Swim Across America Seattle

2016 Impact Report

Last year, volunteer efforts bridged funding gaps; accelerated research in pancreas cancer—an area of exceptional need; and supported immunotherapy—an area of great 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 Seattle Cancer Care Alliance 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.
- Planned purchase 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.

For a number of years, SAA-Seattle has supported cell selection for Chimeric Antigen T Cell Receptor (CAR T) immunotherapy, which involves selecting and genetically modifying lymphocytes to be able to recognize and kill tumor cells. In 2014, SAA grants enabled the SAA-CTL to initiate the first CAR T clinical
trial serving patients at SCCA. This trial has produced remarkable results: the complete remission (CR) rate in refractory (unresponsive to other therapies) B Cell Acute Lymphocytic Leukemia was 94% and the CR rate in refractory Non-Hodgkin’s Lymphoma was 64%. This profound success allowed more patients to be treated, including 35 new patients at SCCA in 2016. In addition, 3 more trials using similar technology are beginning in 2017 for SCCA patients.

Our researchers and medical teams in the Pancreas Cancer Specialty Clinic are better understanding pancreas cancer on multiple levels through collection and analysis of pancreas tumors, molecular diagnostic testing of tumors, as well as funding researcher 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, is leading research of the complex interaction between immune cells and cancer cells, and studying how therapies can be improved for pancreatic cancer patients. $40,000 in early support from SAA (in 2011), 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. 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 is soon to be published.

• 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 to expand its collection of tissue from pancreas cancers removed during surgery.

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.