





Save the Date

14th Annual St. Jude Children's Research Hospital Survivors Day Conference

Friday and Saturday October 26-27, 2012

Conference highlights include a 50th anniversary tribute as well as question and answer sessions with St. Jude cancer survivors throughout the decades and thought leaders in childhood cancer and survivorship. The event will be broadcast via a live webcast.

To register for the conference, email Sharon Hill at

sharon.hill@stjude.org



Dear St. Jude Alumni,

ifty years ago St. Jude was founded by entertainer Danny Thomas to realize his vision that "no child should die in the dawn of life." In the past five decades we have come closer and closer to achieving his dream.

Today, most children who are diagnosed with cancer are cured. Overall survival rates have climbed past 80 percent. Remarkably, more than 90 percent of children diagnosed with acute lymphoblastic leukemia, the most common type of childhood



cancer, now become long-term survivors. And, using new technologies, including molecular tools, we are continuing to develop powerful new methods to extend cure rates even further.

I think Danny Thomas would be very proud of the progress we have made so far!

When St. Jude first opened its doors, no one had the luxury to focus on the fact that one day there would be hundreds of thousands of childhood cancer survivors. As your numbers grew nationwide to 300,000 and beyond, St. Jude researchers realized we would have to extend our vision to learn how to care for long-term survivors as you grew up and even started to grow old.

In response to the growing need, we began the St. Jude LIFE Study in 2007 to investigate the impact of cancer and its treatment on the health and wellbeing of long-term survivors. The study is a ground-breaking research project and a major milestone in St. Jude's 50-year history. Through St. Jude LIFE we're extending our mission and our vision to discover ways to help you stay healthy throughout your adult lives.

Thank you, Alumni, for your continuing participation in this historic project. As the number of adult survivors of childhood cancer continues to increase, survivorship research will become increasingly important, and you are truly our partners in this research. You might say we're finding the future together as we move ahead into St. Jude's next 50 years.

Sincerely,

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Melissa M. Hudson, MD Principal Investigator, St. Jude Lifetime Cohort Study

February 4, 1962 - St. Jude Opening Day

Fulfilling a pledge, Danny Thomas founds St. Jude Children's Research Hospital to care for children diagnosed with catastrophic illnesses. Children are welcomed at St. Jude regardless of their race, color, creed, or their family's ability to pay.



In its first year of operation St. Jude pioneers a new approach to treating acute lymphoblastic leukemia (ALL): "Total Therapy" combines multiple anti-cancer drugs with radiation treatment. Survival rates start to climb.





A group of St. Jude patients are the first ALL patients ever to be taken off therapy, showing that remission can be sustained.



St. Jude publishes results of a study that show a 50 percent survival rate for ALL using combination chemotherapy and radiation.



- > ALSAC Tower opens to house expanded research programs.
- St. Jude researchers discover that ALL is not a single disease. They identify important subtypes of ALL, including T-cell leukemia.





- A St. Jude patient with sickle cell disease is the first to be cured with a bone marrow transplant.
- > The After Completion of Therapy (ACT) clinic is established. ACT is the world's largest long-term follow-up clinic for pediatric cancer patients.





St. Jude's new brain tumor program begins accepting patients. In a pilot study, doctors use chemotherapy after surgery to delay radiation treatment of infants and young children with brain tumors.



St. Jude starts a clinical program to seek a cure for pediatric AIDS.



- > St. Jude researchers discover how to tailor chemotherapy specifically for individual children with neuroblastoma, based on the number of extra copies of a gene produced in their tumor cells.
- St. Jude founder Danny Thomas dies two days after helping St. Jude celebrate its 29th anniversary.
- The hospital continues to grow with the opening of the Danny Thomas Research Tower and the Ronald McDonald House of Memphis.



- By individualizing the dosage of chemotherapy, scientists find they can increase survival rates for children with ALL without causing excessive toxicity.
- > The survival rate for ALL reaches 80 percent.



> Target House opens for families who need long-term housing.



> St. Jude launches Cure4Kids website to provide a free and open online meeting place for doctors worldwide to discuss childhood catastrophic diseases.



St. Jude reports a 94 percent survival rate for patients with ALL using therapy that does not include radiation.



2007

Chili's Care Center, a state-of-the-art research and patient care building opens.



▶ The St. Jude LIFE Study begins!



Kay Kafe opens. St. Jude has just one cafeteria for all patients, families, doctors, and staff. Everyone's in this together!



The Pediatric Cancer Genome Project (PCGP) starts the world's largest effort to identify the genetic changes that lead to cancer. St. Jude is partnering with Washington University in the PCGP.



Bone marrow transplant survival more than doubles for young, high-risk leukemia patients treated at St. Jude.

Help St. Jude mark 50 years by sharing your memories online at: www.stjude.org/fifty



Speaking in (Genetic) Code



e all have the same set of genes, those segments of DNA that give our eyes and hair their color and help determine our

height and other personal traits. Even though we all have the same basic set, many genes come in different versions. That's why one person's eyes will be brown and another's blue. Genetic variation contributes to the uniqueness of each person.

Not all gene variations are as visible as the ones for eye color. Some of these less visible variations have the potential to affect a person's health. For example, some variations might lead to differences in the way individuals respond to medical treatments. Others might be associated with different levels of risk for developing a health condition.

The blood samples from St. Jude LIFE study participants are enabling researchers to apply state-of-the-art techniques to read and interpret variations and patterns in the genetic code. The goal of this research is to answer a crucial question: "Why do some survivors develop health problems after treatment while others, who received the same treatment, do not?"

St. Jude researchers are using an approach called "Genome-Wide Association Studies" or GWAS. The research team is looking at over 900,000 genetic markers (short sections of DNA associated with a particular trait) in each St. Jude LIFE participant who agreed to bank a sample of their blood. So far, the research database contains more than 1.6 billion of these markers. Our scientists are searching through all this data for key pieces to the puzzle that will enable them to predict who is at highest risk for late effects of treatment. Information from these association studies may soon help make it possible to customize cancer treatments for specific patients to avoid long-term toxicity. It may also help us target the delivery of active medical screening for survivors who need it most, those at increased risk of late effects based on their unique genetic makeup.

Tammy Hannah Starks - Growing Up with St. Jude

ammy Hannah Starks, of Southhaven, Mississippi, was born the year St. Jude opened it doors. And St. Jude was destined to play a major role in her life. Tammy, one of 10 children of Lillie B. and the late Arthur D. Hannah, was eight years old when she was diagnosed with Hodgkin lymphoma. She was living with her family in Holly Springs, Missisippi, at the time, and

she began having fainting spells. One day, her mother noticed a bump on her leg near where it joined



Tammy with Danny Thomas

her hip. "It didn't hurt," Tammy recalls, but her mom knew it should be seen by a doctor. The doctor sent the family straight on to St. Jude and Tammy was admitted for the first of many hospitalizations.

"I was in and out of the hospital from the time I was eight until I was 21 years old. That's when I finally went into remission," Tammy remembers. "For most of the time, I couldn't go to school, so I was homeschooled right in St. Jude hospital." Tammy literally grew up at St. Jude. "They called me their St. Jude baby," she says with a smile.



Marlo Thomas writes Tammy a note

Once she achieved remission Tammy jumped into life. She married her sweetheart, Jacob Starks, whom she had met at St. Jude when he came to visit his nephew, a patient at the hospital. Before long Tammy and Jacob became the proud parents of a son, Joshua Jacob.

hen she was invited to join the St. Jude LIFE Study, Tammy was ready to give back to the institution that had saved her life and in some sense helped to raise her. She came for the study evaluation on May 13, 2009, accompanied by her husband and her teen-aged son. On the final day she underwent a colonoscopy and Dr. Kaye Cash broke the terrible news that Tammy had colon cancer.

Tammy returned home to start chemotherapy and Dr. Cash worked closely with her colon cancer medical team. Throughout her therapy, Tammy says, her family relied on the support

LIFELine

Melissa M. Hudson, MD, Medical Editor melissa.hudson@stjude.org

Dept. Epidemiology & Cancer Control St. Jude Children's Research Hospital Memphis, Tennessee

> E-Mail: sjlife@stjude.org www.stjude.org/sjlife 1.866.278.5833

of their church, Brown Missionary Baptist, and their pastor, Bartholomew Orr. She proudly notes that the church has been a generous donor to St. Jude.

By the time Tammy finished treatment, her weight had dropped from 145 pounds to just 87. Tammy is a fighter, though, and after three years she's in remission. Now 137 pounds, she's almost back to her fighting weight! Most importantly, she's regained the beautiful smile of the St. Jude baby she once was.



Tammy with Dr. Kaye Cash