



Notes for portfolio:

- This is a blinded version of a donor stewardship report I wrote in March 2020.
- Once I created the content, it went to our graphic design team for layout.

Texas Children's Cancer and Hematology Centers

2019 Report for _____

A ringing bell is music to our ears at Texas Children's Cancer and Hematology Centers. It means one of our patients has reached the long-awaited end of their cancer treatment.

If you look behind the scenes, you'll see that this joyous moment was made possible through the efforts of many.

It's the culmination of the work of research scientists who have dedicated their lives to understanding, treating, and curing childhood cancer.

It's the result of many highly skilled medical providers who have worked relentlessly to develop and implement treatments tailored to each individual patient.

It all starts with the support of our compassionate and generous partners and philanthropists who have given so that children can survive and thrive.

Texas Children's Cancer and Hematology Centers is immensely grateful for the opportunity to partner with _____, an organization that shares our commitment to improving the health and well-being of children with cancer.

Thank you for your support of Texas Children's Cancer and Hematology Centers.

_____ Immunotherapy Center

At Texas Children's, we are very fortunate to have the best and brightest minds dedicated to finding a cure for childhood cancer. Everyone — including our physician-scientists, research technicians, clinical researchers, and the entire medical team — feels a tremendous sense of urgency to attain this goal.

Thanks to your generosity, the _____ Immunotherapy Center will officially open on 7 West Tower in spring 2020.

New Patient Floor Offers More Space, Enhanced Features

As Texas Children's Cancer and Hematology Centers continues to pioneer new and emerging therapies for patients with cancer and blood disorders, the need for additional inpatient accommodations was crucial. The new space will allow care teams to better meet the needs of patients while continuing to provide the highest quality care.

The spacious, state-of-the-art patient care floor includes 22 hematology-oncology rooms and 10 bone marrow transplant rooms. The newly renovated spaces also feature a multidisciplinary work area for the health care teams, larger family lounge and respite areas, a laundry room, and a beautiful art studio for patients and their families.

"The _____ Immunotherapy Center is a tremendous advance that will be essential to achieving our goal of curing cancer in each and every child. We, along with our patients and their families, are grateful for our partnership with _____. This partnership is incredibly strong, because the founders and leaders of _____ are equally as driven and passionate as we are about caring for children who are diagnosed with cancer and eliminating this disease as quickly as possible."

-Susan M. Blaney, M.D., director of Texas Children's Cancer and Hematology Centers

Research Update: Repairing Shattered Chromosomes

Twenty percent of children with Shwachman Diamond syndrome (SDS) will develop myelodysplastic syndrome (MDS) or acute myeloid leukemia (AML) by 20 years of age. Why they are at such exquisite risk is poorly understood.

A research team at Texas Children's Cancer and Hematology Centers proposed that the increased risk of MDS/AML is due to a defect in the ability of SDS cells to repair breaks in their DNA, which then leads to a series of genetic and genomic changes culminating in MDS/AML.

The team had previously discovered that cells derived from patients with SDS are very sensitive to radiation, which causes DNA breaks. In addition, they found that SDS cells have a reduced ability to repair a specific type of DNA damage known as double strand breaks, where the chromosome is broken into pieces.

In their efforts to understand the ability of cells to repair this damage in patients with SDS, the team accomplished the following over the past year:

- They examined the two repair pathways. One is homologous recombination, which repairs the damage without introducing mutation. The other is nonhomologous end joining, which introduces mutations during repair.

- The level of the Rad51 protein that is essential for the HR repair pathway is markedly diminished; however, restoring the Rad51 level does not rescue the HR defect in SDS cells. This suggests that one or more additional factors are influencing HR efficiency.
- Similar defects were found in cells from patients with Diamond-Blackfan anemia (DBA).

We will continue working to uncover the factors that contribute to predisposition to MDS/AML, not only in SDS, but also in DBA.

Research Update: Stopping Suppressor Cells from Blocking Immunotherapy Response

Relapsed osteosarcoma and neuroblastoma remain extremely difficult to cure and they are resistant to conventional chemotherapy. New strategies to cure these deadly cancers are urgently needed.

Toward this end, researchers in Texas Children's Cancer and Hematology Centers are investigating the role of myeloid-derived suppressor cells in GD2.CAR T cell immunotherapy. T-cell immunotherapy, which uses the patient's own white blood cells (T cells) that have been engineered to recognize their tumor, offers great promise for these patients; however, barriers exist which prevent the T cells from working properly.

One of the barriers to T-cell immunotherapy being effective in solid tumors such as osteosarcoma and neuroblastoma is a population of cells in the tumor environment called myeloid-derived suppressor cells. These cells protect the tumor from the immune response, including T-cell therapies. Overcoming the inhibitory factors produced by these cells is a major obstacle to increasing the effectiveness of T-cell immunotherapy against solid tumors.

The goal of this ongoing project is to investigate ways to overcome these barriers and boost their ability to kill tumor cells. If successful, we could increase the effectiveness of immunotherapy for these patients and improve not only their long-term survival, but also their quality of life.

Global Hematology-Oncology Pediatric Excellence (HOPE)

Thank you for helping us expand the Global HOPE Fellowship Training Program

Cancer used to be a death sentence for all but a few of the children diagnosed in sub-Saharan Africa. Through Global HOPE, thousands of African children with cancer and blood diseases will be treated.

Founded by Texas Children's Cancer and Hematology Centers, the largest pediatric cancer and hematology center in the United States, Global HOPE is building long-term capacity to treat and dramatically improve the prognosis for children with cancer and blood disorders in sub-Saharan Africa.

Our vision is to ensure that children with cancer and blood disorders in Africa receive the most effective, state-of-the-art therapies available, and experience treatment outcomes comparable to those in resource-rich settings in the United States and Western Europe.

_____ Training Centers Across Africa and in Houston

Through Global HOPE, a capacity-building program that trains hundreds of African doctors, nurses and health care professionals, our goal is to cure hundreds of thousands of children with cancer and blood disorders in sub-Saharan Africa. The training programs, which work in conjunction with the Immunotherapy Center at Texas Children's, ensure that local health care professionals are better able to diagnose and treat children with cancer, thus greatly improving survival rates.

Together, _____ and Global HOPE will impact the lives of generations of children across sub-Saharan Africa.

Fiscal Year 2019: First-Year Impact

Global HOPE Paediatric Haematology and Oncology Fellowship Program Makerere University College of Health Sciences in Kampala, Uganda

_____’s generous gift has enabled Global HOPE to expand enrollment of physicians, nurses, pathologists, and other critical health care professionals in this three-year fellowship program.

Insert financials

Plans for Fiscal Year 2020

Thanks to _____, we will continue to expand our inaugural Global HOPE fellowship training program, currently based in Uganda, across the East African community.

Insert anticipated expenses

Meet _____

The Global HOPE Botswana team first met _____ in September 2019, when he was almost 9 years old.

_____ has a type of brain tumor known as a glioma. He has had surgery to remove part of the tumor and is currently receiving chemotherapy. Although he still has some issues with his hearing and vision due to the tumor, he has a sweet and gentle disposition that has made him the instant friend of everyone on the hospital ward. He is always eager to participate in Global HOPE activities, including our annual Childhood Cancer Survivor Party in September.

Most recently, _____ and fellow _____ board members _____ and _____ joined Global HOPE to visit the clinical sites in Botswana and Uganda. In Botswana, _____ kindly sponsored an art activity for Global HOPE Botswana cancer patients. The event drew more than 25 children, all of whom enjoyed an afternoon of painting, playing, laughing, and having fun.

Because _____ has hearing and vision loss, _____ worked very closely to draw and paint with him to ensure that he, like the rest of the kids, enjoyed the party. Over the course of the afternoon, _____ and _____ bonded, so much so that he instantly recognized her the next day when she went to visit him in the hospital.

Insert patient photos

Everyone at Texas Children's Cancer and Hematology Centers is grateful for all that your dedication and support makes possible. We want to especially thank you on behalf of the thousands of children here and across the globe who are living longer and better lives, for they are the true beneficiaries of your kindness.