

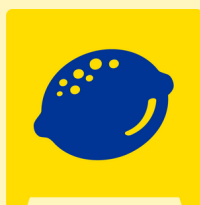


Alex's Lemonade Stand Foundation Rhabdomyosarcoma Impact Report





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.



With Gratitude

Dear Friend,

All of us at Alex's Lemonade Stand Foundation are sending a heartfelt thank you for supporting Alex's mission of curing childhood cancers like rhabdomyosarcoma through the discovery of new and safer treatments.

Your generosity empowers scientists to gather crucial preliminary data, publish breakthrough findings, and advance innovative treatment approaches. Because of you, we're moving closer to a future where no child faces rhabdomyosarcoma.

It's an honor to stand beside you in this fight. Your commitment fuels lifesaving progress. If there's ever anything we can do for you, please let the ALSF team know.

Until there are cures,



Liz & Jay Scott

Alex's Parents & Co-Executive Directors
Alex's Lemonade Stand Foundation



Thanks

to Supporters Like You

76

**Rhabdomyosarcoma projects
(and counting) have been funded**

“ALSF funding was absolutely essential to make this project happen. There are not many funding instruments available to support projects of this scale.”

— Dr. Florian Halbritter,
St. Anna Children’s Cancer Research Institute



“Early career support for pediatric oncology physician-scientists is a critical lifeline during an incredibly vulnerable time in our careers. The support of ALSF has been and continues to be absolutely essential in making better therapies available faster for pediatric cancer patients.”

— Dr. Leo Wang,
City of Hope

Meet a **Rhabdomyosarcoma Hero**

Name: Adalyn

Loves: Exploring National Parks, picture books, Bluey, and music

Just after her 2nd birthday, Adalyn's dad, Kristopher, noticed a nodule on Adalyn's tongue that had grown to the size of a blueberry. After a trip to the pediatrician, dentist and oral surgeon, an urgent biopsy confirmed Adalyn had rhabdomyosarcoma.



She underwent 40 weeks of intense chemotherapy. Then she transferred to a different cancer center for four weeks of proton beam radiation therapy. Adalyn had her “final chemo” treatment, but is currently being monitored because her recent scans showed concerning results.

“Adalyn is the strongest fighter I know,” said Kristopher about his hero, “We're truly blessed to be her parents. Despite enduring every chemotherapy cycle with severe neutropenia, resulting in frequent inpatient stays and extra clinic visits at CHOP, she presses on with incredible energy to the amazement of not only us, but also her care team!”

Kristopher hopes that they continue exploring more National Parks together as a family, meet Adalyn's best friends, learn about her days at school, her favorite interests, and the inspirations she'll discover that'll define her surely bright future! He hinges these hopes on the work of oncology medical staff and charity Foundations like Alex's Lemonade Stand Foundation.

To Kristopher, “ALSF is an ultimate mechanism that raises funding and awareness for the dire need of continued research into the causes and lasting impacts of childhood cancer.”

Research Spotlight: New Projects in Rhabdomyosarcoma

Role of the stemness marker SOX2 in fusion-positive rhabdomyosarcoma cell fate switching

Lauren Ho, Duke University

Rhabdomyosarcoma (RMS) is a cancer related to the skeletal muscle lineage, and the most common soft tissue sarcoma of childhood. The fusion-positive subtype of RMS (FP-RMS) has remained one of the most difficult to cure childhood cancers. To gain insight into FP-RMS biology and eventually identify novel therapeutic targets, the team has been interested in understanding the mechanisms that support FP-RMS cell state plasticity. This is important because plasticity at least partially underlies the resistance to treatment seen so commonly in children and adolescents with FP-RMS. The goal of this project is to assess the expression and role of the certain biological indicators in the cell state switch that have been found in FP-RMS.



Lipid nanoparticle delivery of CRISPR/Cas9 reagents for disruption of oncogenic translocations in alveolar rhabdomyosarcoma

Amadu Tadesse, University of California, Los Angeles

Alveolar rhabdomyosarcoma (aRMS) is a rare and aggressive cancer that starts in the muscle cells of children and young adults. This project is using nanotechnology to try and treat it in a new way. The plan is to create tiny particles (called lipid nanoparticles, or LNPs) that can carry CRISPR/Cas9, a powerful gene-editing tool, into cancer cells. The goal is to remove or "knock out" a specific genetic mutation (called PAX3-FOXO1) that helps the cancer grow and spread.



The approach has two main steps: First, to design CRISPR tools that are aimed precisely at the mutation, and second, to build the LNPs to deliver these tools effectively into the tumor cells. Past experiments have already shown that these LNPs can successfully knock out the mutation. The team will study how removing the mutation affects the cancer cells. Overall, the goal is to show that CRISPR delivered by nanoparticles could be a promising treatment for aggressive childhood cancers like aRMS.



These researchers were awarded the Pediatric Oncology Student Training (POST) grant in 2025, awarded to undergraduate, graduate and medical students who have an interest in pediatric oncology research. The impact is life changing: POST grantees often go on to be the scientists who find breakthroughs and push towards more cures for kids with cancer.



Thank You

for all you do to help kids with cancer!

