

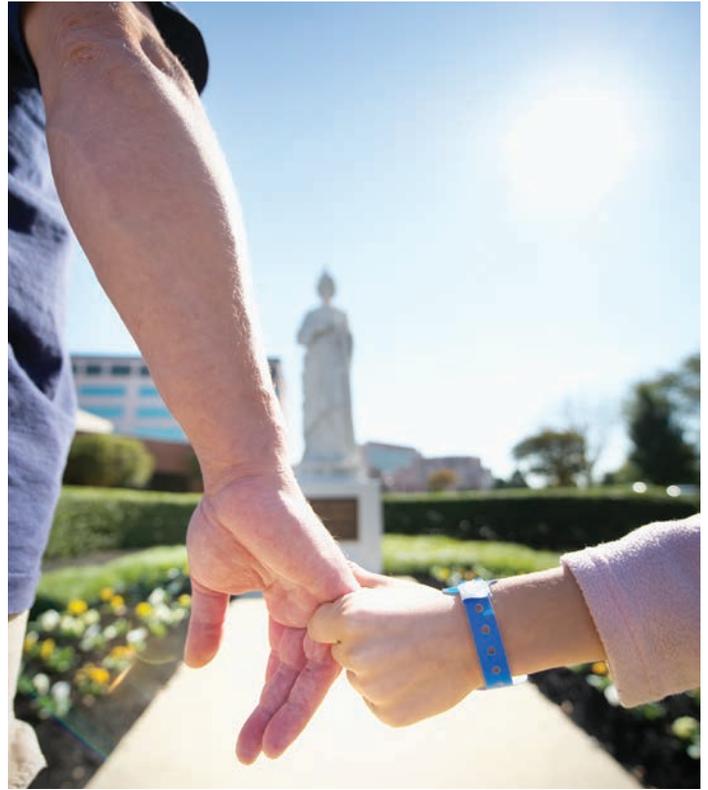
# St. Jude Children's Research Hospital® is deeply grateful for the support of The Key for a Cure Foundation.

The Key for a Cure Foundation provides vital funding of our efforts to advance T cell immunotherapy for infant acute lymphoblastic leukemia (ALL). Through this research, we hope to learn how to harness the power of the immune system to fight and defeat this rare and aggressive form of cancer.

- T cells are white blood cells that circulate throughout the body, searching for “threats” (i.e. cellular abnormalities), including cancerous cells and infections. Once a threat is identified, the T cell can attack and kill the abnormal cell. They are a vital part of the immune system.
- St. Jude researchers have optimized their protocol for identifying T cells that respond to specific tumors and they have defined their anti-tumor responses to a range of ALL tumor types.
- The Key for a Cure has funded research to investigate what part of a patient's cancer cells generate the T cell's primary response. This discovery was achieved in part due to optimization of our computational approaches. This result represents a conceptual advance for the field.

With the steadfast support of The Key for a Cure Foundation, St. Jude scientists are driving progress forward in an effort to save more lives. **Thank you for all that you do to help St. Jude offer hope to families battling cancer.**

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- Several important findings have emerged from this work that researchers are following up on now, thanks to The Key for a Cure's support. Scientists observed that one particular component of the cancer cells was detected in several patients, indicating that it may be a potential target for designing T cell therapies. However, the T cells' attack is clearly not sufficient to control the tumor in these individuals. Therefore, scientists are determining the optimal conditions to engineer T cells so they can more effectively attack these tumors.
- St. Jude scientists will continue to investigate mechanisms involved in suppressing the tumor-fighting functions of T cells. We will also advance our approaches for engineering T cells to more effectively attack these tumors.