new perspective on the power of science to create change.



change.

Health care for the homeless

The way Charlie Lamb saw it, worrying about finding something to eat and somewhere to sleep didn't leave much time left over to worry about diabetes. But then his foot became numb, swollen, and raw. That was his diabetes acting up, said the doctor, and why he needed to take his medication. When the pain got really severe, he said yes when they told him the foot would have to be amputated. Only when his stump started healing did he begin to worry about what happened next.

For once, however, luck was on his side. Nursing faculty member Monica Donohue and her colleague Ann Connor recently had begun a faculty health practice in the 23-bed health recovery section of Atlanta's Gateway Center, the centerpiece project of the Regional Commission on Homelessness. The two nurses helped Lamb learn how to take care of his wound, handle his diabetes medications, and deal with some other problems he had never felt like mentioning before, until the nurses asked him what he wanted to work on. After two weeks he felt more in control—and more willing than in the past to go to the diabetics clinic and do what they said.

Together, Donohue and Connor spend 20 hours a week at the center, providing health recovery care to homeless men like Lamb. Our job is to empower



patients, says Donohue, helping them integrate body, mind, and spirit in their own health practices. For example, some patients can tap into their faith to deal with health-related issues, along with grief, loss, and fear of dying.

The Gateway Center makes for an ideal environment for Donohue's nursing students to learn about health needs in the community. A new grant received by Donohue has enabled the school to double to 80 the number of nursing students who work in the center in projects related to health promotion and prevention.



Nursing faculty spend
20 hours a week providing care at the Gateway
Center and involve
some 80 nursing students in this work.

Emory in the global community

Back to table of contents

or years, the Woodruff Health Sciences Center (WHSC) has helped make Atlanta the public health capital of the world, adding its own international efforts and resources to those of the CDC, Carter Center, American Cancer Society, CARE, Arthritis Foundation, and state and local public health agencies. In January 2007, Emory President James Wagner announced creation of a new, university-wide Emory Global Health Institute (GHI) that draws on faculty expertise both within and beyond the health sciences to address some of the most pressing health challenges around the world, particularly in developing countries. Jeffrey Koplan, former director of the CDC and now vice president for academic health affairs in the WHSC, was named director. The GHI has an initial budget



of \$110 million, much of which comes from the University's own strategic plan and building funds. The new GHI hit the ground running, funding more than a dozen global health initiatives in medicine, nursing, public health, the Emory Vaccine Center, and university departments. The following pages describe these and other efforts.



From trash to treasure

art of preparing for a surgical procedure involves laying out all the surgical instruments, anesthesia devices, gloves, gowns, and other supplies that may be needed. Almost invariably, some of the supplies obtained from bulk packaging are left over. Stringent U.S. laws mandate that such unused materials cannot be restocked. Landfills are often replete with such items, still sealed in individual sterile packages.

Ten years ago, Emory Healthcare began collecting some of these unused supplies for MedShare, a nonprofit organization headquartered in Atlanta that recovers surplus medical supplies and equipment and distributes them to developing countries. This year, Emory Healthcare

stepped up the pace, with employees collecting more than 32,000 pounds of supplies—a 300% annual increase—in 30 MedShare barrels located throughout Emory's hospitals and clinics. Emory Healthcare divisions also donated specialized equipment too big for the barrels, including a rehabilitation therapy

This year, Emory Healthcare employees collected more than 32,000 pounds of medical supplies to ship to needy countries—supplies that otherwise could have gone to landfills.

whirlpool. And the health sciences library collected badly needed medical texts and journals, 9,000 pounds in one month alone.

Emory Healthcare volunteers now spend one Saturday every month at MedShare headquarters, sorting and repackaging supplies.

This year, employees chose the destination country to receive these materials, and Emory

> Healthcare wrote MedShare a check for \$15,400 to help deliver them to their destination. Employees chose the Nigerian Women's Maternal Morbidity Reduction Project, and a representative from the Nigerian consulate general attended the employee celebration at which employees had a chance to sign customized banners to travel with their lifesaving gifts.



Containing an explosion

South Asia is experiencing a rapid, relentless emergence of diabetes. In India alone, an estimated 40 million people currently suffer from the disease, with another 40 million cases expected by 2030. The Indian population, like the populations of Pakistan, Bangladesh, and Sri Lanka, have three critical risk factors for developing diabetes: very low lean muscle mass, high risk of converting calories into fat, and elevated insulin resistance. What can be done to help stop the explosion of diabetes in the large, diverse population of this part of the world?

The Rollins School of Public Health (RSPH), along with the Madras Diabetes Research Foundation (MDRF), has established a Global Diabetes Research Center in Chennai, India, led by





RSPH's Venkat Narayan, who joined Emory last year, after a 10-year tenure as head of the CDC's diabetes epidemiology branch. With funding from the Emory Global Health Institute, the new center serves as a hub for large intervention trials throughout South Asia. These trials emphasize cultural compatibility and low-cost solutions, such as nutritional intervention during pregnancy aimed at reducing the effect of diabetes on the fetus and promotion of indigenous exercise like yoga and regional dance. One study, done in collaboration with the MDRF, focuses on the alarming increase of diabetes in rural areas that are becoming increasingly prosperous. The hope is that such efforts not only will help reduce the impact of diabetes in those who already have it but help prevent or forestall new cases as well.

Reducing a deadly combination: Tuberculosis is the leading killer of AIDS patients in Africa. In Zambia, where roughly half of those living with AIDS also have TB, many don't even know it. They have the latent form of TB, which is symptomless and difficult to detect. Health experts believe that treating the latent form of TB in AIDS patients could reduce the mortality caused by the deadly combination.



Emory infectious disease specialist Henry Blumberg is leading a new study aimed at improving diagnostic tests for latent TB in persons infected with HIV. That's only step 1, however. A new project, the Zambia-Emory Research Initiative in Tuberculosis and TB/HIV, also is working to develop a self-sustaining research infrastructure in Zambia, to facilitate integration of care for TB/HIV, and to provide Zambian physicians and scientists training in research, along with opportunities to collaborate with Emory investigators. All critical, says Blumberg, in bringing an enormous global public health problem under control, in Zambia and in many other countries hard hit by AIDS and TB.

Increasing survival for mothers and newborns

n the poorest parts of the world, the vast majority of births occur at home, and a woman's lifetime risk of dying of causes related to pregnancy and childbirth is one in 16, almost 175 times higher than the risk in developed countries. For more than a decade, Emory nursing faculty member Lynn Sibley has been trying to change that dismal outcome. In 1996, she and three colleagues at the American



Nursing faculty member Lynn Sibley is working to help childbirth attendants in Ethiopia and other countries learn life-saving skills.

College of Nurse Midwives began a program called Home-Based Life Saving Skills (HBLSS), focused on educating traditional birth attendants about inexpensive, non-technological interventions to increase a mother's chance of survival. Such efforts are especially challenging in poor, rural communities where few people

can read—and where cultural norms and beliefs run counter to the kind of midwifery practiced in this and other developed countries.

Sibley has a doctorate in anthropology that allows her to respect those cultural differences, while her cool head and clinical experience in turn win her the respect of birth helpers. Beginning in India, Sibley created picture cards depicting steps to help



ensure a problem-free birth, such as massaging the womb and nipples, making sure the woman stays hydrated, and recognizing when postpartum bleeding (believed in some cultures to be nature's way of ridding the body of unclean blood) has become lifethreatening and requires intervention.

HBLSS has worked so well that it has expanded to Ethiopia, Haiti, Liberia, Afghanistan, Ghana, and, more recently, Bangladesh. There, birth attendants and midwives came to Sibley with a question: how do you know when a long labor has gone on too long and emergency action should begin? Thanks to a grant from the Emory Global Health Institute, Sibley has begun the training that answers that question for birth helpers and families in villages across Bangladesh, decreasing the leading cause of infant mortality, which is lack of oxygen in utero.



Investing in discovery

Back to table of contents

n 2006–2007. Emory's Woodruff Health Sciences Center (WHSC) attracted \$358.7 million in sponsored research funding, bringing Emory University's research funding total to a record \$383.9 million, the most of any university in Georgia.

This funding includes \$32.8 million for flu



research and surveillance, \$8.5 million to support the Emory Center for AIDS Research, \$12.5 million for research into better treatments for head and neck cancer, \$7 million for HIV/ AIDS treatments and

vaccines, \$3.6 for genetic research in schizophrenia, and \$10 million to Yerkes National Primate Research Center for brain research related to aging.

Federal funding accounted for 72% of the above research total. What is sometimes little understood is that this taxpayer investment in Emory's research



requires a large co-investment on Emory's part to support overhead expenses related to research.



Last year, in fact, the total cash loss for unrecovered costs for research in the WHSC was \$65.3 million. While technically a net "loss" in terms of revenue, however, this subsidy from Emory is regarded by researchers as a gain by any measure because of the benefit from this research that will accrue to current and future patients as well as to the local and state economy.

Investing in the next generation

Back to table of contents

Becoming a physician, nurse, researcher, public health professional, physical therapist, physician assistant, or other health professional is expensive, both for the students and for the schools that provide specialized, hands-on training in laboratories, clinical settings, and simulated environments. Tuition covers only a fraction of the cost of such training. And yet, last year, as in previous years, the Woodruff Health Sciences Center invested close to one-third of its tuition revenue in financial aid for students, to help assure that future health professionals and scientists are the best and the brightest, regardless of their financial status.



Last year, the Woodruff Health Sciences Center invested more than \$13 million from its tuition revenue in financial aid to help prepare future nurses, doctors, physical therapists, physician assistants, and public health professionals.





Investing in the economy

Back to table of contents

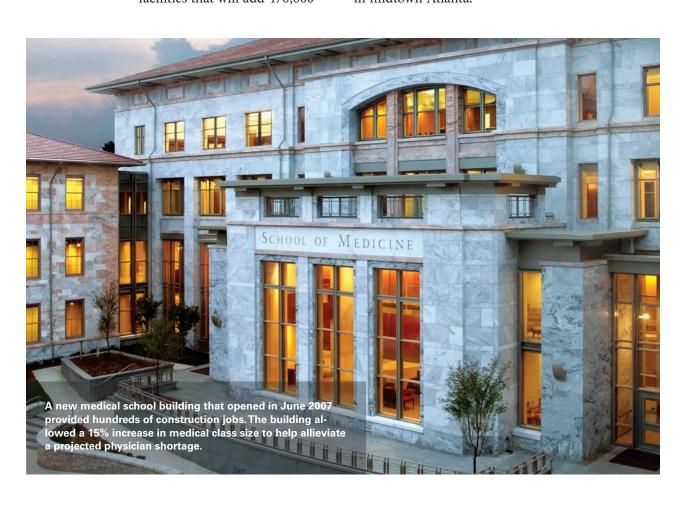
has \$2.2 billion in annual operating expenses, with an estimated annual economic impact of \$4.7 billion on the local economy. The WHSC helps make Emory University the largest private employer in Atlanta, and the WHSC's invest-

ments in construction projects and biotech start-up comp-

anies serve as a major source of employment as well. In the past year, the WHSC opened a new medical school building and a new joint-venture hospital. The center also broke ground on new facilities that will add 470,000

In addition to its construction projects, the center is a major player in technology transfer, with 43 start-up companies launched over the past decade.

square feet to outpatient space. Future plans call for construction of a new research building, a new building for the school of public health, a new field station for Yerkes National Primate Research Center, and a major expansion of research and clinical space at the Emory Crawford Long campus in midtown Atlanta.

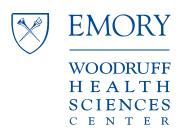


FOUNDING LEGACY IN COMMUNITY SUPPORT

The center's namesake, Robert W. Woodruff—the legendary leader of The Coca-Cola Company—dedicated his life to support of the community, at Emory and in Atlanta, in Georgia and beyond.

ROBERT W. WOODRUFF HEALTH SCIENCES CENTER
EMORY UNIVERSITY

The Woodruff Health Sciences Center of Emory University makes its greatest impact here and now—whether this means responding to those injured in a deadly bus crash, helping the CDC trace foodborne illness, containing the skyrocketing incidence of diabetes in South Asia, applying a newfound treatment for brain injury, or teaching and showing students that the reason we are here is to serve others when they need help.



1440 Clifton Road, NE, Suite 105 Atlanta, GA 30322 www.whsc.emory.edu/