



Alex's Lemonade Stand Foundation Wilms Tumor Impact Report



AlexsLemonade.org



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 Wilms tumor.

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 Wilms 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 **Wilms Tumor Hero**



QUINNLEE



On June 4, 2024, doctors found an 11 cm tumor in Quinnlee's left kidney. Two days later, she had surgery to remove the kidney and tumor, which had weighed a collective one-and-a-half pounds. This was approximately one-eighth of her weight. Luckily, the cancer left when her kidney did.

Quinnlee also has p16 deletion syndrome which makes it likely she may need aggressive follow-up chemotherapy. Quinnlee awaited repeat scans and full genetics to decide whether she should receive chemotherapy or "watch and wait".

Jessica, Quinnlee's mom, hopes her daughter lives a full and bright life as a healthy child. She says Quinnlee is her hero because she always has a smile on her face with the most positive outlook. She loves axolotls, the only thing with the power to make her stop crying in the middle of the night. She also likes to play with pop-its, smile, wave, and say, "Oh no!"

"Looking at her now...you'd never know anything happened," Jessica said three weeks post op. "She's small but mighty and feisty and doesn't let anything hold her back." Jessica wants families going through this journey to know that their child is stronger than they think. Quinnlee has shown immense courage at just 1 year old.

To Jessica and Quinnlee's family, ALSF means hope for the future of all kids with cancer.

“We just want everyone to live to adulthood, go to prom, graduate high school, and live a long and happy life,”

-Jessica, Mom of Childhood Cancer Hero, Quinnlee

ALSF-Funded Wilms Tumor Research

Thanks to you, we have been able to continue funding breakthrough research for more cures. Read through some of our recently funded Wilms 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

Synthetic Gene Expression Regulatory Switches (SynGERS) for Improved CAR T Cell Function in Pediatric Solid Tumors

Leidy Diana Caraballo Galva, PhD
Baylor College of Medicine
Young Investigator Grants, Awarded 2023

HACE1 mediates ubiquitin-proteasomal regulation of tumour-associated mTOR Complex 1 (mTORC1)

Mariam Hassan
BC Cancer (Provincial Health Services Authority)
POST Program Grants, Awarded 2023

Wilms tumor risk and management in WAGR Syndrome

India Cannon
Children's Hospital of Philadelphia
POST Program Grants, Awarded 2022

Understanding disparities in pediatric solid tumor oncology trial enrollment

Oludamilola T. Taiwo
Emory University
POST Program Grants, Awarded 2022



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



Thank You

for all you do to help kids with cancer!

