



Alex's Lemonade Stand Foundation

Retinoblastoma 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 retinoblastoma.

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 retinoblastoma.

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 **Retinoblastoma Hero**

EVERETT



Everett is a content little baby. He loves to show off his gummy smile and coo.

Because Everett's biological father, aunt, and grandfather all had retinoblastoma, his family had him checked right away. Unfortunately, doctors found a tumor over ultrasound at 37 weeks gestation. Everett started treatment at 2 weeks old.

Currently, Everett is receiving chemotherapy at Children's Hospital of Philadelphia. At only a few months old, Everett is his mom, Keirsten's, hero. "He is my son, and has saved me mentally from so many things," she said. "He is the light of my world and makes me smile every day."

Kiersten says that at the beginning, a childhood cancer diagnosis seems complicated and frustrating, but wants to ensure others who may be experiencing a diagnosis that it mellowed out for them. Having support is a big help.

One of these support systems Everett's family has is the Travel For Care program from ALSF. "Alex's Lemonade Stand has been a huge help to us in providing hotels and covering travel costs for Everett's treatments," Kiersten said. Today, the family can focus on the most important thing in their lives: Everett's health.

ALSF-Funded Projects in Retinoblastoma

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

Identification of phenotypic effects of genomic changes in retinoblastoma tumors using an aqueous humor liquid biopsy

Nerea Goni
Children's Hospital Los Angeles
POST Program Grants, Awarded 2024

Identification of Aberrantly Methylated Differentially Expressed Genes to Distinguish High- vs. Low-Risk Retinoblastoma

Jesse Berry, MD
Children's Hospital Los Angeles
Reach Grants, Awarded 2023

Mechanisms to Redirect Tumor Associated Macrophages to Target Retinoblastoma Cells

Timothy Hallstrom, PhD
The Regents of the University of Minnesota
Innovation Grants, Awarded 2023

Molecular Landscape for Targeted Therapy in Retinoblastoma

James Harbour, MD
University of Miami
Innovation Grants, Awarded 2018



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

Research **in Progress**

Identification of Phenotypic Effects of Genomic Changes in Retinoblastoma Tumors Using an Aqueous Humor Liquid Biopsy

Nerea Goni, Children's Hospital of Los Angeles



ALSF has always believed in investing in the future – whether that means helping kids get the treatment they need or funding researchers to keep expanding the field of pediatric cancer research. The Pediatric Oncology Student Training (POST) Program was designed for undergraduate, graduate, and medical students to participate in the field firsthand under the guidance of an experienced research mentor.

Nerea Goni is one of 47 students who was awarded POST Grants in 2024. Under the mentorship of Dr. Jesse Berry, a 2023 ALSF Reach Grant recipient, Nerea proposes to use aqueous humor from patient samples to isolate cell-free DNA derived from tumors. She also plans to correlate the genomic alterations in the tumor(s) with phenotypic characteristics of the eye(s) and the patients.

Dr. Berry, et al, had previously discovered that aqueous humor – a clear fluid found in the eye – harbors abundant tumor-derived DNA. As the aqueous can be safely extracted from the eye, this has ushered in the use of the aqueous as a ‘liquid biopsy’ for retinoblastoma, allowing access to the genomic information of retinoblastoma tumor cells.

Retinoblastoma is the most common pediatric eye cancer; affecting either one or both eyes of babies and toddlers. It is typically diagnosed before the age of 3. A critical issue in the management of this malignancy is that tumor biopsy cannot be performed due to the risk of extraocular tumor spread. Consequently, tumor tissue is not routinely evaluated for retinoblastoma, and understanding of the molecular etiology underlying various clinical features of the disease was limited, prior to Dr. Berry’s discovery.

Nerea’s research will take Dr. Berry’s findings one step further, as they work to identify the highest quality of personalized prognosis and treatment for each patient with retinoblastoma.



Thank You

for all you do to help kids with cancer!

