

Finding Cures Saving Children

Joint Research Project To Create A Genetic Map Of Childhood Cancers

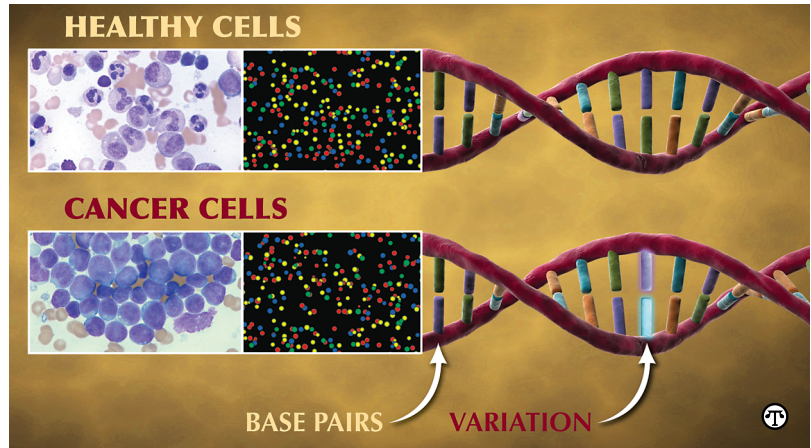
(NAPSA)—Researchers have joined forces in an unprecedented effort to identify the genetic changes that give rise to some of the world's most challenging childhood cancers.

While great progress has been made in treating childhood cancer, it is still the leading cause of death from disease among U.S. children over 1 year of age, and cure rates for some childhood cancers remain below 50 percent.

The St. Jude Children's Research Hospital—Washington University Pediatric Cancer Genome Project is the largest investment to date—estimated to cost \$65 million over three years—aimed at understanding the genetic origins of childhood cancers. Scientists involved in the project will decode and sequence the entire genomes of normal and cancer cells, comparing differences in the DNA to identify genetic mistakes that lead to pediatric cancer.

The collaboration will focus on childhood leukemias, brain tumors and tumors of bone, muscle and other connective tissues called sarcomas. St. Jude will provide DNA from the tissues of patients and Washington University's Genome Center will perform the whole-genome sequencing. Researchers at both institutions will collaborate to analyze the data and make the information publicly available once validated.

An understanding of the pediatric cancer genome should help



St. Jude and Washington University will sequence the genomes of normal and cancer cells to find genetic mistakes that lead to childhood cancer.

in the development of new treatments and diagnostic tools. The project will also yield information that may help physicians in the near future as they choose the most effective treatment options for their young patients.

“We are on the threshold of a revolution in our understanding of the origins of cancer,” said Dr. William E. Evans, St. Jude director and chief executive officer. “For the first time in history, we have the tools to identify all of the genetic abnormalities that turn a white blood cell into a leukemia cell or a brain cell into a brain tumor.”

St. Jude is home to one of the world's largest and most complete repositories of biological information about childhood cancer. The

collection dates to the 1970s and includes more than 50,000 tumor, bone marrow, blood and other biological samples. These samples are essential to efforts to understand the origins of cancer.

“This extraordinary partnership will add a new dimension to our understanding of childhood cancers,” said pediatric geneticist Dr. Larry J. Shapiro, executive vice chancellor and dean of Washington University School of Medicine. “A genome-wide understanding of cancer offers great promise for developing powerful new approaches to diagnose and treat cancer or perhaps even to prevent it.”

For more information, visit www.pediatriccancergenomeproject.org.