

wo hundred volunteers position themselves at strategic points along the corridors. They're beside the elevators, in the lobby. They're near the nurses' stations and along the "Main Street" of the new Monroe Carell Jr. Children's Hospital at Vanderbilt. Clad in yellow t-shirts, they load up gurneys or hand-carry hospital equipment down a 400-foot breezeway leading to sparkling new "neighborhoods." Teams of doctors, nurses, residents and parents hustle children in hospital beds laden with IV poles, ventilators, balloons and ribbons through blue and yellow corridors. They follow whimsical paw prints into rooms decorated with stars and leaves and flowers.

A young man stands in the hallway, listening intently as a voice comes over his two-way radio: "Patient 72 is in the room. Patient 73 is leaving now."

He turns to a colleague. "That's pretty good," he says. "We've just gotten one patient in the room, and the next one is already on his way."

By 4:30 on the afternoon of Feb. 8, 2004—after two full years of planning and after numerous mock drills and several setbacks—it's all over. 112 pediatric patients at Vanderbilt Children's Hospital (VCH) which for 24 years occupied two floors within the larger Vanderbilt University Hospital—have been transferred to the gleaming new freestanding facility named the Monroe Carell Jr. Children's Hospital at Vanderbilt. Modeled on procedures for transporting large numbers of hospitalized children during a disaster, the daylong process has been a success.

"The dedication and love for this place is unbelievable," says Dr. John Brock, chief of pediatric surgery. "We physicians get credit on the top end, but the people throughout this hospital are the ones

who make it fly. I'm proud to the bottom of my heart to be a part of this."

This year Vanderbilt University accomplished something that happens only once every two to four generations—the construction of a new community academic medical facility. For the price of \$230 million (which some would argue is astronomical and others contend is a bargain), Vanderbilt has become the proud possessor of 616,000 square feet of pink granite and blue glass.

If Feb. 8 was a day of celebration, each day since has been one of expectation. Everything from the planning to the financing to the construction of this stunning new hospital was fraught with lofty goals, high-stakes gambles, generous philanthropy, and hard-fought battles lost and won in conference rooms and hard-hat areas. If nothing else, the new children's hospital is a testament to the unstoppable force of a group of strong-willed men and women.

A Growth Spurt

Vanderbilt Children's Hospital evolved from the Junior League Home for Crippled Children, which opened in 1923 to treat young patients with crippling diseases whose families could not afford to pay hospital charges. For 50 years the Home met the medical needs



of its unique clientele, and in 1971 moved to a new facility to include children with chronic diseases as well. However, as the Home's patient population grew, so did demands for services it was not equipped to provide, such as emergency and ancillary care. Also, with American health care moving towards third-party payment, the Home was unable to handle the mounds of paperwork from insurance companies and governmental agencies.

In the meantime, VCH founder Dr. David Karzon, a pediatrician, initiated the concept of a "hospital within a hospital," in which centers specializing in children's services resided within a larger main hospital. Before then, children and adults had been housed together as inpatients at Vanderbilt. In 1980 the Junior League of Nashville signed a contract with Vanderbilt Hospital and transferred the entire Home for Crippled Children to the fifth floor of the University's medical center.

Over the course of 20 years, VCH grew into a leading regional hospital and referral center, treating the sickest and most complex pediatric cases in the Mid-South area. Children were never turned away based on their parents' inability to pay. Primary care physicians, subspecialty clinicians and medical researchers joined the faculty. By the mid-1990s Vanderbilt administrators began to look ahead, later adding a new pediatric emergency department. Immediately, the number of patients and subsequent admissions rose, straining the capacity of VCH to handle the inpatient load.

According to Vice Chancellor for Health Affairs Harry Jacobson, efforts to build a freestanding children's hospital had, in the past, always met with resistance. What was the compelling reason, pundits wondered, to devote so many resources to replacing an existing facility? A few years ago, Jacobson

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- DR. JOHN BROCK

says, he surveyed the medical landscape and decided Vanderbilt had no choice but to pursue such a project.

"First, the growth of Nashville's population and the broad reach of VCH forecasted that in short order we would be out of space," he explains. "Second, we looked at all the cities our size. At that time Nashville was the 42nd largest metropolitan area in the coun-



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- MONROE CARELL JR.

try. And 36 out of those 42 metropolitan areas had already built a freestanding children's hospital in order to meet the needs of the community.

"The third thing is that fully two-thirds of the hospital care of children in the Middle Tennessee area was being done at Vanderbilt. If we did not grow the hospital somehow, the growth in pediatric in-services was going to grow away from us. And at that time we thought it might be possible that one of our competitors would build a children's hospital, which would have been a major, major problem for us."

In addition, Jacobson adds, the volume of adult patients was concurrently increasing, and a separate children's hospital would free up two additional floors in the main hospital. Finally, Jacobson and his fellow administrators examined the state of the VCH endowment. The average endowment of the nation's top six children's hospitals was more than \$700 million. The VCH endowment didn't even come close. He concluded that

it would be easier to raise endowment money if donors could associate their gifts with a physical structure.

Together with then-Chancellor Joe B. Wyatt, Jacobson called in a team of architects, planners, doctors, nurses, parents, patients—and Monroe Carell Jr.

"I Cried"

Monroe Carell Jr. had graduated from Vanderbilt in 1959 but didn't become an enthusiast for the University until 20 years later. By that time he was CEO of Nashville-based Central Parking Corp., a company that runs parking lots and garages in every major city in the United States and in 15 other countries. In the early 1980s Carell made his first charita-

ble contribution to VCH, and as a result decided to pay a visit to the recipient of his donation. He was hooked. He became interested in all aspects of the hospital, was seen regularly on the Neonatal Intensive Care Unit, and eventually assumed the chair of the Vanderbilt Children's Hospital Board of Directors.

While floating the idea of a stand-alone hospital, Chancellor Wyatt asked Carell if he'd be interested in making a sizable contribution and spearheading a campaign to raise \$50 million in additional philanthropic funds. Carell says he and his wife, Ann, were happy to become involved.

At that point, however, all the plans were pie-in-the-sky. "We thought everything would be built for \$150 million," Carell says. "We didn't talk about eight stories of hospital facilities and 11 stories of clinic. We just talked about building a children's hospital. No one had any idea that it was going to be as large or as magnificent as it turned out to be."

Carell refused simply to throw money at an edifice that would eventually carry his name. As a child he'd had to undergo frequent hospitalizations for a gastrointestinal obstruction and remembered well the stark halls and sterilized atmosphere on the children's ward. He joined a team that toured leading-edge children's hospitals all over the country. He attended planning meetings and met faceto-face with potential donors, most of whom were well past the age of needing the services of a children's hospital for their families. Ultimately, he and his capital campaign staff raised \$80 million in philanthropic funds. The majority of those donations were given by people who had little or no affiliation with the University, but who were convinced that a topnotch children's hospital would be an asset to the community.

Significantly, Carell insisted that whatever design the hospital took, it had to be oriented towards the family. That meant larger rooms and a bed for the mother in each room. The architectural firm of Earl Swensson & Associates was hired for the job, with Richard L. Miller and David Miller credited for the building's design and Molly Alspaugh and Ruby Foglesong for the interior décor. The firm walked a fine line between creating a place that was bright, welcoming and child-friendly,

and yet not decorated like a cheesy theme park. In the early stages, Carell was skeptical.

"Every light fixture, every mirror, every ceiling tile has something that's fun and enjoyable," says Carell. "The ceilings are not flat, but have curves and waves and boxes in them. The light fixtures are blue and red and pink and yellow, and the floor has bear tracks in it. When I first heard all this, I thought, 'That's the dumbest thing I've ever heard in my life!' It was hard for me to imagine that all of that could be done and still produce an outstanding facility for doctors, staff and patients. That's the magic of the place. The child is going to get the best care available, but it's going to be delivered in a facility that's fun and convenient for the parents."

The first time Carell entered the building, he was awestruck by the resplendence of light and color and unexpected beauty. "I cried," he admits.

A Place for Mom's Toothbrush

Carell's determination that the new children's hospital would be respectful of families presented obstacles that would have sent many design teams screaming for the exits. The University administration turned to the Family Advisory Council for help. When Holly Lu Conant Rees heard that such a group was forming, nothing would stop her from joining up to advocate for families.

Conant Rees is a petite woman, but as feisty as a tiger and as tough as hardtack. In 1983 her son Samuel was born with a rare genetic disorder, Ring Chromosome 15, which left him with multiple physical and developmental disabilities. Throughout his life Samuel has had to undergo numerous orthopedic and ear surgeries, visit scores of doctors, and schedule his life around various clinic appointments. Conant Rees is intensely familiar with the inside of a children's hospital.

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- HOLLY LU CONANT REES



When I knew I was going over to a more secluded and stretched out environment, I kept saying, 'This is never going to work, this is never going to work.' But now I love it. I can get help quicker than I thought. I can see both my babies, monitoring each one. If I'm in one baby's room and something happens in the other baby's room, it will flash up on my screen. I can push a button, and more people than I need will come running.

-LITA BALDWIN

She joined the Family Advisory Council in 1995, knowing that, if asked, families of children with special health-care needs could bring true expertise to the design process. "I had a kind of mind blast," Conant Rees says. "Here was this unbelievable once-in-a-lifetime opportunity to have a very direct and broad impact on a building that was going to touch tens of thousands of lives."

Under her leadership the council morphed into an adamantine advocacy group, with a representative on each of the 28 design teams for the new hospital. Council members butted heads again and again—over the hospital logo, over the waiting areas, and particularly over the inpatient rooms.

Conant Rees says, "The classic design story [from this experience] concerns space for a toothbrush. That was one thing we were not going to back down on. The fact that there's now space for mom's toothbrush—that matters as much to us as the hospital's Family Resource Center, as far as meeting the needs of a family's day-to-day, minute-to-minute

experience." In addition to securing a place for the toothbrush, the Family Advisory Council also lobbied for shelves over the sinks, wider showers, a refrigerator in each room, a place to plug in a laptop computer and, of course, a bed for a parent to spend the night.

Dr. Ellen Clayton, professor of pediatrics, can hardly believe the transformation in her workplace. "Look," she says, entering an inpatient room and spreading her arms wide, "fully half this room is devoted to families. They literally have places to be. Since part of the goal of pediatrics is to empower parents to take care of kids, this space accomplishes that in a way that's unparalleled."

Not everyone was pleased with the tremendous expansion. While the doctors and parents were delighted, certain nurses feared they had much to lose by placing small children in private rooms. The nurses in the intensive care units fought hardest against the new configuration. Lita Baldwin, who has worked in the neonatal ICU for more than 18 years, admits she was "one of the rebels."



Hannah's Story

Hannah Huth is 6 years old, has soft blonde curls and a sweet smile, and attends kindergarten at Oak Hill School. During a typical week she might go to a birthday party at a friend's house, rehearse for a school play, practice the violin, and go to an appointment at Vanderbilt Children's Hospital—something she has been doing, practically nonstop, for the past three years.

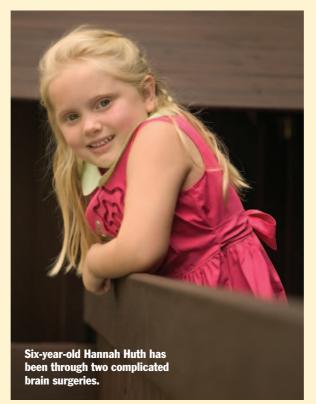
"We're frequent flyers at Vanderbilt," says Hannah's mother, Beth.

It all began the summer of 2000, just after Hannah's third birthday. She was a bright, happy and healthy youngster, and her parents had recently moved to Nashville where her father, Mike, had opened a ticket-brokering agency. In late August, her mother reports, Hannah became lethargic, sleeping for long peri-

ods. She lost interest in puzzles, in coloring, or in having her parents read to her. Concerned, Beth took her daughter to the family's pediatric group and was told Hannah probably had a "virus" and to wait it out. As weeks passed, the little girl lost her appetite, began vomiting and refused to walk. Still, her doctors believed Hannah was suffering from a lingering childhood illness that would soon pass.

"Their last words to me were, 'Give it two weeks, and if she's still sick, call us," Beth recalls. Instead. Beth and Mike loaded their child into the car and drove to Vanderbilt Children's Hospital. The physicians there examined Hannah and decided to have her undergo an MRI to see if they could detect what was causing her symptoms. Finally, after a two-hour wait that included "chewing every last fingernail" (the neurosurgeon who needed to speak with them was in the operating room finishing up a case), the Huths were given the bad news: Hannah had a craniopharyngioma, a benign but dangerous tumor near her pituitary gland that was creating so much cranial pressure on her optic nerve that she'd become legally blind in her right eye.

Beth says, "We went from having a beautiful, bright-eyed child to, in just a three- to four-week period, BAM! Downhill. It was incredibly bizarre."



That day, Oct. 17, 2000, Hannah was immediately admitted to VCH. Beginning at 7 the next morning, she underwent nine hours of surgery to remove the tumor, as well as the cysts it had spawned. Physicians shaved the little girl's head and prepared her parents for the worst.

"They told us she might have a speech disorder, be blind, have brain damage. They have to tell you all that information," Beth says. "But her recovery has been nothing short of miraculous. She had cranial swelling that took six months to go away. Her eye was swollen shut and was 'lazy' for nearly a year afterwards. But her sight came back. She now has better than 20/20 vision. She has no learning deficits. It's unbelievable."

Hannah does have residual affects from the craniopharyngioma and surgery. Because of damage to her endocrine system, she now takes four different types of therapeutic hormones, including growth hormones. The hormones are tough on a young person's body, so she must regularly consume medications for ulcers and stomach pain. But, says her mom, "if you met her you'd never know she had brain surgery." She is an excellent student, plays the violin, sings in the church choir, and was cast as the orphan "Molly" in her school's production of the musical "Annie."

One day her kindergarten teacher assigned her pupils to come to school dressed as a famous person. With the help of her "doctor friends" at VCH, who supplied her with a surgical hairnet, gloves, shoe covers and other hospital garb, Hannah arrived as Elizabeth Blackwell, the first American woman to receive a medical degree.

All went reasonably well until late February 2004. Hannah's parents were driving her to school when she suddenly asked, "Hey, Dad, do you see that hill? It's covered with red hearts. Look, there's a doorbell in the sky. I can grab it."

Most parents would have laughed and attributed the comments to too many cartoons, but the Huths instead called their pediatrician, Dr. Christopher Patton. After a thorough checkup during which he found no cranial pressure, vision problems, vitamin deficiencies or

alarming responses, Patton decided to schedule another MRI for Hannah, just to be on the safe side. The MRI showed another tumor was growing in Hannah's brain.

Beth says, "Without being too 'out there,' for lack of a better phrase, my husband and I truly believe it was God who helped us find this. Hannah's neurosurgeon, Dr. Reid Thompson, told us that the crazy thing about this was that the tumor was so small, it couldn't have created cranial pressure and caused her to see hallucinations. It's not even close to the optic nerve, but was suspended near the pituitary gland."

If Hannah had not had her strange visions, however, the tumor might have grown and produced cysts, and the consequences could have been far more severe. As it was, a nightmare of a day still awaited the Huths.

These types of tumors are sometimes treated with standard radiation, meaning the child undergoes short periods of radiation for 28 days to kill the tumor, but that process carries the risk of peripheral damage around the site. After much discussion and weighing of options, the Vanderbilt team of physicians instead chose to have Hannah undergo "radio surgery," even though she was a very young patient for such a procedure. During radio surgery."

continued on page 87

She liked working in a big room where all the babies were together and within arm's reach should one of them get into trouble. She liked being able to call for help from nurses, doctors and respiratory therapists, who were all within immediate proximity of each other.

Baldwin recalls, "When I knew I was going over to a more secluded and stretched out environment, I kept saying, 'This is never going to work, this is never going to work.' But now I love it. I can get help quicker than I thought. I can see both my babies, monitoring each one. If I'm in one baby's room and something happens in the other baby's room, it will flash up on my screen. I can push a button, and more people than I need will come running."

ICU staff members also had expressed concerns that families might interfere with nursing duties because of their close proximity. Baldwin says, however, that this has not actually been a problem, and that parents have been willing to step back if asked to do so.

In fact, Baldwin has discovered some unforeseen advantages in the new design. Her babies, she says, benefit from the reduction in noise and are sleeping better. She also appreciates the privacy parents have when speaking with doctors, who can discuss their child's status without having everyone in the room around to hear. And, most important, Baldwin believes the rate of infection is bound to go down since adults are no longer sharing the same telephone and rocking chair,

which are now available in each room.

The new children's hospital is 400 percent larger than the old facility, and yet there is only a 30 percent increase in the number of beds. Some of the additional space supports infrastructural areas, such as the cafeteria, kitchen, radiology department, and expanded pediatric emergency room, but the majority of new space is strictly for families—thanks in part to the Family Advisory Council's unrelenting efforts.

For example, the council wanted every floor to have an area where parents could seek refuge, but were turned down because that real estate needed to go towards staff and clinical uses. Undeterred, they brainstormed with designers on alternative solutions and came up with what Conant Rees

In Isolation, But No Longer Alone

Every day Avery Stevenson leaves his hospital room on the sixth floor of Vanderbilt Children's Hospital (VCH) and walks a mile. He circles the nurses station, sometimes pausing to chat with the nurses, speaks to the other patients he passes in the hallway, and checks in to see if anything interesting is happening in the activity room. "Twenty-eight times around is a mile," says 18-year-old Stevenson, "but I usually do about four extra laps, just in case."

On most hospital units, Stevenson's activity would be routine—exercise has been proven to accelerate the healing process. But in this instance, walking a mile in the hospital represents a technological breakthrough. A week earlier, Stevenson had undergone a cord blood transplant after a relapse of lymphoma. He is one of 12 patients on 6-A, the Isolation/Myelo-suppression "neighborhood" of the new hospital. The entire 6-A wing is outfitted with a state-of-the-art air filtration system that eliminates airborne germs and allows bone-marrow transplant and leukemia patients to leave their rooms despite their weakened immune systems and susceptibility to infection.

This is a seminal change in the care of

immunocompromised kids. Previously, bonemarrow transplant patients had to stay in one of five rooms equipped with individual filtration systems. Any child undergoing the risky procedure had to remain inside that specially protected room for an average of six weeks while recovering.

"It was like you were in solitary confinement without sunlight," explains Dr. Haydar Frangoul, who heads up the pediatric bonemarrow transplant program. "About 20 days after transplant, we began to prepare for what we called 'meltdown time.' The patients became edgy, emotionally upset, and cried about still being in the hospital and unable to leave their rooms. We put stationary bikes in their rooms so they could get some exercise, but that's not the same as being able to open the door and walk down the hall."

Frangoul says the staff has seen immediate psychological benefits among the myelo-suppression patients in the wing because of the rapid air-exchange system. "It's creating a community among the families. Now patients can leave their doors open, and they're still safe. In the past we had to leave the doors closed to maintain a safe environment. It has definitely increased the

patient-to-patient and family-to-family interaction."

One of the biggest controversies about the new unit was that, unlike on other floors, pediatric patients of all ages are grouped together. Caregivers have found, however, that a 15-year-old undergoing such bodily assaults as losing her hair, bloating, cramping, and being in a lock-down setting relates well to a 6-year-old having the same experience. Frangoul says, "This is a success story for our program. It was a great move. This population has a lot in common and has drastically benefited psychologically and medically from everyone being together."

In addition, he says, patients are receiving better care because a staff of skilled nurses, trained in the care of transplant patients, is now concentrated in one area. The only drawback is money. VCH has maintained a regular census of more than 20 oncology/transplant patients who would all benefit from being on 6-A, but some of them must be dispersed to other units. Although the 12-bed 6-B wing is also wired and retrofitted for the filtration system, VCH currently lacks the funds to have it installed.

—Lisa A. DuBois

calls "the little pods." The pods are semicircular glassed-in rooms with soft chairs, but no TV or phones—a place where family members can go to escape the beeping monitors and IV drips, somewhere to sit and think, to stare into space, to weep, and still be within shouting distance of their child. Viewed from the outside these pods appear as blue tubes that run along three corners of the hospital. The little pod, Conant Rees says, "is a shining example of the process."

She muses, "I still feel this sense of anticipation that although the hospital is a marvel, we've only just begun. We've already built a building that is more respectful of the family than any other building you can find in this country. Does that mean we're done? Absolutely not. Anyone involved in the design process will tell you it was not easy and it was not quick. But soldiering through it and working out ways to compromise through some pretty violent disagreements brought us to a wonderful place. We've got some wonderful frontiers opening up to us now."

Everything and Everybody

Dr. Arnold Strauss, medical director and chairman of pediatrics, is perhaps more keenly aware of these widening frontiers than any person on the planet. Ultimately, it is his responsibility to fulfill the dreams presented by a quarter-billion dollars' worth of possibility. Already, he says, Vanderbilt is regionally renowned in such clinical programs as heart surgery, care of cancer patients—including bone-marrow transplants—and perinatal, or before and after birth, care. In addition, Vanderbilt has international acclaim in its contributions to research and discovery. Examples of world-class research areas include pediatric infectious diseases, vaccine development, and tracking of health-care out-

"Clinical research is what distinguishes VCH from a lot of places, and that's one of the things we'll be able to do much better in the new building," Strauss says. "We don't expect or want to take care of all the children who have pneumonia, urinary tract infections or asthma. Hopefully, those children will be taken care of by their local pediatricians and rarely hospitalized. But when they get really, really sick, which they do, they need to be taken care of here at this hospital.

"On the other hand, we do want to see all the patients with chronic diseases and subspecialty problems—cystic fibrosis, kids who need heart surgery, kids with cancer, patients with birth defects, patients with rare genetic disorders. We're the only place that can and, therefore, the only place that should take care of those patients in this geographic area."

He is particularly irritated by arguments that Tennessee did not need a big new children's hospital when St. Jude Children's Research Hospital is right down the highway in Memphis. Strauss says, "We take care of more than 95 percent of the pediatric patients in Middle Tennessee who have cancer. St. Jude has 65 beds. We have 216 beds. We take care of everything and everybody. It doesn't mean St. Jude doesn't know how to take care of children with cancer. They do, and they're very good at it. But the number of patients they serve is quite small compared to VCH."

Within the next year or so, the number of visits in the new hospital and clinic will exceed 200,000, with children arriving from every county in Tennessee and from 40 different states. 35,000 children will enter the VCH emergency room. Strauss expects to admit around 9,000 children as inpatients. And Jacobson anticipates a 50 percent growth over the next three to four years in outpatient visits. The hospital actually may reach those numbers sooner than expected. Only three weeks after opening, every bed on the medical/surgical floors was full.



As a rule, children's hospitals are notoriously costly to run. In Tennessee, 45 to 50 percent of the children in the state are on TennCare, the state-subsidized insurance program for low-income families, and Tenn-Care doesn't reimburse VCH for the full cost of many of the expensive procedures these children require. Also, between 4 to 6 percent of pediatric patients at Vanderbilt are charity cases, for whom the hospital receives no reimbursement at all.

That simply comes with the territory of being a full-service medical center, says Strauss. "Having TennCare is a heck of a lot better than not having anything, which is the situation in many other states," he insists. "Children in Tennessee have better access to care than in almost any other state because of TennCare. And they can receive quality care because we're willing to take care of them."

Jacobson adds that because VCH is the only full-service provider in Middle Tennessee, it is very attractive to payers and will therefore be included on every employer's health insurance plan. He is optimistic that VCH will break the mold. Even with so many children on TennCare and even with so many charity cases, he believes the hospital can be run so that it has a black bottom line. "It won't make a lot of money, but it won't lose money. It won't require an ongoing subsidy," he predicts.

One of the major bonuses of the new building is easier recruitment of talented faculty in pediatric subspecialties, an area of medicine that is extremely competitive right now. With the proper faculty, Strauss is ready to chart new horizons, such as starting a program to address eating disorders—which the Nashville Junior League is supporting through philanthropic funds—along with other developmental, behavioral and mental issues. He wants to expand the transplant program to include liver transplants. He intends to further the perinatal care program to better incorporate management and care of mothers and fetuses. And, because children comprise one-third of all patients transported by LifeFlight to Vanderbilt, he envisions improving the pediatric trauma unit of the hospital.

"We Gain Life!"

Undoubtedly, the easiest solution to the problem of children's health would have been *not* to build a hospital. The easiest solution would have been to add on services bit by bit, to wait for better economic times, to let pediatric medicine in Middle Tennessee flow away from 21st Avenue, gambling that less gargantuan measures could be taken down the road.

Even if that would have been the easiest solution, Monroe Carell, for one, believes it would have been the wrong one. "[With this hospital] we gain life!" he says. "We gain life for thousands of children who would either die or would have to be transported hundreds of miles to receive comparable care. They would have been born at 22 weeks gestation with heart and lung problems, and they would have died. They would have had leukemia and needed a bone marrow transplant, and where would they have gone? If they could afford it, they'd have gone to some children's hospital in Boston or Houston. And when you think about people who have children, they're typically young people who don't have the money to travel thousands of miles. When you save the life of a child, you save 60 to 75 years of productivity for the world."

Whatever debates brought it to this point, the freestanding Monroe Carell Jr. Children's Hospital at Vanderbilt is now a reality. With hope in their pockets, children are streaming into its wide-open doors. The people who fought so hard to make this happen don't have the luxury of catching their collective breath and reflecting on what they've achieved. Instead, all they can do is aim yet higher, reaching as far and dreaming as big as they dare. \P

Lisa A. DuBois has been a free-lance writer since 1985, and over the course of her career has penned stories for newspapers, magazines, radio and video. She has worked as a regular contributor to the now-defunct Nashville Banner daily newspaper, the weekly Nashville Scene and, most recently, the daily Tennessean, among other publications. A native of Greenville, S.C., Lisa resides in Nashville with her husband, Ray, who is on the faculty at Vanderbilt Medical Center.

Pediatric Emergency Trans

Somewhere a baby is born prematurely and has drastic cardiac and respiratory problems. Or a 5-year-old has been hurt in a terrible car crash. Or a young girl has gone into diabetic shock. Or a teenager has been shot in a hunting accident. In each case these children have needed to get to Vanderbilt Children's Hospital. Stat.

Nearly everyone in Middle Tennessee has heard the hum of *whup, whup, whup* and looked up to see a familiar black, gold and white helicopter churning across the sky, its rotors cutting a swath through the ambient noise of the city. This is Vanderbilt's LifeFlight helicopter, dispatched to transport a critically ill or injured patient either to or from the hospital.

Over the last 20 years, LifeFlight has completed 20,000 missions, safely ferrying children and adults in need of specialized emergency care to Vanderbilt University Medical Center. But these emergency transport vehicles are only one part of the story—and one component of an ambitious plan set out by Vanderbilt Children's Hospital (VCH) Medical Director Arnold Strauss: "If there's a baby (or child) anywhere in this world who needs to come to Vanderbilt Children's Hospital, then we'll have a means to get that child here."

According to Neonatal Outreach Coordinator Cheryl Major, the opening of the new VCH has sparked this new way of thinking. "We now have the capacity to extend our reach," she says. "We don't have any limitations. With more operating rooms we now have the capacity to do more operations. We have more ICU beds and more pediatric critical-care beds, and we have a better transport system so those patients can get here. We also now have the facilities to support the families who are displaced because of these illnesses and injuries. That's what makes this exciting. We now have the capacity to accommodate additional patients who need our services."

To meet Dr. Strauss' goal of global response, VCH is configuring an intricate network of both ground and air emergency vehicles that can be dispatched within 15 to 30 minutes of get-

port: Going Above and Beyond

ting a call. The emergency transport armamentarium includes four LifeFlight helicopters as well as LifeFlight fixed-wing aircraft (either a propeller airplane or Lear jet) specifically designed to carry Vanderbilt emergency experts long distances. Since being introduced last year, fixed-wing aircraft have completed more than 100 transports, frequently flying to North Carolina, Florida and Kentucky, but also traveling as far away as Egypt and Mexico to bring critically injured patients to Vanderbilt. According to LifeFlight Director Jeanne Yeatof course, pediatric patients brought to the emergency department by other means.

"What I'm proudest of is our coordinated, multidisciplinary approach to the transport of pediatric patients," says Dr. Kevin Churchwell, director of pediatric emergency transport. "The Angel Ambulance people talk to and work with LifeFlight, and LifeFlight nurses work with the staffs in the PICU (pediatric intensive care unit) and the PED (pediatric emergency department) for the transport, coordination and follow-up of these patients."

Alexus Weatherford is one of an estimated 9.000 inpatients expected to be admitted to Vanderbilt Children's Hospital this year.

man, last year LifeFlight flew more than 2,100 missions, and 20 percent of those calls were for pediatric patients.

In addition, the pediatric emergency ground transportation system, which has been in operation for nearly 30 years, now includes the Guardian Angel Ambulance for transporting newborns and infants, and the soon-to-beintroduced Earth Angel, specifically designed for the emergency care of children and adults. Says Major, "In 2003 we performed 433 critical-care transports of babies who needed immediate help and were transported to us before they could go home."

In other words, between LifeFlight and the Angel Ambulances, VCH is averaging two longdistance emergency transports of infants and children per day. These numbers do not include,

In a business where every second counts, a fluid system of communication is essential. When a doctor in a rural county delivers a baby who is having problems, for example, that physician must make only one call to have the Angel Ambulance dispatched, and a team, including a licensed nurse practitioner, responds immediately.

Major says, "I want to emphasize that when we get that call, we take down the information, and we help them manage the baby while we're on the way. Communication is continuous."

Once the team arrives they immediately begin managing the care of the infant, placing the baby into a special portable incubator while also explaining to the parent where the baby will be admitted, whom to call to learn about their child's status, and where to go

when the mother is well enough to travel to Vanderbilt. Before leaving, the mother is given a t-shirt that says, "My child took her first ride on the Guardian Angel."

LifeFlight has honed its own unique systematic response. Nurses are dual-trained in both pediatric and adult care, and are also licensed as EMTs or paramedics. In the past they were all dispatched from the helipad atop Vanderbilt University Hospital. Recently, however, LifeFlight bases have been set up not only in Nashville, but also in Clarksville, Shelbyville and Lebanon, Tenn., cutting the response time and enabling the helicopters to shuttle a patient to Vanderbilt that much faster.

Yet, because the VCH helipad has not been completed, says Churchwell, the system is not as streamlined as it should be. Life-Flight helicopters transporting children still must land on the 11th floor of the main hospital. The child is admitted and stabilized there, then carried down seven flights to the fourth floor, and taken across the corridor connecting Vanderbilt Hospital to VCH where the awaiting pediatric-emergency or intensive-care personnel take over. The total distance is about a quarter of a mile.

"What would be optimal is for them to land on the new Children's Hospital and take the elevator down to where they need to go," Churchwell says. "We could cut down the transport time for that patient who has critical needs, and who could have a critical event, from 10 or 15 minutes to five minutes."

To date, there is no set time for beginning construction of the VCH helipad, although builders estimate it will take nine months to complete once construction begins. Says Tanya Lieber, VCH director of development, "We've had a gracious donor step forward with a gift of \$100,000 toward completion of the helipad. However, we need a total of about \$1 million to build it out. So we're still short \$900,000 to make it possible and are actively looking for donors to fill that need. The helipad is a priority for us."

-Lisa A. DuBois

Vanderbilt Holdings continued from page 25 Lou Silberman, would give steady attention to the Judaica Collection for the next 28 years, until his retirement. In 1963, during Silberman's tenure, local philanthropist Manuel Eskind established the Leah Belle Levy Eskind Memorial, a Judaica Collection fund in memory of his wife.

The Judaica Collection entered a new phase in 1988 with its biggest gift yet—\$500,000 from Nashville businessman Raymond Zimmerman. His donation, honoring his parents, Harry and Mary, allowed the collection to expand its holdings on several fronts. Zimmerman specified that the collection be made accessible such that grade-schoolers and international scholars alike could explore its offerings at their own pace.

"That's the strength of Vanderbilt—it's nondenominational to the extent that it welcomes everyone," says Zimmerman, who now lives in Boca Raton, Fla. "My parents loved Vanderbilt, and this is certainly a fitting memorial to their memory."

In 1991 the Zimmerman Judaica Collection consolidated its identity and expanded its reach when it acquired the collection of the late scholar Nahum N. Glatzer, who taught at Brandeis University and was an editor at Schocken Books. His materials—some 6,000 books—include the correspondence relating to Buber and Rosenzweig, as well as the Star of Redemption manuscript.

For decades, even on campus, the Judaica Collection was hardly known at all, housed in a small corner of the Divinity Library for years. Not anymore. After the library remodeling in the mid-1980s, it was placed in a larger and well-lit space just off the library reading room, where it stands today. The move became symbolic of a higher profile, a more intentional presence in the life of a university and divinity school reaching back 4,000 years across time.

Hannah's Story continued from page 37

gery, doctors affix a metal halo onto a patient's forehead, screwing it into the skull, and a second halo around the neck. Using a CT scan, they locate the site of the tumor, compare it to an MRI scan, and chart its exact coordinates via computer. Then they secure the halo to the table and target 100 beams of radiation directly onto the tumor, killing any cell growth at that site. The Huths would arrive at VCH at dawn on March 1, Hannah would undergo the radio surgery, and they would return home at 7:30 that night.

Still, says Beth, "No one could have prepared us for watching our child go through something like that. No matter how good the doctors and staff are, you can't imagine seeing your child hooked up to that halo with screws drilled into her head. It's unbelievably traumatizing."

Because the staff had to monitor her vital signs closely, they couldn't simply "knock Hannah out" with anesthesia. During the long ordeal, she woke up five or six times, crying that she was hurt and asking her mother, "Why is this happening to me? I never did anything wrong!"

Beth sat in a wheelchair, holding her daughter in her arms, trying to soothe her, as Hannah grew increasingly uncomfortable under the weight of the halo. At 4:30 that afternoon, after being fully anesthetized, Hannah finally went in for her radio surgery. Today the doctors are optimistic that the procedure worked.

Most of Hannah's questions since then, Beth says, have been about whether the tumor will come back, asking her parents if it's gone for good. "As a parent you cannot answer that question," she laments. "I can't say anything that's going to give her some closure."

On the way home from surgery, Hannah apologized for crying so much. Beth responded, "Honey, don't be sorry about crying. You could cry buckets and I'd carry them away."

Hannah said, "I just don't want to be a baby."

"Honey," Beth told her, "you're bigger than me."

A few days later, Hannah began coloring again. She had been talking to her family about dreams, and so she drew a big beautiful picture of a hospital with people in the windows. Above it she wrote this title: "I Wish That No One Would Be in the Hospital." Hannah's dream is that all sick children will one day be well.

Aside from stomach pain and headaches, the biggest aftereffect of Hannah's radio surgery was a large green, black and yellow bruise near a puncture site from the halo, which made Hannah look like she had a black left eye.

On March 4, three days after her surgery, Hannah asked if she could go back to kindergarten for a couple of hours. Rising at 6 a.m., she selected a fancy skirt and a shirt with sparkly flowers, an outfit, she insisted, befitting her first day back. When she walked into school, her friends crowded around her.

"What happened to your eye?" they asked. "I had surgery on Monday," Hannah

"Oh," they said, "do you want to come color with us?" And that was that.

For most people a hospital is a place to fear, a place to avoid. For Hannah Huth, however, Vanderbilt Children's Hospital is an incontrovertible fixture in her routine. Given that, she goes there with bravery and with grace. She accepts that there exists an unspoken connection between visiting the hospital and hanging out with her friends, playing with her cat, teaching neat stuff to her little sister, coloring beautiful pictures, and waking up in the morning excited about all those things that are important in the life of a little girl.

—Lisa A. DuBois