Being an academic surgeon has never been easy, but it offers an intellectually challenging and satisfying career. I can attest to this from my eight years as a surgical oncologist at Seattle Cancer Care Alliance and as a faculty member at the University of Washington. While patient care and teaching are remarkably fulfilling aspects of a career in academic medicine, I am fortunate to also have the opportunity to research ideas that occur to me as I care for patients with pancreatic cancer.

Scientists have countless good ideas; however, only a tiny proportion of them (less than 10 percent) lead to meaningful discoveries. This is why it is so crucial that organizations that fund research are able to take chances on new projects being undertaken by investigators with limited track records to ensure that novel concepts are adequately tested.

Because of generous gifts from Swim Across America – Seattle, several ideas have been transformed into successful experimentation. I’ve dedicated my career to researching improved treatments for people who are diagnosed with pancreatic cancer and other aggressive types of cancer. My goal is to not have to operate, but to find lasting, long-term options that don’t require surgery.

When I began my research in 2009, Swim Across America was essential to my progress. My initial work involved studying the immune cells in human pancreatic cancer. As an early stage researcher, I had limited start-up funds provided by Seattle Cancer Care Alliance partners UW Medicine and Fred Hutch. That’s why I was particularly grateful to receive a $40,000 grant from SAA, which helped fund the salary for my laboratory technician, Kendall Shibuya. Thanks to SAA’s support, we worked together for three years, initially under the strong mentorship of Cassian Yee and, later, Stanley Riddell at Fred Hutch. Ultimately, our work was published and Kendall was admitted to medical school.

If you want to launch careers for innovative new doctors, external funding sources are critical resources. Early SAA funding truly jumpstarted my career, ultimately granting me the opportunity to pursue studies outside of my pancreatic specialty (sarcoma, colorectal, and head & neck cancers), enabling me to look at different tumor types to help me better understand each one.

Today’s research is proving to be very promising, as we continue working toward understanding the interactions between immune cells and cancer cells. We have been very fortunate to have recently received another round of funding from SAA through a competitive grant program at Seattle Cancer Care Alliance. This funding will allow us to learn more about the way that T cells (the primary cancer-killing immune cells) proliferate in pancreatic cancer and some of the mechanisms that might prevent this from happening.

My current SAA funding is also supporting a project that keeps fresh tumor slices alive in culture, allowing us to test different therapies on models of living tumors. Recently, combining immunotherapy treatments created a dramatically effective result, killing numerous cancer cells. Furthermore, since each set of tumor slices represents an individual patient’s tumor, this system may allow us to personalize oncologic therapy by tailoring a patient’s treatment to his or her individual tumor. Our description of this model and how it can be used to study the immune system was just accepted for publication, and we are hopeful that this work will soon translate into new treatments for patients with pancreatic cancer.

Because of my early work and current collaborations with Dr. Raymond Yeung and Dr. Nick Crispe at UW Medicine, I recently secured substantial laboratory funding from both government and industry sources. This would not have been possible without crucial support from SAA. To get a federally funded grant, you need to have done about half of the work that you propose to show that it’s worth the investment. SAA’s support was absolutely essential to my research. There is no way for a clinician scientist to be able to do cutting-edge, high-risk research without funding from forward-thinking organizations like Swim Across America.

Advances Cancer Care and Research

by Venu Pillarisetty, MD

Cover photo and SAA photography courtesy of Alessandra Arendt

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THE BULLETIN
SUMMER 2017

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The history of Swim Across America – Seattle (SAA – Seattle) began in 2007, two years prior to the inaugural event, with a search for a beneficiary that would align with SAA’s mission statement: We unite the swimming community by hosting benefit swims that raise money to fund lifesaving cancer research and clinical trials.

The purpose of an SAA grant is to empower our beneficiaries to conduct clinical trials and research that they otherwise wouldn’t be able to complete due to a lack of funding. SAA – Seattle found their match in Seattle Cancer Care Alliance (SCCA).

SCCA offered an attractive partnership for SAA – Seattle thanks to its unique structure that unites Fred Hutch, UW Medicine, and Seattle Children’s. SAA – Seattle funded an early clinical research study at SCCA’s Cellular Therapy Lab (CTL), led by Drs. Stan Riddell and Marie Bleakley, through its first event in 2009. As stated in the 2009 impact statement from SCCA, “Within weeks of receiving the donation from SAA – Seattle, SCCA doctors were able to start the first patients on a clinical research study to prevent graft-versus-host disease (GVHD), a serious and sometimes fatal complication of bone marrow transplantation used to treat blood-borne diseases like leukemia and lymphoma.”

Since then, SAA – Seattle has funded several research projects at SCCA, including the CTL’s Naïve T Cell Depletion Study (Protocol 2222) and additional clinical trials. It also fueled the development of new lab capabilities for cell selection and vital equipment purchases. SAA – Seattle also funded SCCA’s Pancreatic Cancer Specialty Clinic and has supported the Cancer Consortium Biospecimen Resource (CBBR) and the Center for Accelerated Translation in Pancreas Cancer (CATPAC). In recognition of SAA – Seattle’s partnership with SCCA, the CTL was officially named the “Swim Across America Cellular Therapy Lab” in 2013, when SAA – Seattle’s total research funding for SCCA reached $1 million.

The first SAA – Seattle event was held on September 12, 2009, raising $130,000 with the help of many donors, 129 swimmers, and approximately 50 volunteers. In 2016, 390 swimmers and over 100 volunteers helped raise $540,000. This brilliant level of growth continues to benefit more SCCA patients than ever before and has helped SCCA researchers progress in their battle against cancer. In the eight years since SAA – Seattle’s inception, nearly $2 million has been donated to fund cancer research at SCCA.

SAA – Seattle’s fundraising success is largely thanks to the swimmers, volunteers, patients, and caregivers who form tribute teams for each annual event. Each tribute team carries with them a story of a loved one who was touched by cancer. They honor those who are still battling cancer and remember those who have passed away. Each story of “Why We Swim” is motivating, inspiring, and consoling.

Our 2009 event included 11 teams. By 2016, that number had increased to 45 teams, including Team TBD (The Big Deal) and Team No Limits, who each raised over $150,000, being bested only by Team Benoit, which raised $225,000, a national team record. In 2011, The College Cup was added to inspire universities to
form tribute teams. Each year, Seattle University, the University of Idaho, and Boise State University have brought teams to compete in fundraising and swim together, making waves to fight cancer. Their enthusiasm and spirit move us all.

At each of our SAA – Seattle events, the colorful sunrises and warm days are joined by America’s fastest swimmers, our Olympians, and many Puget Sound area locals. In our eight years, we’ve had a total of 60 Olympians join our fight against cancer, some of who will return this year.

The Event Organizing Committee started with six volunteers and has grown to 14, expanding our community outreach. When we started in 2009, we were delighted to have served 400 pancakes and 30 pounds of salmon to the swimmers and volunteers. On event day this year, our more than 100 volunteers will help set up, check in and register participants, secure safety on the water, and staff a buffet that feeds over 1,000 people well over 2,000 pancakes, 80 pounds of smoked salmon, fruit, and beverages. Hats off to the chef and his culinary staff for eight years of keeping our participants full and ready for their swim.

Since the beginning of SAA – Seattle and continuing today, each annual event is led and staffed completely by volunteers. No one is paid, and services to operate the event are donated or given at discounted fees. This allows SAA – Seattle to donate a majority of the funds raised by participants and through corporate donations, providing an unrestricted open door to directly fund research.

Our corporate sponsorships have grown from $10,000 in 2009 to over $100,000 in 2016. We continue to reach out to give more local corporations the opportunity to support tribute teams and a cause that benefits many.

Alongside our corporate sponsorships and tribute teams are individual swimmers who register for the event. Families, coworkers, friends, and individuals swim in honor of someone they love.

We welcome you to participate in the 2017 Swim Across America – Seattle Open Water Swim.

Volunteer, create a tribute team, and/or swim in beautiful Lake Washington to raise money that funds clinical trials and cancer research at the Seattle Cancer Care Alliance. Over the last eight years, we’ve raised nearly $2 million, which has been leveraged to obtain matching grants that would otherwise not have been obtained. The event is held the morning of 9/09/17. swimacrossamerica.org/seattle

About the Author:
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