Arden was just 16 months old when she was diagnosed with neuroblastoma, one of the most common and deadly solid tumors of childhood cancers. The diagnosis came out of the blue.

“No one had warned us,” recalls Arden’s mom, Megan.

Forty-five percent of children have the high-risk form of neuroblastoma at diagnosis, which indicates poorer long-term outcomes. Arden, unfortunately, was in that high-risk category. She began treatment at Children’s Hospital of Philadelphia, eventually enrolling in a clinical trial led by Alex’s Lemonade Stand Foundation (ALSF)-funded researcher Dr. Yael Mossé.

Despite the odds stacked against her, the trial worked, and today Arden is a cancer-free 5-year-old. The success of the trial wasn’t just good news for Arden though – it was good news for Dr. Mossé and her team so they could help other kids in need of treatment just like her.

Dr. Mossé was able to publish her team's results in *Nature Medicine*, a high-impact medical science journal. Publication is an important part of the research and collaboration process for scientists to reach cures for kids. These publications illuminate findings and enable more collaboration among childhood cancer researchers. When a research team can publish their results, doors open for other research, and more cures can be found more quickly. Today, Dr. Mossé is leading an upfront trial of the drug that was used to treat Arden, meaning kids don’t have to relapse to receive the treatment.

Turning breakthroughs into cures is the hope for all childhood cancer families, and your support is helping other researchers across the country make strides towards better treatments for kids with cancer. ALSF-funded researchers Dr. Andras Heczey and Dr. Leonid Metelitsa at Baylor College of Medicine shared results from a CAR NKT cell immunotherapy trial which found that CAR NKT, which is similar to CAR T therapy but uses a different immune system cell, could be an effective and safe treatment option for children with neuroblastoma.

Additionally, Innovation grantee Dr. Michelle Monje at Stanford University, together with researchers from seven other institutions (including ALSF-funded researchers Kara Davis, Robbie Majzner, Crystal L. Mackall, Julie Park and Leo Wang), collaborated and published a paper to characterize a new side effect of CAR T immunotherapy treatment for children with brain tumors. It provides a preliminary roadmap on how to manage this promising treatment’s side effects, keeping kids safe and hopefully, cancer-free.

All of this, from research breakthroughs to cures, is made possible by generous donors like you, who were inspired by Founder Alex Scott’s dream of finding cures for all children. “If it weren’t for Alex, there wouldn’t be any Ardens,” said Megan.
Getting Kids to Promising Immunotherapy Treatments

CAR T immunotherapy holds a lot of promise for kids facing cancer, however the therapy isn’t available at every hospital, which means kids, like Beaudin (see story to the right), have to travel for treatment.

The treatment isn’t as simple as a prescribed pill — it is custom-made for each child using their own T cells. **These cells are collected, programmed to attack cancer cells and returned to the child.** Think of it as a hero journey like in a movie. The hero (the T cells), leaves their home (the body), receives a special power and learns how to use it (seeing cancer and killing it), and then returns home (to the body) transformed and ready for action (killing cancer).

All of this must happen at a pediatric cancer center with a robust infrastructure, the capability to engineer cells and FDA authorization. **There are only 81 centers in the U.S. that can treat children with CAR T therapy.** Each of these centers offers a unique roster of therapies — some are FDA approved and others are specialized, single-site clinical trials, like the huCAR T trial Beaudin enrolled in.

For children who relapse, clinical trials are often the only treatment option. If they match to a trial far from home, families are left to navigate travel logistics, which can bring intense financial burdens. That’s why the ALSF Travel For Care program is so critical. Your support ensures children can access the most promising therapies like CAR T immunotherapy, proton radiation and other cutting-edge clinical trials.

**Childhood Cancer Chat with ALSF-Funded Researcher**

**Genevieve Kendall, PhD**

**ALSF:** As a recipient of multiple ALSF grants, how has this support helped your research?

**Dr. Kendall:** The Young Investigator Award in 2015 was a huge launching point for my research. It was one of my first grants as a postdoc and was foundational for establishing my own independent research lab. The ‘A’ Award has helped me continue that research.

**ALSF:** What are you studying?

**Dr. Kendall:** I am studying fusion-driven rhabdomyosarcoma. The goal is to study cancers in these different contexts and identify therapeutic possibilities that are effective for children and beyond.

**ALSF:** What keeps you moving forward in your research?

**Dr. Kendall:** I do what I do because I want to help kids.

**ALSF:** Why is it important to donate to ALSF?

**Dr. Kendall:** ALSF is really committed to developing the next generation of scientists, and that’s a big part of how they make a huge impact on kids. It’s just so important to raise awareness and highlight the opportunities for young scientists to join and stay in the field of pediatric cancer research, which is a key gap that ALSF’s focus is on. New ideas, getting inspired and just seeing what other people are doing to inform your own work and how you can contribute and move therapies forward is everyone’s goal here.

**The First Step Toward Change**

For many researchers, ALSF’s Young Investigator Grants help kickstart their new research ideas for how to fight childhood cancer. Young Investigators are critical because they bring fresh approaches for how to find better treatments and cures for kids with cancer. In 2023, one of those researchers is Leidy Diana Caraballo Galva, PhD at Baylor. Her project uses genetically engineered white blood cells to fight solid tumors like hepatoblastoma.

Immunotherapy treatment that uses these special white blood cells has revolutionized the treatment of children and adults with blood cancers. Dr. Caraballo G. and her team see its potential for children with solid cancers too, but solid tumors have a way to inhibit these special cells, causing them to lose their functionality. Their team has designed mini programs that utilize “switches” that they can turn “on” and “off” when needed to help the white blood cells grow and ultimately eliminate the tumors.

Your support is helping Dr. Caraballo G. and many other young researchers turn their new ideas for how to help kids with cancer, into reality.
The **Lengths** Families Go for Treatment

Beaudin was 6 years old and battling what seemed like a bad cold. Because most of his tests came back normal, it wasn’t until a year later that Beaudin received an official diagnosis: acute lymphoblastic leukemia. The next 20 months revolved around Beaudin’s treatment. Then, a routine lumbar puncture revealed abnormal white blood cells in his spinal fluid.

Thankfully, Beaudin’s mom came across a clinical trial at Children’s Hospital of Philadelphia. The only problem – they would have to travel to Pennsylvania regularly from their home in Denver. Support from ALSF’s Travel For Care program covered airfare costs for their family, which allowed Beaudin to enroll in the trial. Today, Beaudin is more than two years cancer-free!

“We didn’t know how we would cover all the costs. We are so thankful for the Travel For Care program for allowing our family the possibility of pursuing a relapse treatment option for Beaudin that we believe will be his forever cure.”

- Betsy, Beaudin’s mom

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### Fall Into Fundraising

**When it comes to raising awareness this Childhood Cancer Awareness Month, the possibilities are endless! Here are just a few fun ways to keep fundraising this fall.**

#### The Million Mile

Every September, supporters across the country are walking, running and cycling towards a better future for kids with cancer. All you have to do is sign up, set your personal mileage and fundraising goals, and get going! Log miles from anywhere and ask friends and family for donations to show how far you’ll go for kids with cancer.

#### Champions for Kids with Cancer

Turn your season’s stats into life-saving research dollars when you join the Champions program. Whether you play football, tennis, field hockey or just want to host a kickball game, your sporting event can be a victory for kids with cancer.

#### Host a Lemonade Stand

Lemonade stands aren’t just a summer thing! Host a lemonade stand any time of the year and swap in seasonal items like apple cider and hot chocolate for sweet success year-round.

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### Chloe

Behind Chloe’s shy disposition is a funny, friendly 10-year-old, giving her all to fighting neuroblastoma. Chloe was 4 years old when she began experiencing strange pains. Her parents took her from doctor to doctor until receiving a diagnosis – stage IV neuroblastoma. The treatment plan involved chemotherapy, radiation, tumor resection, and more. But in 2020, Chloe relapsed with metastasis. Again, she began a string of treatments, plus a clinical trial using vaccines. Traveling from Missouri to New York proved difficult for Chloe’s family, but the Travel For Care Program helped cover travel expenses. Today, Chloe is proud to have beaten her neuroblastoma!
A Lemonade Legacy

As a cancer survivor herself, Gail knows the importance of organizations who support cancer patients and their families. Gail has a history of supporting pediatric cancer charities, like her recently published children’s book Paisley’s Pay It Forward Adventure that donates proceeds to organizations like ALSF. She wanted to take her support a step further by making sure ALSF has a place in her estate plan.

"I believe in ALSF’s mission and have seen the impact they have on children with cancer and their families. ALSF is special, so I wanted a special place in my estate plan for the organization. It was a very easy and seamless addition to my estate that I know will bring needed support to ALSF.”

Learn more about including ALSF in your estate plans at AlexsLemonade.org/Legacy-Gifts.