



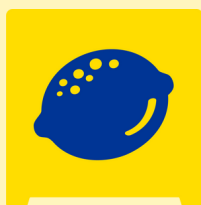
Alex's Lemonade Stand Foundation

Rhabdoid Tumor Impact Report





Alex's Lemonade Stand Foundation (ALSF) emerged from the front yard lemonade stand of 4-year-old Alexandra “Alex” Scott, who was fighting cancer and wanted to raise money to find cures for all children with cancer. By the time Alex passed away at the age of 8, she had raised \$1 million. Since then, the Foundation bearing her name has evolved into a worldwide fundraising movement and the largest independent childhood cancer charity in the U.S. ALSF is a leader in funding pediatric cancer research projects across the globe and providing programs to families affected by childhood cancer. For more information, visit AlexsLemonade.org.



With Gratitude

Dear Friend,

All of us here at ALSF would like to sincerely thank you for your support of Alex's mission to find new treatments and cures for childhood cancers like rhabdoid tumors.

Your support is helping researchers to develop preliminary data, publish their findings, and push forward innovative treatment options. Thanks to you, we are closer to a day where no child will have to suffer from a rhabdoid tumor.

We are truly honored to fight childhood cancer by your side. Thank you for being the driving force behind lifesaving cures. Please don't hesitate to reach out if you need anything from us here at ALSF.

Until there are cures,



Liz & Jay Scott

Alex's Parents & Co-Executive Directors

Alex's Lemonade Stand Foundation



Thanks to Supporters Like You

ALSF is the largest independent childhood cancer charity in the U.S., focused on funding critical research and supporting childhood cancer families.



More than \$300M raised since 2005



Funded over 1,500 medical research grants at nearly 150 institutions



Supported nearly 30,000 families through key programs like Travel For Care

ALSF is the only childhood cancer research organization that has been given the NCI Peer-Reviewed Funder Designation for rigorous selection of research and grants.

Meet a **Rhabdoid Tumor Hero**



HANNAH



One day, Hannah had a small lump on her back setting in between her ribs. When she cried, it popped out further, and doubled in size within a two-week period. The ultrasounds were inconclusive, so doctors scheduled an MRI. That's when they found a mass in her chest. She underwent surgery the next day to remove it, but they discovered it was a stage IV extra-renal rhabdoid tumor. Since then, Hannah's undergone chemotherapy and radiation to try and beat the cancer.

Her parents hope that she lives a long life with God by her side. They bet she'll be a nurse, or at least work in the medical field after spending so much time in the hospital. She loves taking care of "sick" people now. They can't wait to watch Hannah have a family one day.

She is a hero to her parents first and foremost because she is their daughter and she is surviving cancer. She has exceeded everyone's expectations of her treatment and scans. She powers through everything that she faces. Since being home from treatment, she has blossomed. She loves her babies, playing doctor, and watching videos on her phone. Hannah is a strong, intelligent girl who is full of attitude but also loves to cuddle. She is very vocal about what she wants and has no problems bossing her brothers around.

Hannah's parents advise other childhood cancer families to never give up and make sure to ask questions when you don't understand something, as doctors tend to forget to explain in "normal English."

They see ALSF as a way to get your whole family, or just yourself, involved in a charity for a good cause. Their family has received a lot of help from others after Hannah's diagnosis, and they are always looking for ways to give back. ALSF provides that.

ALSF-Funded Rhabdoid Tumor Research

Thanks to you, we have been able to continue funding breakthrough research for more cures. Read through some of our recently funded rhabdoid tumor research projects below:

Synthetic gene expression regulator switches (SynGERS) expressed in CAR T cells to cure children with solid tumors

Andras Heczey, MD
Baylor College of Medicine
R Accelerated Award Grants, Awarded 2023

Development of targeted combination therapies for rhabdoid tumor

Hannah Kim
Children's Hospital of Philadelphia
POST Program Grants, Awarded 2022

Therapeutic Targeting of PGBD5-induced DNA Repair Dependency in Pediatric Solid Tumors

Alex Kentsis, MD/PhD
Memorial Sloan-Kettering Cancer Center
Reach Grants, Awarded 2017

MYC as a Driver and Anti-Cancer Target in Malignant Rhabdoid Tumors

William Tansey, PhD
Vanderbilt University Medical Center
Innovation Grants, Awarded 2016

An Intersection of Cell Metabolism and Differentiation in Childhood Sarcomas

Sandra Orsulic, PhD
Cedars-Sinai Medical Center
Innovation Grants, Awarded 2013



A complete list of ALSF-funded rhabdoid tumor projects can be found at:
AlexsLemonade.org/Childhood-Cancer/Type/Rhabdoid-Tumor/Grants

Research **Spotlight**

Synthetic Gene Expression Regulator Switches (SynGERS) Expressed in CAR T Cells to Cure Children with Solid Tumors

Andras Heczey, MD

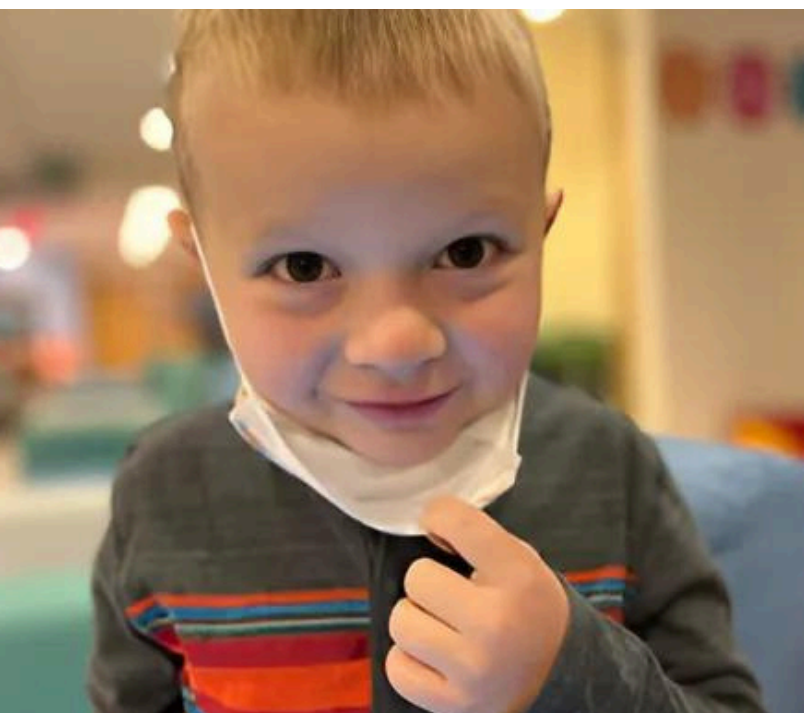
Baylor College of Medicine



Advancing the pace of innovative research is a priority for Alex's Lemonade Stand Foundation. The R Accelerated Award Grant provides funding to scientists focused on research in pediatric oncology that support ALSF's mission to find cures and better treatments for childhood cancers. The goal of this grant is to both advance the pace of innovative research and support researchers pursuing a long-term career in pediatric oncology. Andras Heczey, MD, is one such researcher. He was awarded a 2023 R Accelerated Grant to address a knowledge gap regarding how to genetically engineer a unique type of immune cells, called T cells, to eliminate solid tumor cells.

The immune system can recognize and eliminate cancer. Genetically engineering T cells can result in up to 90% complete elimination of leukemia cells, a type of blood cancer. Such strategy holds exceptional promise for children with solid tumors. Dr. Heczey and his team developed a novel system called SynGERS (Synthetic Gene Expression Regulator Switches). When engaging cancer cells, SynGERS executes mini programs in tumor specific T cells, which can modulate master regulators of T cell function, including increasing the expression of those that help, and repressing the expression of genes that inhibit tumor-redirectioned T cells.

The team has been utilizing the R Accelerated Award Grant to systematically evaluate a library of SynGERS built to modulate the expression of master regulators of T cell function in a tumor-specific manner. Their first goal is to determine which SynGERS enhance the expansion and persistence of tumor-redirectioned T cells the most. This is important as expansion and persistence is associated with improved survival of patients, with leukemia, treated with tumor-redirectioned T cells. Their second goal is to identify the SynGERS inducing the most potent antitumor activity of T cells and understand how this new, artificial gene expression mini program works to rewire tumor-redirectioned T cells. Their long-term goal is to evaluate SynGERS expressed in tumor-redirectioned T cells in children with solid tumors, like rhabdoid tumor.



Thank You

for all you do to help kids with cancer!

