

HONORHEALTH®

Foundation

Saving Lives and Creating Hope Through Cancer Research

Specially Prepared For:

Desert Mountain Members' CARE

Updated July 2023

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Foundation

We're Using Your Gifts to Improve, Extend and Save Lives



Desert Mountain CARE (Cancer Awareness Research and Education) impacts the lives of countless patients with cancer and their loving families through your valued partnership with HonorHealth Foundation.

Your gifts totaling more than \$3 million over the years have funded world-class cancer research, giving our patients the most precious gift—time. Time for new discoveries, time with improved quality of life during treatment, time with family.

You enable our nonprofit, community-based healthcare system to provide compassionate, expert care, state-of-the-art facilities and leading-edge research to discover new cures and treatments to improve and save lives!

**HonorHealth
Foundation is grateful
for your ongoing
support, compassion
and kindness!**



YOU Make Great Care Possible!

Through your generosity and purposeful philanthropy, HonorHealth Research Institute is crafting the future of cancer care today with:

- Innovative new treatments for breast and prostate cancer, including RADAR–Rapid Detection and Assessment of Response
- Advancements in molecular profiling, precision medicine and cellular therapy
- An early detection program to improve outcomes for patients with deadly pancreatic cancer
- The Rare Cancer Initiative, that gives hope to patients with often-ignored cancers
- More early-phase clinical trials than any other cancer center in Arizona



2022

Through the generosity of CARE, the Rare Cancer Initiative has developed several leading initiatives around two key programs.

UVEAL MELANOMA:

Prognostic Markers: We are continuing our work of assessing markers of active disease and working with our collaborators at TGen to develop exosomes for uveal melanoma. This initiative is directed at developing an assay, which we will be able to confirm is associated with a high rate of clinical recurrence in patients treated with primary enucleation or plaque radiation.

Intra-ocular Therapy: We have initiated a pilot project with Dr. Frederick Zenhausern at the University of Arizona to develop porous silicon nanoparticles and organ-on-chip technologies for treatment of recurrent or progressing intraocular disease. This project is presently in the early pre-clinical status.

TENOSYNOVIAL GIANT CELL TUMOR:

Diagnostic Markers: We are working on a series of activities designed to develop a less invasive method for diagnosing this disorder and streamlining the process of getting patients on treatment.

Plant Extracellular Vesicles for Therapy of TGCT: Plant extracellular vesicles represent a unique method for delivering a focused targeted treatment to the joint in question, reducing the risk of systemic side effects of treatment. Our progress thus far has been in identifying optimal plant extracellular vesicle extract. Our plan is to identify the ability to construct the therapeutic vesicle targeting the CSF1R which is dysregulated in TGCT. Our hope is to perform the preclinical laboratory testing on TGCT organoids and then apply for further funding to support pilot clinical work.



Desert Mountain CARE Check Presentation to HRI – October 2022

2021

The support of Desert Mountain CARE in 2021 focused on the transition from the last funding cycle

ORGANOIDS:

HonorHealth Research Institute published data for a case series of study subjects, supported by Desert Mountain CARE, highlighting the ability to identify potentially comprehensive targeted therapy approaches for many patients with advanced cancer. Our plan is to bring that technology forward into a prospective clinical trial that is in development.

CELLULAR THERAPY:

The cellular therapy program, led by Dr. Justin Moser, is presently coordinating six trials using a range of novel technologies as cellular delivery agents, and expansion of killer T cells for the treatment of various malignancies. HonorHealth has been selected to be the pilot site for a new commercial TIL (tumor infiltrating lymphocyte) therapy program in melanoma, with approval expected in early 2023. This therapy is also anticipated for approval in women's cervical cancer. New cellular therapy initiatives in ovarian cancer and sarcoma are all planned to start in 2023. Faculty support continued for Dr. Moser in this his second year as a faculty member at HonorHealth Research Institute.

MULTIPLE MYELOMA:

Under the leadership of Dr. Joseph Mikhael, we have been able to build and grow the Multiple Myeloma Consultative Program and guide eligible patients onto several clinical trials within the HonorHealth system, including a new CAR-T technology for Multiple Myeloma. The support for Dr. Mikhael's activities have resulted in numerous patients both inside and outside of Arizona gaining access to best approaches for treatment of their disease.



CARE's generous gift is presented August 9, 2021. L to R: Louise Zirretta, Dr. Steve McMurray, Gen. Derek Hill, Dr. Michael Gordon, Suzanne Paetzer, Dr. Mark Slater, Jill Porcellato, Wayne Mailoux, Dr. Daniel Von Hoff and Barbara Giovan.

2020

Continuing the Advancement of the Cellular Therapy Research Program

CARE's generous funding in 2020 enabled the Institute to:

- Complete the validation and refinement of organoid models. This includes establishing the organoid model process in scientific literature and applying organoid models in clinical samples to support targeted therapies.
- Advance the science of Tumor Infiltrating Lymphocytes (TIL) cellular therapy for cancer patients. This includes establishing laboratory methods for TIL development, demonstrating effective methods for TIL expansion, evaluating TIL effects on human cancers in organoid models and exploring TIL therapy in the initial first-in-human clinical application study.

2019

Advancing Cellular Therapy and Innovation

In 2019, the Institute reported that the Cellular Therapy Research Program had made great strides in developing program expertise, laboratory structure and scientific achievement through the establishment of initial protocols and studies.

Specifically, CARE's gift facilitated talent and collaborations and lab technology and development. It also provided project seed funding to expand the Tumor Infiltrating Lymphocyte (TIL) therapy program into treating patients with cancer.

Thank you, CARE! Your seed funding of the Cellular Therapy Research Program at the Institute paves the way for our partnership's continued success in fighting cancer.

“HonorHealth Research Institute is increasingly a destination and beacon of hope for those facing rare cancers. Advances against them cannot be made until someone makes them a priority. Powered by generosity, we are transforming and saving the lives of patients who typically have had little—if any —hope.”

**Michael S. Gordon, MD
Chief Medical Officer
HonorHealth Research Institute**





Desert Mountain CARE board members present their generous gift in June 2018 to support the Cellular Therapy Research Program. At far left is Mark Slater, PhD, Vice President of Research and Chief Executive of HonorHealth Research Institute. At far right is Todd LaPorte, HonorHealth Chief Executive Officer.

2018

Launching the Cellular Therapy Research Program

The first of its kind in the region, the Cellular Therapy Research Program focuses on novel treatments that involve transplanting human cells to replace or repair damaged cells. This approach is similar to now-common types of early cell therapies, such as providing blood transfusions in certain medical situations or bone marrow transplants for leukemia and other blood cancers.

The Cellular Therapy Research Program would not be possible without CARE's support. By again partnering with HonorHealth Research Institute, CARE has provided the crucial program support needed.

2017

Taking the Early Detection Program to the Next Level

With CARE's support, the Early Detection Program was able to expand its science infrastructure by acquiring leading-edge genomic-based technology. This includes Next Generation Sequencing that helps advance research more efficiently and cost-effectively.

CARE'S generosity also helped the Early Detection Program to recruit key physician-scientists and expand the program's concept into other types of cancer. In fact, the program now is addressing not only pancreatic cancer but also breast, ovarian, and colon cancer.

Additionally, the Institute's Early Detection Program has moved into other areas and now includes expert neurological researchers who are focusing on Alzheimer's and Parkinson's.

The Institute's Early Detection Program provides a place to turn when individuals are worried that their family history makes them at risk for developing cancer. The program is positioned to have a tremendous impact by successfully demonstrating what's possible in intercepting cancer to save lives.

Serving as an example supported by solid data, the program inspires collaboration with other organizations, enables the pursuit of significant funding opportunities and ultimately aims to expand early detection to benefit greater numbers of people.

2015-2016

Playing a Leading Role in the Early Detection Program

Launched by the Institute, the Early Detection Program is based on advances in understanding and analyzing the structure of an individual's genes, as well as our leadership in precision medicine.

The Early Detection Program offers services including:

- Medical history and physical exam
- Genetic counseling and testing
- Blood testing
- MRIs or other imaging studies, such as ultrasounds to see if the texture of the pancreas has changed, potentially alerting to the development of cancer
- Nutrition consultation
- Risk-reducing surgery, if applicable
- Possible participation in preventative clinical trials
- Experts also may evaluate blood, urine and skin swabs for evidence of gene mutations linked to cancer
- Patients receive a comprehensive review of their risk factors for developing pancreatic cancer, multiple ways to lower their risk of developing the disease and a personalized cancer prevention plan



Desert Mountain CARE members with a plaque honoring their support of the Institute's RADAR program

2012-14

Honing in on RADAR (Rapid Detection and Assessment of Response)

With CARE's support, the Institute's RADAR team launched an initial study in 2012. The study involved patients with breast, colon, prostate, ovarian or lung tumors and utilized a new type of chemotherapy called nanoparticles that are designed to be as effective as standard treatments but have fewer side effects.

Our first-of-its-kind trial was aimed at actually "seeing" the delivery of cancer treatments to tumors through MRIs. This was a vital step toward monitoring the response of tumors to treatment—noninvasively—and quickly determining if the treatment was effective. If not, treatment plans could be promptly revised.

Because of these findings, several companies have sought our help in adopting the novel approaches at the Institute to assist in future drug development plans to accelerate innovation in new cancer therapies.

2008-2011

Fighting Breast and Prostate Cancer

CARE's initial gifts to the Institute helped support breast and prostate cancer research, as well as screening programs. While our research program was in its early years at that time, CARE's support has helped us to become the recognized and respected leader in clinical trials that we are today. In fact, at any given time, dozens of oncology clinical trials are typically underway at HonorHealth through the Institute.

Summary

Because of you, many of these are Phase I or "first-in-human" studies of new drugs or treatments, which are rarely found in a community hospital setting. Impressively, we offer more early-phase clinical trials than any other cancer center in Arizona and are often the first site in the world to evaluate a new therapy in a Phase I trial.

Building on this success, and with your support, we continue to bring hope to patients battling cancer and their loving families!

**Thank you, Desert Mountain Members' CARE
for supporting HonorHealth.
We are grateful for your philanthropic spirit
and all you do for our community!**

