

WORKING TOGETHER TO CURE EVERY CHILD WITH A BRAIN TUMOR



**Children's Brain
Tumor Network**
Until every child is cured

ALL ABOUT CHILDREN'S NEEDS

Brain tumors are complex and difficult conditions to treat in children. This year around the world, more than 67,000 children and young adults will be diagnosed with a primary brain or central nervous system (CNS) tumor. In recent years, brain cancer has overtaken leukemia as the leading cause of cancer-related deaths in U.S. children ages 0-19.

Globally, brain tumors are the leading cause of disease-related death in children and young adults ages 0-19 in countries including the United States, Germany, Japan, Australia, Poland, Ukraine, Indonesia, Brazil, South Africa, Cuba and Kazakhstan. **The median age of death is only nine.**

ACCELERATING DISCOVERIES

Recent medical advances are revealing hidden clues about the underlying biology of pediatric cancers and are helping to rapidly translate this understanding into clinical breakthroughs.

The Children's Brain Tumor Network (CBTN) is a network of researchers, clinicians, patients and foundations from across the globe dedicated to creating a world where no child dies or suffers from a brain tumor. The CBTN strives to be the leading accelerator of pediatric brain tumor research, precision clinical trials, and clinical impact by connecting, harnessing, and empowering the world-wide childhood brain tumor community.

GLOBAL PARTNERSHIP

The 18 CBTN member institutions, located throughout Europe, Asia, Australia and across the United States, are establishing a new standard of care for patients by sharing data, resources and expertise — to accelerate and improve discoveries.

The CBTN's large-scale information sharing efforts are made possible by state-of-the-art cloud-based research platforms which provide researchers and scientists with access to the data they need to understand how brain tumors form and develop.

Today, researchers located anywhere in the world can log in, explore, analyze and compute massive collections of high-quality data. CBTN-developed platforms are helping redefine the traditional research model by improving collaboration across institutions and removing the primary barriers to research.

CONTINUOUS COLLABORATION

CBTN scientific discovery projects focus on understanding and treating more than 30 unique brain tumor subtypes, including both low-grade and midline gliomas and other conditions relating to the brain and central nervous system.

Data collected from biosamples such as brain tumor tissue, blood, cerebral spinal fluid and saliva are available for use by investigators in their discovery projects. In addition to specimen data, the CBTN makes other types of data available to provide researchers with a more complete snapshot of a particular brain tumor subtype. These data include clinical data from patient visits, imaging data from MRI scans, histology data from stained slides of tissue, genomic data extracted from whole genome sequencing (WGS) with paired RNAseq data and proteomic data that reveals the properties of a subject's proteins.



Courtesy of Children's Hospital of Philadelphia



Courtesy of Ann & Robert H. Lurie Children's Hospital of Chicago



Courtesy of UCSF Benioff Children's Hospital



Courtesy of Children's Hospital of Philadelphia



Courtesy of the Hudson Institute of Medical Research



Courtesy of Children's National Health System

Thank you for providing your support to the children and families fighting brain tumors. Your contribution will help accelerate discovery at leading children's research institutions all over the world. For additional information, please visit cbtn.org or email research@cbtn.org



Dr. Joanna Phillips removing samples from a liquid nitrogen storage tank - photo courtesy of UCSF Benioff Children's Hospital

RESOLVING RESEARCH CHALLENGES

Launched in 2013 as the Children's Brain Tumor Tissue Consortium (CBTTC), the CBTN's rapid growth was made possible through the partnership and support of foundations and patient families. In addition to the partnership of the patient community, CBTN is working to identify and collaborate with other academic, consortia, government and industry partners to increase the standard of care and improve access to healthcare services for all brain tumor patients.

Simply too many children are affected every day by these conditions. Despite the CBTN's tremendous strides to gather large collections of data and specimens, there's much more to accomplish together. Only four drugs have ever been developed to treat childhood cancers and NONE of them are designed to treat pediatric brain tumors.

No single institution or laboratory can collect enough data or understanding to treat these conditions on their own. Each member of the clinical, research and patient communities can make a tremendous impact in the care and treatment for these conditions. **We need your help to more quickly develop these treatments.**

YOUR SUPPORT MAKES A DIFFERENCE

We are at a pivotal moment for pediatric cancer research. For the first time in modern history, significant NIH funding opportunities for pediatric conditions are on the horizon - we are working tirelessly to ensure that the CBTN is well-positioned to qualify for this funding.

Support and funding for the CBTN's research projects and infrastructure helps to meet critical research needs and accelerates the development of more effective treatments for solid tumors of the brain and central nervous system.

In this next phase of growth, we also seek to fund urgent research needs including sequencing and proteomic data generation, preclinical model development, and most importantly, clinical trials. ***With your help, we can continue to speed the development of new therapeutics to improve the scientific understanding of how to find the answers for each child with a brain tumor.***

The time is now to make a difference for generations to come. Together, we can continue to support the development of precise, tailor-made therapies for the children and families who depend on us.

Please contact us for more information about the Children's Brain Tumor Network:

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