For over three decades, Swim Across America volunteers have hosted swimming events across the United States to raise critical funds to prevent, treat, and end cancer. For the past nine years, the Seattle chapter of SAA has generously supported research at SCCA, raising close to 3 million dollars to directly benefit the Pancreatic Cancer Specialty Clinic and the Swim Across America Cellular Therapy Lab.

Last year, volunteer efforts bridged funding gaps; accelerated research in pancreas cancer—an area of exceptional need; and supported cell-based immunotherapy—an area of increasingly outstanding results and additional promise.

The success of innovative cell-based immunotherapies over the past few years to treat previously intractable disease is unprecedented in the history of cancer research. The Swim Across America Cell Therapy Lab (SAA CTL) at SCCA is at the leading edge of this work and SAA funding has been critical in supporting our immunotherapy program, which brings this research excellence to patients.

The growth in numbers of patients enrolling in trials as well as new trials launching has necessitated an increase in capacity for CTL to meet this need.

Specifically, SAA funding has been essential to the following:

- Education of staff to expand the theoretical and practical expertise required to perform these complex processes, and produce the therapeutics to treat more patients in need.
- Purchase and extensive validation of the sophisticated instruments required to contribute to research, including new flow cytometers that allow us to identify and quantify subsets of blood cells that are the basis for immunotherapy products. This includes training staff to use these new advances.

Among the many new advances in cell-based immunotherapy, SAA-Seattle has supported cell processing for Chimeric Antigen T Cell Receptors (CAR T) from early phase 1 trials several years ago through phase 2. The SCCA/CTL are now implementing FDA approved versions of these therapeutics from biotech. In
addition, SAA-CTL is processing new versions of CAR Ts, which may improve both efficacy and safety profiles in more indications (types of cancer) as well as cells for use in combination with biologic drugs such as checkpoint inhibitors.

Another important SAA supported immunotherapy research project aimed to reduce GVHD complications by removing a subset of T cells from the mix of hematopoietic cells collected from a donor. This research has proved so successful in decreasing GVHD in our early phase trials that it has led to additional clinical trials and a total of 100 patients treated with cells processed by SAA CTL. The principal investigator (PI) for this protocol, Marie Bleakley, is expanding this work to a new trial at multiple sites nationally to provide this therapy to even more patients in need.

Our researchers and medical teams move fearlessly against this cancer and are better understanding pancreas cancer on multiple levels through collection and analysis of pancreas tumors, molecular diagnostic testing of tumors, as well as funding research initiated pilot studies. These projects have a potential to advance detection, diagnosis, and care of pancreatic cancer, the third leading cause of cancer-related death in the country. Noteworthy strides:

- Dr. Venu Pillarisetty, a surgical oncologist, continues to lead research of the complex interaction between immune cells and cancer cells, and studying how therapies can be improved for pancreatic cancer patients. Early support from SAA helped launch his work, which has allowed him to leverage an additional $1 million in funding today. With one published paper and another to be published soon, Dr. Pillarisetty is making great strides in enhancing our understanding of pancreas cancer.

- Dr. Andrew Coveler, SCCA’s medical lead for pancreatic cancer, is conducting a local trial called Peri-Operative Chemotherapy/Radiation Trial Completion for Pancreas Cancer. This trial seeks to demonstrate that multi-agent chemotherapy improves survival outcomes, and it soon to be published. We are thrilled to continue supporting investigators in their groundbreaking research efforts towards the detection, diagnosis, and treatment of pancreas cancer.

- Dr. Sunil Hingorani has developed the Center for Accelerated Translation in Pancreas Cancer (CATPAC), establishing a bio-specimen repository available to all researchers. With continued support from SAA, the CATPAC works in the Pancreas Cancer Specialty Clinic and expands its collection of tissue from pancreas cancers removed during surgery. The pancreas bio-specimen repository currently has over 20,000 specimens from ~400 patients. This repository provides CATPAC with the potential to perform future IRB approved research studies.

**Today, we are on the precipice of important advances,** and the hard work of everyone involved in SAA Seattle has enabled us to meet these new opportunities head on. We look forward to celebrating our successes again this year, together.

Better together.