



Current Research Grants

Developing & Identifying New Therapies to Treat Brain Tumors

Mebendazole Clinical Trial – Johns Hopkins

We are funding a clinical trial at Johns Hopkins to test whether mebendazole, a drug already approved by the FDA to fight infections, might be an effective anti-brain cancer medication. This drug has a strong safety profile and is available as a generic, which could be widely available in the near term and at a low cost to patients.

Combination Drug Screening Program – Novartis/Henry Ford Hospital/Columbia

We are working with Novartis, Henry Ford Hospital, and Columbia University to develop state-of-the-art model systems to identify novel combination drugs to treat brain tumors. This project builds on the theory that the most effective way to treat brain tumors is to use multiple drugs at the same time.

CDK Glioma Trial – University of California, San Francisco

Our grant to UCSF is funding the screening of patient tumor samples for a key predictive biomarker as part of a larger Pfizer Phase II clinical trial of a cdk4/6 inhibitor to treat recurrent brain tumors. This funding is allowing researchers to better understand which patients are most likely respond to this new drug.

Accutane Project – University of California, Los Angeles

We are funding the development of a clinical trial to determine if retinoic acid – *Accutane*, isotretinoin, the skin medication – might be an effective brain cancer treatment for patients with IDH mutations. Early data indicates that treating patients with IDH1 mutations with Accutane doubles their life expectancy.

Development of RNA Therapies – Regulus Therapeutics

In partnership with Regulus Therapeutics and South Korea's Samsung, we are funding work to identify micro RNA therapeutics to treat glioblastoma.

Understanding of IDH and Developing IDH Drug – Duke University

In partnership with the V Foundation, we are funding a \$1 million research grant to discover and develop new anti-cancer drugs for IDH mutated brain tumors. IDH is a genetic mutation found in many brain tumors, which is thought to play a key role in their growth.

Advancing Precision Medicine

Precision Medicine Project

We are funding a multi-center effort (Johns Hopkins, Mass General, Henry Ford, etc.) to enable patients to have their brain tumors fully sequenced for genomic alterations. This effort is designed to bring cutting edge analysis to patients to help guide their care and improve survival by better matching them to clinical trials. The information that is generated will be de-identified and stored in a database to drive research efforts.



Understanding Brain Cancer Genomics – Mayo Clinic/TGen

In this project Mayo has contributed tumor samples and animal modeling expertise so that TGen can do deep genomic screening of tumor samples. The goal is to see if it is possible to identify non-obvious genetic mutations that could lead to new and non-obvious treatment options using drugs not otherwise intended or approved for brain cancer indications.

Using Exosomes as Glioma Biomarkers – University of California, San Diego

We are driving the development of a consortium of medical centers to collect tumor tissue, cerebrospinal fluid (CSF) and blood to enable the identification of brain cancer biofluid biomarkers. It is already the largest consortium of centers ever brought together to gather brain cancer biospecimens. The initial project focus is to identify the actionable EGFRvIII mutation in blood and CSF. Later phases of the effort will expand the list of useful mutations to create a broad-based panel of informative brain tumor biomarkers that can be gathered without the need for surgery or biopsy.

Low Grade Brain Tumor Research

Treatment Optimization for Low Grade Gliomas – University of California, San Francisco

We are funding a research effort at UCSF to better understand and optimize the use of temozolomide in a clinical setting. Dr. Joseph Costello is studying how this drug affects the genetic makeup of lower grade gliomas over time. Based on preliminary data, the study is validating mutations that arise during a tumor's evolution and for which novel targeted therapies exist, but have not yet been tested in this patient group.

Low Grade Glioma Vaccine – University of California, Los Angeles

We are funding a clinical trial at UCLA to test whether brain tumor patients will benefit from use of DCVax, a vaccine which triggers the body's immune system to fight off cancer. Early evidence indicates that the vaccine creates significant anti-cancer effects and slows the progression of brain tumors.

Pediatric Brain Tumor Research

Identification of New Drugs to Treat DIPG – Oregon Health & Sciences University

We are funding a multi-center and multi-foundation project that uses state-of-the-art animal models, genomics and combination drug screening to try to develop the first treatment for an especially difficult pediatric glioma called Diffuse Intrinsic Pontine Glioma (DIPG).

Partnership with the Florida Center for Brain Tumor Research

In collaboration with the Florida Center for Brain Tumor Research we have funded over \$500,000 in brain cancer research in the state of Florida.

If you would like to learn more about our research please visit www.abc2.org or email us at info@abc2.org.