

# Updates from our UCLA Seed Grant Recipients

In early October, we hosted a gathering of scientists and researchers working on pancreatic cancer at UCLA, highlighting some of our recent Seed Grant awardees. With the goal to share innovative work happening across disciplines, connect researchers, and foster collaboration, it was an inspiring afternoon.

We're excited to share some updates from past Seed Grant researchers that came from this gathering. We look forward to sharing more from these great minds as the afternoon sparked connections and potential future collaborations.

In 2019, [Thuc Le, PhD](#), was awarded a Seed Grant for his project *Mapping and Targeting Nucleotide Biosynthetic Plasticity in Mutant KRAS Driven Pancreatic Cancer*. This research focuses on tackling mutant KRAS in pancreatic cancer and understanding its effects on cell signals and metabolism to influence the immune response. One important discovery that has been made to date is that blocking KRAS leads to higher levels of adenosine released by tumor cells, which can make the immune system less effective. Combining therapies that target both KRAS and adenosine shows promise in achieving stronger anti-cancer effects in this difficult-to-treat cancer.

Some pancreatic adenocarcinoma (PDAC) patients survive exceptionally long despite metastatic disease; these patients are able to generate effective, systemic immune responses against their tumors. [Jason Link, PhD](#), a 2022 awardee, looked at the anti-tumor immune response that takes place in tertiary lymph structures to understand if these structures can be therapeutically ignited as a treatment avenue. Patients with

poor outcomes fail to generate these immune responses due to ineffective signals between the tumor and immune cells, but these signals are therapeutically targetable.

KRAS mutations are the most common drivers of pancreatic ductal adenocarcinoma (PDAC). Recent clinical translation of mutant KRAS-specific inhibitors has reinvigorated hope for direct targeting; however, research has shown they need to be administered as combination therapies. Research from [Evan Abt, PhD](#), a 2022 Seed Grant Awardee, uncovered new mechanisms that restrain anti-tumor immunity in pancreatic cancer. The suppression of the immune response is partly due to unexpected crosstalk between metabolic and immune networks. These insights provide a rationale for new therapeutic interventions to unleash immune responses targeting pancreatic cancer.

2022 Seed Grant researcher, [Alexandra Demcsak, MD, PhD](#), looked into hereditary pancreatitis, an early-onset form of chronic pancreatitis caused by mutations in the digestive proteases (enzymes that break down proteins). Her research investigated the effects of carboxypeptidase A1 (*CPA1*) gene mutations on pancreatic ductal adenocarcinoma development. Based on the results, the p.N256K mutation of the *CPA1* gene accelerates the development of precancerous lesions in the pancreas of *KrasG12D* x *p48-Cre* models. These findings provide support for the concept that misfolding *CPA1* mutants are risk factors for pancreatic ductal adenocarcinoma, deepening our understanding of how chronic inflammation promotes tumor growth in the pancreas.

An innovative 2021 Seed Grant project by [Keisuke Iwamoto, PhD](#) used weak magnetic fields to enhance treatment sensitivity of pancreatic cancer cells.

The projects presented at the UCLA gathering helped spark

inspiration, collaboration, and connection across disciplines. We look forward to sharing future progress reports from these researchers as they continue their important work. It is because of your support that we can fund these crucial projects and help move science towards better diagnostic and treatment options, and ultimately, a cure.

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## 2023 CancerCare Summary on Financial Assistance for Patients

At the heart of the Hirshberg Foundation's [mission](#) is our commitment to provide [support for pancreatic cancer patients and their families](#) as they navigate this disease. In 1998, the Foundation established a partnership with [CancerCare](#), a national organization providing free, professional support services to help manage the emotional, practical and financial challenges of cancer. This longstanding relationship has allowed our organization to provide low-income patients with a one-time grant. Thanks to community fundraising and the generosity of our supporters, we have made a positive impact on thousands of survivors and loved ones thanks to this grant.

Each year, CancerCare provides the Hirshberg Foundation with a [report](#) on how these funds have been used to support patients and families thanks to our partnership. Below are details on the services provided.

## **2023 PROGRAM SUMMARY**

In 2023, through the Hirshberg Foundation's grant program with Cancer Care, nearly 150 financial assistance grants were provided to pancreatic cancer patients. This grant helps to alleviate some of the hardship that can come with a cancer diagnosis and the devastating impact it can have on a patient's life. CancerCare was able to serve a diverse group of individuals impacted by pancreatic cancer throughout the country.

This year, the program served 67 women and 78 men with resources provided across 33 states including Florida, New Jersey, Georgia, Pennsylvania, and California. Funds to help cover the cost of transportation to and from treatment continue to be the highest need for CancerCare clients; approximately 43% of grant funds disbursed over the course of the 12-month period were allocated to transportation. Copayment charges and treatment expenses were the second most needed type of assistance, at 28% of grant funds. The remaining financial assistance grants contributed to insurance premiums, imaging tests, home care, massage/acupuncture treatments, biopsies, and childcare.

## **LEARN MORE ABOUT THE CANCERCARE GRANT**

To date, the Hirshberg Foundation has provided over \$1.2 million dollars for this patient program offering limited financial assistance associated with transportation to and from treatment, pain medication, childcare, home care, and beyond. Funds are provided to low-income patients for whom it has been a vital resource over the years. Patients and families can learn more about eligibility and program information today.

[CancerCare Program](#)

### [Medicaid Eligibility](#)

CancerCare also offers a wealth of other resources free of charge including support groups, educational workshops, co-payment assistance, and case management. Counseling is available in English and Spanish and centers on the emotional and practical challenges that arise from cancer.

### [More CancerCare Services](#)

## **HIRSHBERG FOUNDATION PATIENT RESOURCES**

Patients and families are not alone in this journey. We are here to help guide you through the initial steps of educating yourself and your family about this disease. Learn more about programs, events, and resources offered by the Hirshberg Foundation when you [watch this video](#) and review our [patient and caregiver support services](#).

[Learn More](#)

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## **Participate this November to Help Raise Pancreatic Cancer Awareness**

“Participate” is one of our three key calls-to-action for November’s Pancreatic Cancer Awareness Month and a great way to get involved with making a difference. Join us to help raise awareness and funds for pancreatic cancer research and crucial patient & family support programs. Participation, by attending

an event or hosting one yourself, by fundraising and giving, or by raising awareness allows us to help thousands of patients year-round while driving research towards a cure.

Get started by telling your family and friends how important our cause is to you. Hearing first-hand how this disease has affected you can make all the difference and inspire others to action. Whether you start a Facebook Fundraiser, create a You Can H.E.L.P. Fund or share how pancreatic cancer has touched your life, telling your story is the first step. Next, invite your community to become a part of this journey towards curing cancer. Give your loved ones an opportunity to donate and show their support.

Find great ways to ***participate*** this November!



On November 8th, join us and Wendy Conlon to discuss the benefits and implications of genetic counseling and testing for you and your family. A great opportunity to educate yourself and loved ones.

[Register Today →](#)



Love a good party, 5K or yard sale as much as we do? Host your own in-person or virtual event. We've made it easy with guidance and ideas to get you started.

[Be a Host →](#)



Looking for an even bigger challenge? Register today to run a full or half-marathon with the Hirshberg Training Team! Wherever you are, you can sport your purple while running and get personalized coaching to help you cross the finish line.

[Hirshberg Training Team →](#)

However you choose to *participate* in Pancreatic Cancer Awareness Month, let's make it fun and meaningful!

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# Celebrate this November to

# Help Raise Pancreatic Cancer Awareness

“Celebrate” is one of our three key calls-to-action for November’s Pancreatic Cancer Awareness Month. This month we invite you to get involved in events and activities, engage with your community, and find fun ways to color the world purple as we to raise awareness.

We have resources to help you create awareness events, large or small, in-person or virtually, in your community. It’s the perfect time to connect with local businesses and community partners inviting them to raise awareness, donate a portion of their sales, create a unique purple item to sell throughout the month or host an event. Reach out if you need any help or suggestions!

Let’s ***celebrate*** Pancreatic Cancer Awareness Month!



Shop gifts that do good. From cute purple beanies to cozy awareness socks, shirts to jewelry, we’ve got something for everyone on your list, and it all helps raise awareness.

[eStore →](#)



It's easy to raise awareness – and support – with a Bonfire campaign. Design a shirt and share with your community; when someone buys a shirt, they not only spread awareness, they help you fundraise. Plus, custom shirts make great gifts!

[Bonfire Shirts →](#)



Engage with us through our diverse range of events. Allow these opportunities to inspire you to initiate similar initiatives in your community and help us raise awareness.

[Calendar of Events →](#)

However you choose to celebrate, you can join us in making a difference for the pancreatic cancer community!

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# Dedicate this November to Help

# Raise Pancreatic Cancer Awareness

“Dedicate” is the heart of our campaign and asks you to share how this disease has touched your life for Pancreatic Cancer Awareness Month. Making a dedication this November represents our commitment to raise awareness, educate our communities and share our stories to inspire others to join the fight for a cure.

Our stories express the devastating impact this disease can have but they can also inspire hope and show the resilience and courage of the human spirit. We dedicate our time and effort to fighting for a cancer-free future and our stories help share that journey. Join us by sharing your story, reading the inspiring tributes from others, and making a dedication that will make a difference. November is a month to celebrate our long-term survivors and lend strength to those who are currently battling this disease.

***Dedicate*** yourself to making an impact for Pancreatic Cancer Awareness Month!



Read [inspiring tributes](#) from our supporters, doctors, participants, and survivors. These accounts show the resilience and courage of the human spirit while helping raise awareness.

Let their stories inspire you to share your own.

[Share your story →](#)



Read inspiring tributes from our supporters, doctors, participants and survivors. Let their stories inspire you to share your own

[Never Give Up →](#)



Dedicate a You Can H.E.L.P. Fund to a loved one. Our Fund pages allow you to share your story of remembrance, celebration, or tribute while you fundraise. Plus, it'll be available for you to return to year after year.

[Learn More →](#)



Make a bequest in your will and you ensure a legacy of giving that continues beyond your lifetime. A planned gift provides future funding for critical pancreatic cancer research and patient services.

[Planned Giving →](#)

Join us in our **dedication** to finding a cure for pancreatic cancer and we will never give up.

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# An overview of Exocrine Pancreatic Insufficiency (EPI) and Pancreatic Enzyme Replacement Therapy (PERT)

Exocrine Pancreatic Insufficiency (EPI), also referred to as pancreatic exocrine insufficiency (PEI) or exocrine pancreatic dysfunction (EPD) is a condition where the pancreas doesn't produce enough digestive enzymes, or the enzymes are not mixing properly with nutrients. This can happen because of certain diseases, including cancers of the pancreas, small intestine,

and stomach, radiation therapy, and/or surgical resection of these organs.

The pancreas is an organ that makes three types of enzymes – lipase, protease, and amylase. These three enzymes are involved in fat, protein, and carbohydrate digestion and aid to digest food and absorb nutrients. When EPI is present, normal digestion and absorption of nutrients are impaired and may result in undesirable symptoms and undernutrition (malnutrition) over time.

## **Signs and symptoms of EPI & Patient Generated Screening**

Unfortunately, EPI presents in a variety of ways which can make diagnosing this condition difficult. In many cases, the symptoms of EPI can overlap with other medical conditions. A patient generated questionnaire below can be used to see if you should be evaluated for EPI.

### **Patient Screen for Clinical Indicators of Pancreatic Exocrine Insufficiency**

1. Are you experiencing any of the following symptoms? Check all that apply.

- Excessive gas (belching, flatulence, bloating, or abdominal fullness)
- Feel full quickly when eating
- Cramping or pain with meals
- Stomach makes excessive noise
- Gas that is foul or rotten smelling
- None of the above

2. Do any of the following describe your bowel movements? Check

all that apply.

- Floating, fluffy, or puffy
- Loose or unformed
- Urgent
- More frequent than usual
- Large size
- Yellow or light-tan
- Oil visible in the toilet after a bowel movement
- Unusually foul or rotten smelling
- Cramping or pain with bowel movements
- None of the above

3. Are you avoiding certain foods or types of foods because they cause unpleasant digestive symptoms? Yes/No

4. Are you eating regular amounts of food but losing weight? Yes/No/Unsure

## **Treatment for EPI**

Pancreatic enzyme replacement therapy (PERT) is a prescription medication which replaces the enzymes your body isn't making enough of to help digest and absorb nutrients. Your prescribing health care professional can help you find the right dose based on factors like your body weight and diet pattern, including how often and how much you eat with meals and snacks. Generally, you will need to take PERT with the first bite of food for all meals and snacks. It may take some time to figure out what dose works best for your body to help you digest and absorb nutrients.

There is an array of PERT capsules to choose from, some common ones being CREON, Pancreaze and Zenpep. There may be an adjustment period to find the correct enzyme for your body as well as the correct dosage. While these enzymes can often be expensive, many drug companies offer payment assistance programs that can help.

# Enzyme Assistance Programs

- [CREON® capsules](#)
- [Pancreaze® capsules](#)
- [Zenpep® capsules](#)