CPK Philanthropizza

Every time you use your Philanthropizza card, 20% of your food & beverage purchases will be donated to the Hirshberg Foundation.

22nd LA Cancer Challenge Honorary Medical Chair to be Dr. Timothy Donahue of UCLA

We are excited to announce that Dr. Timothy Donahue will serve as the Honorary Medial Chair for the 22nd Annual LA Cancer Challenge. Dr. Donahue has been a valued member of the surgical team at the UCLA Agi Hirshberg Center for Pancreatic Diseases and a beloved speaker at our annual Symposium.

Both a researcher and a surgeon, Dr. Donahue will be recognized for his focus on personalized medicine and his collaborative efforts to provide the best treatment option for pancreatic cancer patients. Dr. Donahue's advocacy for treating patients with chemo or radiation therapy prior to surgery, has led to some of the best survival rates. In addition, Dr. Donahue is dedicated to training the next generation of surgeons.

Beyond his accolades, Dr. Donahue embodies the Hirshberg Foundation spirit with his emphasis on the genuine care of patients. His optimism that pancreatic cancer survival rates will markedly improve during his career makes him the ideal candidate for our LACC Honorary Medical Chair.

Join Dr. Donahue & the pancreatic cancer community as we walk for research and race towards a cure at the LA Cancer Challenge on October 20th 2019 at UCLA!

More about Dr. Donahue:
Dr. Donahue was appointed to the UCLA faculty in 2009 and has made great strides in pancreatic cancer ever since. He is a Professor of Surgery at the David Geffen School of Medicine at UCLA, the Chief of the Division of Surgical Oncology and has a joint appointment in the Department of Molecular and Medical Pharmacology to facilitate his research program. His scientific research also focuses on developing improved treatment strategies and earlier diagnostic markers for patients with pancreatic cancer. Dr. Donahue is a valuable part of the surgical team at the UCLA Agi Hirshberg Center for Pancreatic Diseases, performing up to three pancreatic surgeries per week. In this role, he oversees all of cancer surgery including the pancreatic cancer program, which is one of the largest in the nation.

Research Into The Pancreatic Cancer Microenvironment May Provide Novel Treatment Avenues

Pancreatic cancer is one of the most difficult cancers to treat in part because of the poorly understood and complex mechanisms of disease progression. Pancreatic cancer is characterized by

the infiltration of multiple inflammatory cell types that surround the tumor, known as the tumor microenvironment. This microenvironment is harsh and nutrient-poor yet cancer cells continue to adapt and grow. Research by 2017 Seed Grant Awardee Mara Sherman, PhD seeks to better understand how the interaction of the tumor microenvironment and cancer cells fuels tumor growth in order to find better treatment options.

New research published in *Cancer Discovery* by Dr. Sherman, of Oregon Health & Science University, found that a specific cell type within the pancreatic tumor microenvironment known as stellate cells have evolved mechanisms to "feed" energy to cancer cells. These stellate cells simultaneously regulate the expression of cancer-supportive genes by tumor cells and secrete factors that promote the survival and growth of cancer cells.

Dr. Sherman's research demonstrated that inhibition of this energy-providing mechanism drastically suppressed pancreatic tumor growth. This suggests that there are potential avenues for treatment through targeting the metabolic pathways of the stellate cells.

While further investigation is needed, this study is an important stepping stone in understanding the pancreatic cancer microenvironment. Dr. Sherman's research suggests that despite the statistics, pancreatic cancer may have a novel metabolic vulnerability, which may be targetable for therapeutic benefit.

Read Dr. Sherman's full paper at Cancer Discovery.

Dr. Sherman and Jurre Kamphorst, PhD, a co-author on this study, were interviewed as part of the National Cancer Institute's RAS Initiative. From their website:

More than 30 percent of all human cancers – including 95 percent

of pancreatic cancers and 45 percent of colorectal cancers – are driven by mutations of the RAS family of genes. NCI established the RAS initiative in 2013 to explore innovative approaches for attacking the proteins encoded by mutant forms of RAS genes and to ultimately create effective, new therapies for RAS-related cancers.

You can read the interview with Drs. Sherman & Kamphorst on the NCI's website.

New research illuminates complex architecture of pancreatic cancer tumors

Recently published research from Seed Grant recipient, Matteo Ligorio, MD, PhD, of Harvard Medical School has expanded our understanding of how the stromal microenvironment shapes a pancreas tumor and can impact clinical outcomes.

Dr. Ligorio and his team discovered that cancer associated fibroblasts (CAFs) profoundly alter the tumor microenvironment promoting an aggressive cancer phenotype with the ability to proliferate (PRO) and metastasize (EMT), called the Double Positive (DP) phenotype. With the use of cutting-edge technologies including single-cell RNA sequencing, phosho mass spectrometry and mass cytometry it was revealed that the co-activation of MAPK and STAT3 signaling pathways in these DP cells. This discovery may provide a new combination therapy strategy to target these specific cancer cells.

Most significantly, this research highlights the significance of the intra-tumor architecture, and links it to treatment responsiveness. The diversity within the tumor means that the cells do not behave uniformly but instead make up different tumor "glands" with their own proliferative and metastatic propensity. These eight different types of tumor "glands" were associated with differences in stromal abundance and correlate with patient survival and treatment response.

This study is an important step forward in understanding the complex biology of the tumor microenvironment and paves the way for novel therapeutic strategies for pancreatic cancer.

Dr. Ligorio and his team "would like to thank the Hirshberg Foundation for their generous support throughout the years…and especially express gratitude for being selected as a recipient of the 2017 Seed Grant."

We congratulate Dr. Matteo Ligorio on this publication. The determination to understand the complex tumor microenvironment is providing the possibility of improved therapeutic options, and ultimately, increased survival rates.

Full article: https://www.cell.com/cell/fulltext/S0092-8674(19)30510-0

New Publication by Seed Grant Awardees from UCLA

We are pleased to share that the January 2019 issue of *Pancreas* features an article titled "Emerging Evidence for the Clinical

Relevance of Pancreatic Cancer Exosome," written by the Director of the UCLA Agi Hirshberg Center for Pancreatic Diseases O. Joe Hines, MD; Hirshberg Seed Grant Awardees Jonathan C. King, MD and Guido Eibl, MD; and Roxanne L. Massoumi, MD.

The article explains that over the last 5 years, exosome biology has gained increasing interest as a field of study. While much is still unknown about the role exosomes play in human health and disease, there is growing evidence that exosomes – nanovesicles produced by nearly all human cell types – may play a crucial role in cancer biology.

The team behind this publication focused on the currently available literature to review how exosomes have the potential to change the clinical management of pancreatic ductal adenocarcinoma, the most common form of pancreatic cancer. Pancreatic cancer is an aggressive malignancy that is often treatment-resistant yet there is a limited understanding of the molecular mechanisms that underlie this behavior. A growing body of literature points to exosomes as the mediators of numerous processes utilized by pancreatic cancer tumors to grow, invade and spread in the body while evading the body's innate defenses.

Exosomes may also be valuable markers of disease and provide information on prognosis and treatment efficacy. There is still much work to be done to fully understand the role exosomes can play in diseases processes but there is clear evidence of their importance. **In the future, further understanding of exosomes and the role(s) they play in the biology of pancreatic cancer may have significant impacts on the diagnosis and treatment of this deadly disease.**

We are proud of the team behind this paper. Publishing an article in a renowned medical journal is an important milestone for all scientists. We are hopeful that further research into

exosome biology yields results for the treatment of pancreatic cancer.

Read the full article »

Symposium Speaker Spotlight: Wendy Conlon to discuss Genetic Counseling

The Hirshberg Foundation is happy to announce that genetic counselor, Wendy Conlon, will be joining us at the 15th Annual Symposium on Pancreatic Cancer to discuss the importance of genetic counseling.

Wendy Conlon, MS, CGC, is a genetic counselor board certified by the American Board of Genetic Counseling and licensed in California. She received her MS in genetics from the University of Arizona's genetic counseling program in 2000, and received her BA from the University of Vermont in 1988. Before attending graduate school, she worked in a laboratory at the University of Vermont Cancer Center and performed genetic testing for hereditary cancer predisposition for Lynch syndrome, retinoblastoma, Li-Fraumeni syndrome and others. Prior to coming to UCLA, her career as a genetic counselor has included over 12 years in the biotechnology industry working with physicians, scientists and patients in the development and provision of genetic testing, focusing on hereditary cancer and endocrinology. She has also worked as a clinical genetic counselor in varied settings, including adult cancer genetics,

assisted reproductive technology and prenatal and preconception genetics.

Wendy is currently one of two genetic counselors that are part of the Integrated Practice Unit (IPU) at the UCLA Agi Hirshberg Center for Pancreatic Diseases. With approximately 5 to 10 percent of pancreatic cancers linked to an inherited cancer predisposition, the IPU offers genetic testing and counseling. A genetic counselor can assess the likelihood that pancreatic cancer in a family is due to an inherited mutation and help to understand personal and family history with pancreatic, and all cancers. Results from genetic testing may also be used to devise tailored surveillance and risk reduction strategies for at-risk family members.

A highly requested topic, we are excited to have Wendy joining us to discuss the topic of *Why Should I See A Genetic Counselor?* at the 15th Annual Symposium.