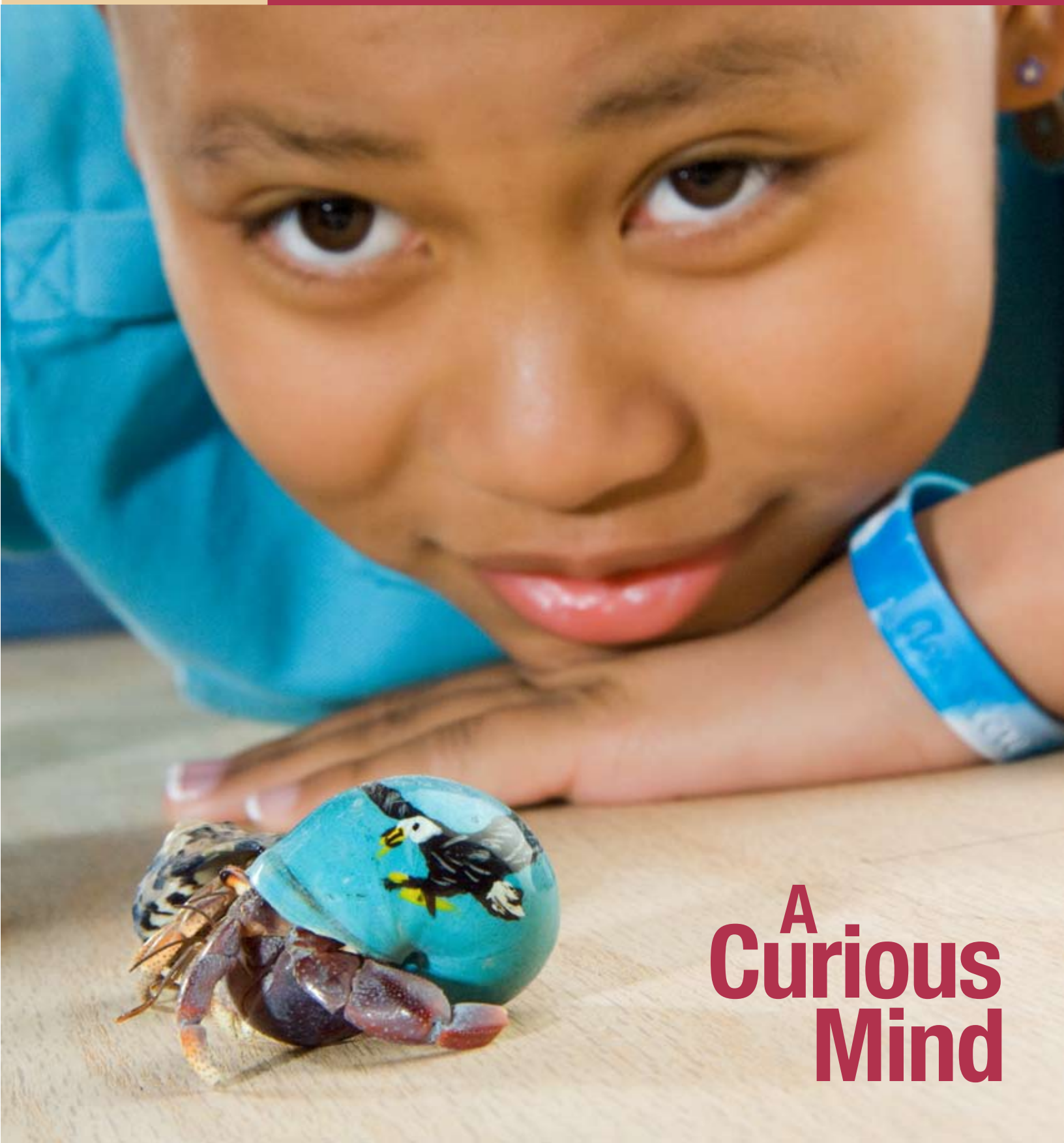


Promise

SUMMER 2008



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Mind**

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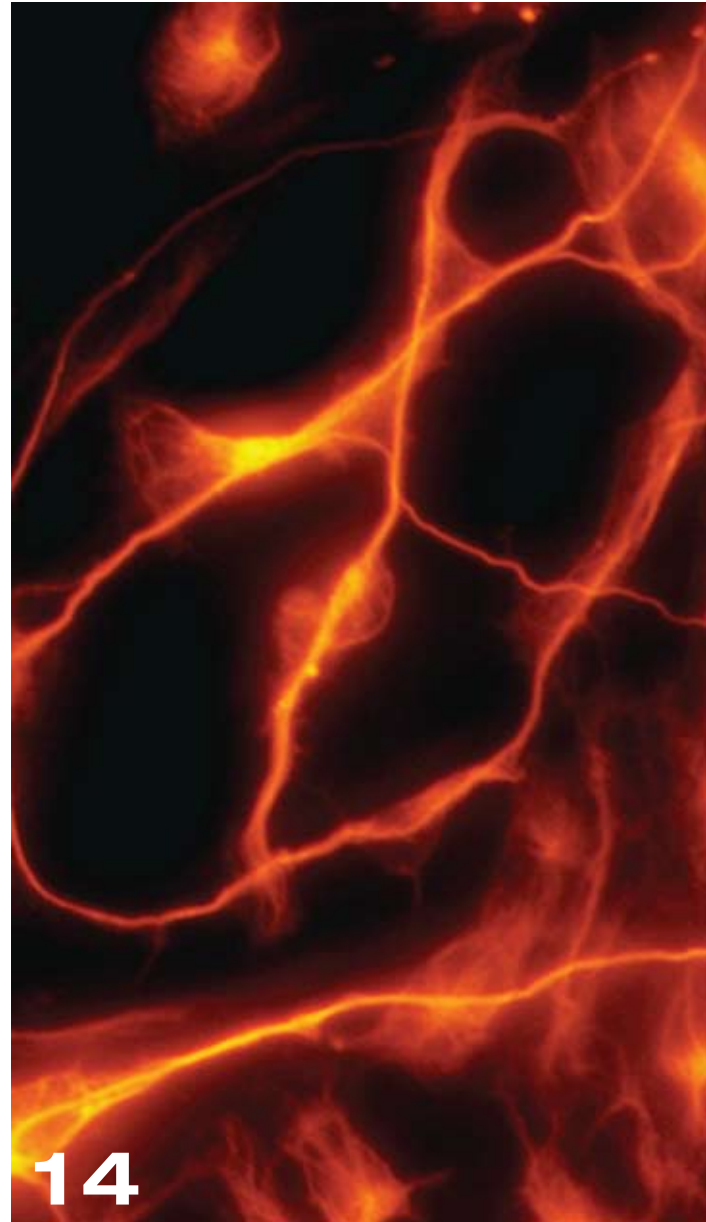
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Promise

is a quarterly publication of the
Department of Public Relations
St. Jude Children's Research Hospital
262 Danny Thomas Place
Memphis, Tennessee 38105-3678

St. Jude has changed its mailing address to reflect the hospital's historical roots. The new address, 262 Danny Thomas Place, represents February 1962, the date St. Jude opened its doors.

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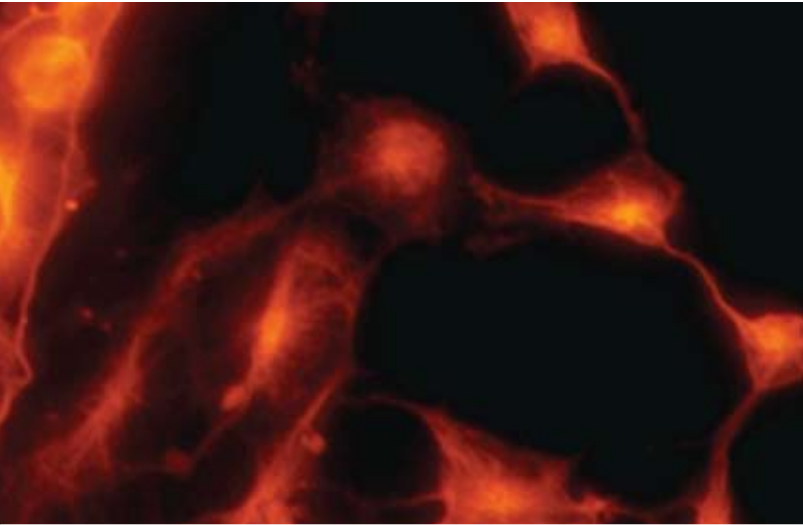
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A publication of St. Jude Children's Research Hospital Summer 2008



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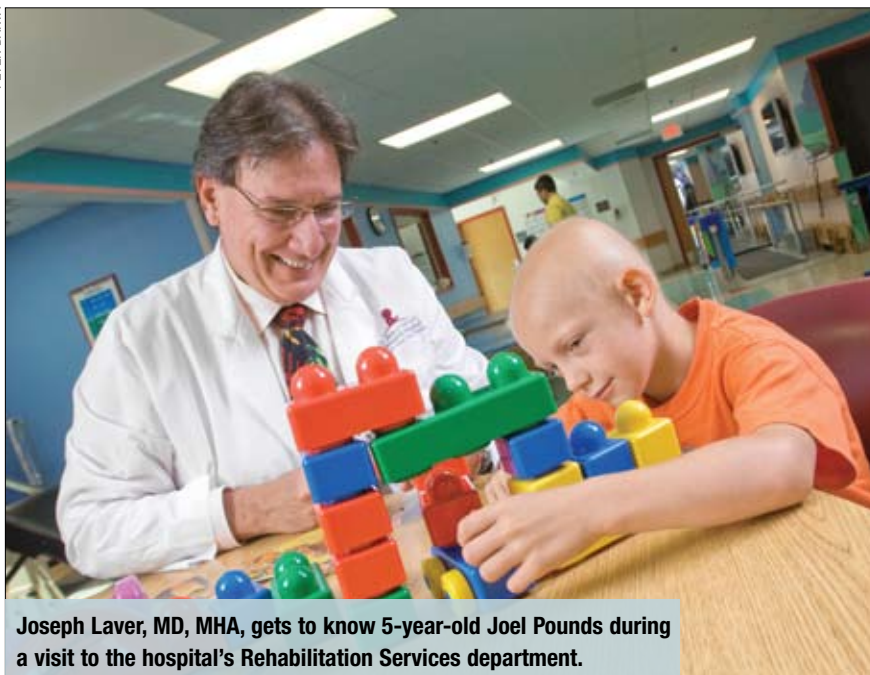
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St. Jude Children's Research Hospital's mission is to advance cures, and means of prevention, for pediatric catastrophic diseases through research and treatment. Consistent with the vision of our founder, Danny Thomas, no child is denied treatment based on race, religion or a family's ability to pay.

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Highlights

PETER BARTA



Joseph Laver, MD, MHA, gets to know 5-year-old Joel Pounds during a visit to the hospital's Rehabilitation Services department.

“The breadth of Dr. Laver’s career and expertise is an ideal fit for the needs of St. Jude.”

Laver to head hospital’s clinical programs

St. Jude has named Joseph Laver, MD, MHA, as its new clinical director and executive vice president.

Laver, a nationally recognized expert in pediatric oncology and bone marrow transplantation, comes to St. Jude from Virginia Commonwealth University Medical Center, where he chaired the department of Pediatrics and held the Jesse Ball duPont Professorship in Pediatrics. Laver will head St. Jude clinical operations, including clinical care delivery and patient care quality, and will oversee the consulting physicians and adjunct clinical faculty programs. Additionally, Laver will supervise the planning and managing of the overall clinical space, systems and staff.

Laver also served as medical director of Children’s Hospital in Richmond, Virginia. He is the recipient of numerous professional honors, including Best Doctors in America recognitions for many years.

“The breadth of Dr. Laver’s career and expertise is an ideal fit for the needs of St. Jude,” said Dr. William E. Evans, St. Jude CEO. “He brings the experience and acumen needed to provide knowledgeable leadership in the treatment and care of children with cancer and other

catastrophic diseases. Dr. Laver is a gifted individual, an accomplished pediatrician and a highly regarded administrator. He will be an outstanding addition to our patient care, our research capabilities and our institution.”

Laver studied medicine in Israel before training in pediatric hematology/oncology and bone marrow transplantation at Memorial Sloan-Kettering Cancer Center in New York. He previously served as director of the division of Hematology-Oncology and Pediatric Bone Marrow Transplantation Service at Medical University of South Carolina, in addition to holding the vice chairman position in the institution’s department of Pediatrics.

“I am honored to join the outstanding physicians and scientists at St. Jude,” Laver said. “The close alignment between exceptional clinical care and world-class research makes St. Jude an institution of national and international importance.”

A fellow of the American Academy of Pediatrics, Laver is a member of the Children’s Oncology Group, the American Society of Clinical Oncology, the American Society of Hematology and the American Society of Pediatric Hematology/Oncology.



Scientists uncover secrets of rare form of ALL

St. Jude researchers have found evidence that a series of genetic mutations work together to initiate most cases of an aggressive and often-fatal form of acute lymphoblastic leukemia (ALL).

The defects include the deletion of a gene, *IKZF1*, whose protein, Ikaros, normally helps guide the development of a blood stem cell into a lymphocyte. The researchers also found that loss of the same gene accompanied the transformation of chronic myelogenous leukemias (CMLs) to a life-threatening acute stage.

“These findings provide new avenues to pursue to gain a better understanding of these disease processes and, ultimately, to develop better therapies,” said James Downing, MD, St. Jude scientific director and Pathology chair.

The study, which he and his colleagues reported in an April 2008 issue of the journal *Nature*, adds further support to a key concept in cancer genetics: Malignancies frequently require mutations in multiple genes in order to develop.

St. Jude researchers sought to identify genetic differences between CML and a form of acute leukemia known as BCR-ABL1-positive ALL.

Both diseases are characterized by the Philadelphia chromosome, which results when parts of two different chromosomes join together, and BCR-ABL1 is expressed.

The scientists’ findings may ultimately offer insight into a better way to treat the disease, Downing said.

NCI designates St. Jude Comprehensive Cancer Center

St. Jude recently received the prestigious recognition of being designated as a National Cancer Institute (NCI) Comprehensive Cancer Center. The designation makes St. Jude the first and only NCI-designated Comprehensive Cancer Center solely focused on pediatric cancer.

“It is always gratifying to see one of the NCI-designated cancer centers achieve comprehensive status: recognition of excellence, not only in state-of-the-art care and cancer research, but also in patient education, community outreach and the dissemination of vital information to professionals and the public,” said John Niederhuber, NCI director, in the May 16, 2008, issue of *The Cancer Letter*. “This enhanced designation is a timely recognition of important contributions and advances made by the dedicated staff of St. Jude.”

In addition to a proven track record and impact in laboratory, clinical and population-based cancer research, NCI-designated Comprehensive Cancer Centers must have significant efforts in professional and lay cancer education and provide notable community service and outreach.

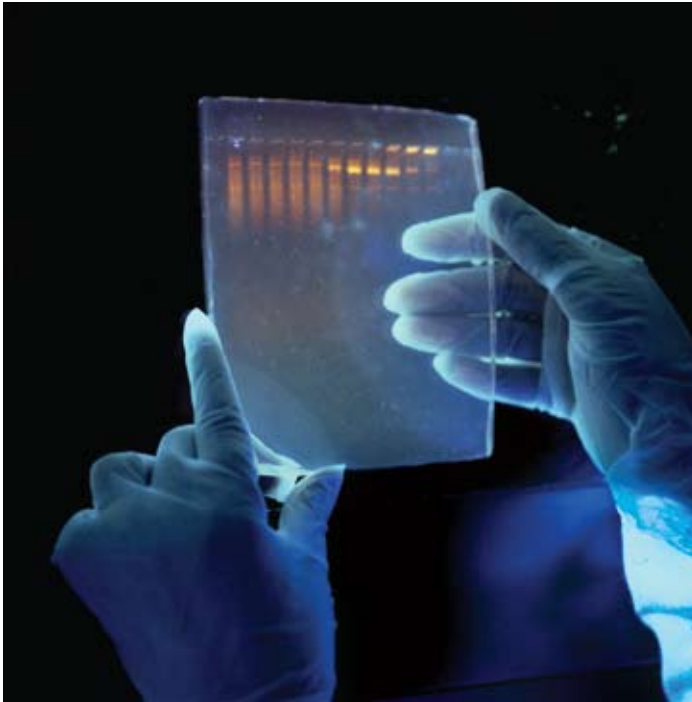
Of the hundreds of institutions in the country that treat cancer patients, only 63 are NCI-designated Cancer Centers and receive funds from the NCI to support their infrastructure. Of those centers, only 41 have the “comprehensive” designation.

The recent addition of the epidemiology and population research program established the final scientific component needed for NCI Comprehensive Cancer Center consideration, said Michael Kastan, MD, PhD, St. Jude Comprehensive Cancer Center director. The non-scientific requirements for comprehensive status are education and community outreach. St. Jude has a long history of significant efforts in both areas.

“Being designated a Comprehensive Cancer Center is a prestigious accomplishment, and to be the only pediatric center is an incomparable distinction for St. Jude,” said Dr. William E. Evans, St. Jude CEO. “St. Jude is well known for having innovative programs led by the best and the brightest faculty and staff; now being awarded ‘comprehensive’ stature places an additional NCI imprimatur on St. Jude and further validates our position among the country’s leading cancer centers. This also speaks volumes about Dr. Kastan’s strong leadership as our Cancer Center director.”

“This enhanced designation is a timely recognition of important contributions and advances made by the dedicated staff of St. Jude.”

Highlights



“We need to find out those who are at risk so that we can spare them from toxicity.”

Molecular science could increase survival rates

By using new scientific techniques, the dramatic increase that has occurred in the cure rate for children with acute lymphoblastic leukemia (ALL) may someday be replicated in older patients, said St. Jude experts in the March 2008 issue of *The Lancet*.

But to raise the survival rate of adolescents and adults with ALL, researchers need a more thorough understanding of the biology of this form of leukemia, including the role genes play in therapies, said Ching-Hon Pui, MD, Oncology chair.

St. Jude research contributed to the high cure rate for children with ALL. “We already have 94 percent surviving at 5 years,” Pui said. But adolescents with ALL do not fare as well as children; and among adults with ALL, only 30 to 40 percent are cured.

Pui and his colleagues said two areas of molecular science hold promise for improving the survival and quality of life of ALL patients: genome-wide analyses of leukemic cells and pharmacogenetic studies of host normal cells.

“By studying messenger RNA (protein-coding gene) and microRNA expression profiles that are differentially expressed between different genetic subtypes of leukemia, it has been possible to identify novel pathways in malignant transformation, mechanisms of drug resistance and new targets for therapy,” Pui said.

Pharmacogenetics is the study of how genes influence a person’s responses to drugs.

“Certain drugs may be good for 99 percent of patients but bad for 1 percent,” Pui said. “We need to find out those who are at risk so that we can spare them from toxicity.”

How T cells avoid autoimmunity

A St. Jude study shows that T cells, the body’s master immune regulators, do not use simple on/off switches to govern the cellular machinery that regulates their development and function. Rather, they possess sophisticated molecular controls that enable them to adjust their function with exquisite precision. Such subtle adjustment enables T cells to modulate their development and function, including avoiding autoimmunity.

In autoimmune disease, rather than attacking invading microbes, the immune system attacks the body’s own organs, tissues or cells. Some 80 autoimmune diseases are known, including type 1 diabetes, multiple sclerosis, rheumatoid arthritis and lupus.

“A relatively small defect in the efficiency of how T cells respond to stimulation could give rise to a subtle failing in what’s called negative selection. This process eliminates harmful cells that could cause autoimmunity,” said Dario Vignali, PhD, St. Jude Immunology. “Over a long period of time, a few overly active T cells that might initiate autoimmunity could escape this process. Our studies suggest that you don’t need a big reduction in the responsiveness of T cells to have a defect in the negative selection process.”

Vignali is the senior author of a report on this work that appeared in the journal *Nature Immunology* in May 2008.

Protein trio prevents cells from dying

St. Jude investigators have discovered that the presence of three proteins protects certain cells from undergoing apoptosis, also known as programmed cell death.

Apoptosis rids the body of damaged, mutated or infected cells. For example, cells that suffer irreparable DNA mutations undergo apoptosis to prevent them from forming a tumor. But molecular malfunctions that trigger apoptosis may actually cause some diseases, including Parkinson's disease.

In a series of experiments, St. Jude researchers found that if any of three molecules—Hax1, HtrA2 or Parl—is missing, certain cells lose the ability to protect themselves from apoptosis. A report on this work appears in the February 2008 edition of the journal *Nature*.

"This is probably the first description of what is happening mechanistically that contributes to the ability of cells to delay apoptosis," said the paper's senior author, James Ihle, PhD, Biochemistry chair. "It provides incredible insights into how three proteins work and how they can control apoptosis."

The molecular interactions occur in nerve cells and blood cells that develop from blood-forming stem cells.

Understanding the biochemical interactions that control the extent of apoptosis could help scientists learn to control this process and could lead to new treatments.

"It provides incredible insights into how three proteins work and how they can control apoptosis."

Your hair cells are dancing

St. Jude investigators have found that an electrically powered amplification mechanism in the cochlea of the ear is critical to the acute hearing of humans and other mammals. The findings will enable better understanding of how some kinds of hearing loss can occur.

For several years, Jian Zuo, PhD, Developmental Neurobiology, has been studying hearing, since children often experience hearing loss as a side effect of cancer treatment.

Sound is detected by the vibration of tiny, hair-like cilia that extend from cochlear hair cells. While the cochlea's "inner hair cells" are only passive detectors, the so-called "outer hair cells" amplify the sound as it transforms into an electrical signal that travels to the brain's auditory center.

Zuo and his colleagues sought to find out how outer hair cells produce such amplification.

Sound signals are amplified by a protein called prestin that is embedded in the outer hair cell membrane. Prestin is powered by voltages within the membrane that are produced by mechanical sound vibrations. When an outer hair cell is stimulated by sound, the cell body elongates and contracts along with the sound, in a "dancing" action.

Zuo found that the "dancing" movement of the outer hair cells is critical to cochlear amplification. He is senior author of a report on this work that appeared in the journal *Neuron* in May 2008.

By finding prestin's role in hearing, Zuo and his colleagues may help scientists better understand the mechanisms of hearing loss.



DEVAN LORE'S first bout with a common wintertime virus gave the toddler a weeklong runny nose and cough. While the illness was an added burden for the child, who was undergoing treatment for acute lymphoblastic leukemia, the virus soon cleared.

At age 6, Devan again caught the respiratory syncytial (pronounced sin-SISH-ul) virus, or RSV. This time the results were terrifying.

Within days, the virus moved deep into Devan's lungs, causing pneumonia, necessitating a move to the Intensive Care Unit at St. Jude Children's Research Hospital. The boy spent 12 hours a day in an oxygen tent, where he inhaled an antiviral drug.

"From 8 p.m. to 8 a.m. for five days," recalls Gail Lore, Devan's mother. "I wanted to reach out, hold him, cuddle him—and couldn't."

RSV

BY SUMMER FREEMAN

MILD OR MENACING?

Devan Lore's first RSV infection made him cough. The second one sent him to the ICU. What accounted for the drastic difference?

Following this regimen, Devan continued around-the-clock breathing treatments.

"It was two weeks before he was well enough to be taken off oxygen, and he was still so weak afterwards," Gail says. "It was easily our roughest patch at St. Jude."

Although usually associated with cold-like symptoms, RSV is the most common cause of bronchiolitis and pneumonia among children under 1 year of age. Repeated RSV infections can occur throughout life in otherwise healthy people. The virus can present severe problems in those who are extremely young, elderly or in people who have compromised cardiac, pulmonary or immune systems. For children with cancer, especially those who have had recent bone marrow transplants, the virus can be deadly.

More than a cold

Devan's two brushes with the virus typified how RSV infection can develop in completely different ways. In both instances, Devan's immune system was weakened from chemotherapy, but his first round with the virus produced cold-like symptoms, while the second threatened his life.

To better understand the difference in response, investigators reviewed the cases of St. Jude patients who had experienced RSV infections. The researchers sought a common thread that would help them identify which children were at greatest risk.

"Before our study, most information about RSV infection in patients with cancer came from adult patients—information that was not necessarily applicable to the children we treat," says Aditya Gaur, MD, of St. Jude Infectious Diseases. "We needed data from children and adolescents with cancer to be able to put together RSV management guidelines. We wanted to know if there were characteristics that would tell us up front which patients might have a particularly severe course of RSV infection."



His life-threatening bout with RSV behind him, Devan Lore plays with bubbles on the Target House playground.



Aditya Gaur, MD, chats with Devan Lore in an isolation room at St. Jude. Gaur and his colleagues have discovered why some children develop serious illness from RSV infections.

Lymphocytes are key

The research team studied the St. Jude records of 58 children with cancer who had tested positive for RSV between 1998 and 2005.

The investigators found that children under 2 years old and those with low levels of lymphocytes—infection-fighting white blood cells—are at high risk for more severe RSV-related disease.

“The new information is important because it helps identify children with cancer who are most at risk for severe disease by using easily available clinical information,”

Gaur says. “The findings don’t imply that all patients with one or both risk factors will develop a serious RSV infection, but they tell us who needs to be considered for antiviral therapy, which is costly and often inconvenient to receive from a child’s perspective.”

Investigators also found that they could predict risk more accurately by evaluating a child’s lymphocyte count instead of the neutrophil count. Neutrophils are immune system cells that engulf and digest germs.

“With cancer patients, clinicians are used to identifying those at risk

“The new information is important because it helps identify children who are most at risk for severe disease.”

for infections based on patients having abnormally low levels of neutrophils,” Gaur says. “But our study shows that for RSV, low levels of lymphocytes and not neutrophils identify those at risk for severe disease.” Total neutrophil count and total lymphocyte count are both available as part of routine blood tests for patients with cancer.

Asking the right questions

The project began three years ago, when Gaur and former St. Jude fellow C. M. El Saleeby, MD, treated two children who had life-threatening RSV infections.

“When you have someone who is very sick, you try your best to find the answer that will help and to ask yourself whether the severity of sickness could have been predicted,” Gaur recalls. “There was information about adults, but the information wasn’t there for the children we were trying to treat.”

El Saleeby and Gaur started to ask questions that were not being posed about pediatric patients; in so doing, they found new answers that promise to improve care for these children.

“While the RSV management guideline that has been developed based on our study’s findings is a good first step toward optimizing treatment of this infection, further research is necessary,” Gaur says. “Ultimately, good, consistent hand hygiene at home and in the hospital is the most cost-effective way of preventing not only RSV but many other viral infections.”

All of these findings by Gaur and his colleagues are sure to make kids—as well as moms like Gail Lore—breathe much more easily. ●

Fighting Fatigue

Researchers at St. Jude take aim at one of the most serious side effects of cancer therapy—fatigue.

BY ELIZABETH JANE WALKER

Nausea. Hair loss. Pain. These are just a few of the problems that plague children undergoing cancer treatment. But the issue that kids overwhelmingly cite as the most debilitating of all may surprise you. It's fatigue—a bone-deep lethargy, a ponderous weariness that pins children to the bed and interferes with their ability to laugh, learn and even heal. It's more than just a minor inconvenience; it's a serious problem. And researchers at St. Jude Children's Research Hospital are determined to do something about it.

When Courtney Barnett began treatment for acute lymphoblastic leukemia (ALL), the teen learned that she must take a steroid called dexamethasone for much of her two-and-a-half years of therapy. Traditionally, patients and parents have warned one another about the drug's effects.

"Dex time is coming, and my child is never my child during dex," parents would say.

Courtney soon learned the truth of that adage. "When I was on dex, I was mean," she admits. "That's the nice way of putting it. I couldn't sleep, and I would toss and turn all night. As a result, I felt really tired, and I was always grumpy."

Watching her daughter's distress evoked feelings of utter helplessness in Laura Barnett.

"I could do things to help the nausea; I could take care of some of her other problems," Laura says. "But when your child just sits there and looks at you and cries because she's so tired, there's nothing you can do but hold her."



In the hospital's fatigue studies, patients wear actigraphs that measure activity levels.

For kids undergoing cancer therapy, sleep is one of the best medicines, critical for protein synthesis and cell regeneration.

Rude awakening

For kids undergoing cancer therapy, sleep is one of the best medicines, critical for protein synthesis and cell regeneration. “Children are especially vulnerable because they are growing,” says Jami Gattuso, RN, who has been involved in St. Jude sleep research for 10 years. “They need energy for development of their brains and bones and muscles. But on top of that, sleep is important for your immune system, which can help in fighting cancer.”

Children who are battling fatigue often miss out on school, extracurricular events and other enriching activities. They have problems learning, and they may become alienated from friends who lead more active lifestyles.

When researchers from St. Jude approached the Barnett family about participating in a sleep and fatigue study, they enthusiastically agreed. After all, Courtney was not the only one affected by the problem. When kids have

insomnia, parents keep vigil.

“As a result, everybody in our family was pretty irritable,” Laura says. “But we knew that taking dex is one of those necessary evils. She had to take it for her treatment and make the best of it.” The Barnetts hoped that the research project would help other children avoid the problems Courtney was experiencing.

Studying slumber

As part of the study, 100 children and teens agreed to wear actigraphs, which resemble sleek, black wristwatches. The device contains a computer chip that records activity levels. Participants wore the monitors for five days before and five days during administration of dexamethasone.

Some children needed reassurance before they would agree to wear the actigraphs, recalls Pamela Hinds, RN, PhD, St. Jude Nursing Research director. “One little guy



Dexamethasone causes patients like 7-year-old Jashaylin Jackson to suffer debilitating weariness during treatment.

Pamela Hinds (at right), RN, PhD, and Jami Gattuso, RN, study how cancer treatment affects the fatigue level of children. “Nocturnal awakenings for most kids who are older than age 2 are generally zero to five per night. Our kids had, on average, 13 to 16 per night—and sometimes up to 40,” says Hinds, who is leading a new project to help alleviate the problem.



asked me, ‘If I wear this, can you tell if I’m lying?’ I said, ‘No, I cannot tell when you’re lying.’ He said, ‘Well, then, I’ll do it.’” Other children pretended that the device imbued them with super powers.

Patients and parents kept sleep diaries and completed surveys that recorded activities, moods and fatigue levels. Researchers also conducted tests to determine how the children metabolized the drug.

The investigators ultimately discovered what parents already suspected: Dexamethasone routinely disrupts the sleep of patients and is not just a problem that affects specific children or age groups.

“Nocturnal awakenings for most kids who are older than age 2 are generally zero to five per night,” Hinds says. “Our kids had, on average, 13 to 16 per night—and sometimes up to 40.”

Dream it, do it

Now that they understand the extent of the problem, St. Jude researchers are focused on finding a solution. In the hospital’s newest ALL treatment study, the dexamethasone dosages in one phase of treatment are lower than the ones Courtney received. The study team is also studying the pharmacogenetics related to sleep and dexamethasone. Using blood samples obtained during the previous study, scientists are exploring the role of a protein called albumin. Investigators suspect that when children have low levels of albumin, they may have more exposure to dexamethasone and thus more disturbed sleep.

The study team is also examining the blood samples for two cytokines, messenger proteins that allow cells to communicate with one another. The scientists theorize that these cytokines become unbalanced and cause sleep

disturbances. “There are treatments that can be used with cytokines to get them in balance,” Hinds explains. “So we’re hoping that through these mechanisms we’re going to be able to help our patients avoid this negative experience.”

A two-year study that begins this summer is aimed at reducing fatigue and disrupted sleep in children with the brain tumor medulloblastoma. The study incorporates several components: education about sleep and fatigue, relaxation techniques, window coverings to eliminate excessive light, and “white noise” to muffle sounds and promote a relaxing environment.

Researchers have found that staff members sometimes enter a child’s hospital room as many as 40 times during the night. As part of the new study, nurses will coordinate care, so that they do not have to enter the room as frequently. “For instance, if a child needs vital signs taken and hydration—tasks usually done by two different team members—the individuals will enter the room together and do that care at the same time,” Hinds says.

“Making the hospital environment more conducive to sleep will be great,” Gattuso predicts. “We’re excited to be doing this intervention.”

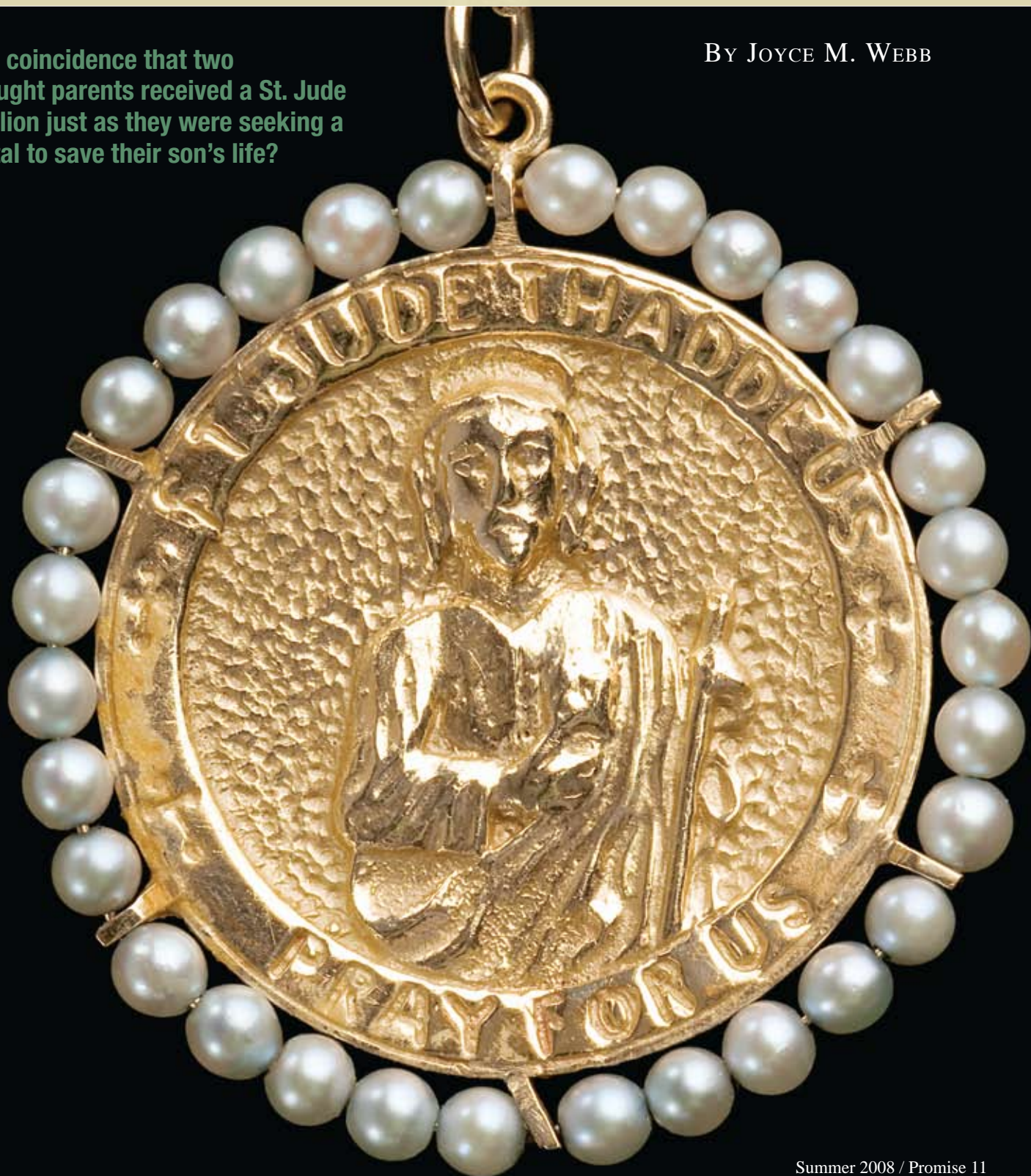
St. Jude families say they appreciate the researchers’ attempts to reduce fatigue. Courtney’s mom says it’s just one more area in which St. Jude excels.

“If every hospital in the country could be run half as efficiently as St. Jude, and half as caring, there wouldn’t be any problem with our medical system in the U.S.,” Laura says. “When Courtney was diagnosed, her pediatrician said that St. Jude was the best place that she could go. And he was right.” ●

Legacy of Hope

Was it coincidence that two distraught parents received a St. Jude medallion just as they were seeking a hospital to save their son's life?

BY JOYCE M. WEBB



Sometimes a “mere coincidence” can have life-changing consequences. Just ask Patrick and Kristin Trysla. An unexpected gift helped this couple make a decision that saved their baby’s life.

Their son, Clayton “Clay” Trysla, was born with a muscular disorder that caused his head to tilt slightly to one side and eventually flatten in the back. The Tryslas requested a CT scan, which showed no abnormalities.

Kristin began to notice signs of extreme fatigue in her normally energetic son. Then she noticed that Clay could no longer use his left arm to grab his feet while having his diaper changed. A pediatrician suggested that his elbow was out of socket, but Kristin’s maternal instincts told her otherwise.

“I was very uncomfortable with that diagnosis,” she recalls.

Less than 24 hours later, Clay started throwing up. The Tryslas took him to the emergency room and asked for another scan. That’s when a team of doctors delivered the disturbing news.

“There’s no easy way to say this; he’s got a large mass in his brain, and it’s going to have to come out as soon as possible,” the doctors said.

Million-dollar question

The mass was an aggressive brain tumor known as primitive neuroectodermal tumor or PNET, located in the

part of Clay’s brain that controls movement, orientation and recognition. This kind of cancer is extremely rare in children younger than 3 years old.

At 7 months old, Clay underwent an operation to remove the tumor.

“I remember these words exactly. They said, ‘We got everything we could see.’ As a parent, you want to hear, ‘We got it all,’” Kristin recalls.

Because their local hospital had treated few PNET cases like Clay’s, the Tryslas explored other institutions that specialized in treating infants with rare brain tumors. Clay’s dad, Patrick, tapped into his own siblings’ experience in health care to identify and consult with leading neuro-oncologists and medical research professionals on the best treatment centers for Clay. The couple pared the list down to the top three, contacted the physicians by phone and posed the “million-dollar” question.

“We asked them, ‘If this were your child, where would you take him?’ The overwhelming response was St. Jude Children’s Research Hospital,” Kristin says.

Good as gold

Every moment was critical to Clay’s survival. The Tryslas knew they had to make a decision prudently, but quickly. That night, they prayed for a sign that St. Jude was the right place for Clay’s treatment.

The next morning, Kristin’s longtime friend, Luann, showed up unannounced on their doorstep. She said she had been compelled to make the three-hour drive from Des Moines, Iowa, to Kansas City, Missouri, to give the Tryslas a precious gift—a gold medallion encircled with pearls. On the front was a profile of St. Jude Thaddeus, the patron saint of hopeless causes. On the back was the inscription “To Janet, Love Rose Marie.”

Rose Marie, the wife of St. Jude founder Danny Thomas, had originally presented the medallion to their longtime executive secretary, Janet Roth, who died in 2006. Eventually, the object had been given to Luann.

For the Tryslas, the medallion served as confirmation that St. Jude was the place for Clay.

Focus for a cure

St. Jude has the largest research-based pediatric brain tumor program in the country. Daily collaboration among researchers and clinicians ensures that children benefit from the latest discoveries in brain tumor research. The hospital’s most recent research protocol in treating rare PNET cases combines chemotherapy and highly focused radiation treatment to spare healthy brain tissue in infants like Clay.



St. Jude has the largest research-based pediatric brain tumor program in the country. Daily collaboration among researchers and clinicians ensures that children benefit from the latest discoveries in brain tumor research.

When the Trylas arrived at St. Jude in October 2007, they met with a team of physicians that included radiation oncologists and neurosurgeons. They learned that Clay's tumor had already returned. Now lemon sized, it was even larger than before.

Standard treatment after surgery for children older than age 3 is radiation to the whole brain and spinal cord. For children under age 3, this treatment is not practical because of adverse effects to the developing brain and central nervous system, says Thomas Merchant, DO, PhD, Radiation Oncology division chief.

"Twenty years ago—and even today at some centers around the world—physicians would look at a case like Clay's and would be reluctant to give radiation to one of the most sensitive areas of the brain," Merchant says.

Instead, infants at other institutions often receive chemotherapy only to delay or avoid radiation, resulting in a 50 percent recurrence rate within six months of diagnosis.

"We now know that by treating some children early, we can reduce the chance of tumor recurrence, and they can get the benefit of focal (highly focused) radiation with minimal side effects," Merchant explains.

After undergoing a second operation to completely remove the tumor, Clay received four rounds of intensive chemotherapy and six weeks of focal radiation. By the end of treatment, Clay's energy level was back to normal.

Clay will continue to receive maintenance oral chemotherapy for six months in Kansas City and return to



"Clay's family has done an amazing job, and it's good to see him doing so well," says Andrea Simmons, RN, his nurse practitioner at St. Jude.

St. Jude for regular follow-up visits to closely monitor his progress.

Making miracles happen

The reception that welcomed the Tryslas home from St. Jude couldn't have been better. Trees were festooned with yellow ribbons. Friends and family gathered to show their support. It was the perfect medicine for Clay, as well as for his parents and his sisters, Tatum and Cimone.

"Through this difficult experience, we have been extremely blessed with how well Clay is doing and the outpouring of love and support from our family and friends," Kristin says. "When you have a child with cancer, it's a catastrophic event for the whole family. It is a lifetime of scans and worries, and we're learning to balance the real world with the world of cancer."

Kristin believes it was no coincidence that her family received the medallion and made their way to St. Jude. Thanks to the Thomas family legacy, Clay obtained access to the best possible treatment.

"The doctors and nurses at St. Jude took such good care of our son and wanted what was best for him," Kristin says. "I truly believe in my heart that anybody who supports St. Jude is helping make miracles happen." ●

Making Tumor Cells Disappear

Poof! They're gone. In the lab, scientists find a way to transform brain tumor cells into normal brain cells.

BY CARRIE L. STREHLAU

Stopping brain tumor cells from growing sounds like a dream. Turning those cells into normal brain cells sounds like a fantasy. But scientists at St. Jude Children's Research Hospital are in the process of turning fantasy into reality.

A team of researchers led by Martine Roussel, PhD, of Genetics and Tumor Cell Biology, discovered that three proteins called BMP2, BMP4 and BMP7 can stop the growth of brain tumor cells and turn them into normal brain cells. The discovery suggests a safer way to treat medulloblastoma, a rare but often fatal childhood brain tumor.

Disappearing act

Medulloblastoma occurs in the cerebellum, which is located in the lower, rear part of the brain. The cancer strikes about 350 children in the United States annually. The researchers' finding is important because, although treated patients have an overall five-year survival rate of 70 percent, conventional therapies combining surgery, irradiation and chemotherapy frequently lead to permanent neurocognitive impairment.

"We think we have identified a

pathway that can be used to prevent tumor formation and a potential target for therapy," Roussel says. "This means that this pathway could be targeted for treating medulloblastoma. This is exciting because those BMP proteins induce differentiation."

Differentiation is the process by which cells or tissues change to a more specialized form or function.

"The cells will differentiate and then disappear," Roussel explains. "A lot of the chemotherapeutic drugs attack the cell by creating DNA damage. Here, you force them to become neurons that cannot be tumor cells anymore. The cool thing is that it can happen only in tumor cells because the neurons that no longer divide cannot be attacked by BMPs. So, this potential drug would specifically attack tumor cells and not the surrounding normal neurons."

Protecting bones with BMP

The laboratory finding that BMP proteins can reverse brain cancer comes several years after other St. Jude researchers showed that an experimental drug called HhAntag is effective at eliminating medulloblastoma cells without the use of chemotherapy or radiation. But then researchers discovered that

HhAntag treatment interferes with bone growth.

Would it be possible to reduce the level of HhAntag and still have a good treatment? Roussel and her team found that using a lower dose of HhAntag in combination with BMP may provide the same therapeutic effect as giving high doses of HhAntag.

Therefore, clinicians might one day be able to use reduced levels of both compounds, preventing the harmful effects on bone growth while reducing the amount of BMP needed for therapy.

"The only drawback for the BMPs is that they are important for bone development and, since we would treat kids with this disease who are in their growth phase, we would have to conduct further research to see how this would affect their growth," Roussel says.

When pathways converge

Several research teams are also studying the intricate signaling mechanisms that govern the rapid increase of cells called granule neuron progenitors (GNPs). These cells develop into neurons in the cerebellum during the first year of life. But disruption of



Martine Roussel, PhD, discovered that three proteins can stop the growth of brain tumor cells and turn them into normal brain cells. The discovery suggests a safer way to treat medulloblastoma.

“The cells will differentiate and then disappear...You force them to become neurons that cannot be tumor cells anymore.”

this differentiation can trigger medulloblastoma.

“We were interested in whether there were signals that inhibited tumor formation,” Roussel says. “And if there were, which ones were they? Could they be used to identify new therapeutic targets?”

Previous research had shown that spurring GNP cells to differentiate into neurons requires that the BMPs bind to receptors on the cell surface. This, in turn, blocks the activity of a signaling pathway triggered by another molecule called Sonic hedgehog.

“We found that the effect of BMPs on normal GNP cells is almost exactly mimicked in GNP-like tumor cells,” Roussel says. “We knew from the published literature that the BMP were antagonizing Sonic hedgehog. But, no one had shown this in tumor cells.”

The researchers showed that the antagonism was not on the Sonic hedgehog pathway itself, but occurred downstream from that pathway. Both of those pathways seem to work in concert, converging into a protein

called Math1, a transcription factor that helps control gene expression.

The Math test

In cell culture experiments, Roussel’s group found that BMPs rapidly cause the degradation of Math1, which occurs in dividing GNPs, but not in non-proliferating neurons. After BMP treatment, researchers could detect no Math1, and cell growth soon stopped.

“People had never before linked the BMP signaling pathway to the Math1 signaling protein,” Roussel says. “We knew there was a correlation between the expression of this transcription factor and proliferation, but nobody knew how this protein was regulated. The direct link between BMP and Math1 allowed us to speculate that if we use BMP as a drug, it could be used to inhibit tumor formation. We found this to be true in the lab.”

The exact way Math1 works remains unknown. However, research has shown that the protein is vital to the formation of a normal cerebellum.

All of these recent, novel

discoveries create leads for many more types of experiments.

“The most speculative but exciting project is that we are screening for new, small-molecule BMP agonists with the St. Jude Chemical Biology and Therapeutics department,” Roussel says. An agonist is a drug that triggers an action from a cell.

“We formed a collaboration with Dr. Taosheng Chen from Chemical Biology and Therapeutics in order to screen chemical libraries,” Roussel says. “If we can find agonists, we will test them in a pre-clinical setting. If any of them are successful, companies might want to go further with it.”

More BMP protein discoveries could one day lead to treatments for tumors other than medulloblastoma.

“There was a paper published in the journal *Nature* in 2007 demonstrating that cancer stem cells from glioblastoma could be inhibited in their growth with the same BMPs,” Roussel says. “So, there is a potential for usage not only for medulloblastoma but for other brain tumors.” ●

A Curious Mind



Alex Vannier's curiosity for knowledge is not slowed by a brain tumor.

PHOTOS BY SETH DIXON



Whether playing with her hermit crabs or floating down the red carpet at the St. Jude Prom, this multifaceted teen refuses to be defined by a brain tumor.



BY MIKE O'KELLY

Thirteen-year-old Alex Vannier has a list of activities and interests that might tire other teens, but she finds time for them all: playing with her hermit crabs, reading fantasy books, collecting rocks and acting. She's adept at wrapping her mind around a variety of concepts, facts and ideas. But late last year when she

learned she had medulloblastoma—the most common malignant brain tumor in children—she had trouble making the connection between the word “cancer” and reality.

“It’s like nothing connects in your mind,” Alex says. “I had a hard time saying ‘cancer’ for a while. It was just mind boggling.”



Radiation oncologist Atmaram Pai Panandiker, MD, has encouraged Alex Vannier's interest in medicine. The two have a rapport that helps Alex cope with the rigors of treatment. "I've never seen a teenager who enjoys reading medical textbooks as much as she does," Pai Panandiker says.

The realization was just as difficult for Alex's mother, Joan, who says two weeks passed before she fully understood what Alex faced.

"Alex and I hadn't talked much about this before now, but I had the exact same reaction," Joan says. "That word 'cancer' is so hard."

Seven months later, Alex is undergoing treatment at St. Jude Children's Research Hospital.

Alex, who lost nearly 20 pounds. She continued to experience vomiting and head tilt—a condition in which patients lean their heads to one side.

Then a CT scan revealed a dark mass on Alex's brain. In mid-December, an MRI revealed that the mass was average-risk, stage IV medulloblastoma, meaning the tumor had not spread to her spine.

Reading the signs

Recognized as a speed reader by age 6, Alex voraciously leafs through the pages of her favorite fantasy novels with ease.

"I can go through quite a few books in a day, which frustrates my mother because we'll get 30 books at the library, and she'll have to go back in a week," says Alex, who is currently writing a set of books about the adventures of a young girl named Sapphire. For three years, Alex was a winner in her state's PTA Reflections program, a recognition program for the arts.

Alex and her brother, Cordell Philip, share the acting bug. Both siblings have performed in regional theater productions and have appeared in TV commercials and programs. Before she became sick, Alex also spent her time drawing dragons, rollerblading, acting, riding horses, playing the piano, swimming and even ice skating.

Cancer was far from her mind two years ago as she sat in her living room, filming a commercial that is still televised on the Disney Channel. The 60-second spot focused on Alex's rock collection and provided an informative look into how and why she began her hobby.

Alex was on a science field trip in 2007 when the first sign of illness appeared. After experiencing dizziness from a simulator ride, she began to exhibit vertigo-like symptoms and nausea. Trips to the doctors became a daily occurrence for



This publicity photo is part of Alex Vannier's acting portfolio. In addition to performing in regional theater productions, she has also appeared in a 60-second spot for the Disney Channel.

Alex and Joan are amazed at the breadth of services offered to St. Jude families. "It's incredibly comprehensive, and it's all right here," Joan says.

Seeking help

Alex's love of reading, which included perusing detailed medical books, gave her a preliminary understanding of the treatment that lay ahead. "Alex knew exactly what she was going to have to go through when this happened," Joan says. "She knew too much and was really scared."

Five days after the diagnosis, Alex underwent surgery to remove the tumor. Ninety-nine percent of the tumor was removed, but she experienced partial paralysis.

"She had right-side weakness. Alex still has deficits to work on, but she can walk again," Joan says. "She couldn't read.

Nothing could hold her attention. It was awful."

Alex began rehabilitation in December 2007, while Joan sought information on brain tumor programs, sending e-mails to institutions in the National Cancer Institute's Pediatric Brain Tumor Consortium. St. Jude Radiological Sciences Chair Larry Kun, MD, who also heads the consortium, was the first to respond.

Two days later, the Vannier family drove to Memphis.

Treatment and transplants

After arriving at St. Jude and undergoing a complete evaluation, Alex received six weeks of radiation. She was then allowed a rest period and later returned to St. Jude for the next part of therapy, which includes four monthly cycles of high-dose chemotherapy followed by transplants in which Alex receives her own blood stem cells.

Before beginning chemotherapy treatment, Alex underwent a bone marrow harvest so that an adequate amount of bone marrow could be obtained to give back to her after the first chemotherapy course. St. Jude clinicians then collected and stored Alex's peripheral blood to ensure she would have blood cells available for the other three courses of therapy.

Chemotherapy treatments killed the remaining cancer cells in her brain. To help Alex's blood counts rebound quickly after chemotherapy, clinicians infused the hematopoietic (blood) stem cells they had harvested.

These stem cells will find their way through the blood stream to the center of the long bones, where healthy, new bone marrow will become established.

"With this intense therapy, she will complete therapy sooner than if she had received chemotherapy alone, and her quality of life may be improved sooner," explains Kimberly Kasow, DO, of St. Jude Oncology.

The treatment also focuses on extensive biological studies of tumor tissue to help investigators better understand what causes normal brain cells to become cancerous.

"We anticipate that this information will help us find new therapies to treat high-risk tumors and allow us to safely reduce therapy in low-risk patients," says Amar Gajjar, MD, principal investigator of the protocol and co-leader of the St. Jude Neurobiology and Brain Tumor Program.

An optimistic approach

It's a rainy morning as Alex and Joan sit next to an aquarium inhabited by Alex's three hermit crabs—Tomato, Fossil and Seagull. As she watches her pets, Alex explains that her fears have subsided due to the care and compassion of the St. Jude staff.

"There is a culture of one-mindedness and sincerity at St. Jude that I have not seen in any other organization," Joan says. "This is a bonus, because all we expected was that we would receive the best treatment available."

Joan and Alex are also amazed at the breadth of services offered to St. Jude families—ranging from a school program and research to outpatient housing and a dental clinic. "It's incredibly comprehensive, and it's all right here," Joan says.

At St. Jude, Alex has become especially close to Radiation oncologist Atmaram Pai Panandiker, MD. The two have a rapport that helps Alex cope with the rigors of treatment. "I've never seen a teenager who enjoys reading medical textbooks as much as she does," he says.

Transitioning to a new life away from her current seventh-grade world has been challenging, but Alex remains optimistic. "Going through this is difficult, but St. Jude is a great place. I'm glad that I'm here," she says. ●

Photo Finish

BY JANICE HILL

Remembering his own son,
Jeff Carlin reaches out to
St. Jude kids.

When Jeff Carlin looks at the photos of patients at St. Jude Children's Research Hospital, he knows firsthand about the challenges they experience.

"I see those faces, and I think of their parents and siblings and what they are going through," says the 70-year-old retiree from Georgia.

Carlin empathizes with the parents of St. Jude patients because he was once in their shoes. In 1969, doctors discovered that his 1-year-old son, Jefferson Daniel Carlin, had the eye cancer retinoblastoma. Carlin and his wife brought their toddler to St. Jude for treatment. Although doctors did all they could to stop the malignant eye tumors, Jefferson Daniel died July 5, 1971.

"It was a terrible time for us because of what he had to endure at such a young age. You have such terrible anxiety, not only for your own child, but for the other patients as well," Carlin recalls.

"What helps level that out are the people who work there—from those who keep the place clean to the doctors and nurses," he continues. "St. Jude is a place of peace and tranquility because of their care and compassion. If there is any place on earth that is like heaven, it is St. Jude. It is simply a wonderful, wonderful place."

Carlin also remembers the kindness of hospital founder Danny Thomas. "When I told him about my



Although Jefferson Daniel Carlin's life was tragically cut short by cancer in 1971, his father keeps his memory alive by supporting St. Jude.

*"Helping families
by giving to St. Jude
makes us forget
about ourselves and
think about others.
That's what we're
here to do."*

son, you could see the grief in his face," Carlin says.

Today, Carlin is retired from RCA Motion Picture Lab, where he developed film for both the Cape Canaveral Air Force Station and NASA at the Kennedy Space Center. He and his wife, Janet, have chosen to leave St. Jude in their will. They have also funded a tribute brick in Jefferson Daniel's memory in the hospital's south meditation garden.

Although Carlin lost his child, he continues to help raise other children as a foster parent. He says he felt

led by God to dedicate his life to children after participating in a religious retreat in 1998. Since that time, he and his wife have opened their home to 13 foster children, and he mentors children at a local elementary school. An avid motorcyclist, he has also participated in Poker Runs and other cycling fundraising events benefiting St. Jude.

Making the decision to include St. Jude in his will was a natural outgrowth of his faith and his own family experiences.

"I know what the hospital stands for," he says. "A family can come in the front door of St. Jude and not have 5 cents in their pocket, but they will receive the best care. Helping such families by giving to St. Jude makes us forget about ourselves and think about others. That's what we're here to do."

To learn more about making a gift to St. Jude or other planned giving opportunities, call ALSAC Gift Planning at (800) 395-1087 or e-mail giftplanning@stjude.org. ●

Ahead *of the* Game

BY BETSY TAYLOR

A life-threatening disease helps one Pro-Am player find his passion.

A

As Cindy and Ron Theobald sat in the comfort of the Stanford hospitality tent, pretending to ignore the leaderboard, they cautioned themselves against hope. After all, hope was best reserved for the big stuff, like surviving cancer. And Aaron, their 23-year-old son, had already done that.

It was April 26, 2008, and the inaugural Stanford International Pro-Am golf tournament in Aventura, Florida, was winding down. A relaxed Aaron sat nearby, joking with his tournament partner Beth Bader, a seasoned professional of the LPGA Tour. The Bader-Theobald team had shot a 64 and finished 25-under par. No matter what, they'd done a good job.

Then the leaderboard finally

changed, revealing that the most competitive team had fallen by the wayside.

"It began to seem like he might win this thing," Ron says.

So the parents allowed themselves to feel that surge of emotion that had sustained them during the long years of Aaron's treatment: Hope.

The Bader-Theobald team beat their best competition by three shots and won the tournament.

Aaron broke into a grin and enjoyed his moment. After all, he'd come so far.

Inauspicious beginnings

When Aaron was 8 years old, he spied a set of golf clubs at a garage sale. He ran all the way home and begged his father for \$5 to buy them.

"He came home with the

most beat-up set of clubs," Ron remembers. "Then he proceeded to dig up our front yard by smacking the balls all around."

Once Aaron started playing, he never stopped. He was an intuitive player who got better without lessons. His abilities seemed a gift.

So in summer 2001, when 16-year-old Aaron lost his enthusiasm for golf, his parents knew something was wrong.

"Mentally I felt fine, but I was tired all the time," Aaron says. "Normally you couldn't keep me from golf on a sunny day, but all I wanted to do was sit on the couch."

That July, Aaron began suffering from nausea and abdominal cramps. His symptoms indicated mononucleosis, but tests for the virus came back negative. The family doctor referred Aaron to a local hematologist, where Aaron underwent a bone marrow biopsy. Even before the tests came back, the family knew something was wrong.

"Normally, you want your bone marrow to be watery and juicy," Ron says. "But he said the bone marrow was so dry and packed that it was hard to get it into the syringe."

The biopsy confirmed a diagnosis of acute lymphoblastic leukemia (ALL), the most common type of cancer in children.

"I was very upset about it," Aaron says. "This was the summer after I had just turned 16. I wanted to go out with friends. This was the first summer that I had my driver's license, but instead I was stuck doing nothing. But I knew I had to tackle it head on. I didn't really have a choice."

If Aaron was annoyed by the inconvenience of cancer, his father was petrified.

"I had lost my younger sister to leukemia in 1969 when I was 10, so it scared me," Ron says. "I watched what the disease did to her and to my parents. When she passed away, it was terrible."

Ron asked the doctor if Aaron would die from the disease.

“The doctor looked at me very surprised and said, ‘Oh, no. I don’t think so. It’s not the killer it used to be.’”

Thanks in large measure to research and treatment protocols developed at St. Jude Children’s Research Hospital, great strides have been made in leukemia research. In the 1960s, the survival rate for ALL was in the single digits. Today, the survival rate is 94 percent.

The hematologist advised the family to take Aaron to St. Jude.

“The doctor told us, ‘Because he’s young enough and fits the St. Jude protocol, that’s absolutely where you want to be,’” Ron says.

A tough opponent

The family packed their belongings and drove to the hospital for a two-month stay.

“I knew we were in the right place,” Ron says. “From the moment we walked in the door, we felt a sense of well being.”

Aaron endured three years of a chemotherapy protocol tailored to his leukemia subtype.

“With St. Jude testing, we discovered that Aaron’s leukemia cells had a genetic marker, TEL-AML1, which put him into the low-risk leukemia category,” explains St. Jude oncologist Sima Jeha, MD. “So because of that, he received less intensive chemotherapy than he would have had otherwise.”

Even with the

Aaron Theobald strides across the green during the Stanford International Pro-Am golf tournament. The 23-year-old survivor of acute lymphoblastic leukemia credits St. Jude with saving his life.



calibrated dosages, Aaron's treatment took its toll. He suffered nausea and mouth sores, the typical side effects of chemotherapy, and lost a drastic amount of weight.

He also went through periods of lowered immunity. When Aaron's counts were low, he couldn't attend school. But he could play golf.

"Golf was always relaxing for me," Aaron says. "I hear about how golf stresses some people out, but it was never that way for me. What I like about golf is that it gives me time to myself. It's one of the few places where I feel in control."

But then the pain began.

An MRI of Aaron's hips, knees and ankles revealed avascular necrosis (AVN), a bone condition that can arise from the administration of steroids, a crucial component of leukemia therapy.

"We've found that certain patients, especially adolescents like Aaron, are more predisposed for this side effect," Jeha says. "In these patients, the steroids reduce the blood supply to the bones, resulting in bone tissue death. AVN most commonly affects the ends of long bones such as the femur—the bone that extends from the knee joint to the hip joint. In severe cases, involvement of the head of the femur often leads to collapse of the joint, and hip replacement is needed."

His St. Jude treatment team acted quickly.

"As soon as AVN is detected, a multidisciplinary team of oncologists, orthopedists, physical therapists, nurses and pharmacists work together

to help prevent further bone and joint damage and reduce the pain" Jeha says. "We protect the joint by limiting movement, and we adjust the steroids based on AVN severity and treatment phase. We ask ourselves: 'How much can we reduce steroids without compromising the benefits of treatment?' In Aaron's case, we decided to stop the steroids and substitute that with methotrexate."

Ultimately, however, hip surgery was needed. In September 2004, Aaron had his right hip replaced. A second hip surgery was performed two months later.

Something to live for

Aaron approached these setbacks with a fighter's spirit. He built his muscles back with physical therapy and relearned his golf swing not once, but twice.

"He wasn't one of these kids who bucked the treatment and therapy just because it was hard," says Nurse Practitioner Martha May. "He persevered and made the best of the situation."

Now 23, Aaron has a near-genius IQ. He enjoys writing and political theory and would probably be well matched in any number of careers, but his true passion is golf. Aaron, who carries an 8 handicap, knows a golf career requires dedication, talent and more than a little bit of luck, but he's determined to try.

"Golf is important in my life," Aaron says. "I still feel like I have a chance to make a golf career. If I'm going to do it, I need to do it within the next few years. I have this short

window of time when I'm in my best physical shape to make the move."

Aaron's golf skill brought him to the attention of the Stanford Financial Group, which sponsors the Eagles for St. Jude fundraiser. Stanford invited him to play in the Pro-Am, and his performance there set him squarely in the right direction toward reaching his goal.

Aaron says that his LPGA pro partner Beth Bader gave him confidence.

"To hear Aaron's story, and what he's battled at such a young age touched me and still touches me," said Bader after the pair's final round. "It was a pleasure and an inspiration playing with him."

Buoyed by the win, Aaron will keep practicing his game, particularly the putting.

No matter what, he's already a winner.

"Having cancer and surviving has changed my perspective," Aaron says. "I'm more comfortable being who I am, if that makes any sense. St. Jude made me realize that I need to be true to myself. Life isn't necessarily about following the rules." ●

Stanford Financial Group supports St. Jude through the Eagles for St. Jude fundraiser, as well as its sponsorship of the Stanford St. Jude Championship. For every eagle recorded on the PGA and LPGA Tours, Stanford donates \$1,000 to the hospital. To make donations to Eagles for St. Jude or participate in an Eagles for St. Jude fundraiser, visit www.eaglesforstjude.com.



Aaron Theobald has come a long way since his days as a St. Jude inpatient (far left). Now he's at his prime, winning tournaments and inspiring others with his accomplishments both on and off the course.

Home on the Web



Partners In Hope family members have a new "home" online. Log on today to learn more about the children you are helping.

BY TARA MILLIGAN

Partners In Hope are some of the hospital's most loyal supporters who give monthly donations to help innocent children stricken with cancer and other catastrophic diseases. Now there is a special online community just for this family of supporters at www.partnersinhope.org.

The site allows Partners In Hope to learn more about the children they are helping and to see how their gifts are helping save lives. Other special features include:

- a video tour of the hospital
- the Family Album
- an online Giving Calculator

The site also provides a secure and easy way for Partners In Hope to make pledge payments online, and allows visitors to sign up for the Partners In Hope program.

Each month Partners In Hope receive a story and photo of a St. Jude child in the mail. Now, through the new Partners In Hope Web site, it's possible to read more about the children. You can get updates on the children's progress through the St. Jude Family

Album section of the Web site.

Because the Family Album is updated frequently, visitors can check back as often as they want to see how previous Patients of the Month are doing.

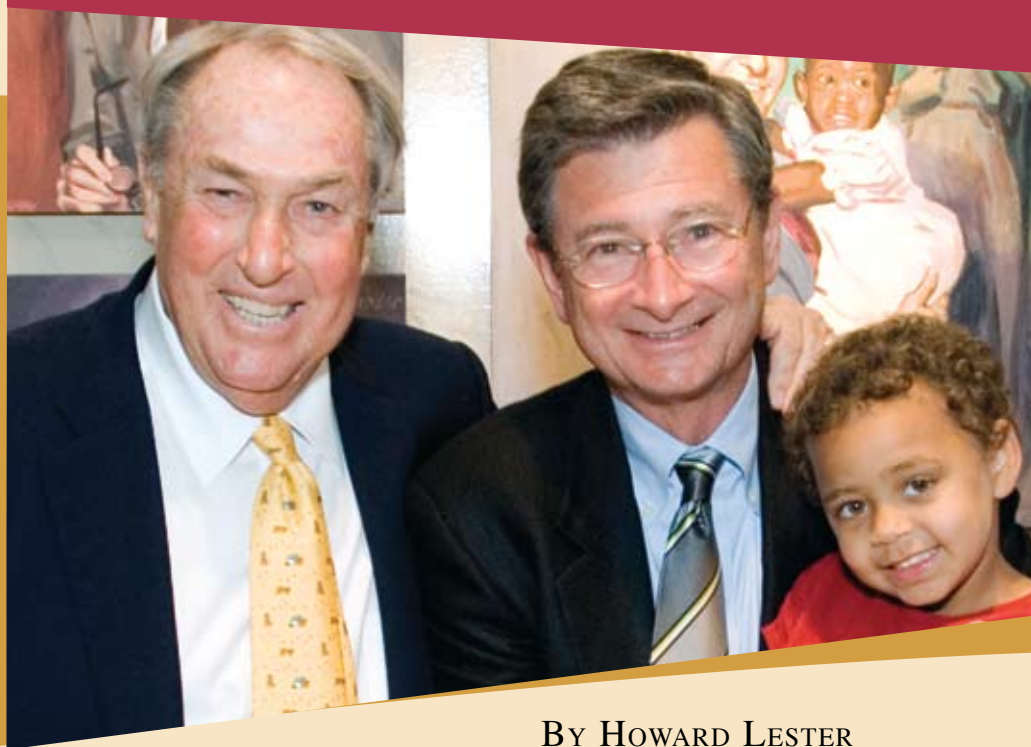
"We hope our Partners In Hope will take the time to view the album when they visit the Web site and get to know our children whose lives they are helping to save," says John P. Moses, CEO of ALSAC. "As you look through their photos and read their inspiring stories, you will realize what a world of difference you are making for these patients and their families."

Another special feature is the Giving Calculator, which allows Partners In Hope to see how their gifts can help St. Jude patients. For instance, a monthly gift of just \$26 for one year can help St. Jude provide one day of treatment for acute lymphoblastic leukemia (ALL), the most common form of childhood cancer, or assist in providing a CT scan for a child.

To see all of these features and more, visit the new, online community built especially for Partners In Hope: www.partnersinhope.org. ●

Perspective

Partners for the Kids



“If you want to give to life, which is really what giving to medicine is about, I just can’t think of a better place to support than St. Jude”

Howard Lester (at left), chairman of the Board and CEO for Williams-Sonoma Inc., and Pat Connolly, the company’s chief marketing officer, get to know patient Taylor Dempsey during a visit to St. Jude.

BY HOWARD LESTER

ALTHOUGH my company has officially partnered with St. Jude Children’s Research Hospital since 2005, I’ve known about the hospital for decades. During the 1960s, I spent a couple of years in Memphis, and eventually Williams-Sonoma Inc. chose that city as the distribution hub for our stores and customers.

For several years, my company looked for a corporate charity that all of our associates could embrace in a meaningful way. Then, through one of my associates, I was introduced to Marlo Thomas, daughter of St. Jude founder Danny Thomas.

Marlo came out to California and visited with a few of us. She described the history of St. Jude and the progress that has been made. From that moment on, we were hooked. St. Jude was the perfect charity for us to support. So we got involved in the hospital’s *Thanks and Giving* program, and we’ve been involved ever since.

Employees in our company are enthusiastic about helping the children of St. Jude. We have contests each year in which our people compete for the honor of coming to the hospital by raising money for St. Jude. As a result, more than 40 of our top employees had the opportunity to visit the hospital in May of 2008.

Marlo Thomas’ father had such an incredible vision. From the very beginning, he was determined to cure awful diseases—particularly cancerous ones—that had high fatality rates. I can remember when St. Jude was almost thought of as a hospice

back in the early days. Since then they’ve made tremendous progress, steadily raising survival rates. They’ve saved thousands and thousands of children who otherwise would not have remained alive—and they’ve done it in a way that is not elitist but is so democratic.

St. Jude is special because of its long history, because of the successes that it has, because of its ability to create a place where no children die because they can’t afford to pay for treatment.

To do that and to reach out to children all over the world is a wonderful, huge undertaking. It’s one of the greatest visions that I’ve come across in my lifetime. And St. Jude does that through great leadership and incredible public support.

If you want to give to life—which is really what giving to medicine is about—I just can’t think of a better place to support than St. Jude Children’s Research Hospital. ●

Howard Lester is chairman of the Board and CEO for Williams-Sonoma Inc. A St. Jude partner since 2005, the company also has an employee giving program. The company’s Pottery Barn division has made significant contributions of their signature furniture to the hospital, lending a warm, family feel to areas that are used by families as well as employees. St. Jude named Williams-Sonoma Inc. 2007 Corporate Partner of the Year for its outstanding efforts on behalf of the hospital.



Sam, 2 – medulloblastoma

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**St. Jude Children's
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ALSAC • Danny Thomas, Founder



Twenty-three students took part in the St. Jude School Program's first kindergarten graduation ceremony May 30. Michaela Shurden, an elementary school teacher in Behavioral Medicine, pins a mortarboard on Andrew Benson while (from left) T.J. Flowers, Ryan Dean and I-iman Carey mentally prepare for the momentous procession into the St. Jude Auditorium.



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