LE BONHEUR CHILDREN'S
PEDIATRIC notes

On The Inside


Dennis Black, M.D.

Our commitment to provide quality pediatric clinical care goes hand in hand with our work to advance the science of the health care we provide.

Every day, clinicians throughout Le Bonheur are finding better ways to care for the children of our region.

A significant amount of space at Le Bonheur Children's is dedicated to laboratory research that is carried over to clinical care, but it may surprise you to learn that our physicians and nurses outside of the lab are also working on significant research projects.

In this edition of *Pediatric Notes*, we'll tell you about some of those studies.

You'll read about two studies funded by the National Institutes of Health on how genetics can affect low birth weight and hypertension. You'll also learn how Le Bonheur will play a major role in a proposed NIH center that will promote "bench to bedside" research.

We'll tell you about a local study published in the national journal, *Pediatrics*, on a more effective sedation method for children receiving radiological services. And finally, read about how Le Bonheur neurosciences nurses are using research to combat head injuries caused by recreational vehicle accidents.

Keep reading, and learn more about how Le Bonheur is at the forefront of finding better ways to care for children.

january 2008

Pediatric Notes is a quarterly publication for the medical staff of Le Bonheur Children's Medical Center, produced by Le Bonheur Marketing & Communications Services.

Please submit comments or story ideas by calling 287-6030.

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Le Bonheur First To Use New VNS Therapy on Epileptic Patients

New implant "significant advance" compared to former models

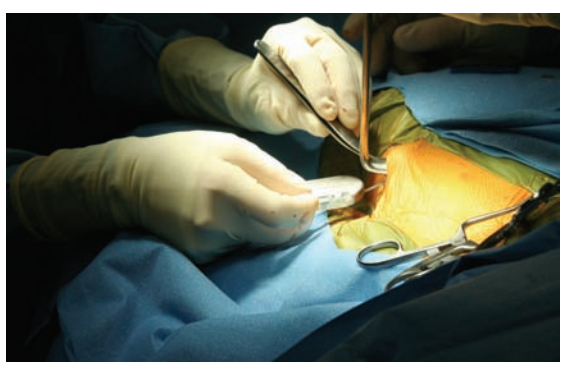
Neuroscientists at Le Bonheur Children's Medical Center are the first to utilize the latest advancement in Vagus Nerve Stimulation therapy for epileptic patients.

The new VNS Demipulse 103 is an updated model on therapy that has been used since 1997 to treat uncontrollable seizures. VNS Therapy is the only device approved for epilepsy, and is often used when medicines aren't effective in controlling seizures.

VNS Therapy delivers stimulation via a device implanted just under the skin in the left chest area. The small pacemaker-like device sends precisely timed and measured mild electrical impulses to the left vagus nerve, which then activates various areas of the brain. The patient or caregiver also has the ability to initiate or abort stimulation with a hand-held magnet.

Dr. James Wheless, director of Le Bonheur Neuroscience Center and Comprehensive Epilepsy Program, has been involved in the development of VNS Therapy since 1995. VNS Therapy manufacturer Cyberonics approached Wheless and his team to implant the newest model. He and Le Bonheur's team of neurosurgeons implanted the first two devices in the U.S. in November.

"This new device represents a significant advance over the prior models in the treatment of epilepsy. We are happy to continue to be on the forefront of new treatments for children with epilepsy at Le Bonheur Children's Medical Center." Wheless said.


Le Bonheur surgeons implant the new VNS Demipulse 103 into a patient.


Neurosurgeon Stephanie Einhaus, M.D., left, inserts the newest VNS model in a Le Bonheur patient with the help of UTHSC Neurosurgical Resident Dr. Jody Helms. Neurologist James Wheless, M.D., center, assists in the surgery. VNS Therapy manufacturer Cyberonics approached Wheless and his team to be the first in the U.S. to implant the new model.

The latest implant features advanced internal monitoring of its electronic system, and has the future capability of seizure detection, once software is developed and approved. Neurologists like Wheless also have more capabilities to program this device specifically for the patient who wears it – much like a doctor would prescribe a dosage of medicine.

The device is also about half the size of previous models, making it less noticeable under the skin. It also alerts the physician when the battery is about to expire.

Wheless foresees that as new software is introduced, and even more advancements come down the pike, the manufacturer will look to Le Bonheur and its neuroscientists to be the first to implant the upgrades.

"VNS Therapy is the only approved device for epilepsy, and after medicine, it is the second most commonly used treatment," Wheless says.

An ideal candidate for the procedure has been on two or three medicines, but still has seizures. Once evaluated in Le Bonheur's Comprehensive Epilepsy Center, neurologists can decide if VNS Therapy might be a good fit.

Task Force Aims To Reduce Multiple IV Sticks For Patients

Clinicians at Le Bonheur Children's are working to reduce the number of multiple intravenous sticks, thanks to recommendations from an internal IV Task Force.

The Task Force was formed at the request of a hospital committee tasked with improving quality. Its goal was to find ways to reduce the number of IV sticks and complications arising from vascular access, such as infiltration rate, infection, and also to improve patient and family satisfaction.

The group recommended that members of the health care team consider several factors prior to initiating IV therapy. This may include the patient's medical history, physical exam, type of medication to be infused, duration of IV therapy and the pH and/or osmolarity of the IV therapy and its toxicity to the integrity of the vein itself. Another approach was a consistent approach to peripheral IV access. Clinicians are also encouraged to utilize existing technology to assist in the establishment of peripheral access, such as the Vein Viewer, Venoscope, etc.

An IV Decision Tree was created using current IV experts. Also, clinicians will have access to a dedicated IV team beginning in 2008. Finally, the plan limits the number of IV attempts before communicating with the physician regarding alternative access or therapies.

"Children and their parents are looking to us as an advocate regarding their care. We need to be mindful of the various factors influencing the actual delivery of the therapy," said Interim Chief Nursing Officer Kathie Krause. "With pro-active planning and early intervention, we should see a decrease in the need for multiple restarts and other complications."

physician SPOTLIGHT

Joel Siegel, M.D.

Finding the Right Fit

Residency program brings Siegel to Memphis, the kids keep him here

Dr. Joel Siegel remembers always wanting to mold his career around kids. But it was his wife who convinced him that his career was waiting on him down South.

Siegel, a general pediatrician at Laurelwood Pediatrics, is a New Jersey native who found himself at home in the residency program at Le Bonheur and the University of Tennessee Health Science Center. Once he landed in Memphis, he decided to stay.

"My wife, Rachel, really opened my eyes to opportunities and places outside of New York," Seigel said. "I started researching residency programs all over the country and finally narrowed it down to programs in the South."

He decided to visit the University of Tennessee and was immediately impressed. "I really feel that their philosophy is right on target," he said. "Everyone from the top down is dedicated to their work and to teaching both primary care and sub-specialties, which is a really unique quality in a residency program."

Today, Siegel says his job is an absolute ideal situation. He feels even more fortunate that he's able to work with Dr. Chris Hanson, someone who has remained a role model and mentor to him since his residency.

"Kids are such fascinating people – just talking to them and explaining things on their level is one of the biggest contributions that I believe I can make," Siegel said.

His passion is prevention, specifically obesity and diabetes.

"There is an epidemic going on today and 15 to 20 years from now, these kids will have diabetes and heart disease – they're going to die young." He feels that there is a lack of accountability from insurance companies to pay for kids to attend specialty clinics before they develop deadly diseases.

Joel Siegel, M.D.

"I can tell the parents and the kids about the lifestyle changes to prevent this from happening, but the diabetes clinics are where they need to be going. The clinics allow them to be with their peers who are battling the same issues, and when you're dealing with kids, that can make the biggest difference."

The youngest of three, Siegel grew up in Fair Lawn, N. J. He attended the University of Pennsylvania. He later attended medical school at Mt. Sinai. There, he met Rachel, a Tampa native, who was attending Columbia University.

The Siegels have two children, Benjamin, 3 and Dahlia, 6 months. They live in East Memphis and enjoy attending Baron Hirsch Synagogue and taking advantage of the many assets that Memphis has to offer.

"I'm in a great place. I have a great job, a great family and I'm doing exactly what I've always wanted – what more can you possibly hope for?"

Hospital Names New Executive Leaders

Le Bonheur Children's has filled three new leadership slots in its new organizational structure.

The changes were made to support quality and family-centered care and establish clear lines of authority and accountability throughout Le Bonheur.

Bob Duncan has been named vice president of Planning and Strategy, and will lead new business development, regional strategy, regional services and clinics, Le Bonheur service lines and Physician Relations and Recruitment. He will also continue to lead Le Bonheur's Government Relations efforts.

In turn, the hospital will hire a new vice president of Community Outreach, which will include many areas and departments that Duncan formerly supervised.

As the vice president of Ambulatory Services, Wyatt Howell will lead the Emergency Department, Trauma Program, PediFlite, CRPC coordination, Radiology and Nuclear Medicine, Neurodiagnostics, the Urodynamics and GI labs, Outpatient Clinics and Rehabilitation Services. He will also be Le Bonheur's liaison to the Urgent Care and Diagnostics centers and Pediatric Outpatient Rehabilitation in Germantown.

Finally, new administrative director of Support Services Rick Kanschat will be charged with Plant Operations and Facilities, Environmental Services, Materials Services/Mail Room, Security, Food Services, Patient Advocates, Interpreters, Information Desk, Patient Transport, AV Services, Telecom and Operators, Clinical Engineering and the Family Resource Center.

"We're fortunate to have such outstanding leaders within our organization like Bob, Wyatt and Rick to step into these new roles," Le Bonheur President Meri Armour said. "It's exciting to see our plans come together so that Le Bonheur can serve our kids, families, physicians and Associates."

New Lab Objectively Measures Lung Function In Infants

Physicians can now objectively measure lung function in children 3 years old or younger with the help of a new infant pulmonary function lab at Le Bonheur Children's Medical Center.

"This lab allows us to accurately measure lung volume and determine lung function abnormalities in babies 3 years or younger – children who can be uncooperative in typical lung function labs," said Dr. James Tutor, medical director of Le Bonheur's infant and pediatric pulmonary function lab and associate director of Respiratory Care.

Le Bonheur's infant pulmonary function lab is one of only 39 in the country – with the closest in St. Louis, Mo., and New Orleans, La.

"It will be useful in everything from deciding whether a wheezing baby has asthma to determining the pulmonary progression of cystic fibrosis in a young infant," Tutor said. The lab will also help pediatric pulmonologists determine how medicines given to treat those diseases work on each particular patient.

In a typical pulmonary function lab, patients are asked to breathe deeply so that clinicians can measure lung capacity and flows. Because infants can't follow directions to voluntarily perform pulmonary function tests, it can be difficult to obtain objective data on their lung function. Instead, physicians are often forced to use subjective methods like stethoscopes, blood gases and chest radiographs to gain information about an infant's lung disease. Le Bonheur's new lab, however, can give objective data about an infant's lung disease.

"The earlier we diagnose an infant's lung disease, the sooner he or she can be started on appropriate therapies," Tutor said.

When patients come in for a test, they are sedated with choral hydrate, a mild sedative that doesn't significantly affect breathing. The infants are then placed in a chamber that resembles an incubator to measure lung volume and flow and the affect that certain drugs might have on their breathing. An average test lasts about two hours.

Lab testing is performed by specially trained personnel – Respiratory Therapists Linda Mallory and Lavonda Redd and Registered Nurse Nan Stahl.

Tutor and the other pediatric pulmonologists at Le Bonheur also hope to use the new lab for research to explore infant lung diseases such as cystic fibrosis and aspiration syndromes. "Many of the facilities across the country that have infant pulmonary function labs actually use them more for research than clinical use," Tutor said.

Memphis is also a logical place to have such a lab, given the large number of wheezing infants in and around the city.

"I care for children with wheezing with the frequency that most general pediatricians care for children with ear infections," Tutor said.

For now, tests for the lab can only be ordered through local pediatric pulmonologists who can screen to see if the patient is a good candidate. Referrals can be made by calling UT Medical Group Inc. at (901) 287-5222.

Respiratory therapists Linda Mallory (left) and Lavonda Redd (right) perform an infant pulmonary function test on 11-month-old Jack Young.

Neonatal Conference Planned For January

The Mid-South Seminar on Neonatal Care will be held Jan. 25-26 at the Memphis Marriott Downtown.

The course is designed for neonatologists, pediatricians, family physicians and other professionals involved in treating neonates and will include keynote speaker Seetha Shankaran, director of neonatal-perinatal medicine at Children's Hospital of Michigan and Hutzel Women's Hospital.

This seminar will encompass state-of-the-art practices and trends in treating the neonatal patient. The seminar faculty, both clinically and academically oriented, will address relevant issues and provide valuable information and insight into situations commonly presented to subspecialists and primary care providers.

Ramasubbareddy Dhanireddy, M.D., Le Bonheur's physician liaison for Neonatology Services and the University of Tennessee Health Science Center's chief of the Division of Neonatology, is the course director. Moderators include Drs. Ajay J. Talati, Bruce Jenkins and Marilyn Robinson.

Faculty members include Drs. James Beaty, Rick Boop, Vickie Brewer, Antonio Cabrera, Eunice Huang, Deborah Jones, Dennis Stokes and R. Sidney Wilroy.

The conference will be held in the Nashville Meeting Room of the Marriott Hotel in Downtown Memphis, 250 N. Main St., Recommended hotel accommodations are at the Memphis Marriott and participants are advised to asked for the Le Bonheur Mid-South Seminar on Neonatal Care room block.

For more information about the seminar, call (901) 516-8933 or visit www.methodistmd.org or www.lebonheur.org.

Neuroscience Institute Names New Administrator

Jennifer Havens

Jennifer Havens has been named service line administrator of Le Bonheur's Neuroscience Institute.

In her new role, Havens is responsible for improving processes and communication within the program and among physicians, as well as coordinating research studies and developing growth strategies for the Institute.

Havens came to Le Bonheur from St. Jude Children's Research Hospital, where she triaged and organized more than 150 new patients and 200 formal consults each year as the brain tumor coordinator. She was also instrumental in the development of the first parent-directed Web site at St. Jude, which resulted in a 35 percent increase in patient accrual throughout five years. In 2006, Le Bonheur hired Havens as the manager of its Neuroscience Institute.

Havens says while in nursing school she was intimidated by anything that dealt with neuroscience, but once she met the patients that all changed.

"I realized what a special group of patients they are because they're dealing with things that really impact their lives like memory and motor functions," Havens said. "What I've received from working with neuroscience patients and their parents far outweighs what I've been able to give."

Recently, Havens received a bachelor's degree in organizational management from Crichton College and is currently pursuing her master's in business administration.

Research Looks At Sedation Techniques For Radiological Services

A local study published in the September 2007 issue of *Pediatrics* suggests that the use of propofol to induce sedation in children for radiological services is more effective and has fewer side effects than pentobarbital, which is still used at several children's hospitals and pediatric facilities nationwide.

Jay Pershad, M.D. of Le Bonheur Children's Medical Center and University of Tennessee Health Science Center was the lead author of the study. Co-authors included Jim Wan, Ph.D. of the Department of Preventive Medicine at UTHSC and Doralina L. Anghelescu, M.D. of the Division of Anesthesiology at St. Jude Children's Research Hospital.

The study was conducted in collaboration with hospital administration and Pediatric Sedation Specialists, PC, the group that provides anesthesiology services at Le Bonheur. The emphasis was to improve quality and efficiency of radiology services. Pershad enrolled 60 patients between the ages of 1-17 years who required intravenous sedation for elective cranial MRI.

The group looked at propofol and pentobarbital, which are frequently used to induce deep sedation in children when undergoing an MRI. Pershad says to his knowledge, these two drugs had not been compared in a randomized, controlled trial. Investigators looked at the recovery time of children after deep sedation with single-agent propofol and a pentobarbital-based regimen for MRI. They also considered safety and efficacy of the two medications.

According to Pershad, pentobarbital has been and is still being used in several pediatric facilities around the country for radiology sedations. It has a long track record of safety and efficacy. Propofol was introduced when Pediatric Sedation Specialists, PC, began providing sedation services at Le Bonheur in 2005.

"The results of our study suggest that patients who receive propofol have shorter MRI times from start to finish, and scored our services higher on their follow up patient satisfaction surveys. There were no differences in the quality of images or number of repeat sequences," Pershad said. "This information is extremely valuable as we open a second MRI scanner at Le Bonheur. Efficiency and through put times in the MRI suite will be key determinants of patient satisfaction and profitability."

Pershad is an associate professor of pediatrics, co-director of the Pediatric Emergency Medicine Fellowship Training program and a partner with Pediatric Sedation Specialists, PC.

"Administration of propofol requires greater skill and vigilance for airway related complications. We have extensive experience with propofol for procedural sedation both in the Emergency Department and in radiology, with a very low rate of complications or sedation failures."

Propofol is used to induce sedation for radiological services at Le Bonheur Children's Medical Center, after a local study suggested it had fewer side effects than the frequently used pentobarbital. Pictured above, Katharine Cox, M.D. (left) and Lisa Booth, RN (right) help prepare patient Brandon Hickman (center) for an MRI scan.

Le Bonheur Will Be Partner In Translational Research

Le Bonheur Children's will be a key partner in a proposed National Institutes of Health Center that would promote research that can be translated to the bedside and into the community.

The hospital's investigators will provide a pediatric component to a Clinical and Translational Science Institute that will be based at the University of Tennessee Health Science Center.

UTHSC has applied to be home to one of 60 NIH-funded Clinical and Translational Science Institutes across the country that will promote clinical and translational investigation and look to improve health and prevent disease.

The institute will provide a home to conduct research that translates scientific discoveries into clinical applications, educate professionals on all aspects of translational and clinical science and serve as a resource for taking scientific discoveries from the bench to the bedside. Here, multidisciplinary teams would have a location to address translational research.

Le Bonheur has long served as a pediatric satellite facility to UTHSC's General Clinical Research Center, and in turn will play an important part in the new Clinical and Translational Science Institute.

"The CTSI will dramatically alter the way in which scientific discoveries and innovations in medicine and health care are accomplished to enhance efficiency, output and economic return," reads the executive summary on the CTSI application.

In fact, UTHSC was able to apply for $6 million annual funding from the NIH – versus $5 million – because its application carries a pediatric component. NIH funding is renewable every five years. In turn, the NIH will conduct multi-center research projects with its 60 CTSIs across the country. The UTHSC CTSI is actually being established ahead of the NIH funding using commitments from UTHSC, Methodist Le Bonheur Healthcare and other sources in order to "hit the ground running." While much of the CTSI will operate out of designated space on UTHSC's campus, the pediatric component will be based at Le Bonheur. Adding the pediatric component to UTHSC's application for national funding can only heighten its chances of securing the grant, said Dr. Dennis Black, director of the Children's Foundation Research Center headquartered at Le Bonheur and Associate Director of the UTHSC CTSI.

The CFRC is a joint partnership between Le Bonheur, UTHSC and the Children's Foundation of Memphis, and will continue as an important component of the new CTSI.

"I think we have as good of a chance as anyone," Black said. "The Pediatric Clinical Research Unit is a critical component of the CTSI and will provide a tremendous boost to pediatric clinical and translational research at Le Bonheur, as well as across the campus and our affiliates and partners."

In addition to broadening educational opportunities for students, trainees and faculty, the CTSI will also provide research support and core technical services – like grant writing, subject recruitment, research compliance and regulatory components and financing. Now, investigators can spend more time on research.

Black told a story of a researcher who was an expert in fruit fly genetics and had a special interest in the genetic basis for some types of autism. He spent months trying to find a group to partner with, as well as expertise and resources to conduct clinical studies on patients with autism, so that he could translate his fruit fly research over to human autism. Although the researcher was ultimately successful, the CTSI would have provided a centralized "front porch" for him to enter the CTSI and find resources and partners for his project.

UTHSC should know by the spring whether it has received the NIH grant or whether it will need to re-apply. Le Bonheur is one of 15 partners on the project. Those partners include the Methodist Le Bonheur health system, St. Jude Children's Research Hospital and The Regional Medical Center.

NIH-Funded Studies Tackle Birth Weight, Hypertension

Researchers look for genetic effects in both projects

Two separate studies at Le Bonheur are investigating how genetics can affect low birth weight in full-term infants and hypertension. The studies are funded by the National Institutes of Health.

The first, which is led by Cardiologist Dr. Bruce Alpert, tests healthy African-American kids ages 12-21 for markers of and mechanisms for hypertension. The study conducts close analyses of genes that control substances in the body regulating blood vessel (arterial) constriction.

The goal is to identify kids who are at risk for high blood pressure at the earliest age so that treatment and prevention options can be put into place. The study will release results and analyze the genetic data within the next six months.

"We know that African-Americans are at higher risk for developing high blood pressure and organ damage resulting from the condition," Alpert said. "The study will allow us to take the data found to identify those who possess the genes to develop the disease and possibly, treat them early in life."

> ***"We hope to use our results to identify pregnancies at high risk of low birth weight."***
>
> *- Ronald Adkins, Ph.D.*

The second study looks at how selective gene silencing, called imprinting, can increase the risk of low birth weight in full-term infants.

It's particularly important because smaller babies are often more likely to get Type II diabetes later in life, says lead study investigator Ronald Adkins, Ph.D.

"We hope to use our results to identify pregnancies at high risk of low birth weight and to identify ways to influence gene silencing," Adkins said.

The two-year study is funded by a $300,000 grant from the National Institutes of Health. Adkins is an investigator at the Children's Foundation Research Center, which is headquartered at Le Bonheur. He is also assistant professor of pediatrics at the University of Tennessee Health Science Center.

The study will look at full-term, healthy babies weighing less than five and a half pounds. Moms and babies picked for the study have no history of diabetes.

Adkins hopes that the research may eventually enable physicians to address potential problems *in-utero*.

Neuro Nurses Study Helmet Use In Preventing Head Injuries

Group works to educate, follow up with patients and families

A team at Le Bonheur Children's Neuroscience Institute is conducting one of the first nursing research studies of its kind to look at the use of helmets in preventing head injury.

The study, which has been approved by the Methodist Institutional Review Board, is designed around a troubling situation Le Bonheur nurses have observed for years.

Neurosurgery Nurse Practitioner Tracy Tidwell says she has watched patient after patient come to the hospital with a neurological injury as a result of an accident involving ATV, bicycle or other recreational vehicles. The vast majority of those patients were not wearing helmets.

As Tidwell talked with families, she learned that many parents did not understand how important it is for children to wear helmets. She hopes this study, which provides education and a free helmet, will show a transformation in the child's behavior.

"I think there is a lack of understanding of what could happen to children if they are not wearing a helmet," Tidwell said. "I believe most people will do the right thing, if they know what it is."

In 2006, more than 100 children were admitted to Le Bonheur as a result of an ATV, bicycle, motorcycle/dirt bike or go-cart accident. The American Academy of Neurological Surgeons estimates that 21 percent of all traumatic brain injuries in children and adolescents are a result of sports and recreational activities. In fact, research published in *Pediatrics* has shown that helmet use may reduce the risk of non-fatal head injuries by 64 percent.

Le Bonheur Patient Care Coordinator Emily Snider (right) shows a safety DVD to patient Claudius Weterton, 13, as part of the hospital's helmet safety research study. In the background, Claudius' mom, Laurette, fills out a questionnaire for the study.

Joining Tidwell on the project is Neurosciences Service Line Administrator Jennifer Havens, Patient Care Coordinator Emily Snider and Jack Steele of Snells Orthotics & Prosthetics.

The team has a three-step approach to measuring these patients' attitudes and behaviors. First, Tidwell or Snider will ask the parents to complete a two-page questionnaire. The survey asks 13 questions including when and if helmets are worn by members of the family and friends.

Then, the patient and parents are shown a short DVD about bicycle or ATV safety. Tidwell or Snider will discuss the video and be available to answer any questions that may arise. Parents will receive a voucher for a free helmet and professional fitting from Snell Orthotics & Prosthetics.

Three months later, a follow-up phone call will be made to the parents to see if the helmets are still being used.

Tidwell and the team hope that education and the free helmet will eliminate the excuses often used for not wearing a helmet. They'll report their findings next fall.

By the numbers

In 2006, more than 100 children were admitted to Le Bonheur Children's Medical Center as a result of an ATV, bicycle, motorcycle/dirt bike or go-cart accident. Here's a breakdown of the type of accidents hospital clinicians see most often:

Type of accident	2006 incidents
ATV	61
Bicycle	30
Motorcycle/dirt bike	14
Go-carts	2

Paragould Cardiology Clinic Provides Convenience With Care

Bruce Alpert, M.D.

In Paragould, Ark., kids with cardiac conditions can take advantage of being seen in a timely and friendly manner. Dr. Bruce Alpert, cardiologist with UT Medical Group Inc., heads up the clinic and says that their mission is all about making it easy on the patient and parents.

"When your child has a condition or a symptom that needs attention, parents don't want to wait to be seen," Dr. Alpert said. "Through the outreach clinic, we are able to see eight to 10 patients every other week who would otherwise be waiting for long periods of time or driving long distances."

The clinic is staffed by Dr. Alpert, an echocardiogram technician and a nurse. They schedule the clinic from 8-10 a.m. every other week and see patients from Northeast Arkansas communities such as Jonesboro, Paragould, the boot heel of Missouri and a few from the Dyersburg, Tenn., area. Alpert says the vast majority of his patients are seen and discharged because there is nothing that requires further testing.

"The clinic offers echo testing and screenings close to home for kids who need answers sooner rather than later," Alpert said. "That's the concept behind the clinic and we'll be providing it as a service as long as we're able."

Have a story idea?

Call 287-6711 or e-mail Nellann Mettee at metteen@lebonheur.org

Demolition Begins In Drive To Hospital Expansion

Le Bonheur Children's kicked off construction of a new hospital in early November, with a celebration to mark the beginning of the demolition of the former Memphis Mental Health Institute.

Hundreds of Associates, physicians and patients watched as a three-ton wrecking ball adorned with red paint and their signatures collided with the former MMHI building. The building sits adjacent to the current Le Bonheur Children's campus and will be the site the new hospital.

"You are now party to the future – a brand-new Le Bonheur," said Le Bonheur President Meri Armour.

Armour was joined by retired pediatrician Dr. George Lovejoy, who told of the days when a women's sewing circle decided to build a hospital dedicated to children. Lovejoy, who Armour introduced as a physician "rated by moms one small step down from God," was Le Bonheur's chief of staff from 1967-68. During his career, he also led the Health Department and the Arlington Developmental Center.

Dr. George Lovejoy speaks during MMHI demolition event in November.

The day also focused on hospital employees and patients. Former patient Ben Tracy and his twin, Will, pulled a lever that signaled crane operators to swing the wrecking ball into the old MMHI building.

Demolition will be completed in 20 weeks, and Le Bonheur has plans to break ground on the new hospital on Valentine's Day 2008. The new Le Bonheur Children's is scheduled to be complete in summer 2010.

Former patient Ben Tracy (center) and his twin, Will, pull the lever to signal crane operators to swing a three-ton wrecking ball into the old MMHI building. Right, 51-year-Le Bonheur employee Euilia Flinn watches the symbolic event.

The new hospital will consist of 12 floors and 610,000 square feet of space. After the addition is complete, the eastern two-thirds of the existing hospital will be demolished to make way for a 400-car patient parking garage, a new entry boulevard and a site for future expansion.

The new facility is projected to cost $327 million, and Le Bonheur Children's is raising a significant portion of funds from the community and its hospital family. So far, the hospital and its supporters have raised more than $79 million of its $100 fundraising campaign goal.

Physicians are part of that fundraising effort. The Physicians' Campaign Committee hopes physicians can help raise $5 million for the new facility. To contribute, contact Ethel Gilmore at 287-5535 or gilmoree@lebonheur.org.

Neuroscience Institute Adds Neurology Residents, Neurosurgery Fellow

Le Bonheur Children's Neuroscience Institute is training a new group of neuroscientists with its residency and fellowship programs.

Stephen Fulton and Kate Van Poppel have accepted resident positions in the institute's newly formed neurology residency program.

Dr. Fred Perkins, residency program director and pediatric neurologist at Le Bonheur says the program will both raise the academic bar and provide better neurological services to patients.

"As the residency program progresses, our plan is that it also provides an avenue for trainees to participate in research and further the name of our Neuroscience Institute," said Perkins, who also serves as an assistant professor in the Department of Pediatrics/Division of Child Neurology at University of Tennessee Health Science Center.

Meanwhile, Dr. Michael Tobias has been named to the Neuroscience Institute's Neurosurgery Fellowship Program. Tobias is originally from Edison, N. J., and attended Brown University and Brown University School of Medicine.

He began his venture in medicine originally interested in both psychiatry and pediatrics, but says he fell in love with the operating room during a surgery rotation. "After my OR experience, I opted for pediatric neurosurgery because it combined my original interests," he said.

Tobias says his reason for choosing Le Bonheur is two-fold.

"I admire Dr. Boop and Dr. Sanford for their vision of how a fellow should be used during their year of training," he said. "The partnership with St. Jude also made it very attractive to me."

Emergency Department Tackles Turnaround Times, Communication

Le Bonheur leaders are working to improve Emergency Department turnaround times and parent communication with two new initiatives.

The first is a project aimed at moving patients through the ED more efficiently, decreasing total length of stay and increasing patient satisfaction. A team has studied current ED flow, and is figuring ways to eliminate it by using the Lean Process, which includes structural, methodical and systematic approaches to solving complex process issues by focusing on non-value added activity.

The Lean Care Tract, which was implemented in November, is a more efficient way of seeing certain categories of patients, said Dr. Barry Gilmore, director of Emergency Services.

"The Lean Care Tract is another tool that we are using to address the ongoing issues of wait times and patient throughput," Gilmore said. "We hope to expand this process to other areas to help us reduce waste, improve productivity and enhance patient care."

The process defines and standardizes the work of each team member to minimize waste and maximize efficiency. Operating much like a physician's office in a defined area of the ED, the Lean Care Tract process allows stable patients with a predetermined list of presenting conditions or diagnoses to be seen without occupying a bed for their entire stay. In turn, the same number of available beds is used more efficiently.

Data shows the process is working. The number of patients seen per physician, per hour, has improved 43 percent. Throughput time on patients who are discharged from the

Le Bonheur leaders are working to increase turnaround times and communication for patients and families in the hospital's Emergency Department. Above, Medical Director of Emergency Services Dr. Barry Gilmore cares for a patient.

ED has been reduced 27 percent, and 11 percent on those patients who are admitted.

Moreover, patients saw a physician 31 percent faster than they had in the past.

"As with any new system or idea, change comes hard, but the ED staff has shown the resiliency and commitment to make this happen," said ED Administrative Director Carolyn Jackson.

Secondly, hospital leaders are also working to improve communication between the ED staff and families – after hearing from families that there was room for improvement in this area.

The idea was to improve patient satisfaction scores on things like how well the ED nursing staff kept families informed of their child's treatment and condition and how well tests and procedures were explained before they were performed. The team also looked for improved satisfaction scores on the efforts to keep families informed of any delays in care.

To accomplish that, they asked parents throughout their stay what sorts of questions they had during each step. Then, team leaders brainstormed ways to help answer those questions. Staff members were encouraged to be proactive in answering as many questions as possible – and were even given talking points to help with the process.

Brochures and fact sheets also helped inform families about the ED process and the care of their children.

The result: patient satisfaction scores went up in some of the key communication areas.

SHORT SCRIPTS

Neurologist Shares Mnemonics

Amy McGregor, M.D.

Dr. Amy McGregor, a neurologist at Le Bonheur, is the author of a new book geared toward helping medical students and physicians pass their boards and in-service exams in neurology. *Laughing Your Way to Passing the Neurology Boards!* was based on her experiences studying for the neurology boards.

McGregor suggests using mnemonics like "Broca's patients have few words like broke people have few dollars," when trying to remember Broca's aphasia. The book is published by Medhumor Medical Publications, LLC and edited by Stu Silverstein, M.D. For more information, visit www.passtheboards.com.

RSV Research Wins Award

A presentation by Dr. John DeVincenzo received the Best Advance in Therapy and Prevention Award for 2007 at the largest infectious disease society meeting in the world. The Interscience Conference on Antimicrobial Agents and Chemotherapy conference was held in Chicago in September.

DeVincenzo's research, "Development of a Human Experimental Infection Model of Respiratory Syncytial Virus," describes how through classical virology techniques, a virus collected from an infant at Le Bonheur infected with RSV can be grown and purified and then used to infect human volunteers.

John DeVincenzo, M.D.

The abstract describes how the infection and the disease caused by the infection are highly reproducible and can be quantified using virological and molecular techniques. Lisa Harrison, who works alongside DeVincenzo in the virology lab, was instrumental in accomplishing the difficult task of measuring RSV concentrations very precisely during the study. Dr. DeVincenzo's laboratory is based in the Children's Foundation Research Center at Le Bonheur.

Project Diabetes Aims To Educate, Provide Resources

Le Bonheur Community Outreach recently received $50,000 from the state of Tennessee to provide education and resources to children, adolescents and adults who are pre-diabetic or diabetic in Tennessee's Hardin County. Le Bonheur is one of seven health care providers in the state to receive a planning grant to prevent or treat diabetes and its most common risk factors. Le Bonheur is partnering with Lifespan Health, Hardin County Regional Health Center, a federally funded community health center. The Tennessee Center for Diabetes Prevention and Health Improvement recently distributed more than $300,000 across the state to help treat the chronic disease.

CFRC Director Named To Endowed Professorship

Dr. Dennis Black, director of the Children's Foundation Research Center and Vice President for Research at Le Bonheur, has been named to the John Dustin Buckman Endowed Professorship.

The $1.73 million endowment is earmarked to continue to pay a portion of the salary of the director of the Children's Foundation Research Center, a partnership between Le Bonheur, the University of Tennessee Health Science Center and the Children's Foundation of Memphis. Black has served as director of the CFRC since 1998. During this time, the Foundation tripled its federal funding and now has 28 scientists.

Dennis Black, M.D.

Le Bonheur Children's Medical Center
50 North Dunlap
Memphis, Tennessee 38103

New Palliative Care Program Offers Sensitive Care To Life-Limited Patients

Le Bonheur Children's has launched a new Palliative Care program designed to offer a family-centered, culturally sensitive approach to the dignified care of infants and children with life-limiting illnesses.

The program includes health care professionals from a variety of disciplines – including pharmacists, chaplains, clinical psychologists, nurses, child life specialists, social workers and hospice workers – with a special interest in providing comfort care to both patients and families.

Greg Stidham, M.D.

"The desire on my part is to try to make dealing with life-limiting condition better for families who have to deal with it," said Dr. Greg Stidham, a Critical Care physician who also serves as medical director of Le Bonheur's Palliative Care program.

Stidham said the concept of the program was created after a great number of consults came to Le Bonheur's Ethics Committee that weren't really ethical issues. Clinicians just needed help caring for children facing life-limiting diagnoses.

"I think it's a skill that you have to learn," Stidham said. "We're not trying to replace anyone, we're here to help them. Every patient who has those sorts of needs should have them met somehow."

Flotyl Gresham

Le Bonheur clinicians and physicians are encouraged to consult the Palliative Care team as early as possible – even when curative care is still the goal. The team specializes in offering support to those clinicians who may find it uncomfortable to have tough discussions with families.

"Once consulted, we can help build that trust, and have a better understanding of what the family is facing," said Palliative Care Coordinator Flotyl Gresham.

Specifically, the team offers help for children who have experienced a life-limiting event that is likely to shorten their lifespan or significantly alter their future functions.

They can help manage pain and other symptoms, clarify goals and therapy limits for chronically ill children, help with end-of-life decision making, support the family of the critically ill child, support staff members who are caring for that child and assist family members who grieve for their child after his or her death.

For more information about how to refer patients to the team, call 516-1600.