Esther Lee Shares Her Pancreatic Cancer Journey

We are delighted to have Esther Lee, DPT, as our Honorary Starter for the 2021 LA Cancer Challenge Walk/Run. The LACC Honorary Starter is a special honor we bestow each year on a pancreatic cancer survivor who has shown great courage, strength and positivity throughout their cancer journey.

Diagnosed in July 2020 with stage IV pancreatic neuroendocrine tumor with metastasis, Esther faced a long and bumpy treatment journey that she is still on. Through it all she exemplifies grace and expresses gratitude every step of the way. In Esther's own words, "I've truly learned to take it one day at a time, the greatest challenge being fully present in each day, moment by moment... this is the amazing place of peace and gratitude."

Learn more about Esther in this short video

Esther is a source of joy and inspiration to everyone she meets, including her long-time client Serena Williams. The tennis icon and Esther's dear friend shared a heartfelt video rallying support for Esther and her team.

Watch Serena's video

Esther has the amazing support of her family, friends and her medical team at UCLA. On October 31, 2021, we rally for Esther and all those facing pancreatic cancer to walk for research, race towards a cure and never give up!

Momentum Newsletter: Fall

Our calendars are packed with Fall events — great ways to get involved and make a difference for the pancreatic cancer community. We recently held the 9th Annual Tour de Pier, our first in-person event since March 2020, and it was so great to see friendly faces in-person and come together as a community to make a difference for those facing cancer. We look forward to more warm embraces and catching up at the LA Cancer Challenge and our Purple People Party at the LA Marathon. With both inperson and virtual options for all our events, we're uniting across the nation to raise awareness, especially during Pancreatic Cancer Awareness Month in November. There are many opportunities to get involved, so let's finish the year strong as champions in the fight to cure pancreatic cancer!

Seed Grants

In August, we received our <u>Seed Grant</u> applications from Italy to Ohio, Yale to MD Anderson. Scientists and researchers around the world stand at the ready with brilliant ideas to help change the face of this disease, thus it is crucial that we fund as many of these projects as possible. We have spent the last 24 years funding the groundwork research to better understand this disease. Real progress is being made, and our research team at <u>UCLA</u> is hopeful that over the next 10 years there will be leaps and bounds in diagnostics and treatment options. New opportunities and scientific advancements are on the horizon, and we look forward to funding them with your support.

Donate to advance research today →

Fall Events are Here!

Our mission to unite generations, young and old, through physical fitness is back to in-person activities! Our Foundation events help fund research, educate the public about pancreatic cancer and provide an opportunity to honor our loved ones as we unite as a community. Learn more about our upcoming events and join us in-person or virtually

Tour de Pier

The 9th Annual <u>Tour de Pier</u> returned to Manhattan Beach on Sunday, September 12th and it was a magical, emotional, and powerful reunion after so many months apart. Announcing that we surpassed our \$1 million dollar goal during the final hour made the day all the more impactful. You can relive the wonder of the day and ride again and again with our livestream.

Watch Today →

24th Annual LA Cancer Challenge 5K Walk/Run, Sunday, October 31, 2021

It's October which means the LA Cancer Challenge is around the corner! We are excited to reunite at UCLA and across the nation on October 31st. Whether you run, walk or stroll, your participation helps ensure we can provide crucial patient services and drive research towards a cure. Grab your costume, sneakers and recruit your friends — be a hero for the pancreatic cancer community this Halloween!

Register Today →

Hirshberg Training Team 2021 at the LA Marathon, Sunday, November 7, 2021

Join us as we cheer on our <u>Hirshberg Training Team</u> runners at the Purple People Party along the LA Marathon course on November 7th — during National Pancreatic Cancer Awareness Month! Sport your purple gear, come ready to cheer and get a 2nd hand runner's high. You might even decide to join the team as a runner for 2022!

Purple People Party at the LA Marathon, Sunday, November 7, 2021
Volunteer →

Run the 2022 LA Marathon with the Hirshberg Training Team, Sunday, March 20, 2022

<u>Register</u> →

Whether in-person or virtually, there are so many great ways to get involved and raise pancreatic cancer awareness.

Honoring our UCLA Researchers at the LA Cancer Challenge

The LACC Honorary Medical Chair position is awarded to a professional whose exemplary work in pancreatic cancer has benefited both medical and patient communities. We're excited to announce that Dr. Zhaoping Li, Chief of the Division of Clinical Nutrition, has accepted our invitation to be LACC Honorary Medical Chair. Nutrition can be a contentious topic for many patients navigating a diagnosis and side effects, but Dr. Li's compassion, knowledge, and warm personality make each event outshine the last. Whether she's speaking at our Symposium or hosting a nutrition webinar, she always has patients' best interests at heart. We are thrilled to welcome her as LACC

Honorary Medical Chair and grateful to have her <u>walk and</u> fundraise on the UCLA Health Sciences Team!

Patient & Family Webinar Series Finishes with Dr. Isacoff in advance of our 2022 Symposium

In July, we concluded our season of <u>Patient & Family Webinars</u> with an extraordinary discussion with Dr. William Isacoff. <u>Dr. Isacoff</u> spoke about low-dose chemotherapy and the work he is doing to develop more effective and less toxic treatments for patients with pancreatic cancer. While his approach is at times unconventional and goes against the current guidelines, Dr. Isacoff's webinar was filled with hope and the promise to provide patients with better outcomes.

Our webinar series, which began when COVID made holding our Symposium in-person untenable, has grown into a library of 19 video resources. With topics ranging from pancreatic cysts to cannabis, caregiving to genetic counseling, clinical trials to our nurses guide to navigating a diagnosis, these video are a valuable resource for our pancreatic cancer community. As we look toward the year to come, we are optimistic that we will be able to safely gather again for our Symposium at UCLA on April 23, 2022. Providing both an in-person and virtual opportunity to gather, learn from one another and create bonds through a shared experience, our Symposium is a keystone of the work we do. However you choose to join us, we hope to see you on April 23rd.

The work we accomplish is possible because of your support, through donations, participation and raising awareness. Every donation helps drive research, provide patient programs, and

Esther Lee to be Honorary Starter for the 24th Annual LA Cancer Challenge

The Hirshberg Foundation is thrilled to welcome Esther Lee, DPT, as our Honorary Starter for the 2021 LA Cancer Challenge Walk/Run! Esther exemplifies courage, hope and positivity in the face of her pancreatic cancer diagnosis. We first met Esther in January of 2021 when she joined our Patient & Family Webinar where we celebrated 10, 20 & 30 year pancreatic cancer survivors. Esther instantly made an impression on Zoom in her purple headband and within hours had ordered purple beanies and wristbands for her whole family; and from there she became part of the Hirshberg Family.

As a local cancer patient, we invited her to participate in our Healing Bloom Zoom, a virtual flower arranging class for survivors. She and her sister created a beautiful floral arrangement. Esther shared that this floral class inspired her "new favorite hobby" of gardening in her back yard. Before we knew it she had registered Team Esther for the LA Cancer Challenge, 6 months in advance! She is all in with her support of the Foundation and we are some of her biggest cheerleaders — although she has many, a great community rallying around her.

She generously shared some details of what the last year has been like for her:

Prior to a year ago, I was zipping around my typical busy fast paced life. I was thoroughly enjoying my super busy life as a doctor of physical therapy, providing manual treatments for my private clients in LA and around the world. When I wasn't working, I was playing beach volleyball 3-4 times per week, playing tennis, snowboarding, riding my bike, jogging, and working out. I lived a "healthy," active life and was passionate about traveling and exploring the wonderful cultures and beautiful landscapes around the world. When home in LA, I loved hosting game nights with friends and loved building deeper connections with loved ones.

July 29th, 2020, my world flipped upside down and took a sharp turn. I was diagnosed with stage IV pancreatic neuroendocrine tumor with metastasis to my liver, spine and lymph nodes. Fortunately, on August 26th, 2020, I was able to undergo surgical removal of my 14cm tumor, spleen and part of my pancreas because I was having difficulty eating and had developed severe pain in my spine. Due to complications with fluid build-up around my right lung, I had to undergo several procedures to drain and resolve the accumulation that was resulting in my lung collapsing and making it extremely difficult to breathe for almost 4 months. I had the fluid around my lung drained every morning for 3 months until I was finally able to have my pleural catheter removed December 10, 2020. I underwent 3 rounds of chemotherapy and then 4 rounds of peptide receptor radionuclide therapy (PRRT, which I am about to complete July 27th, 2021), "the bazooka treatment for neuroendocrine tumors" according to my wonderful oncologist. I will be getting my first scan post-PRRT treatment, in late October, just prior to the LA Cancer Challenge. This scan will assess how my cancer cells have responded to treatment.

It has been a long bumpy road but I am so very thankful that I have come an extremely long way in (almost) 1 year. My family,

friends, medical team of doctors, nurses, techs, and my chaplain at UCLA, the wonderful Hirshberg Foundation community and of course my adorable sidekick maltipoo pup, have been my greatest support, inspiration and gift along my journey. My sister and brother immediately stepped in from day 1 to be my personal 24/7 nurse, pharmacist, chef, driver, masseuse, tear wiper, dog walker, maid, secretary and entertainer to keep me smiling. My incredible community of loved ones have consistently blown my socks away with the love, prayers, encouragement, and thoughtful, generous gifts over the past year.

I am overflowing with gratitude that I am still here to appreciate each day, continue building each relationship in my life and create new wonderful memories. I am continuing to learn the incredible healing power of love, gratitude, and positive determination which come in all shapes and sizes. We all constantly cycle through different ups and downs of life, but we all have the powerful ability to help ourselves and others make our journeys enjoyable and fulfilling. I've truly learned to take it one day at a time, the greatest challenge being fully present in each day, moment by moment... this is the amazing place of peace and gratitude.

Esther exemplifies grace and expresses gratitude in every step of her treatment journey. She is a constant source of inspiration and joy, which is just a part of why she has been chosen to be our Honorary 5k Starter for 2021 LA Cancer Challenge.

Momentum Newsletter: Summer

Summer is here and we're excited to share that each of our signature fundraising events have launched with in-person and virtual dates throughout the fall! Summer started strong as we kicked off National Cancer Survivor's Month, a notable moment for our community to share supportive Messages of Hope for patients. In addition, applications for the Seed Grant Program are being accepted and reviewed by our Scientific Advisory Board and we're happy to share a career progress update from a past awardee. Each of our programs benefiting research and patients has a positive impact on our community. Your participation makes a difference whether you make a donation, join us for a Patient & Family Webinar or register for an event to increase awareness, raise funds and encourage healthy living. We hope you will take this opportunity to get involved and champion the fight to cure pancreatic cancer in 2021!

National Cancer Survivors Month Spreads Hope

In celebration of National Cancer Survivors Month we shared incredible stories from Steve, Laura and Roberta, all pancreatic cancer survivors with a common goal to use their experiences to raise awareness. Concurrently, our Messages of Hope campaign invited both supporters and survivors to express words of encouragement, support and gratitude. Ruth, a 23-year survivor expressed her joy of being cancer free and impressed the importance of testing to be proactive and stay healthy. Kay, a 1-year survivor, thanked the doctors, researchers and caregivers who support patients throughout their cancer journey. Joanne, a supporter, shared her faith in every new day bringing a chance

for hope, treatments and a cure. Together, we will continue to celebrate every milestone reached and every challenge overcome by patients. We shared extraordinary stories and reminded the world that pancreatic cancer patients and families are fighters.

Read Our Message of Hope →

Registration Is Open For Upcoming Signature Events!

Our tradition of increasing awareness, raising funds and encouraging healthy living is building momentum as all of our favorite Hirshberg events return this Fall! Hirshberg Foundation events help fund research, educate the public about pancreatic cancer and provide an opportunity to honor our loved ones as we unite as a community. Register for one of our signature events to participate in-person or virtually!

Tour de Pier, Sunday, September 12, 2021

The <u>Tour de Pier</u> returns to the Manhattan Beach Strand on Sunday, September 12th. Our award-winning charity event brings stationary cycling outdoors with a beautiful ocean view. Whether you register as an in-person rider or tune in to our immersive livestream, you'll help make a difference for all those facing cancer.

<u>Tour de Pier →</u>

24th Annual LA Cancer Challenge 5K Walk/Run, Sunday, October 31, 2021

We also look forward to reuniting with our <u>LA Cancer Challenge</u> family on October 31st, so get those dazzling costumes ready to

walk, run or stroll this Halloween! It's sure to be a memorable family-friendly event for everyone joining us in-person at UCLA and for our virtual participants across the country.

LA Cancer Challenge →

Hirshberg Training Team 2021 at the LA Marathon, Sunday, November 7, 2021

If you're ready for an exciting challenge and want to return to a steady fitness routine, join the <u>Hirshberg Training Team</u> and start training for the LA Marathon on November 7th — during National Pancreatic Cancer Awareness Month. Many of our runners have been preparing for this event for over a year and are ready to honor loved ones and cross the finish line.

<u>Hirshberg Training Team</u> →

Registration is open for every event so <u>save these dates on your calendar</u> and register today!

Seed Grant Program Gives Researcher a Career Boost

Our <u>Seed Grant Program</u> is designed to invest in young researchers with the aim of aiding their careers in pancreatic cancer and driving innovative, collaborative research projects. Our investment supports early discoveries and helps pave the way for a career in pancreatic cancer research. A 2018 Seed Grant awardee, <u>Dr. Kathleen DelGiorno</u> is working to understand the initiating events that lead to tumor progression. Our funding allowed <u>Dr. DelGiorno</u> to publish extensively, making her a more attractive research candidate and helping her secure an Assistant Professorship at Vanderbilt University. As she wrote

to us, "Your generous funding has allowed me to be very productive. Thank you so much for launching my career!" Dr. DelGiorno's trajectory is emblematic of what our Seed Grant program aims to achieve, and it is all made possible thanks to your support.

Read more about Dr. DelGiorno's research →

New Clinical Trials Info & Patient Tools

In spring, we highlighted <u>Clinical Trial Awareness Month</u> by sharing new information and resources on this complex topic. When patients and families learn all of the treatment options available to them, they can develop a clear understanding of the benefits of new and emerging treatments and make informed decisions. Today, over <u>285 trials across the country are listed on the NIH website</u>, all are actively recruiting and taking action by attacking this disease from every angle. Learn more about the process, <u>phases</u>, <u>safety protocols</u> and how to find a trial on our <u>clinical trials webpage</u>.

A cornerstone of our commitment to the pancreatic cancer community is to provide resources for patients, caregivers and loved ones. We continue to deliver on that promise through our ever evolving library of Patient Tools. From a resource guide for newly diagnosed patients to information on the financial costs of cancer to a new podcast from long-term survivor Roberta Luna, we are working to tackle the topics that impact our community. If you would like us to address a particular issue, please let-us know.

Our research, programs, and services are made possible thanks to your support. Every donation has a positive impact on our

The 2021 LA Cancer Challenge Honorary Medical Chair is Dr. Li of UCLA

On October 31st the LA Cancer Challenge is making a triumphant return to the UCLA campus once again! We are delighted to share that a dedicated supporter of the Foundation, <u>Dr. Zhaoping Li</u>, Chief of the Division of Clinical Nutrition, has accepted our invitation to be LACC Honorary Medical Chair. It is fitting that we begin a new post-pandemic chapter with Dr. Li at the helm; her exceptional commitment to wellness and expertise in nutrition impacts pancreatic cancer survivors every day.

Zhaoping Li, MD, PhD was welcomed into our Foundation family in 2016 when she was awarded a <u>Seed Grant</u> for 'Nutrition Support to improve outcomes in patients with unresectable pancreatic cancer.' It was the first study of its kind to be funded by the Hirshberg Foundation. A couple years later she would also launch a medically supervised study investigating how dietary counseling, with and without nutrition supplementation, can affect outcomes of non-surgical patients. Dr. Li's research and position at UCLA continue to enrich our partnership and effectively serve patients in new ways.

In 2017, Dr. Li presented for the first time at the Hirshberg Foundation's Symposium for Pancreatic Cancer. Her unique insight made a memorable impression on patients. She was immediately a

crowd favorite, sharing with patients how to achieve optimal nutrition. Not long after, the Hirshberg Foundation hosted a hands-on Cooking Healthy class, and Dr. Li answered the call once again. She patiently led survivors and caregivers through a fun cooking experience sharing nutritious recipes and cooking tips. Dr. Li continues to be instrumental in educating patients as they find themselves balancing the complexities of a changing diet during and after treatment.

Whether she's discussing <u>nutrition</u> and <u>pancreatic cancer</u> at the 2019 Symposium or hosting our very first webinar during the pandemic, 'Eat & Live Well During the Corona Virus,' Dr. Li always has patients' best interests at heart. Nutrition can be a contentious topic for many patients navigating side effects, but Dr. Li's compassion, knowledge and warm personality make each event outshine the last. We are thrilled to welcome her as LACC Honorary Medical Chair and grateful to have her <u>walk and fundraise</u> on the <u>UCLA Health Sciences Team</u>!

More about Dr. Zhaoping Li

Zhaoping Li, MD, PhD is Professor of Medicine and Chief of the Division of Clinical Nutrition at the University of California, Los Angeles. Dr. Li completed her MD and PhD in Physiology at Bejing University. Dr. Li has been a faculty member at UCLA and VA Greater Los Angeles Health Care System since 1997. Dr. Li is board-certified in Internal Medicine and Physician Nutrition Specialist. Dr. Li has been a principal investigator for over 100 investigator-initiated NIH and industry-sponsored clinical trials; she has published over 200 peer-reviewed scientific papers and co-authored two books focusing on nutrition and nutrition-related to oncology.

Understanding Early Tumor Progression Through Tuft Cells

One of the main ways to improve the outcomes for pancreatic cancer patients is early diagnosis and the way to better diagnostics is through a greater understanding of the initiating events in tumor progression. That is exactly what Kathleen DelGiorno, Ph.D. and her lab at Vanderbilt University are studying.

Dr. DelGiorno was a 2018 Seed Grant Awardee back when she was at The Salk Institute for Biological Studies in the Wahl Lab. Thanks to funding from the Hirshberg Foundation, she was able to publish her research, collaborate on other publications, and in her words, "become a much more attractive candidate for Assistant Professor positions." We were thrilled to hear that in July 2020 she was offered the position of Assistant Professor at Vanderbilt University in Nashville, TN. She wrote to Agi, "Your generous funding has allowed me to be very productive over the last year. Thank you so much for launching my career!" Dr. DelGiorno's success is emblematic of what our Seed Grant program aims to achieve.

Below, read more about Dr. Kathy DelGiorno's research and what she has been studying thanks to support from the Hirshberg Foundation.

Dr. DelGiorno's research is looking to uncover early changes in the pancreas that lead to tumor formation. Chronic pancreatitis is a known risk factor for pancreatic ductal adenocarcinoma (PDAC), which accounts for more than 90% of pancreas cancers, and is characterized by inflammation, fibrosis and acinar to ductal metaplasia (ADM). ADM is a process where acinar cells (differentiated specialized cells in the pancreas) undergo remodeling back to ductal-like cells when the pancreas is injured. When oncogenic KRAS is present, ADM can be initiated, but the reversal of ADM does not happen, leading to metaplastic cells (less differentiated cells) that can then lead to precancerous lesions such as pancreatic intraepitheliel neoplasia (PanINs) or directly into PDAC. Dr. DelGiorno also studies tuft cells, which are solitary chemosensory cells seen throughout the hollow organs of the digestive tract and have been found to form spontaneously in the pancreas as the result of injury or tumorigenesis.

Research published by Dr. DelGiorno in <u>Frontiers in Physiology</u> details the landmark formation of tuft cells in the pancreas of wild-type mice, those with no genetic mutations, in the context of wound healing. This study linked tuft cell formation to ADM and shows that ADM takes place in the pancreas of mice after injury. This research demonstrates that wild-type mice can be used as a model and establishes a system to further study pancreatic tuft cells.

Subsequent research published in *Gastroenterology*, demonstrated that the formation of tuft cells originated during ADM, and that tuft cell generation may be a step in the process of tumorigenesis in the pancreas. The study found that when tuft cell formation was inhibited, pancreatic cancer development increased. They analyzed gene expression and found differences in the genes involved in inflammation, lipid (fat) synthesis, and metabolism. Prostaglandins, lipids that have hormone like functions, specifically prostaglandin D2, was shown to be lower when tuft cells were deleted. These lipids play an important

role in keeping the pancreas from becoming inflamed and activating stromal cells, which contribute to pancreatic tumor formation. This suggests that tuft cells may actually restrain early tumor progression by secreting lipids, which inhibit inflammation.

Recently, Dr. DelGiorno's lab at Vanderbilt released a pre-print (a research paper that is still under peer review) at bioRxiv
using single cell sequencing to characterize all of the cell types that result from ADM and pancreatic injury. They found that, in addition to tuft cells, ADM is also characterized by enteroendocrine cell formation, cells that generate hormones with the potential to control information, tissue injury, and tumor formation. The DelGiorno lab is now studying how these cells control tumor formation and their potential to become tumors themselves.

Through her lab at Vanderbilt, Dr. DelGiorno's research continues studying how tuft cells inhibit tumors in the hopes that these pathways can be mimicked therapeutically. Her ultimate goal is to exploit anti-tumorigenic signaling or target pro-tumorigenic signaling pathways in the hopes of benefitting patients. We applaud the work of Dr. DelGiorno and her lab for their contributions to understanding the early mechanics of tumor formation.

These advances are made possible thanks to your support. Thank you for helping us fund this vital research.