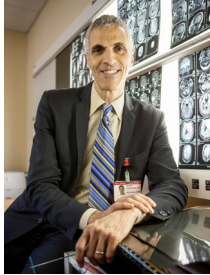


The **Children's Brain Tumor Project** was founded in 2011 when the work of two innovative researchers came together at the Weill Cornell Pediatric Brain and Spine Center:

**Dr. Mark M. Souweidane** completed more than ten years of research into convection-enhanced delivery (CED) to combat inoperable brain tumors. Based on those results, in December 2011 he received FDA approval for the first clinical trial of the procedure, allowing him to test the safety of CED in children with diffuse intrinsic pontine glioma (DIPG). This clinical trial promised to be a giant step for Dr. Souweidane's work testing alternative delivery systems that get cancer-fighting drugs directly to the tumor, bypassing the blood-brain barrier and sparing a child the toxicity of chemotherapy.



**Dr. Jeffrey Greenfield** told one of his patients and her family about his belief that routinely unlocking the genetic mysteries of pediatric brain tumors could help lead to a cure. If he could identify a tumor's "fingerprints" at the molecular level, Dr. Greenfield knew that data could open the door to personalized tumor therapy. The patient was Elizabeth Minter, who was determined that her own battle with gliomatosis cerebri not be in vain. Elizabeth and her family and friends founded *Elizabeth's Hope* to provide funding for Dr. Greenfield's research.



In early 2012, Dr. Souweidane started enrolling patients in his clinical trial and *Elizabeth's Hope* had given Dr. Greenfield start-up funding for his genomics project. The **Children's Brain Tumor Project** was off and running.

The **Children's Brain Tumor Project** has a single goal: to bring hope to the hundreds of patients and families each year who confront these heartbreaking diagnoses. Because they are so rare, these inoperable tumors simply do not get the research funding or attention required to find a cure.

#### ABOUT THE PROJECT

The Weill Cornell **Children's Brain Tumor Project** offers neurosurgeons the unprecedented ability to quickly identify a brain tumor's genetic fingerprints. Only a few years ago, that information was prohibitively expensive and time-consuming to obtain. Today, state-of-the-art gene sequencing can identify each tumor's unique profile in days or weeks—not months or years.

With that individual genetic information in hand, researchers hope to identify the best drugs and delivery methods to target each young patient's tumor. That's what makes the **Children's Brain Tumor Project** unique: Dr. Greenfield's genetic research and Dr. Souweidane's clinical trials work together to accelerate the search for better treatment options.

#### "Powered by Families"

The project owes its existence and progress to the families and friends of the children, adolescents, and young adults diagnosed with these tumors. In the absence of major funding from government agencies or large foundations, the **Children's Brain Tumor Project** is supported by those with the most at stake in this battle.

#### THE CHILDREN

At the **Children's Brain Tumor Project**, we never forget why we do the work we do. We find our inspiration in the faces of the children and young adults who have bravely faced these terrible diagnoses, and we are determined that one day we'll be able to offer them the hope of a cure.

**TY LOUIS CAMPBELL** was almost three when his troubled sleep was attributed to an extremely rare brain cancer: atypical teratoid/rhabdoid tumor (AT/RT). His parents never lost hope, and Ty defied the odds, surviving two years after diagnosis. He passed away in 2012, just a few days after his fifth birthday.



"They call them rare cancers, but the majority of childhood cancers, when singled out, are rare. Cancer among children, however, is not rare. There is no known reason or cause. And it can happen to any child at any time."

—Cindy Campbell, Ty's mom

**CRISTIAN RIVERA** was four years old when he was diagnosed with DIPG in 2007, and six when he succumbed to the disease in 2009. Since then, through the work of the Cristian Rivera Foundation, his parents have worked tirelessly to support Dr. Souweidane, who was Cristian's surgeon.



"From the day I learned my son was sick, my mission in life has been to find a cure for DIPG. I can't wait for the day when no parent will have to walk into a hospital and hear the same chilling diagnosis we did on that fateful January day."

—John Rivera, Cristian's dad

**ELIZABETH MINTER** was 19 years old when an MRI revealed an inoperable brain tumor: gliomatosis cerebri. Her parents were told to take her home and await the inevitable. Instead, before her death in 2012 she founded *Elizabeth's Hope* to fund genomic research. Elizabeth's gliomatosis cerebri tumor was the first to be fully sequenced. "Early in her illness, Elizabeth was told that she was in the fight of her life—but there were few treatment options for her disease. She knew the only hope for victims like her would come through innovative research."



—Emma Hill, Elizabeth's mom

The **Children's Brain Tumor Project** team conducts its research in the pediatric neuro-oncology laboratories at the Weill Cornell Pediatric Brain and Spine Center, 525 East 68th Street, Box 99, New York, NY 10065