

talent solicitude response

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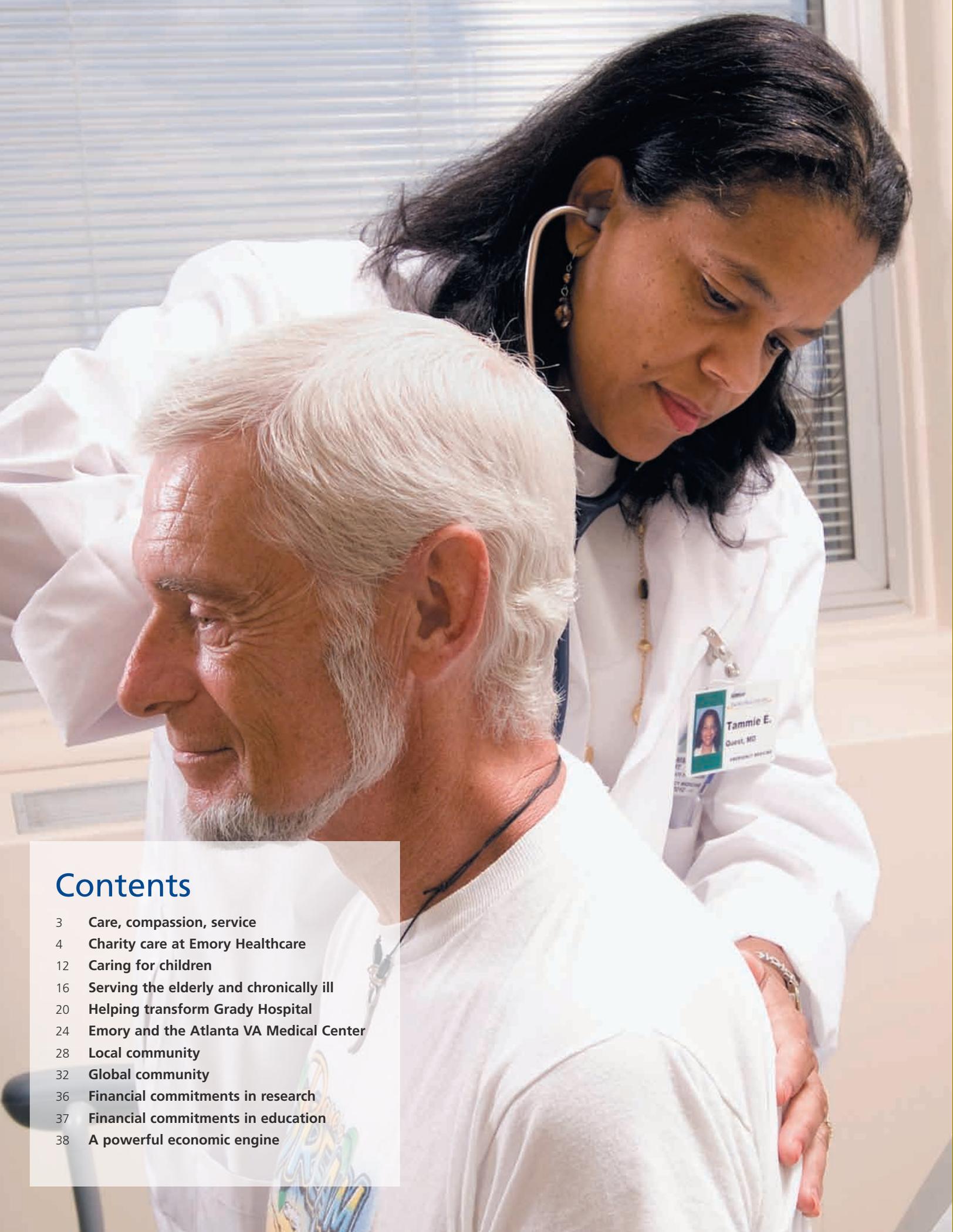
empathy encouragement

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EMORY
UNIVERSITY

Woodruff Health
Sciences Center



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WOODRUFF HEALTH SCIENCES CENTER
of Emory University

Community Benefits Report | 2010

For many Georgians, this past year was especially hard.

Unemployment continued above the national average. Six of the 10 counties with the highest rate of bankruptcy filings in the nation were in Georgia, most located in or around Atlanta. The state had the fifth-highest number of medically uninsured people in the United States: almost one in five adults under 65, one in 10 of those under 18, figures Georgia economists expect to rise when new census figures are released. Other Georgians had some insurance—but not enough to cover the illness or injury that brought them to their financial knees.

While every hospital in Georgia felt the impact of this crisis, Emory Healthcare is referred a disproportionate number of patients with extremely complex and challenging illnesses, cases that in many instances have already used up the family's resources and the limits of any insurance coverage they might have had. These patients, like all who enter the doors of Emory's hospitals and clinics, receive the best and most compassionate care possible from a health care system that puts service ahead of reimbursement.

Patient stories throughout this book are real, but patients' names and in some cases details have been changed to protect privacy (see pages 6-27). Photos on these pages are representational and not those of the patients whose stories are being shared.



Medical faculty and students make at least two trips to Haiti each year to provide care. They made additional trips this year in response to the devastating earthquake last January.

Care, compassion, service



For Emory’s Woodruff Health Sciences Center (WHSC), the first and last word in all that we do is “people,” and in these challenging times, concern for the people we serve motivates and inspires us more than ever.

The current recession has been challenging for the WHSC, as it has for so many other institutions and individuals. But when your goal is serving people in need, doing less is never an option. Instead we exercise caution and creativity—operating as leanly and efficiently as possible and innovating processes that allow us to use our

resources wisely and continue to deliver on our lifesaving mission.

Again in 2010, the most critically ill patients in the region were referred to our facilities—people whose conditions had all too often depleted both their finances and their spirits. Here they found a nurturing environment in which they and their families received the finest cutting-edge, compassionate care available, regardless of their ability to pay. You’ll read their stories in this report, along with the stories of some of the thousands of others who benefited last year from our extraordinary work throughout Georgia and around the world.

As you read about the young cancer patient whose dream of graduating with his high school class was realized thanks to the coordinated efforts of his health care team, the young woman with Crohn’s disease who can concentrate on her health and her future rather than her massive medical bills, the battered women empowered by counseling offered by our faculty at Grady Hospital, and the many other powerful stories in this report, I suspect many words will come to mind. Words, for example, like care, compassion, and service. But the word that matters most to the faculty, staff, and students of the Woodruff Health Sciences Center will always be “people.”

S. Wright Caughman, MD

Interim Executive Vice President for Health Affairs, Emory University

CEO, Woodruff Health Sciences Center

Chairman, Emory Healthcare

FOUNDING LEGACY IN COMMUNITY SUPPORT

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



Charity care in Emory Healthcare

In fiscal year 2009-2010, Emory Healthcare (EHC) physicians provided \$63.5 million in charity care, a number that appears likely to keep rising.

What is charity care? Under EHC policies, charity care encompasses indigent care (for patients with no health insurance, not even Medicaid or Medicare, and no resources of their own) and catastrophic care (for patients who may have some coverage but whose health care bills are so big that to pay them would be impossible or, if possible, would leave their lives further shattered).

In addition to the charity care at EHC facilities listed on the opposite page, Emory physicians provided enormous amounts of uncompensated care at Grady Memorial Hospital (see page 20) and other hospitals where they practice and in clinics where they volunteer during their free time.

In addition to charity care, Emory Healthcare (EHC) provides numerous other community services whose goal is to improve access to care, advance medical knowledge, and relieve or reduce the burden of government or other community efforts. This year marks EHC's inaugural effort to quantify and report the value of such services. In fiscal year 2009–2010, this total for EHC was **\$56.4 million**:

- **\$2,018,251** for emergency preparedness planning and for educational programs for the public, future health professionals, and patients
- **\$54,401,127** shortfall between EHC's cost to provide care to Medicaid patients and Medicaid reimbursement, plus costs to EHC for the Georgia provider tax





Charity care at Emory Healthcare

Fiscal year 2009–2010

Emory University Hospital	\$27,648,929
Emory University Hospital Midtown	16,856,295
The Emory Clinic/Emory-Children's Center	18,389,402*
Wesley Woods Center	643,170
Total	\$63,537,796

The \$63.5 million total above represents the cost of providing charity care, based on actual expenses to Emory Healthcare. Cost reporting is now standard for calculating charity care totals, as required by the IRS and advocated by the Healthcare Financial Management Association and the Catholic Health Association.

*The total for The Emory Clinic and Emory-Children's Center also includes Emory Specialty Associates, an outreach physician practice organization within Emory Healthcare.

From the moment she arrived at the ER, Haile's health crisis became Emory's responsibility.





Social workers often can help get the most vulnerable patients access to different types of public and private aid. What can be harder is finding a facility to care for them once they're able to leave the hospital.

FAMILY AWAY FROM HOME

Twice Marti Haile had gone to outlying county hospitals with back pain, twice been given pain pills, twice postponed the long return flight to Australia until she felt better. Early in January, when she awoke unable to walk, struggling to breathe, her friend's son drove past more than half a dozen emergency rooms to get to the one at Emory University Hospital (EUH).

Admitted for studies, the 45-year-old woman was found to have a large tumor pressing against her spinal cord. Emory surgeons removed some of the tumor, but it was too late to undo the damage to the central nervous system. Haile was transferred to Emory's Center for Rehabilitation Medicine (CRM) to learn how to live as a quadriplegic, a complex process made more complex because she had to transfer back to EUH every three weeks for a round of intense chemotherapy. Haile, originally from Ethiopia, speaks little English. The CRM has hired an Amharic interpreter.

Haile calls CRM's Dorothy Reed her "sister," grateful for the kindness and help that Reed and others at Emory give her every day. What the social services care coordinator cannot do, however, is get the Australian back home or find a way that Emory will ever be reimbursed for the more than \$1 million it already has spent on her care, with no easy end in sight. Reed believes she has talked United Airlines into flying Haile

home, even with all the complications involved with a severely ill, paralyzed patient. But every hospital Reed has contacted in Australia says it does not have an appropriate bed—and besides, they add, the woman has no suitable discharge plan, no family or friend who will take responsibility for her there. Haile's health crisis became Emory's responsibility, legally and financially, and—as Haile would say—like that of family.

GETTING BEYOND THE RED TAPE

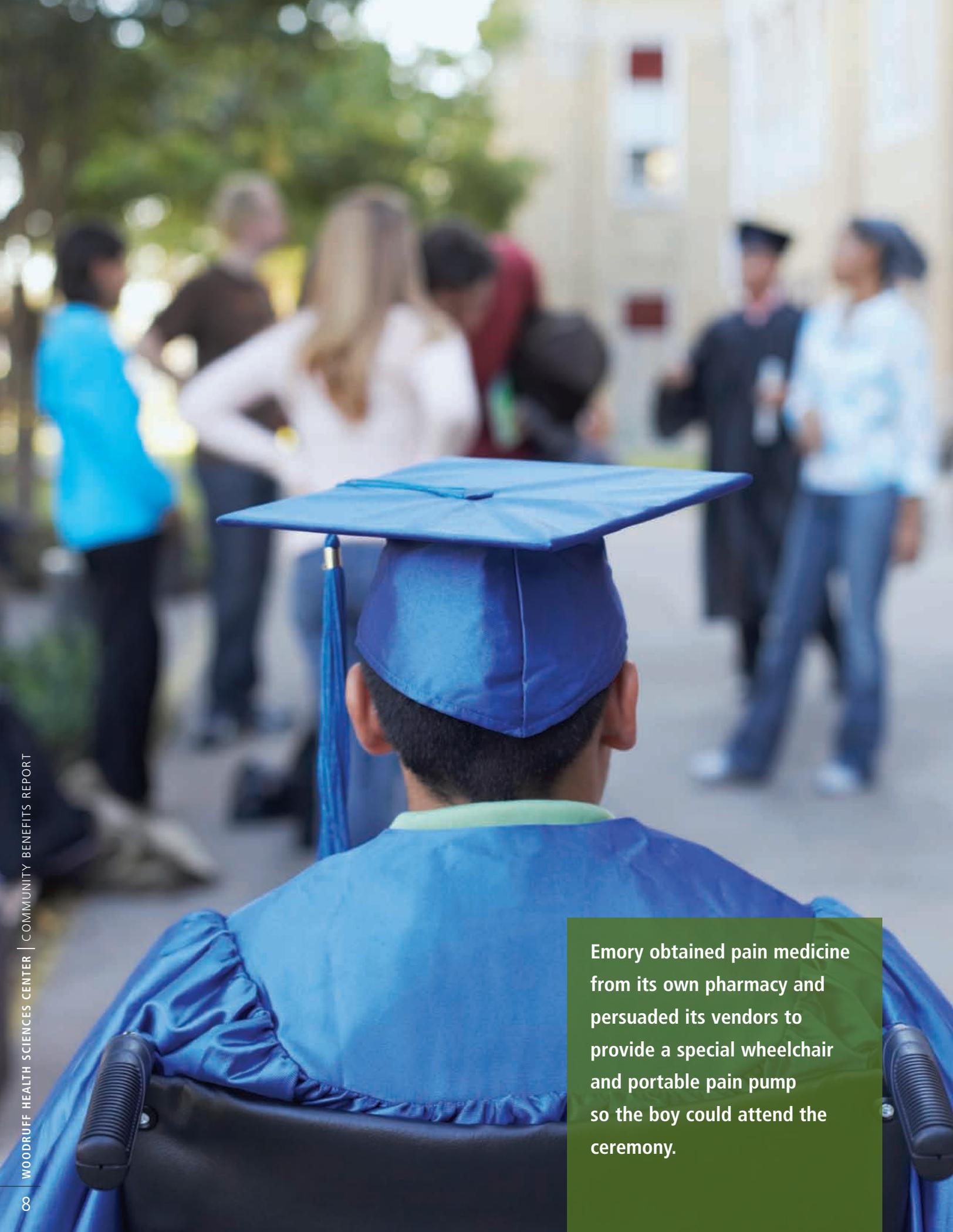
Jonathan Detlef thought being laid off from the company where he had worked in sales for 10 years was as bad as it could get. Then he fell behind on the mortgage and lost his house. Little wonder that he had started waking up with headaches and even felt dizzy and off balance. When he was offered another job, he thought the worst was over—until his local doctor insisted that he go for tests. Within days, doctors at Emory's Winship Cancer Institute began fighting an aggressive brain tumor.

Winship social workers fought a different battle. Unable to work and uninsured, with his resources depleted from unemployment, Detlef started receiving help from Medicaid. When Social Security Disability Insurance kicked in, however, Medicaid bowed out because his income was then too high. Medicaid also decided to stop payments to Mrs. Detlef, something the family chal-

lenged with help from the Cancer Legal Initiative Program offered through the Atlanta Legal Aid Society. His application for Medicaid Spend Down (a program in which the patient pays a certain percentage of his/her income before Medicaid begins to pay) was also delayed.

Lost in the red tape yet? The social workers had seen this scenario before, and they knew where to turn within Emory Healthcare. **Detlef's case was classified as "charity care," meaning that Emory would forgive his medical bills, an enormous load off the family's mind.** When drug companies refused to help with one of the expensive medications he required, it was covered by the Winship Cares Patient Assistance Program, which also provided the family with debit cards for gas and groceries. Emory's unreimbursed costs continued to rise, but that was not what was front of mind at Emory as Detlef's condition worsened. The social work team referred the family to the Jack and Jill Late Stage Cancer Foundation, which helped the Detlefs plan a family trip, while the medical team worked to buy Detlef the time he needed to be able to take it.

top left: Dorothy Reed is a social services care coordinator in Emory's Center for Rehabilitation Medicine.



Emory obtained pain medicine from its own pharmacy and persuaded its vendors to provide a special wheelchair and portable pain pump so the boy could attend the ceremony.

In today's economy, more and more patients like Kristina are asking for help on small bills as well as large ones.



GETTING TO GRADUATION

John Howell's friends whooped and whistled when the principal handed Howell his high school diploma. They knew their buddy had been through hell, but they had little idea just how much he was still suffering. Every six minutes, Howell pressed the pain medication pump hidden by his graduation robe.

Just a year ago, Howell had been the picture of health, except for a few digestive problems he had blamed on his typical teenager's diet. When rectal cancer was discovered—an uncommon cancer and rare in youngsters—it was already well advanced, necessitating a colostomy.

Emory surgical oncologist David Kooby says that whatever came Howell's way—weeks of chemotherapy and radiation, the unexpected death of his father, more surgery for a small bowel obstruction, the continuing spread of the disease—the boy took it with a strength far beyond his years. **In recent months, when the cancer had metastasized widely, what Howell wanted most was to graduate with his friends.** That would require as much negotiation—and generosity—as medical know-how.

Medicaid had terminated the Howell family's coverage because, according to its records, Mrs. Howell was behind on her Medicaid HMO premiums, although she had receipts showing that the premi-

ums had been paid. While social worker Mackenzie Moore worked to see if she could straighten the matter out, Kooby continued with the boy's care. Howell's most recent hospitalization already had cost almost \$100,000.

But reimbursement was not what Kooby was focused on. Instead, he, Moore, and Howell's high school assistant principal focused on making the young man's wish come true. The expensive pain medicines were the easiest to secure, since Emory's new inpatient pharmacy could provide them without cost to Howell. Emory's long-time vendors also stepped up to the plate: a special wheelchair from High Tech Healthcare, a portable pain pump from Coram Specialty Infusion Services. The new graduate came back to the hospital that night, exhausted but smiling, to the congratulations of his health care team.

SMALL COSTS IN LARGE NUMBERS

Slender and pale and in her early 50s, Kristina Carter appeared to be relatively healthy. But she came to Emory University Hospital Midtown (EUHM) for back pain that made it hard to concentrate at her office job. Why yes, she told the doctor, she had broken a couple of bones in the past 10 years, and no, neither happened from a fall or accident,

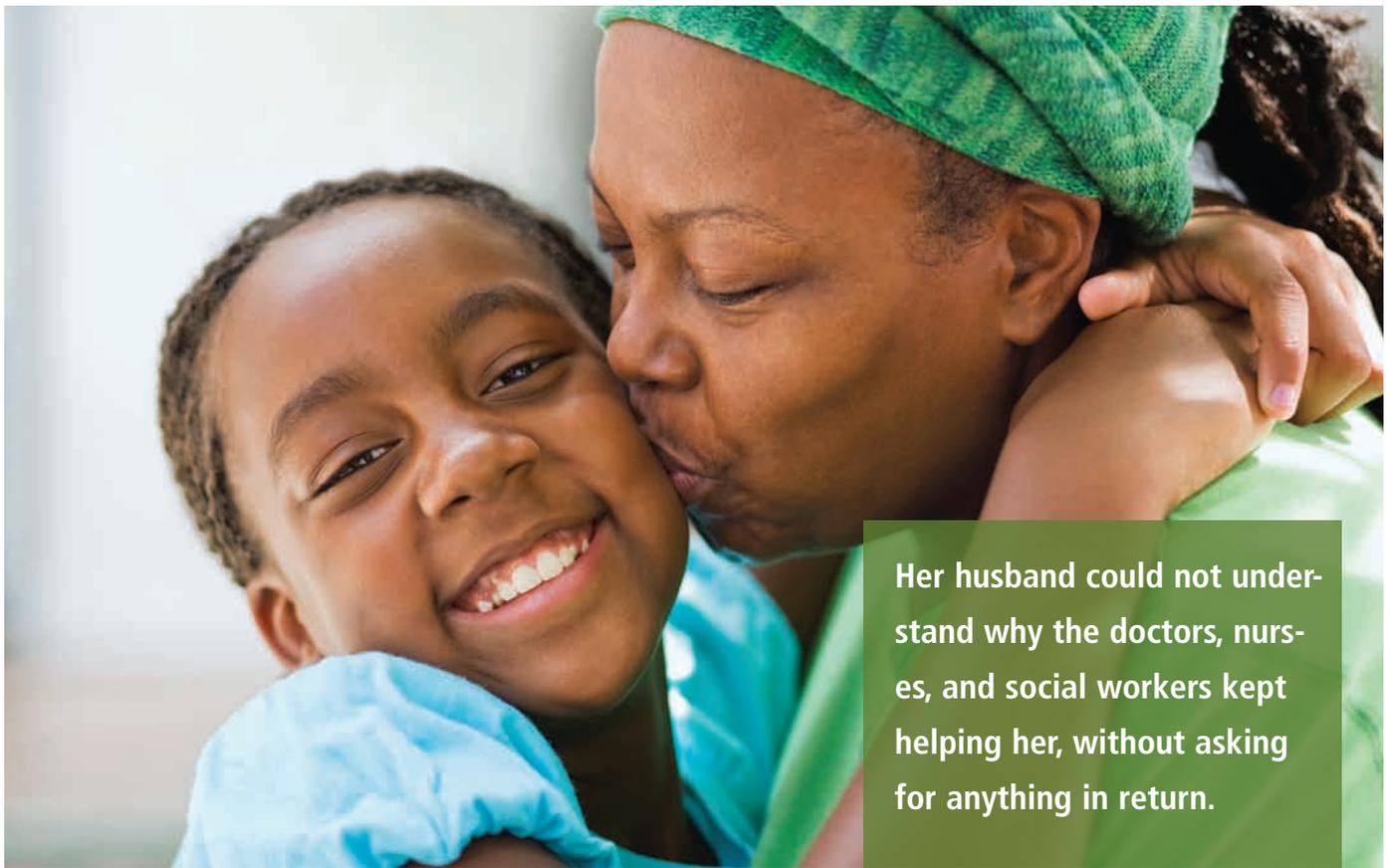
just from being a bit of a klutz.

The doctor ordered scans that showed osteoporosis and small compression fractures of the spine. Tests also indicated that her thyroid was overactive, causing excess excretion of calcium and phosphorous. In addition to prescribing calcium, vitamin D, and various medicines, the doctor ordered physical therapy so Carter could learn exercises to increase bone mass and strengthen muscles to help prevent further fractures.

Things were going well until Carter's mother broke her hip, leaving the older woman almost helpless. Carter, an only child, saw nothing else to do but give up her job for a while and move in with her mother.

Although she had health insurance when she first came to EUHM, Carter had been left with a large deductible and sizeable co-pays, charges she had been paying in installments. These payments now seemed overwhelming.

Care coordinators at EUHM found Carter eligible for waiver of remaining costs, for which Carter was immensely grateful. The total charges waived were less than \$2,000, a fraction of amounts for care in other cases—\$20,000, \$200,000, and more—that often routinely go unpaid. But in today's economy, more and more patients like Carter are asking for help on small bills as well as large ones.



Her husband could not understand why the doctors, nurses, and social workers kept helping her, without asking for anything in return.



As an academic medical center, Emory has the expertise to treat the sickest of the sick—as a result, a disproportionate number of patients with extremely complex and challenging illnesses are referred here. They come from nearby and from locales across the state. Caring for these patients requires not only more expertise but also considerably more resources.

NO ONE ELSE TO ASK

Henri Dixon's job as a truck driver supported the family and covered taxes and tithes. What his wife Abigail had—food, love, time, energy—she gave away to her family, church, and community. She even took in children who needed a home, asking nothing in return. Everyone in the Atlanta Jamaican community adored her.

When her moment of crisis arrived last November—a blinding headache, a frantic trip to Emory University Hospital, major loss of physical and cognitive function—dozens of those whom she had helped for years encircled her with love and support. During the three months she remained hospitalized, her husband took off work to be at her side, giving up the house, moving the family in with friends. He could not understand why she sometimes opened her eyes but never seemed to see him, nor why the doctors, nurses, and social workers kept helping her, without asking for anything in return.

There was no one to ask. Had the 40-year-old woman already been a citizen, not just a legal resident, Medicaid would have paid some of the costs of her care. Had she worked for pay, she might have become eligible for federally mandated Emergency Medical Assistance for persons qualified for Medicaid in all ways except citizenship. **The brain hemorrhage had not waited, however, so it fell to Emory to provide more than \$600,000 in emergency care and hospitalization—and to keep on paying.**

Last March, the team told her husband that the hospital had done all it could, that Abigail would require 24-hour care. Dixon wanted to take her home but knew he did not have the resources there to care for her—nor the stunning amount of money a nursing home would cost. Emory Hospital worked out an agreement to pay these costs—some \$150,000 per year—for his wife to live in Budd Terrace skilled nursing facility at Wesley Woods, part of the Emory Healthcare complex. It was the kind of thing Abigail herself would have done.

Caring for children

Emory's 250-plus pediatric specialists are an important part of the safety net for Georgia's youngest and most vulnerable. It's a net that spreads wide. Emory-Children's Center (ECC), a joint venture between Emory Healthcare and Children's Healthcare of Atlanta, is the largest pediatric multi-specialty group practice in Georgia. In addition to providing almost 50,000 outpatient services in the past year throughout the state, Emory pediatricians provide most of the inpatient care at Children's Healthcare at Egleston on Emory's campus and a substantial portion of inpatient care at Children's at Hughes Spalding Hospital on the campus of the publicly owned Grady Memorial Hospital. Emory pediatricians also care for sick newborns and other high-risk babies at the Emory Regional Perinatal Center at Grady and in the neonatal intensive care unit at Emory University Hospital Midtown.

Emory's pediatric safety net is also one that Georgia families increasingly need. The largest proportion of children seen by Emory pediatric specialists (56%) are covered by Medicaid, which reimburses at a rate far below what it actually costs Emory to provide care, even less than reimbursement for adult care (see page 4). Another significant portion of patients seen by Emory pediatricians are referred to as "self-pay," but in reality frequently this means that they simply can't pay. Based on the most recent census figures available, more than one out of nine Georgia children—the vast majority living in homes where at least one parent works—has no health insurance whatsoever.

Whether patients are covered or not, however, is a distinction noted only in the business office. All that Emory pediatricians see are sick children who need the expertise they can provide.



Rheumatologist **Larry Vogler** directs one of only a handful of pediatric rheumatology centers in Georgia, where Emory-Children's Center specialists treat more than 2,000 children and teens every year with disorders such as arthritis, lupus, and immune deficiency disorders.

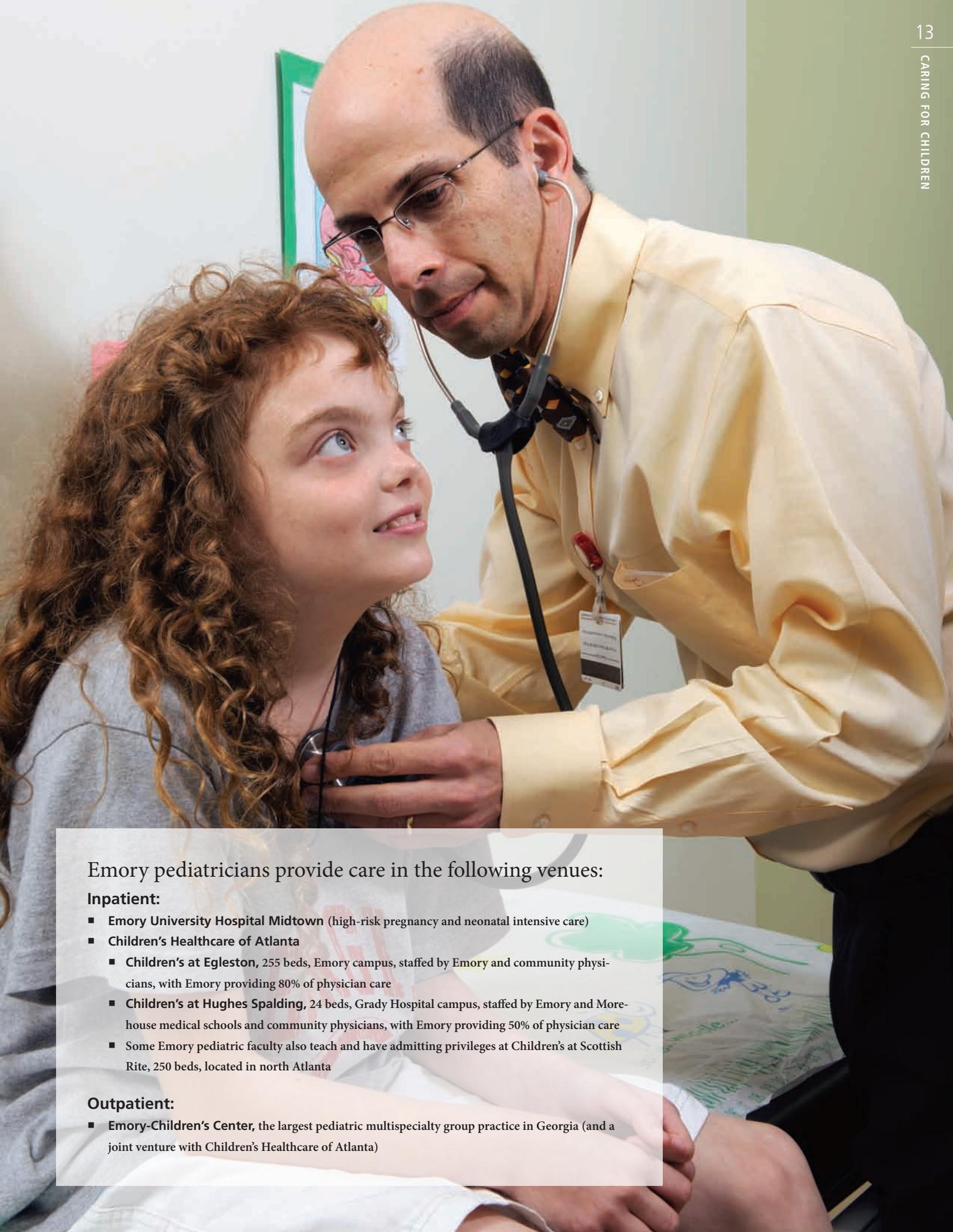
Last year the Emory pediatric transplant program at Children's Healthcare of Atlanta performed more pediatric kidney transplants than any institution in the United States. However, transplant is not appropriate for all children, and those ineligible for transplant face a lifetime of dialysis.

Emory-Children's Center (ECC) provides chronic dialysis each year to more than 40 children, from newborns to teenagers. **Since ECC has the only pediatric dialysis unit in Georgia, it is the only place in the state where very young children can receive chronic hemodialysis.** Some families commute more than five hours three days a week.

About 55% percent of the children seen in the dialysis unit at ECC have Medicaid, while 10% have no insurance whatsoever. Emory nephrologist Larry Greenbaum doesn't know which of his

young patients have coverage. What he does know is that they all have life-or-death dependency on the machines that remove toxins from their blood, work that their own malfunctioning kidneys can't do. Without dialysis, most would survive no more than five or six days. Greenbaum and his colleagues engage in research to improve care for these children, including studies assessing the poor growth and bone weakness by which many are affected.

opposite: Nephrologist **Larry Greenbaum** leads a team of clinicians and researchers in kidney disease at Emory-Children's Center, which conducts clinical trials in chronic renal failure, dialysis, and transplantation, among other areas.



Emory pediatricians provide care in the following venues:

Inpatient:

- **Emory University Hospital Midtown** (high-risk pregnancy and neonatal intensive care)
- **Children's Healthcare of Atlanta**
 - **Children's at Egleston**, 255 beds, Emory campus, staffed by Emory and community physicians, with Emory providing 80% of physician care
 - **Children's at Hughes Spalding**, 24 beds, Grady Hospital campus, staffed by Emory and Morehouse medical schools and community physicians, with Emory providing 50% of physician care
 - Some Emory pediatric faculty also teach and have admitting privileges at Children's at Scottish Rite, 250 beds, located in north Atlanta

Outpatient:

- **Emory-Children's Center**, the largest pediatric multispecialty group practice in Georgia (and a joint venture with Children's Healthcare of Atlanta)

Her father got another job, only to have the new insurer refuse to cover Rita's care, since her Crohn's was a pre-existing condition.





The largest proportion of children seen by Emory specialists (56%) are covered by Medicaid.

ACTING ON MEDICAL NECESSITY

Rita Hart was 12 when the abdominal pain and frequent bouts of diarrhea began. Her pediatrician referred her to Emory-Children's Center (ECC), where specialists diagnosed Crohn's disease.

Once a month, Rita went to the infusion center at ECC, where a watchful nurse joked with her and other children while medicines dripped into needles in their arms or hands. Rita's infusion of Remicade kept the inflammation and symptoms under control.

Then her father lost his job. **As his boss was apologizing, Joe Hart kept thinking of Rita's medical costs.** The Remicade alone cost almost \$4,000 monthly. When he called ECC to confess that the family no longer had insurance, pediatric gastroenterologist Bess Schoen seemed concerned only about Rita: "Don't even think about not showing up for your daughter's next infusion. She needs this treatment. Emory will figure it out."

And Emory did. Kathy Thornton, director of patient accounts, started by helping the family apply for Medicaid. In the meantime, Schoen and the infusion nurses not only provided care but also persuaded the pharmaceutical company to provide the costly drug without charge. Rita's father got another job, only to have the new insurer refuse to cover Rita's

care, since her Crohn's was a pre-existing condition. Thornton and Schoen filed a medical necessity appeal: without this treatment Rita would have a terrible quality of life and could even face death. The insurer agreed to pay half of the cost of the treatment, after an \$8,000 deductible.

Now 20, Rita is doing well. Since taking on her care, Emory has written off more than \$40,000 in charges. Next year, she will say goodbye to her Emory pediatric specialist and hello to an Emory gastroenterologist. As an adult patient, she will receive the same kind of care, whether it is fully reimbursed or not.

AN ABRUPT CHANGE IN SCENARIO

Three months before her baby was due, Jan Turner's blood pressure shot up, making her head ache. In the ambulance on the way to Emory University Hospital Midtown (EUHM), she began having seizures. She gave birth to baby Vivi, born weighing 1.7 pounds. But Turner had sunk into a coma and never recovered.

Within hours, her husband had become a grieving widower and father. Vivi spent much of her first year in the neonatal intensive care unit, which soon felt more like home to Turner than his empty apartment.

Before everything had changed,

he had gotten a new job, scheduled to start after the baby's due date. He had arranged for COBRA insurance from his old carrier, never dreaming he would need it to cover costs of his wife's illness and his daughter's premature birth. **Then the insurance at his new job refused to pick up the costs of Vivi's care.**

While Emory staff helped Turner appeal the insurance refusal, bills continued to climb. The first \$5,000 of refused charges were written off as uncollectible. By the time the next wave began, Turner had regrouped. He called the hospital to say he wanted to make "good faith" payments. Would the billing office send him a copy of everything he owed?

The clerk was close to tears during the conversation and then almost lost it when she realized he still owed \$1,500 in co-pays for the weeks when his first insurance was paying. EUHM wrote the charges off as charity care. The outcome with the insurance company is still unknown, but clearly paying the bills himself would be catastrophic for Turner. In the meantime, Vivi is doing well.

top left: Neonatologist **Ann Critz** directs the neonatal intensive care unit at Emory University Hospital Midtown.

top right: Pediatric gastroenterologist **Bess Schoen** helps desperately ill children with digestive disorders get the care they need.

Serving the elderly and chronically ill

What Emory's Wesley Woods Center does extraordinarily well also makes the geriatric center a nonprofit poster child—meeting the needs of patients in their 70s, 80s, 90s, or beyond as well as those of younger patients requiring extensive wound care, rehab, or respiratory care. Many patients are able to pay for services, but an increasing number are either ineligible for federal or state programs or have already reached the limits of any coverage or personal resources they once had. For more and more of the 30,000 patients seen every year in Wesley Woods Hospital, outpatient clinic, and nursing care facilities, reimbursement falls short, often far short, of the actual costs of providing services.

During fiscal year 2009-2010, expenses at Wesley Woods Center exceeded revenue by \$6.2 million, a "negative increase" of 38% over the previous year. While next year is expected to be even worse from an economic point of view, clinicians at Wesley Woods expect to continue to serve as the same source of compassion and hope for their patients that they always have.



above: Hospitalist **Patricia Haibach** specializes in inpatient care and directs long-term acute care at Emory's Wesley Woods Hospital.

right: Emory geriatrics researchers are conducting a study among residents at Wesley Woods Towers to see if dancing the tango improves mobility, balance, and overall wellness in seniors suffering from limited or declining vision. To watch a video of the dancers, visit bit.ly/seniors_dancing.

LOOKING FOR A MIRACLE

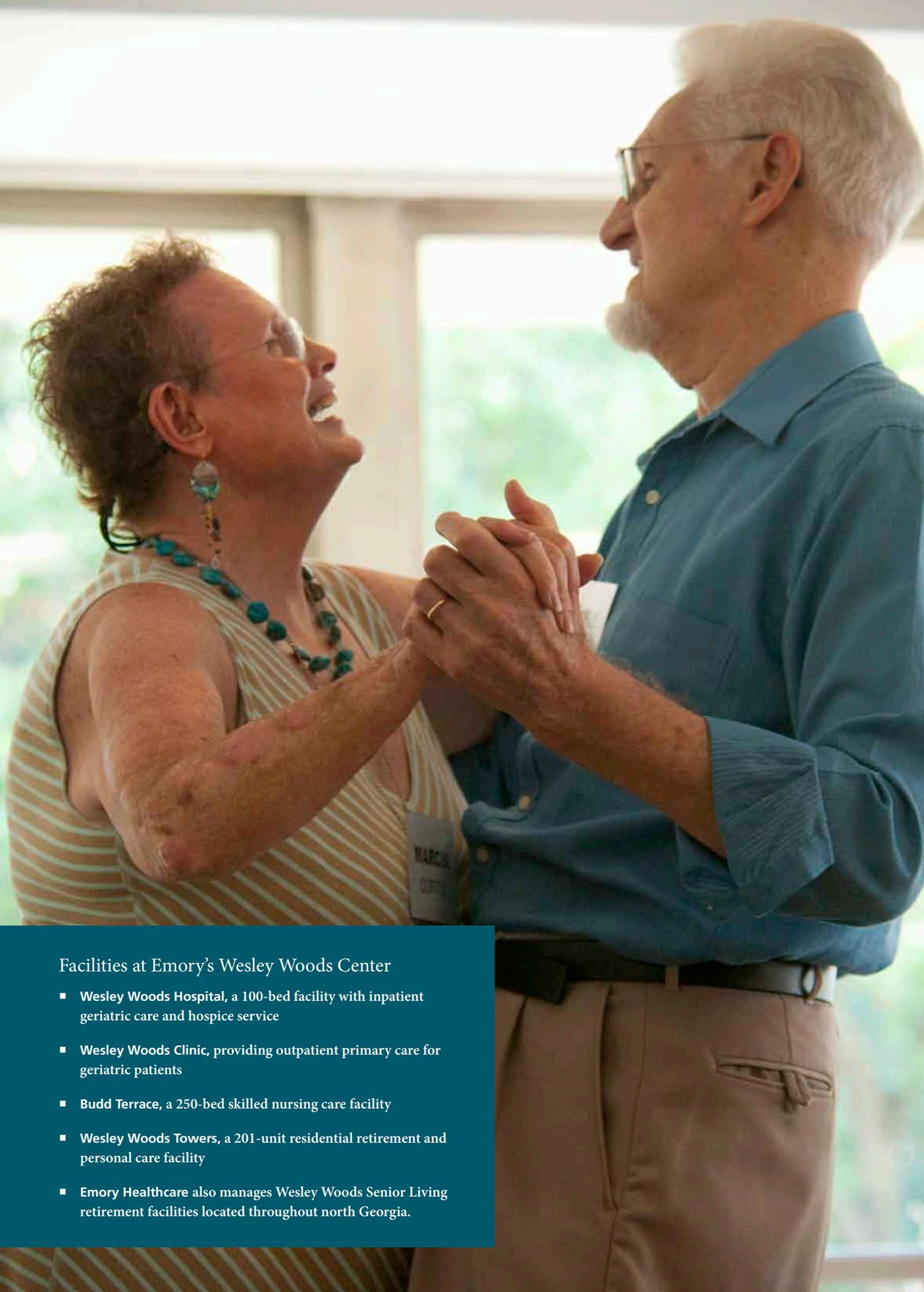
For years, Frances Walker had managed reasonably well, despite her diabetes, hypothyroidism, a prior stroke, and heart problems. As her heart condition continued to worsen, however, her doctor in south Georgia told her she needed valve replacement—preferably at Emory University Hospital Midtown (EUHM), where doctors had extensive experience in handling patients as broadly ill as she was.

From a cardiac perspective, the surgery was a success. But in the cascade of events that followed, everything that could go wrong did. One crisis led to another, with the result that some of her bowel tissue died and several fistulas or tears opened up between her bowel and the rest of her abdomen—a perfect storm for infection. She was transferred to Wesley Woods' long-term acute care unit for wound care until she could return to EUHM for fistula repair. At Wesley Woods, she developed a fungal infection

in her artificial valve—not uncommon in patients with both bowel wounds and traumatized hearts.

Too debilitated for more surgery and often delirious, she was lucid enough to refuse Wesley Woods' offer to arrange hospice care at home. As her condition further deteriorated, her family agreed that she should be moved to an inpatient hospice site closer to home.

Medicaid paid only the surgery costs at EUHM. The rest, from the wound and ventilator care to the ambulance that transported Walker to the inpatient hospice where she died, Wesley Woods had to cover on its own, with charges totaling roughly \$668,000.



Facilities at Emory's Wesley Woods Center

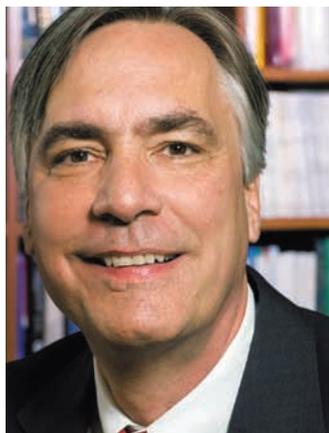
- Wesley Woods Hospital, a 100-bed facility with inpatient geriatric care and hospice service
- Wesley Woods Clinic, providing outpatient primary care for geriatric patients
- Budd Terrace, a 250-bed skilled nursing care facility
- Wesley Woods Towers, a 201-unit residential retirement and personal care facility
- Emory Healthcare also manages Wesley Woods Senior Living retirement facilities located throughout north Georgia.



opposite: Wesley Woods horticultural therapist **Kirk Hines** helps seniors improve motor skills and muscle strength.

right: Psychiatrist **Bill McDonald**, director of geriatric psychiatry at Wesley Woods, says depression is not a normal part of aging. To read more, visit bit.ly/depression-in-aging.

far right: **Kevin Hendler** specializes in geriatric dentistry.



For increasing numbers of the 30,000 patients seen every year at Wesley Woods facilities, reimbursement falls short, often far short, of costs of providing services.

SENIORS WITH DEPRESSION

Henry wasn't sad, he had just lost interest in woodworking, church, even visits from his grandchildren. Formerly the life of family gatherings, he became apathetic and withdrawn. His memory seemed to be slipping, or maybe he simply no longer cared. Once fastidious about his diet and dress, he no longer took care of himself.

Depression can look a lot different in the elderly, says William McDonald, who directs geriatric psychiatry at Emory. Little wonder that patients, family members, even clinicians often mistake late-life depression for symptoms of other diseases. Some mistakenly see it as a natural part of aging. Not so, says McDonald.

Depression is treatable in the elderly, even in those with other diseases (30% of Alzheimer's patients also have depression, as do 40% of Parkinson's patients). That's why for more than 10 years, Emory's Fuqua Center for Late-Life Depression has worked to help older Georgians with depression get help that can improve their quality of life, independence, and even cognitive abilities.

Fuqua's geriatric clinicians treat patients at their Wesley Woods offices, through telemedicine, and in 21 senior residential facilities. But the most powerful use of Fuqua expertise, says nurse practitioner Eve Byrd, is to support indi-

viduals and organizations on the front line of elder care. Each year, the center provides training in depression screening to more than 2,000 people, coordinates community resources across Georgia and four surrounding states, and provides continuing education to the primary care physicians who care for the great majority of the elderly.

It works. After attending one of the 100 educational programs Fuqua provided last year, Henry's minister recognized the signs of late-life depression in his old friend and got him connected to local mental health services for treatment. No one at Fuqua ever met Henry, but they changed his life nonetheless. The work they do gave back the old Henry to his family and community.

PROVIDING SOME NEEDED MAGIC

Lou Brown had seen the same dentist for 25 years. Now that he had Alzheimer's, however, he no longer recognized the man in the white coat. Now suddenly when the dentist tried to examine him, Brown refused to open his mouth, jerking his head back and forth in terror. The dentist referred his patient to Kevin Hendler at Emory Healthcare's Ina T. Allen Geriatric Dental Center located at Wesley Woods.

That happens a lot, says Hendler. He

accepts any patient over 55, but he has a reputation as a magician when it comes to patients like Brown. It's not really magic but great empathy and patience.

Hendler says he does have a few tricks. He always touches patients on the arm or shoulder, so they aren't startled by sudden movements. He relies a lot on distraction, talking nonstop, even singing if that helps. If patients have Parkinson's or some other movement disorder, he tries to work with the rhythm of their movements. And when it's needed, he uses mild drugs to alleviate their anxiety. He usually can get done what needs doing.

In Brown's case, a deep sore was hidden in the folds of his lip, caused by ill-fitting dentures. Once he was treated, the change in Brown was like magic, said the family. **They had assumed his newly uncooperative behavior was part of his evolving dementia, but with his pain relieved, their father was once again calm and pleasant.**

Struggling financially and lacking private insurance, the Brown family couldn't pay for Hendler's services. Medicare does not cover dental care and Medicaid in Georgia covers exams, x-rays, and extractions but not denture-related services or other basic dental care. But the care Hendler provided was well worth the effort, in his view, possibly saving the state considerable dollars by averting a more serious infection.

Helping transform Grady and the lives of its patients

Last year, Emory physicians provided more than \$22.3 million in uncompensated care at publicly funded Grady Memorial Hospital, where Emory medical faculty are responsible for 85% of physician care (Morehouse School of Medicine covers the other 15%). As more and more Atlantans lost jobs and insurance during the mounting financial crisis, the hospital's historical role as a "safety net" for the community became even more critical.

Just two years ago, the 118-year-old hospital was on the verge of financial collapse, which would have been a disaster not only for Grady's patients and their families but also for the city's health system and its overall economy. In recent months, however, new leadership at Grady and financial support from the community—including a \$20 million debt forgiveness on the part of Emory—started paying off. Despite a 7% increase in uninsured patients, a cut in state trauma funding, and a 25% increase in indigent and charity care, Grady is operating in the black for the first time in years.

Emory medical faculty—and their willingness to provide vast amounts of unreimbursed care—make possible the staggering number of patients seen at Grady: 26,700 admissions and 616,271 outpatient and emergency services last year. Any payments Emory physicians do receive go to the Emory Medical Care Foundation, which invests every cent to support Emory's patient services at Grady. In fiscal year 2009-2010, this meant \$36 million was used to upgrade equipment and support vital services provided by Emory doctors working at the hospital.

AN AFTERNOON IN THE ER

The average emergency medicine physician at Grady sees about 5,000 patients a year, more than half of whom are considered "self-pay," meaning they have no medical coverage whatever. The term self-pay is a bit optimistic: the current collection rate for self-pay patients is about three cents on the dollar. But the doctors don't know and don't have time anyway to think about which insurance category patients might be in. They are too busy prioritizing patients' needs and meeting those needs as fast as humanly possible.

Take, for example, one afternoon in the life of Leon Haley, Emory's vice chair of clinical affairs at Grady. It started quietly enough with an asthma patient wheezing from the summer heat and an abashed weekend handyman limping from a fall off his ladder. Then a couple from Cobb County arrived, the man seemingly oblivious to the blood drying

on his shirt, the woman with no memory of the accident on I-75 who kept looking at the bruises on her arms as if they were coming out of nowhere. What other internal damage could the blunt trauma have caused? As a team of physicians began orchestrating her care, two more ambulances arrived, both with trauma patients. One held a man and woman, each with several gunshot wounds, the other, the shooter and would-be robber who had been shot three times in the leg by the intended robbery victim. The woman, wounded in the abdomen, was rushed to surgery.

The bills kept mounting. **Most gunshot wounds cost more than \$5,000, often more than twice that, depending on which bones or organs are affected.** Most car crashes cost even more because of the complexities of the injuries involved and the typically longer ICU stays.

Who pays? The nicely dressed couple were uninsured, both laid off from pro-

fessional jobs more than a year earlier. The robbery victim and his wife turned out to have Medicare and Medigap insurance. Even the young robber was covered by Medicaid, thanks to his mother. It was not a bad day in the ER, from Haley's perspective—everybody got put back together. And although he was unaware of it, some were even able to pay.



above: Emergency medicine physician **Leon Haley** is Emory's vice chair of clinical affairs at Grady. To read more about the partnership between Emory and Grady, visit emory.edu/grady/.



Most programs for abused women kick them out if they go back to their abusers or have a drug or alcohol problem. Not the Grady Nia Project.

right: Emory psychologist **Barbara Rothbaum** is one of the nation's leading experts on post-traumatic stress disorder.

far right: Emory psychologist **Nadine Kaslow** established the Nia Project at Grady Hospital more than a decade ago to help women who are abused and suicidal.



Emory faculty—and their willingness to provide vast amounts of unreimbursed care—make possible the staggering number of patients seen at Grady.

REMOVING FEAR FROM MEMORIES

The party took a turn for the worse when a man asked Sherry, in words no man had ever said to the 22-year-old, if she wanted what he wanted. Of course she said no, maybe even laughed nervously. But two hours later, when she got out of her car at her apartment complex, there he was. The knife at her throat was terrifying, and even more so was the way his face twisted in rage as he hurled obscene names at her.

Afterwards, surprised to be alive, she managed to call her best friend. When the friend saw Sherry—stunned, bloodied, clothes torn, her arm broken—she drove her to the Grady Hospital emergency room. Sherry was there for hours, with clinicians x-raying and setting her arm, cleaning cuts and abrasions, and performing a pelvic exam. Somewhere in the mix of doctors and police, a researcher asked her about what had happened and what she was thinking. **Sherry would see the researcher a week later and again a week after that, as part of an Emory study to prevent post-traumatic stress disorder (PTSD), a first of its kind study funded by the NIH and the Emory Center for Injury Control.**

“We believe it’s important to help trauma victims process what happened before that first night’s sleep, when memories are consolidated,” says the

study’s principal investigator, Barbara Rothbaum, who directs the Emory Trauma and Anxiety Recovery Program and is one of the nation’s leading experts on PTSD.

The therapist listens and points out unhelpful thoughts (“I didn’t fight hard enough”) and helps replace them with more helpful, therapeutic ones (“I did what I needed to save my life”) that the traumatized person then incorporates into his or her memory of the event. Later, the counselor helps the person identify new fears—talking to strangers, going out at night—and sort out what is realistically safe.

Since the study began in January 2009, Rothbaum and four mental health counselors have screened thousands of rape, assault, and other trauma victims at Grady’s emergency department and entered those at highest risk for PTSD in the ongoing study. Results won’t be available for another year, but feedback from patients suggests that the treatment is helping ease some of the negative emotional impact and fear from the trauma memory.

HELPING BATTERED WOMEN

Leaving an abusive relationship can take as many as 10 tries, especially for women with no job, dependent

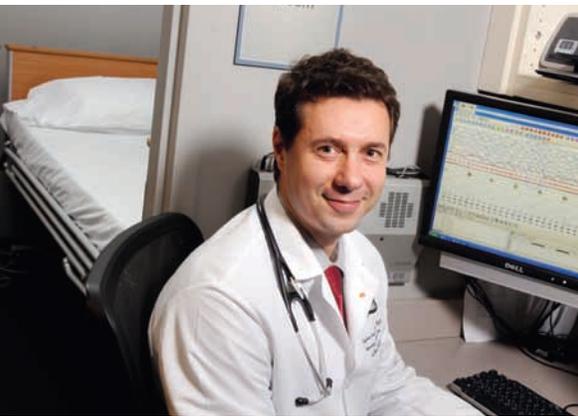
children, broken spirits, and no place to go but the street. Most programs for abused women kick them out if they go back to their abusers or have a drug or alcohol problem. Not the Grady Nia Project, established by Emory psychologist Nadine Kaslow more than 10 years ago to help African American women who are abused and suicidal.

Early in her career, Kaslow treated a woman who repeatedly returned to her abuser and who later killed herself. Kaslow wanted to do something to change the disastrous scenario faced by that patient and countless others like her. **Counselors in Nia (a Swahili word for “purpose”) are on call 24/7, often making a trip to the Grady emergency department in the middle of the night when a woman arrives who has made a suicide attempt or who has injuries suggestive of partner violence.**

Women who enroll in Nia join an empowerment therapy group of 50 to 75 other women—some remain in the group for years—while Nia counselors help them develop safety plans, find shelter, and enroll in addiction, work readiness, and/or literacy programs.

Emory and the Atlanta VA Medical Center

Emory and the Atlanta VA Medical Center share back-to-back campuses, a partnership that stretches over six decades, and a commitment to give veterans the quality of health care they deserve, desire, and need. Some 250 Emory physicians along with 142 full-time equivalent residents provide physician care at the facility, which has 165-bed hospital beds and 120 nursing home beds. Emory scientists have made the Atlanta VA Medical Center one of the nation's top VA centers for research that is directed at some of the most serious problems faced by veterans. Last year, Emory-directed research funding totaled \$29 million and involved more than 500 projects covering areas ranging from diabetes and drug addiction to cancer, HIV/AIDS, depression, hypertension, and dementia.



WAKING UP FEELING YOUNGER

Studies indicate that veterans are disproportionately affected by sleep apnea, which interrupts breathing anywhere from 10 seconds to a full minute during sleep. In recent years, a surge in awareness of the disorder and its risks has caused a sharp rise in the number of veterans seeking help for sleep-related problems.

Since Emory's Octavian Ioachimescu was recruited as director of the VAMC's sleep disorders center almost four years ago, the number of veterans seen annually has tripled to more than 4,000. Every case is different, he says, but Everett Baker is about as typical as it gets.

In his 60s, Baker had gained 50 pounds since his slim, trim, Vietnam days and then a dozen pounds more after his family physician persuaded him to stop smoking. At first, Baker blamed his increasing fatigue, sleepiness, and hypertension on his weight. But his wife was convinced that it had something to do with the snoring that almost rattled her out of bed. She was terrified when he abruptly stopped breathing until she elbowed him to wake up.

Baker ended up in a sleep laboratory bed in Ioachimescu's clinic, hooked to a web of monitoring wires. The results confirmed that he stopped breathing

for 15 to 20 seconds once or twice every minute. **Once he was fitted with a face mask and CPAP (continuous positive airway pressure) machine, Baker said he had the best sleep he'd had in more than 20 years.** Over the next several weeks, he continued to feel better, his blood pressure went down, and his snoring stopped. With more energy, Baker started exercising more and lost 10 pounds. He said it was like waking up every morning to find himself another day younger.

left top: Emory pulmonologist **Octavian Ioachimescu** directs the sleep center at the Atlanta VA Medical Center.

left bottom: Not every apnea patient can cope with sleeping with a face mask and CPAP device. Emory pulmonologist **Michael Hart** is working on other solutions and has discovered that some drugs currently used to treat type 2 diabetes reduce expression of enzymes involved in apnea and apnea-related hypertension. In addition to his role as a researcher, Hart is associate chief of service for all of Emory's research at the Atlanta VA Medical Center.



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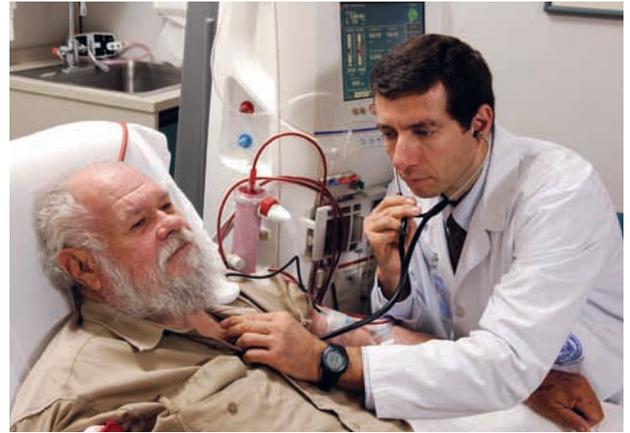
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top left: Geriatric specialist **Wilson Holland** asked his patients to write their war memories in his copy of *The Greatest Generation*.

top right: Nephrologist **Steven Gorbatkin** is one of some 250 Emory physicians at the VAMC.

opposite: Endocrinologist **Peter Thule** treats patients with diabetes and conducts gene research aimed at developing better therapies.



Emory and the Atlanta VAMC first teamed up in 1946 to treat vets returning from World War II.

CONTROLLING INSULIN LEVELS

Every year, more than 10,000 veterans with diabetes come to the Atlanta VA Medical Center for treatment. As a clinician, Emory endocrinologist Peter Thule cares for many of them, but as a researcher he won't be satisfied until he finds a way to help them produce the insulin their bodies need to live. My patients inspire me, says Thule.

Take, for example, Tom Jenkins, who was first diagnosed as a 20-year-old Army private. When Jenkins left the Army, he came to the VAMC for treatment, where Thule immediately replaced Jenkins' daily routine of six insulin injections with a pump that delivers insulin continuously throughout the day. Diabetes patients at VAMC get the best treatment available anywhere, says Thule, but it's still not good enough.

Diabetes occurs when pancreatic cells produce either no insulin or too little. **Thule was not the first to find a gene that enables cells to produce insulin, but he was among the first to figure out how the gene could regulate the amount produced.**

His secret? Working in lab space at the VAMC, he injects the gene into the liver, which, like the pancreas, has the ability to sense glucose levels. In rats and other rodents, Thule's gene has been suc-

cessful in controlling blood sugar levels and decreasing long-term complications of diabetes, including the vascular disease from which many diabetics eventually die. Thule is now working with cats, which can develop diabetes spontaneously. He believes human trials are only a few years away.

Tom Jenkins is waiting. Meanwhile, he has completed training to be a physician's assistant, inspired by the care he receives through this extraordinary partnership of Emory and the Atlanta VAMC.

GREATEST GENERATION

Five years ago, when Emory geriatrician Wilson Holland was reading Tom Brokaw's *The Greatest Generation*, about those who grew up in the Great Depression and then fought in World War II, he found it hard to put down. As a doctor in the VAMC's Bronze Outpatient Geriatric Clinic for patients 75 and older, Holland had worked with thousands of these men and women. When his older patients came into the clinic, mostly veterans from WWII and the Korean War, he began asking them if they would like to write down their name, where they served, and perhaps a few of their memories.

More than 1,000 veterans now have

written in the book, describing experiences such as watching the flag being raised at Iwo Jima, seeing shrapnel barely miss a sleeping off-duty nurse, and tapping out the telegraph message that President Roosevelt had declared war. Many also brought in photographs, medals, and other memorabilia that are displayed throughout the clinic, along with the book itself.

For some, writing in the book was a continuation of commemorations they were already involved in: one veteran made it his mission to attend the funeral of every veteran in his county; another asked Holland to write a letter of permission required by the French Health Ministry for the 84-year-old to join a group of paratroopers repeating their jump into Normandy 60 years earlier.

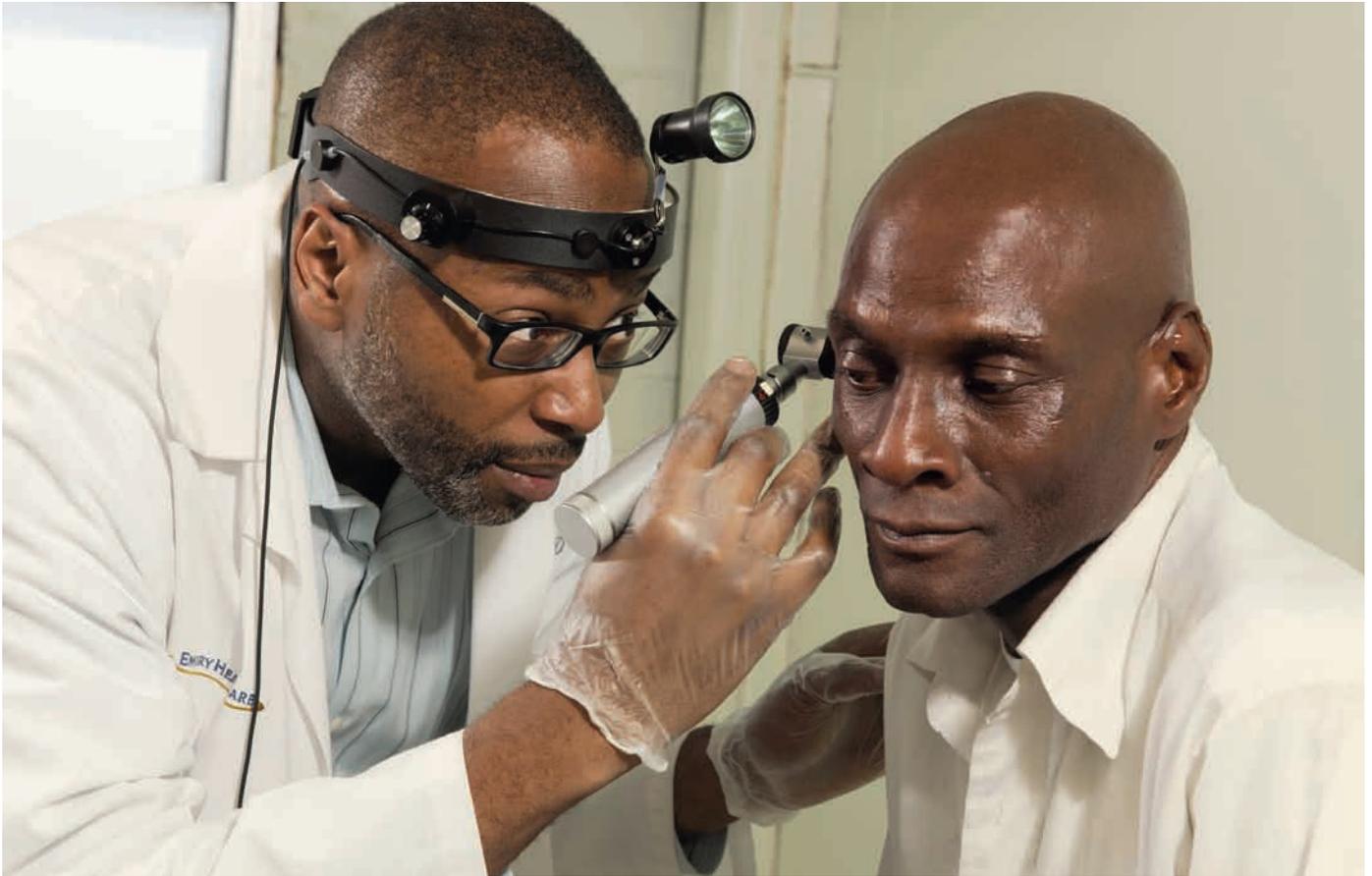
For others, painstakingly recording memories marked the first time they had ever talked about their experience. The outpouring often surprised their families.

For many veterans, reading about others' experiences and writing about their own has been therapeutic. For the caregivers at the VA, it also is "a familial experience," says Holland. "Their memories give us and the young Emory doctors we are training more insight into the lives of our patients and another way to honor their service and the courage and sacrifices they made for our freedom."



From a local perspective

Because of where they work and study, faculty, students, and employees in Emory's Woodruff Health Sciences Center are at a particularly good vantage point to see unmet needs in the community. As clinicians or scientists seeking answers day in and day out to perplexing health problems, they could say to themselves that they are doing enough. But for many, the same desire that drew them to health care or research in the first place is one that compels them always to seek to do more.



Creating a free clinic: As chief of ear, nose, and throat at Grady Hospital, Emory physician **Charles Moore (above)** saw too many patients with previously undiagnosed late-stage head and neck cancer. A man of action as well as heart, he chose the three zip codes with the highest percentage of these cases and used his free time to offer education and health screening in churches and homeless shelters. He also packed the modern-day equivalent of a black bag and began offering basic clinical services out of the back of his old Subaru. His residents

offered to help, as did Emory colleagues. The work grew so much that Medical Missions International provided money for a van and other organizations helped with free medicines and supplies.

Last year, Moore established the Healing Community Center, a clinic providing free primary care, cancer screenings, and mental health services at the City of Refuge, an Atlanta nonprofit operated by the Mission Church, with support from the Atlanta Housing Authority. Faculty and staff from the Emory's schools of medicine and nursing volunteer long hours in

the clinic, and those in Emory's Rollins School of Public Health provide health counseling. Now, with support from United Way and a number of partners, including Grady Health Systems, MedShare, Emory University Hospital Midtown, The Emory Clinic, and local architects and engineers, Moore is working on a clinic expansion expected to quintuple patients served, to 5,000, its first year.

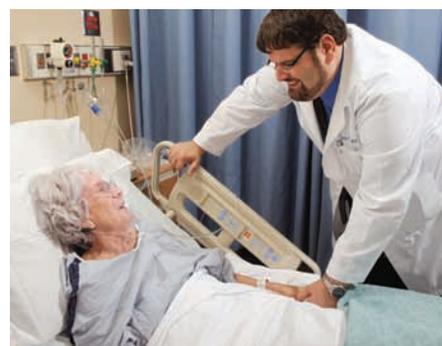
Grady CEO Michael Young says the clinic helps patients in need and also will save tens of thousands of dollars each year for Grady and other area hospitals.

Safe haven for abuse victims: Last year, DeKalb County prosecuted 40 cases of elder abuse. DeKalb County Solicitor General Robert James says this total doesn't begin to reflect the real number of such cases in a county with one of the fastest-growing senior populations in the Southeast. He believes hundreds, maybe thousands of cases have been slipping through the cracks.

That is now changing. A new partnership between prosecutors and Emory Healthcare is the first in the nation that guarantees victims of elder abuse immediate help, shelter, and a way to

preserve evidence for prosecution. In a comprehensive program called VALARI (vulnerable adults living at risk invisibly), first responders bring patients to Emory, where **Thomas Price (right)**, chief of medicine at Wesley Woods Center, gives them an exam designed to determine whether they have been neglected or injured by their caretakers.

If so, Price and his staff work with police and the solicitor general's office to prosecute the abuser. Victims are given beds at Wesley Woods Center, where they receive care until they find a permanent safe home. Beds and care are provided at



no cost to the victim. The VALARI team works to restore the person's financial and social status while the victim's body and mind are healed at Wesley Woods.



Learning from and giving to the elderly: What students like the one above in Emory's Nell Hodgson Woodruff School of Nursing learned last year while spending time in a diversely populated high-rise is likely to make them better nurses. What they did about their findings made life more pleasant for the aging residents.

Faculty member **Corrine Abraham (above center)** arranged for 13 juniors to spend time in a naturally occurring retirement community (NORC) in a high-rise apartment complex, where residents are 60% Russian immigrants, 30% Koreans, and about 10% African Americans.

Residents receive lots of help—this NORC is a partnership between the Jewish Federation of Greater Atlanta, Atlanta Regional Commission, and the Atlanta Housing Authority, with funding from the Georgia Department of Human Resources and the Harry and

Jeannette Weinberg Foundation. The diversity of their languages, religions, and cultures puts them at special risk, however.

When Abraham's students conducted a needs assessment, the residents' No. 1 concern was isolation and loneliness. One outcome of isolation is malnutrition, so the students prepared a nutrition assessment, translated into Russian and Korean, and carried it door to door. Based on this, the students then donated their own money to prepare food and invited everyone to share a meal together. The meal was so successful that the Jewish Federation and other supporters are now considering making it a regular event. The information obtained by the students also is being used by the Atlanta Housing Authority in development of new programs and services going forward.



Immersing kids in science: This past summer, Emory's Yerkes National Primate Research Center hosted a number of students from six local high schools to work in different Yerkes labs under the tutelage of neuroscientists like **Beth Bufalo (above)**. The students worked with researchers who were studying memory, emotional processing, changes in brain function in aging, transgenic models of learning mechanisms, and brain neuroimaging techniques. Four high school teachers also worked in the labs as a means of enriching the teaching curriculum for science programs at their schools.



Making a habit of volunteering: The fourth annual Rollinsteer Day took place in August, when incoming students at Rollins School of Public Health volunteered at various venues throughout Atlanta. This year, they worked at 19 sites, sprucing up the grounds at Jerusalem House for the homeless, assisting clients at the International Refugee Center, and painting homes for senior citizens. Many students and faculty continue such volunteer work throughout the year, working to help cultivate a community garden in Decatur, doing clean-up at a local urban farm, and assisting at Samaritan House, a support service to homeless people struggling with addiction issues, mental health concerns, and physical disabilities.



Caring for farmworkers: Crops start coming ripe in June in south Georgia, and seasonal farmworkers work long hours to harvest them. As they have for the past 15 years, Emory faculty and students spent two weeks in the rural area, setting up clinics to provide free health care to more than 1,700 workers. Until late in the night, the workers came—with hypertension, headaches, diabetes, respiratory infections, eye problems, and more. Many had never seen a health care provider before. For most, this is the only care they receive during the year.

This year, for the first time, physical therapy students joined the other teams from Emory's Nell Hodgson Woodruff School of Nursing and the physician assistant program in Emory's medical school, helping with injuries common in strenuous farm work.

Because of the program's impact on indigent patients and the community, it was selected as the beneficiary of this year's national Physician Assistant Foundation campaign to promote literacy. The award brings money and hundreds of children's books that the Emory faculty and students can use toward educating the farmworker families they serve each summer.



Experiential math: Historically, children with fetal alcohol syndrome (FAS) were considered unteachable. Such children have difficulties regulating their behavior and organizing themselves. Sitting still and paying

attention for more than a few seconds may be hard. Add to that the visual and spatial deficiencies that characterize FAS, and math skills may seem beyond reach.

Not so, say educators in the Math Interactive Learning Experience (MILE) program developed by faculty members **Claire Coles and Julie Kable** (above) in Emory's medical school. Children solve math problems while using a timer so they can see the passage of time, important since alcohol-affected children often have no concept of time. Parents and guardians also attend workshops, where they not only get help in controlling their child's behavior but also learn to reinforce math skills through everyday situations such as counting sugar packets when eating out. What never happens is traditional drilling of math facts.

In one study, more than 55% of children in MILE improved in math, and more than 68% showed persistent improvement in learning and behavior. What's most important, say the Emory faculty who developed MILE, is that the children experience success in a learning environment, become more open to learning, and achieve improved relationships with their parents.

Responding to H1N1: When H1N1 arrived last year, Emory emergency medicine specialists developed a web-based algorithm, SORT (strategy for off-site rapid triage), to help manage the surge of people who could quickly overload an already strained health care system in the event of a moderate to severe pandemic. Microsoft hosts the site (<http://h1n1responsecenter.com>), and the CDC and U.S. Department of Health and Human Services use lightly modified versions on their own sites.



Protecting pregnant workers: Many female farmworkers have no choice but to continue working while pregnant, often with little awareness of how exposure to occupational hazards like extreme heat and pesticides or long periods of standing may be affecting their health and that of their unborn baby. Linda McCauley, dean of Emory's Nell Hodgson Woodruff School of Nursing, wants to change that. With a CDC grant, McCauley is examining how these women perceive their risks and is developing culturally and linguistically appropriate materials about protective behaviors to decrease the impact of these risks during pregnancy. Co-investigator Maureen Kelly is developing strategies to improve these women's access to prenatal care.

Easier access to clinical trials: Emory is one of 51 institutions participating in a new, free website, researchmatch.org, sponsored by the NIH's National Center for Research Resources to help match people interested in participating in clinical research studies with appropriate available trials.

Emory also expanded its own clinical trial resources in cancer, with the Winship Cancer Institute's opening of a new unit dedicated to phase I clinical trials, the "first-in-human" studies conducted to determine safety of new drugs as well as optimal doses. The unit was developed through collaboration with the Georgia Cancer Coalition and Georgia Center of Oncology Research and Education. Community oncologists had expressed strong interest in having such a unit at Emory, and Winship considers it a resource for the entire state.



Opening doors with science: Sixteen years ago, as part of Emory's ongoing efforts to encourage a more diverse physician and research workforce, Robert Lee, director of multicultural student affairs in the medical school, established a summer science academy designed for Atlanta high school students from minority backgrounds. For two weeks each year, these students participate in lectures, labs, and field experiences in anatomy,

neuroscience, genetics, environmental biology, and interactive cases designed to teach preventive medicine. Working with Emory medical faculty and students who volunteer as counselors and teachers, the youngsters learn about the possibilities of careers in health care or research. The first class, back in 1994, had eight students; the 2010 program had more than 100.

From a global perspective

Whether responding to disaster or simply to an ongoing acute need, faculty, students, and employees in Emory's Woodruff Health Sciences Center work around the world to help relieve suffering today and build infrastructure for tomorrow.



PHOTO BY SANDRA ZAEH

Après le jour: This is how Haitians refer to time after the day of the historic earthquake last January. Across the Woodruff Health Sciences Center, many faculty and students rushed to help because they felt the tragedy personally. They knew Haiti, having spent time there already as volunteers. Others understood the impact of the quake based on their experiences elsewhere, having helped stunned victims of natural disasters in other locales.

For example, several times a year,

some 10 Emory medical faculty and 40 medical students travel to Haiti, carrying supplies and equipment and providing primary, surgical, and ob-gyn care to some of the most medically underserved people in the world. They go as members of Emory Medishare, a branch of the national nonprofit Project Medishare for Haiti.

It's a long-term commitment. "We don't just parachute in and then leave," says one of the medical students. They

help set up clinics in villages, train local health care workers, and assist in improvement of the health care infrastructure. Project Medishare is so well respected that the Haitian president asked it to lead the medical relief field sites in and around Port-au-Prince following the earthquake.

Before the earthquake, the Emory team had launched a campaign to build a year-round primary care center. After the quake, they redoubled their fundraising



efforts and headed back, with more supplies and help.

Other faculty have their own paths to Haiti. Emory gyn-ob **Eva Lathrop (above right)** has volunteered there for years so it was only natural that after the earthquake, she would head there to see what she could do. Emory neurosurgeon Nick Boulis packed his personal OR tools and electric drill in a footlocker, along with mosquito nets and flashlights. He performed not only neurosurgery but orthopedic and general surgery—basically, whatever needed doing. By day 5, as volunteer physicians came and went, Boulis found himself serving as chief medical officer. Now back at Emory, he continues working to procure a portable CT scanner and a stable rotation of neurosurgeons for the Haitian site.

After the earthquake, many displaced

Haitians ended up in the Dominican Republic. That's where emergency medicine resident Mark Fenig went, setting up a clinic in a compound in Jimani. Emory nursing students armed with food, medicine, and clothing spent their spring break partnering with Dominican nursing and medical students to provide health screenings and other services.

Students in the Rollins School of Public Health (RSPH) gathered funds and supplies, which they sent to Haiti with fellow students **Jean Cadet (below left)** and Madsen Beau de Rochars, both of whom are physicians from Haiti. Cadet used megaphones to provide classes on prevention of infectious disease, construction of latrines, and proper garbage disposal. Beau de Rochars had directed the lymphatic filariasis program in a hospital about 18 miles west of Port-au-

Prince before coming to the RSPH. Soon after arriving in Haiti, he was tapped to serve on a presidential commission to provide technical assistance on needs assessments, preparation for infectious disease outbreaks, and distribution of medicine.

To read student blogs from Haiti, visit emorymedishare.org.

Emory medical students typically travel to Haiti with faculty at least twice yearly. This year faculty and students from medicine, nursing, and public health made a number of unscheduled trips after the quake in January. Opposite page, medical student **Denise McCullough**; top left: oral surgeon **Steven Roser**; top right: gyn-ob **Eva Lathrop**; bottom right: one of many Haitian children requiring limb amputation; bottom left: public health student **Jean Cadet**.

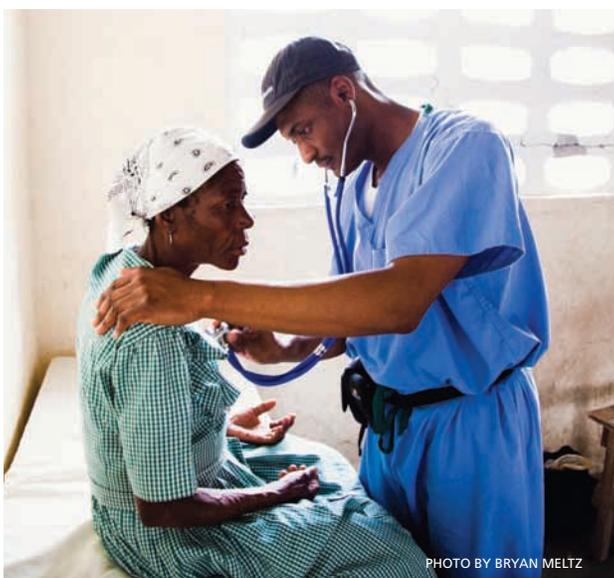


PHOTO BY BRYAN MELTZ



PHOTO BY MARK FENIG

Keeping the promise of protection:

Some of the patients referred to Emory physician **Jeremy Hess (right)** were discovered stowed away in a ship. Others arrived over a long and arduous path through Central America. Still others managed to buy an airplane ticket, knowing they would be taken into custody when they arrived in the states without papers. For all, it was a journey away from fear and politically motivated persecution and toward the dream of asylum in the United States.

Hess is medical director of the Atlanta Asylum Network. His job and that of the 20 or so other Emory physicians and psychologists who volunteer their time and expertise to the network is to evaluate asylum seekers and then write affidavits for the Asylum Court to document any physical and psychologic find-

ings of torture and abuse: scars, crushed bones, nerve damage from being hung by one's arms, cigarette burns on the hands or feet.

Such work is emotionally difficult, even for an emergency medicine doctor like Hess. It's also challenging, since some kinds of torture, such as electrocution or repeated rape, don't always leave lasting physical evidence. But it is important, says Hess, that America keep her promise to at least hear the concerns of those who come here seeking protection. It's important, he adds, that medical professionals bear witness.

Hess helped found the Atlanta Asylum Network while he was a medical student at Emory more than a decade ago, as part of the Emory Institute for Human Rights. The program is affiliated with a similar, national network administered



by Physicians for Human Rights.

It's also important, Hess says, that the medical students and residents who volunteer with the program see what immigrants have been through. Even if they are not asylum seekers, many who immigrate to this country have experienced torture and mistreatment that have long-term impacts on their physical and mental health.

Supporting safe childbirth: In rural Ethiopia, where more than 90% of births take place at home, women have a one in 27 lifetime risk of dying during childbirth. Their babies fare even worse—the infant mortality rate there is about one of every 13 live births.

Lynn Sibley, a nurse midwife, anthropologist, and faculty member in Emory's Nell Hodgson Woodruff School of Nursing, is working with the Ethiopian Ministry of Health to change those dismal figures. Their community strategy will serve as a model throughout the country. Mothers and babies are most vulnerable during birth and the following 48 hours. Sibley calls this period of vulnerability a window of



opportunity to intervene for newborn survival and well-being.

With funds from the Bill & Melinda Gates Foundation, Sibley and her collaborators are working to improve the capability and performance of frontline health care workers. This includes teaching traditional birth attendants simple, yet critical procedures such as care for mother and child at delivery, postpartum health

assessments, and counseling on nutrition, personal hygiene, and illness recognition and care seeking. The Ethiopia project is part of the nursing school's Lillian Carter Center for International Nursing, which focuses on improving health for vulnerable populations.

**Helping create giant databases:**

Emory genetics specialist **Christa Lese Martin (left)** is helping lead the effort on an international genomics database that collects data from 50,000 to 100,000 patients with autism or other developmental disorders every year. The online database will create a powerful new resource for gene discovery and for interpreting results of genetic testing. Emory also is providing

registry coordination and other services to the first and only international registry for congenital muscular dystrophy (CMD). CMD represents several rare forms of muscular dystrophy that often are misdiagnosed because of physicians' lack of familiarity with CMD. The registry will raise awareness, facilitate diagnosis, and connect affected individuals with research trials and future therapies.

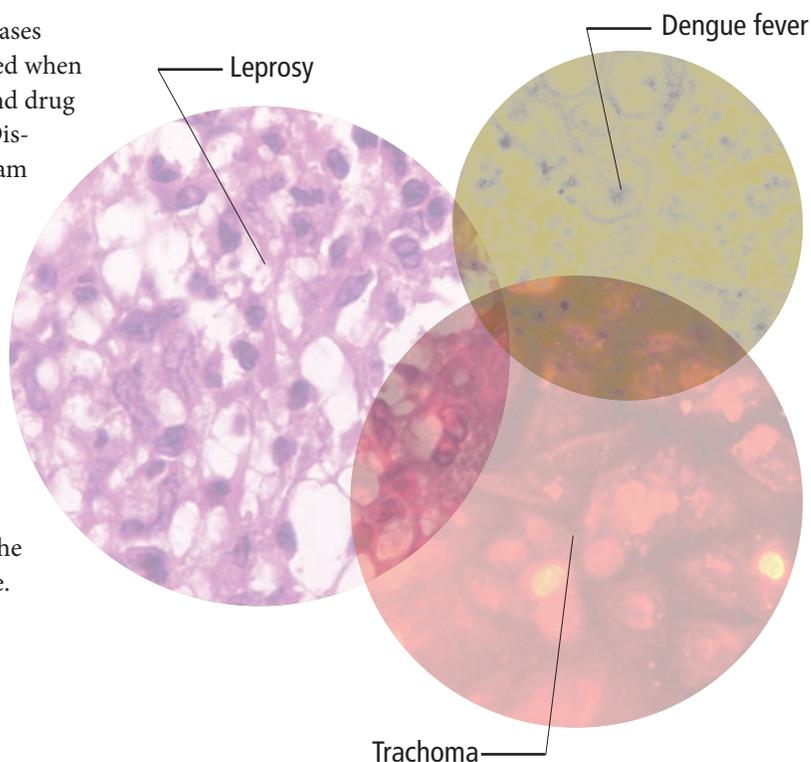
Spring break in Jamaica: As part of a robust service-learning curriculum in Emory's nursing school, students travel to Caribbean islands on spring or winter break each year to provide care to those in need. In Jamaica, they work in coordination with Missionaries of the Poor, a faith-based organization. They work with medically fragile children—"holding, diapering, bathing, feeding, and loving them," in the words of one student. They also provide wound care and other services for adults with mental or physical disorders, including HIV/AIDS. Another student wrote about the experience: "My expectation was to see a center of sadness where loneliness dwelled and hope was extinguished. However, I saw happiness and love in the faces of the brothers and in the smiles of the residents." To see a related slide presentation, visit bit.ly/alternative_break.



Taking care where it is needed: Linda Cendales is one of many Emory physicians who volunteer their services to help patients who otherwise would never have a chance at a normal life. Cendales heads the Emory Transplant Center's research program evaluating hand transplantation as a potential therapy for loss of one or both hands.

Earlier this year, she returned to Vietnam to treat dozens of limb injuries and to follow up on patients from a previous trip, including an 11-year-old boy with the country's first toe-to-hand transfer. The boy had lost four fingers on his right hand. After transplanting one of the boy's toes to his maimed hand, Cendales surgically fashioned it into a finger. The procedure has allowed him to perform tasks like dressing himself and holding a pencil.

Drugs for the neglected killers: Dreadful tropical diseases that kill and maim millions every year often go neglected when pharmaceutical companies select targets for research and drug development. This year, the Emory Institute for Drug Discovery (EIDD) joined with GlaxoSmithKline and Alnylam Pharmaceuticals on research aimed at developing new drugs for 16 neglected tropical diseases that disproportionately strike the least developed countries. Among these are malaria, blinding trachoma, dengue hemorrhagic fever, leishmaniasis, and leprosy. Emory and other participating scientists will sort through research data and select the most promising compounds that could lead to effective new medicines. The EIDD builds on Emory's strong history of drug discovery research, including development of drugs taken by more than 90% of patients with HIV/AIDS in the United States and many more patients around the globe.

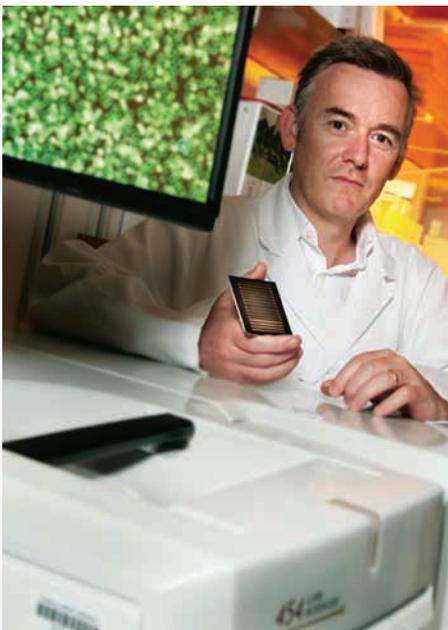


Financial commitments in research

In fiscal year 2009–2010, Emory’s Woodruff Health Sciences Center (WHSC) was awarded \$500.7 million in research funding, bringing Emory University’s total for the year to \$535.1 million, an increase of 10.5% over the previous year.

These awards include \$15.5 million from NIH to the Emory Vaccine Center to improve vaccine effectiveness, \$8.1 million from the Gates Foundation to the nursing school to improve maternal and newborn survival in rural Ethiopia, \$8 million from NIH to renew Emory’s designation as an Alzheimer’s Disease Research Center (one of only 30 in the country), and \$5.6 million to Emory and University of Georgia to establish one of six NIH core centers on drug abuse to understand how to prevent such risky behavior. There are many others as well.

To obtain such awards, Emory must be prepared to make considerable financial investments of its own to pay the overhead costs to conduct this research. Last year, for example, the total cash lost for unreimbursed overhead costs for research in the WHSC was approximately \$103.6 million. Investment in such effort has a track record of yielding important dividends in discovery and also sparking economic growth. While well worth the cost, research investment nonetheless consumes a significant portion of the WHSC overall budget capacity.



Financial commitments in education

Emory Healthcare invests millions each year in the WHSC's teaching and research missions, including \$83.1 million in fiscal year 2009–2010.

Student enrollment in schools within Emory's Woodruff Health Sciences Center (WHSC) has never been higher. Public health and medicine each has its largest entering class ever. Nursing has the largest group of master's students in history, and applicants to its six nurse practitioner programs have grown by double- and triple-digit percentages over the previous year—in pediatric acute and primary care, alone, for example, applicants increased, respectively, by 71% and 112%.

While Emory is doing its part to ease the shortage of physicians and other health care providers in this country, the focus really is more on quality than quantity. The goal is to produce students who will be leaders in making health care more cost-effective, accessible, focused on prevention, and oriented to the needs of society as a whole and to individual patients and their families.

Learning a health profession is a very costly proposition, which is why the Woodruff Health Sciences Center invested 23.1% of its tuition income in financial aid for students last year. For fiscal year 2009-2010, this amount totaled \$15.1 million.



By the numbers:

Emory students and trainees in health sciences:

Emory University School of Medicine

- 522 medical students, including 73 MD/PhD students; 581 postdoctoral fellows
- 1,156 residents and fellows
- 466 students in health profession training, such as physical therapy and physician assistant programs

Rollins School of Public Health

- 925 master's students, 123 PhD students, and 17 postdoctoral fellows

Nell Hodgson Woodruff School of Nursing

- 256 BSN, 200 master's, 18 PhD students

A powerful economic engine

Last May, the Science Coalition released a report demonstrating the link between federally funded research and economic growth. To illustrate its point, the report highlighted four health-related Emory start-up companies among its 100 “success stories,” along with superstars like Google, Genentech, and Cisco Systems.

The four companies cited in the report are among 51 launched at Emory over the past decade. Over the past two decades, the Woodruff Health Sciences Center (WHSC) has helped Emory bring more than \$788 million into the state in licensing revenues from drugs, diagnostics, devices, and consumer products. More than 50 products currently are in various stages of development or regulatory approval, with 27 having reached the marketplace and 12 more in human clinical trials.

In the past year alone, Emory attracted \$535.1 million in research funding, \$500.7 million of which was in health sciences.

Clearly, the WHSC is an economic driver for Atlanta, the state, and the region. Following are some other tangible examples of ongoing contributions to the health of the economy.



Rendering of a research building to be shared between Emory and Children’s Healthcare of Atlanta

Construction and other growth: This fall, Emory dedicated the Claudia Nance Rollins Building in the Rollins School of Public Health (RSPH). Joined by a bridge to the RSPH’s first building, the new edifice more than doubles the school’s physical size. The added space already has made possible new faculty recruitments and expanded student enrollment.

With funds donated to Children’s Healthcare of Atlanta by the Joseph P. Whitehead Foundation, Emory and Children’s are making plans to break ground for a new shared research building located on Emory’s campus. The building will help expand the growing research partnership between Emory and Children’s. Some of the pediatric research to be conducted in the new

building will focus on heart disease, cancer, vaccines, and new drug discoveries. The building also will serve as a recruiting tool to attract top investigators from around the world. Children’s also announced plans recently to invest \$75 million of its own funds in pediatric research in eight areas, with Emory faculty to hold key leadership roles in each of these.

Emory Healthcare recently took several steps with implications for economic and other benefits to the community. The health care system opened a new retail outpatient pharmacy in The Emory Clinic to provide not only routine prescription and over-the-counter drugs but also medications used by cancer and transplant patients that sometimes can be hard to find.

Emory Healthcare expanded telehealth services throughout Georgia, adding heart and vascular care to telehealth services already provided in transplant and psychiatry. Emory Healthcare also implemented a major redesign and enhancement of its own electronic medical record system, first implemented throughout the health care system in 2005.

Finally, Emory Healthcare recently announced plans to purchase HCA’s ownership interest in the 110-bed Emory Johns Creek Hospital (EJCH), which opened in 2007 and is staffed by Emory and community physicians.

Jobs and expenditures: With almost 18,000 employees, the Woodruff Health Sciences Center makes Emory the largest employer in DeKalb County and the third largest private employer in metro Atlanta. **With \$2.5 billion in expenditures for fiscal year 2009-2010, the WHSC has an estimated economic impact on metro Atlanta of \$5.8 billion.**



Under construction for the past two years, a new building for the Rollins School of Public Health was dedicated this fall. (See photo, opposite page, far right, second from top.)



Value to the community

In addition to providing charity care, Emory's Woodruff Health Sciences Center (WHSC) benefited the community in many other ways in fiscal year 2009–2010:

	(millions)
Costs of charity care provided by Emory Healthcare (EHC)	\$63.5
Financial aid provided to students from tuition income	15.1
Emory Healthcare investment in WHSC teaching and research	83.1
Other community benefits	56.4*
Cash loss for unrecovered costs for WHSC research	103.6
Unreimbursed care provided at Grady Hospital	22.3
Investment of Emory Medical Care Foundation in services at Grady	36.0
Total (millions)	\$380.0

*This includes the following:

• Costs of emergency preparedness planning and of educational programs for the public, future health professionals, and patients (millions)	\$2.0
• Shortfall between EHC's cost to provide care to Medicaid patients and Medicaid reimbursement, plus Georgia provider tax total paid by EHC (millions)	\$54.4

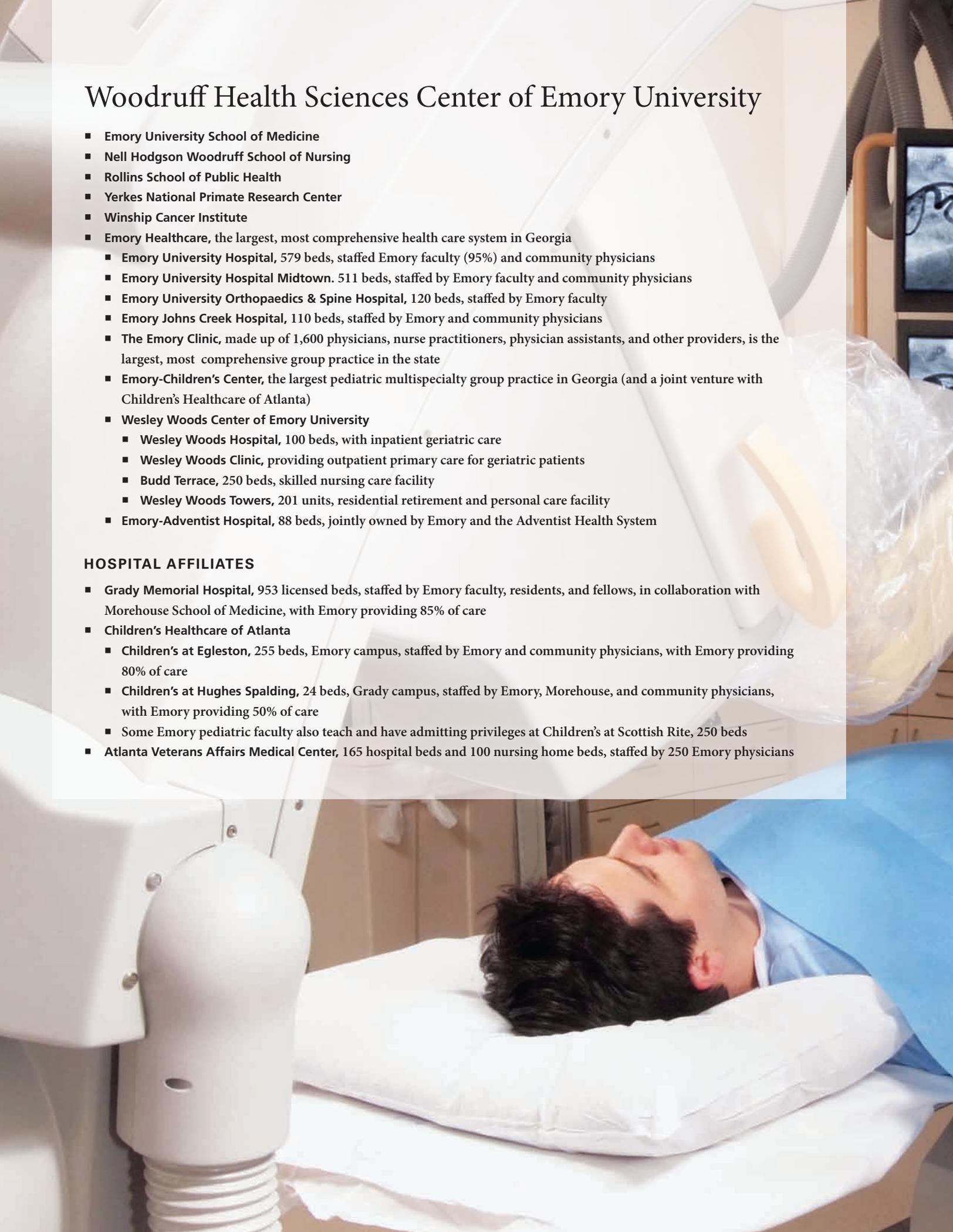


Woodruff Health Sciences Center of Emory University

- Emory University School of Medicine
- Nell Hodgson Woodruff School of Nursing
- Rollins School of Public Health
- Yerkes National Primate Research Center
- Winship Cancer Institute
- Emory Healthcare, the largest, most comprehensive health care system in Georgia
 - Emory University Hospital, 579 beds, staffed Emory faculty (95%) and community physicians
 - Emory University Hospital Midtown. 511 beds, staffed by Emory faculty and community physicians
 - Emory University Orthopaedics & Spine Hospital, 120 beds, staffed by Emory faculty
 - Emory Johns Creek Hospital, 110 beds, staffed by Emory and community physicians
 - The Emory Clinic, made up of 1,600 physicians, nurse practitioners, physician assistants, and other providers, is the largest, most comprehensive group practice in the state
 - Emory-Children's Center, the largest pediatric multispecialty group practice in Georgia (and a joint venture with Children's Healthcare of Atlanta)
 - Wesley Woods Center of Emory University
 - Wesley Woods Hospital, 100 beds, with inpatient geriatric care
 - Wesley Woods Clinic, providing outpatient primary care for geriatric patients
 - Budd Terrace, 250 beds, skilled nursing care facility
 - Wesley Woods Towers, 201 units, residential retirement and personal care facility
 - Emory-Adventist Hospital, 88 beds, jointly owned by Emory and the Adventist Health System

HOSPITAL AFFILIATES

- Grady Memorial Hospital, 953 licensed beds, staffed by Emory faculty, residents, and fellows, in collaboration with Morehouse School of Medicine, with Emory providing 85% of care
- Children's Healthcare of Atlanta
 - Children's at Egleston, 255 beds, Emory campus, staffed by Emory and community physicians, with Emory providing 80% of care
 - Children's at Hughes Spalding, 24 beds, Grady campus, staffed by Emory, Morehouse, and community physicians, with Emory providing 50% of care
 - Some Emory pediatric faculty also teach and have admitting privileges at Children's at Scottish Rite, 250 beds
- Atlanta Veterans Affairs Medical Center, 165 hospital beds and 100 nursing home beds, staffed by 250 Emory physicians







EMORY

WOODRUFF
HEALTH
SCIENCES
CENTER

Emory University's Woodruff Health Sciences Center contributes in critical ways to the health of the community—providing millions of dollars in charity care, educating the next generation of health professionals, investing in research to improve health, and generating jobs and income for the local economy.