Swim Across America-Atlanta support of the Aflac Cancer and Blood Disorders Center

2013-2016

Brain Tumor Research Grant

$400,000 funding for Dr.MacDonald's grant

SAA Atlanta funds from 2013-2015 supported Dr. Tobey MacDonald to identify a specific driver of medulloblastoma tumor, the most common type of pediatric brain tumor. Dr. MacDonald and his team have identified a potential inhibitor, STAT3, to block tumor initiation and growth and initiated a promising clinical trial with this drug for investigation in children with refractory brain tumors. STAT3 is a critical stem cell target in medulloblastoma, and WP1066 effectively targets STAT3 and inhibits medulloblastoma tumor growth in vivo and kills human medulloblastoma ex vivo. The first pediatric clinical trial of the STAT3 inhibor drug, WP1066, officially opened for enrollment in April of 2020. The Aflac Cancer Center treats more kids with brain tumors than anywhere else in the country, and we greatly thank SAA for their support that allowed this project to move forward from concept, to bench, to bedside.

2016-2019

AML Research Grants

$400,000 funding for Dr. Doug Graham and his AML team Research Grant (Drs. DeRyckere, Bunting and Wang)
$1,000,000 commitment to fund Dr. Graham's AML Clinical Trial

SAA Atlanta funds from 2016-2018 supported the research of Dr. Doug Graham, Director of the Aflac Cancer and Blood Disorders Center. Dr. Graham and Dr. Deborah DeRyckere developed a promising new cancer drug, MRX-2843, which is special because it kills cancer cells and reprograms the immune system to attack cancer cells. The first-in-human clinical trial to test the safety of MRX-2843 in patients with solid tumors opened at Emory University's Winship Cancer Institute in May 2018 to define a safe dose that can then be used for a clinical trial with AML patients. Studies in the Graham/DeRyckere laboratory suggest that MRX-2843 may be particularly effective in patients with acute myeloid leukemia (AML) which is one of the most common types of pediatric cancer. Funding from SAA in 2016-2018 allowed this clinical trial to move forward.

2019-2021

Young Investigator Research Grants

$90,000 funding for Dr. Waitman Aumann, $75,000 funding for Dr. Ryan Summers
$70,000 funding for Dr. Rafi Kazi, $70,000 funding for Dr. Curtis Henry, and $70,000 funding for Dr. Sherri Smart

Support for young investigators provides funding to a cohort of promising investigators and future research leaders to encourage and promote quality research in clinical oncology. The intent is to fund physicians and provide career and project support for young, proven investigators in postdoctoral fellowships or who have recently achieved junior faculty positions and are committing their lives to the field of pediatric cancer to provide research with vibrant new ideas. Funding is designed to nurture young scientist in the pursuit of independent hypotheses and to enable them to develop the preliminary data necessary to successfully compete for major research grants. SAA funding will support 5 young investigators (Drs. Aumann, Summers, Kazi, Henry, and Smart) and their respective research studies.

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2021-2022

Young Investigator Research Grants, Continued

$82,500 funding for Dr. Waitman Aumann, Dr. Ryan Summers, Dr. Curtis Henry, and Dr. Sherri Smart
$30,000 to support young investigator research efforts in the Clinical Research Office

2022-2023

Young Investigator Research Grants, Continued

$95,000 funding for Dr. Waitman Aumann, Dr. Curtis Henry, and Dr. Sherri Smart

DR. AUMANN

Leukemia is the most common cancer seen in childhood. Despite significant progress in the treatment of some pediatric leukemias, the prognosis for others, including leukemias harboring the CALM-AF10 fusion protein remains poor. CALM-AF10 expression results in abnormally high levels of HOXA genes, which are critical for white blood cell development and are known to play a key role in leukemias. This project's first aim is to explore whether CALM-AF10 activates the SIX1 gene in a similar manner to the HOXA genes. The second aim is to identify the role of the interaction between SIX1 and a companion protein, EYA, in CALM-AF10 leukemia. Funding from Swim Across America allows for a multi-modal approach of understanding these aims, which could serve as a model for other fusion protein cancers.

DR. HENRY

Research conducted in this study seeks to understand how obesity impacts leukemia and lymphoma progression. In this proposal we will determine how obesity impacts T-cell based therapies and if their effectiveness can be improved by the addition of T-cell stimulating drugs, thanks to funding from Swim Across America.

DR. SMART

Osteosarcoma is the most common pediatric bone tumor and outcomes remain poor in patients with advanced or relapsed disease. Our goal, with support from Swim Across America, is to evaluate the receptor tyrosine kinase MERTK as a novel therapeutic target in osteosarcoma, both alone and in combination with chemotherapy, with potential to directly translate our findings into a clinical trial in pediatric patients with osteosarcoma.