

St. Jude Children's Research Hospital launches data website for genome project

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St. Jude Children's Research Hospital has launched a freely available website for published research results from the St. Jude Children's Research Hospital – Washington University Pediatric Cancer Genome Project (PCGP). The PCGP is the largest effort to date aimed at sequencing the entire genomes of both normal and cancer cells from pediatric cancer patients, comparing differences in the DNA to identify genetic mistakes that lead to childhood cancers.

Titled "Explore," the website is designed to expand access to high-quality genomic data related to pediatric cancers, accelerate discovery and hypothesis testing, and provide comprehensive visualizations of the data. Explore is also designed to make it easier for clinical and basic researchers to search published results from the PCGP.

Launched in January 2010 in collaboration with Washington University School of Medicine in St. Louis, the PCGP is focused on sequencing the entire genomes of both normal and cancer cells from 600 childhood cancer patients in the first three years, comparing differences in the DNA to identify genetics mistakes that lead to cancer. No one had sequenced a complete <u>pediatric cancer genome</u> prior to the PCGP, which has sequenced more than 250 sets to date. This work has already led to discoveries featured in two recent papers published in Nature reporting significant advances in understanding the genetic basis of an aggressive subtype of acute lymphoblastic leukemia (ALL), known as early T-cell precursor ALL or ETP-ALL, and in retinoblastoma.



"Explore allows researchers to access the genome project's unique, published data specific to pediatric cancers and to make discoveries of their own," said James Downing, M.D., deputy director and scientific director at St. Jude. "We want to be a catalyst for the field and accelerate progress with the research gleaned from the genome project."

Rich in visual features, Explore allows users to get an overview of the genome project's progress; access to specific diseases; summaries of current discoveries; links to associated publications; views of single-patient genome data to disease levels and more. An online workbench of sorts, Explore will also provide information on what other cancers are currently under investigation by the PCGP.

"The entire research community will now be able to mine this rich set of findings," said Clayton Naeve, Ph.D., chief information officer at St. Jude. "Access to the genome project's user-friendly data website is a step in that direction."

More information: To access Explore, go to explore.pediatriccancergenomeproject.org

Provided by St. Jude Children's Research Hospital

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