**FRESHLY SQUEEZED NEWS**

**ALSF’S FORMULA FOR CURES**

For a lofty goal such as curing childhood cancer, one needs a formula in order to be successful. Over the last 13 years, we at Alex’s Lemonade Stand Foundation (ALSF) have learned that curing childhood cancer is not just a product of fundraising or volunteering or even from a breakthrough that happens in a lab. It is not just one successful treatment for one child or one donation that makes cures possible.

Curing childhood cancer is a combination of all of these elements and all of us working together to save generations of children. It begins and ends with the inspiration of people everywhere and in between it requires an approach that empowers each of us to make a difference. This is our formula.

At ALSF, we:

- Select the most promising projects through a rigorous scientific review process conducted by our Scientific Advisory and Review Boards.
- Encourage innovative collaboration between researchers that speeds up the rate of breakthroughs—ensuring that researchers share information and work together.
- Accelerate breakthrough research by cutting down the time it takes for projects to go from bench to bedside, bringing safer treatments to children every single day.
- Provide immediate impact to families through our Family Services programs that assist with travel to lifesaving treatments and provide support to heroes, siblings and parents.
- Invest in technology that gives researchers access to cutting-edge tools and decades of data available through our Childhood Cancer Data Lab.
- Encourage supporters to take a stand against childhood cancer by offering ways to support the research community who continue to search for cures and the families impacted by this disease.
- Draw on the inspiration of supporters, researchers and the children battling childhood cancer to do all these things, one cup at a time.

This is ALSF’s Formula for Cures—and your support is the most powerful ingredient! Thank you for joining ALSF in this fight.

Inside this month’s newsletter read more about how your donations are impacting research and changing lives.

**ALSF FOUNDER,** Alexandra "Alex" Scott, inspired us all to help kids with cancer by funding better treatments and more cures. During Childhood Cancer Awareness month, ALSF presents the “Gold” issue of our newsletter featuring the Formula For Cures. With your help, together we can continue Alex’s legacy and reach the ultimate goal—to end childhood cancer once and for all.

As Alex said it best, “I think if we all work together, we can do it.”

**Hold A Stand Or Event Any Time Of Year**

**AlexsLemonade.org/Get-Involved**
**EMMA DOESN'T LET CANCER STAND IN HER WAY**

Emma is going through the fight of her life with acute lymphoblastic leukemia (ALL), but she still finds time to enjoy reading and creative art classes. The 6 year old even hosts her own YouTube channel where she shares her baking recipes. Even with the difficulties of her diagnosis, Emma also wants to give back to kids facing the same disease. This summer, Emma and her family held their first Alex’s Lemonade Stand at home in Texas. Although she has a long road ahead of her, Emma’s beaming smile and love of life keeps her family motivated and hopeful for a cure.

**MODIFIED NKT CELLS COULD BRING HOPE TO KIDS WITH NEUROBLASTOMA**

Children with neuroblastoma are prone to relapse, making it difficult to treat and cure. With your support, ALSF helped to fund Dr. Andras Heczey of Texas Children’s Hospital. He opened the first-in-human immunotherapy clinical trial to specifically target neuroblastoma using engineered Natural Killer T cells (NKTi)—an important type of white blood cell found in the immune system. By modifying a child’s own NKT cells to recognize a specific target found only on neuroblastoma cells, the treatment could mean an effective cure without dangerous side effects. The trial aims to establish maximum doses of the immunotherapy, measure the length of time the treatment takes to be effective and hopefully, lead to a broader application to other types of childhood cancers—helping kids everywhere get the cures they deserve.

**NEW IMMUNOTHERAPY TRIAL OPENS FOR BRAIN TUMORS**

Immunotherapies have made huge strides in treating children with cancer. It’s most successful in pediatric blood cancers that are resistant to conventional treatments. Now, many researchers are trying to apply it to pediatric solid tumors as well. T cell trials, such as the BrainChild-O1, use methods developed by Julie Park, MD of Seattle Children’s Hospital. BrainChild-O1 is a new trial that opened in June to test CAR T cell therapy in children with relapsed brain and central nervous system (CNS) tumors. Kids enrolled in this trial will have their CAR T cells reprogrammed to target HER2, a protein expressed on these tumors. Thanks to you, ALSF is able to fund Dr. Park and her team with an early phase trial support grant so they can offer kids and their families more treatment options like this clinical trial.

**ELI’S ROAD TOWARDS A DREAM AND A CURE**

Eli has big dreams—2,200 miles long to be exact. That’s how far the Appalachian Trail stretches and he hopes to visit there someday. First, the 15 year old plans to beat his CNS germinoma, a type of brain tumor that recently relapsed. Part of his treatment includes traveling to Chicago, nearly three hours from home near Indianapolis, to receive potentially lifesaving treatment. Thankfully, your support of ALSF’s Travel For Care program provided financial assistance to ensure Eli could get there.

“If I didn’t have that gas card, I don’t know that I’d have the money to get him there. Every penny counts,” said Jennifer, Eli’s mom.

**THE CRAZY 8 INITIATIVE TAKES RESEARCH TO THE NEXT LEVEL**

ALSF has always facilitated collaboration between the best and the brightest in the field of childhood cancer research while continuing to distinguish itself as a leader in funding research and accelerating cures. To continue to strategically choose the best, most promising projects, ALSF is launching the Crazy 8 Initiative to create detailed roadmaps for cures for specific, hard-to-treat childhood cancers and address pressing topics within the childhood cancer community.

“We are allowing researchers to ask, ‘what can we do differently, better, faster, more far-reaching and meaningful to cure childhood cancer?’” said Crazy 8 Initiative co-chair Dr. Nada Jabado, MD, PhD, of Montreal Children’s Hospital. The outcomes of this initiative will create a new funding pillar that will drive ALSF’s investment and increase the pace of finding new cures for all children with cancer.

For more information including the Crazy 8 Initiative topics, visit AlexsLemonade.org/Crazy-8-Initiative.

**WHERE DATA & RESEARCH COME TOGETHER**

This summer, the Childhood Cancer Data Lab (CCDL) launched the beta version of its data repository, Refine.Bio. Its wealth of childhood cancer data will be available for free to researchers across the globe who are excited for its potential to streamline processing datasets. This is just the beginning. Data scientists at the CCDL like Dr. Jaclyn Taroni, the first ALSF staff member with a PhD in genetics, can advise researchers on how to design experiments so their data is most beneficial to the research community. The CCDL is also harnessing machine learning to provide researchers greater insight into an individual's specific biology and lead to more targeted treatments. Already, the CCDL is creating new tools that will pay dividends in the search for cures now and in the future.

**GARY’S LEGACY INSPIRES A COMMUNITY OF FRIENDS**

Dressed in his tuxedo, Gary entered his senior prom in a wheelchair. His friends surrounded him, surprised but happy he was there. Sadly, the morning after he was crowned prom king, Gary passed away from rhabdomyosarcoma. Throughout his first year of treatment, Gary maintained his number four class rank and served as class president. He loved sports and while he couldn’t play, he attended practices and games whenever possible. Even during the toughest moments of his nearly two-year cancer fight, Gary’s selfless attitude never waned. Six years later, Gary continues to inspire his community. His parents hold annual fundraisers in the hopes of giving other kids a chance for the future Gary never had.
PARTNER SPOTLIGHT

1

Power Home Remodeling took employee giving to a whole new level this year by raising over $620,000 for childhood cancer research. Employees went above and beyond for kids with cancer by hosting lemonade stands, planning fundraisers, visiting hospitals, crushing kickball tournaments and spreading Alex’s message to the world.

2

Congrats to John McPeak, of Lower Merion, PA, who won the Volvo car raffle and a brand new 2018 Volvo XC60 at the Alex’s Original Lemonade Stand! A big thank you to Volvo for donating the car and thanks to everyone who helped ALSF sell out of this year’s raffle tickets!

3

Thank you to Five Below for their fundraising efforts. This year, more than 650 stores nationwide raised over $1.1 million for childhood cancer research!

DID YOU KNOW?

2/3 of childhood cancer patients will have long lasting chronic conditions from treatment.

Childhood cancer research receives just 4% of the annual budget from the National Cancer Institute.