



## ABOUT US

### MISSION

- To find a cure for pancreatic cancer in honor of Ron Hirshberg and the thousands of people who are diagnosed with this disease each year.
- To create a premier Pancreatic Cancer Center where all needs of pancreatic cancer patients can be met in one location with the most advanced treatment options.
- To be recognized as a patient support reference source for pancreatic cancer patients and their families.
- To fund new projects and programs designed to improve patient care, treatment and, ultimately, pancreatic cancer survival rates.
- To integrate and unite generations, young and old, through physical fitness participation, while creating public awareness and raising money to find a cure for pancreatic cancer.

### HISTORY

Founded in 1997, the Hirshberg Foundation for Pancreatic Cancer Research is a national, nonprofit organization dedicated to advancing pancreatic cancer research, and providing information, resources, and support to pancreatic cancer patients and their families.

Established by Agi Hirshberg, whose husband Ronald died of pancreatic cancer at the age of 54, the Foundation began by funding two projects at the University of California, Los Angeles. The Ronald S. Hirshberg Translational Pancreatic Cancer Research Laboratory and the Ronald S. Hirshberg Chair in Translational Pancreatic Cancer Research were funded with a commitment to support the research programs until the National Institute of Health grant recognition became available.

### To date, the Foundation has:

- Funded Seed Grant Award Recipients who have received \$18 million dollars in NIH grants
- Raised more than \$11 million for pancreatic cancer research
- Granted over \$650,000 in financial aid for patients
- Provided assistance to thousands of patients and their families
- Expanded seed grant funding to Loma Linda University, City of Hope, Johns Hopkins Medical Center, Mayo Clinic, Columbia University, University of Minnesota, University of Pittsburgh, Memorial Sloan-Kettering Cancer Center, MD Anderson and Dana-Farber Cancer Institute
- Supported the American Pancreatic Association (APA), Japan Pancreas Society, and the European Pancreatic Club's Annual Meetings
- Presented the Agi Hirshberg Symposium at UCLA, focusing on research progress and patient and family education
- Funded the creation of the Tissue Data Bank at UCLA
- Awarded international grants to new investigators

### Foundation Commitments:

- Fund medical symposiums for pancreatic cancer research
- Fund seed grants for new research projects of merit for pancreatic cancer
- Consistently update the pancreatic.org site with the latest news and information
- Host fundraising events to raise awareness and funds for pancreatic cancer
- Provide financial assistance for patients

The Hirshberg Foundation for Pancreatic Cancer Research is a California charitable non-profit, corporation. It is a tax-exempt organization under Section 501(c)3 of the Internal Revenue Code. The federal tax ID number for the foundation (EIN) is 95-4640311. All donations are tax-deductible to the extent allowed by law.



## WHAT WE FUND

### **The Hirshberg Pancreatic Cancer Research Laboratory at UCLA**

- Department of Surgery
- Directed by Howard Reber, MD. Opened in 1998
- Goal is to advance research to clinical trials
- 14 National Institutes of Health (NIH) Grants have been received

### **The Ronald S. Hirshberg Chair of Translational Pancreatic Cancer Research at UCLA**

- Department of Digestive Diseases
- Enrique Rozengurt, PhD, was appointed in November 1999
- Goal is early diagnosis and therapeutic intervention

### **Pancreatic Tissue and Data Bank at UCLA**

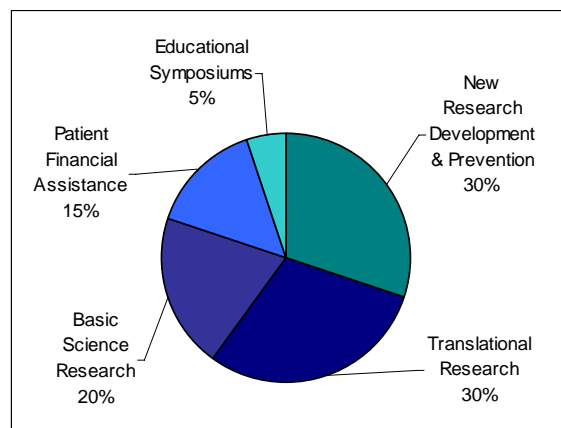
- Department of Pathology
- Directed by David Dawson, MD. & PhD
- Goal is to support researchers with an extensive data bank

### **Hirshberg Foundation Seed Grants**

- Open to all researchers in the United States and internationally
- Seed grant program funds encouraging new projects
- Goal is to recruit established scientists to study pancreatic cancer

### **Patient Support at Cancer Care Inc.**

- Our annual support for patients who need financial aid has provided individuals with pain medication, transportation, chemotherapy and home care
- Goal is patient comfort





## **FUNDING SEED GRANTS**

**The Hirshberg Foundation for Pancreatic Cancer Research Seed Grant Award Program began in 2000 with the following goals in mind:**

- To provide start-up funding for basic scientists and clinicians who intend to test innovative ideas for improving the diagnosis and current therapies and to develop new treatment modalities for pancreatic cancer.
- To obtain preliminary data required for additional funding from other agencies for pancreatic cancer research.
- To impact on the understanding of pancreatic cancer cell biology, biochemistry, physiology, morphology and response to therapy.
- To establish collaborations within the field for mutual projects that can be considered for further funding.

Our Scientific Advisory Board reviews the proposals based on the National Institutes of Health's review and funding guidelines. The 2010-2011 Recipients are:

**Andrea Viale, MD**

Dana Farber Cancer Institute, Boston, MA

Department of Medical Oncology

*"The role of oncogenic K-RAS in self-renewal and maintenance of cancer stem cells in pancreatic cancer"*

**Ying Ma, PhD**

University of Texas, MD Anderson Cancer Center, Houston, TX

Department of Immunology

*"Mast cell blockage as immunotherapy for pancreatic cancer"*

**Larry Karnitz, PhD**

Mayo Clinic, Rochester, MN

Department of Radiation Oncology

*"An innovative drug combination for pancreatic cancer"*

**Guido Eibl, MD**

University of California, Los Angeles, CA

Department of Surgery

*"Western diet-induced pancreatic cancer"*



## NIH AWARDS

The Hirshberg Foundation for Pancreatic Cancer Research is proud to announce the following NIH awards, granted to UCLA Investigators who have been Seed Grant recipients from the Foundation. The National Health Institute's recognition represents a milestone for the Foundation's mission of funding discoveries of the cause, cure and prevention of pancreatic cancer. We extend our Congratulations to the following recipients:

**NIH Reference #:** R21 CA137292  
**Principal Investigator:** Dr. Enrique Rozengurt  
**Date of Grant:** 05/01/2009 – 04/30/2011  
**Funding Institution:** National Institutes of Health/National Cancer Institute  
**Total Amount:** \$338,000  
**Description:** ***Targeting crosstalk between insulin and Gq signaling systems in pancreatic cancer***

The major goals of this project are to characterize a novel crosstalk between insulin receptor and Gq signaling in human pancreatic cancer cell lines. Furthermore, we will test whether metformin inhibits this crosstalk and offers a novel approach for the treatment of human pancreatic cancer, using tumor xenografts in nude mice.

**NIH Reference #:** 1 P01 AT003960-01A1  
**Principal Investigator:** Dr. Vay Liang W. Go  
**Date of Grant:** 09/30/2007 – 09/29/2012  
**Funding Institutions:** National Institutes of Health/ National Center for Complementary and Alternative Medicine  
**Total Amount:** \$5,675,865  
**Recipient:** ***UCLA Center for Excellence in Pancreatic Diseases***  
**Description:**

The goal of this Center for Excellence is to study phytonutrient mechanism of action in both inflammatory and proliferative diseases of the pancreas using molecular biology and metabolomics technology to investigate altered cellular functions.

**NIH Reference #:** 1 R01 CA123273-01A1  
**Principal Investigator:** Dr. Anthony Heaney  
**Date of Grant:** 10/01/2007 – 09/30/2012  
**Funding Institution:** National Institutes of Health/National Cancer Institute  
**Total Amount:** \$1,250,000  
**Description:** ***Refined Fructose Promotes Pancreatic Cell Growth***

The goal of this application is to study the effects of diet rich in fructose on pancreatic cancer cells growth in vitro and in a tumor model.



**NIH Reference #:** 1 R21 CA124609-01A1  
**Principal Investigator:** Dr. Oscar Joe Hines  
**Date of Grant:** 07/01/2007 – 06/30/2009  
**Funding Institutions:** National Institutes of Health/National Cancer Institute  
**Total Amount:** \$308,000  
**Description:** ***The Role of CXCR2 in Pancreatic Cancer***  
The study investigates the role of CXCR2 in pancreatic cancer biology and angiogenesis as well as determine chemokine and receptor expression in human specimen.

**NIH Reference #:** 1 R01 CA122042-01A1  
**Principal Investigator:** Dr. Guido Eibl  
**Date of Grant:** 08/01/2007 – 05/31/2012  
**Funding Institutions:** National Institutes of Health/National Cancer Institute  
**Total Amount:** \$1,463,000  
**Description:** ***The Role of n-3 Polyunsaturated Fatty Acids in Pancreatic Cancer***  
This project is designed to explore the efficacy of n-3 polyunsaturated fatty acids in therapy and prevention of pancreatic cancer using xenograft and transgenic animal models of the disease.

**NIH Reference #:** 1 R01 CA119025-01  
**Principal Investigator:** Dr. Anna Gukovskaya  
**Date of Grant:** 07/01/2006 – 05/31/2010  
**Funding Institutions:** National Institutes of Health/National Cancer Institute  
**Total Amount:** \$300,000  
**Description:** ***NADPH Oxidase and Pancreatic Cancer Cell Survival***  
This project is designed to determine the mechanisms of growth factors-induced NADPH oxidase activation in pancreatic cancer cells, as well as the role of this activation in promoting pancreatic cancer cell survival.

**NIH Reference #:** 1 R01 CA104627  
**Principal Investigator:** Dr. Guido Eibl  
**Date of Grant:** 02/01/2004 – 02/29/2009  
**Funding Institutions:** National Institutes of Health/National Cancer Institute  
**Total Amount:** \$1,100,000  
**Description:** ***The Role of COX-2 and PPARY in Pancreatic Cancer***

**NIH Reference #:** R01 DK55003  
**Principal Investigator:** Dr. Enrique Rozengurt  
**Date of Grant:** 02/28/2008-05/30/12  
**Funding Institutions:** National Institutes of Health/ National Institute of Diabetes and Digestive And Kidney Diseases  
**Total Amount:** \$1,637,250  
**Description:** ***Gastrointestinal Peptide Signaling through PKC/PKD***  
The major goals of this project are to characterize the activation of the PKC/PKD pathway and define the role of PKD in proliferative signal transduction in gastrointestinal (GI) cells.



**NIH Reference #:** R01 DK56930  
**Principal Investigator:** Dr. Enrique Rozengurt  
**Date of Grant:** 05/30/2006 – 06/01/2011  
**Funding Institutions:** National Institutes of Health/ National Institute of Diabetes and Digestive And Kidney Diseases  
**Total Amount:** \$1,356,255  
**Description:** ***GI Peptide signaling through tyrosine phosphorylation***  
The major goals of this project are to identify the role of GI peptide-induced tyrosine phosphorylation in signal transduction pathways implicated in cell migration and proliferation.

**NIH Reference #:** P30 DK41301  
**Principal Investigator:** Dr. Enrique Rozengurt  
**Date of Grant:** 11/30/2009-11/30/2014  
**Funding Institutions:** National Institutes of Health/ National Institute of Diabetes and Digestive And Kidney Diseases  
**Total Amount:** \$4,725,000  
**Description:** ***CURE: Digestive Diseases Research Center***  
The major goals of the P30 Core Grant are to support multidisciplinary research, transfer of information and the award of seed grants. The CURE: Digestive Diseases Research Core Center Grant supports multiple Scientific Cores, a Pilot and Feasibility Program, the recruitment of a Named New Investigator and an array of Enrichment Activities regarding the function and diseases of the digestive system, including the exocrine pancreas.

**NIH Reference #:** M01 RR00425-33  
**Principal Investigator:** Dr. Paul Lee  
**Date of Grant:** 12/01/2006 – 11/30/2011  
**Funding Institutions:** National Institutes of Health/National Center for Research Resources  
**Total Amount:** \$732,095  
**Description:** ***Biomedical Mass Spectrometry Core***

**NIH Reference #:** 5 P60 AA11999  
**Principal Investigator:** Dr. Hidekazu Tsukamoto  
**Date of Grant:** 01/01/2009 – 12/31/2014  
**Funding Institutions:** National Institutes of Health/National Institute on Alcohol Abuse and Alcoholism  
**Total Amount:** \$756,165  
**Description:** ***USC-UCLA Southern California Research Center for ALPD and Cirrhosis: Alcohol Abuse and Pancreatic Necrosis***  
The long-term objective of this project is to determine the role of PKC isotypes in ethanol-induced sensitization of the inflammatory response using *in vitro* and *in vivo* models of the pancreas.



**NIH Reference #:** R21 AA016840  
**Principal Investigator:** Dr. Ilya Gukovsky  
**Date of Grant:** 07/01/2008 – 06/30/2010  
**Funding Institutions:** National Institutes of Health/ National Institute of Diabetes and Digestive And Kidney Diseases  
**Total Amount:** \$275,000  
**Description:** ***Alcoholic Chronic Pancreatitis Results from Dysregulated Immune Response***  
This project is designed to determine the mechanism and role of immune regulation by ethanol in mediating chronic alcoholic pancreatitis.

**NIH Reference #:** 1 R21 AA015781-01  
**Principal Investigator:** Dr. Aurelia Lugea  
**Date of Grant:** 07/10/2006 – 06/30/2008  
**Funding Institutions:** National Institutes of Health/National Institute on Alcohol Abuse and Alcoholism  
**Total Amount:** \$275,000  
**Description:** ***Plasminogen System and Alcoholic Pancreatitis***  
This project is designed to determine the effects and role of changes in the plasminogen system in alcohol-induced pancreatic disease. There is no scientific or budgetary overlap with any other active or pending project.

**VA Merit Award**  
**Recipient:** Dr. Anna Gukovskaya  
**Date of Grant:** 10/01/2006 – 09/30/2010  
**Funding Institutions:** Department of Veterans Affairs  
**Total Amount:** \$980,000  
**Description:** ***NOX4, Protein Tyrosine Phosphatases, and Pancreatic Cancer Cell Survival***  
This project is designed to determine the effects of pancreatic cancer Nox4 in regulating protein tyrosine phosphatases; and the role of phosphatases in mediating pancreatic cancer cell survival.

**VA Merit Award**  
**Recipient:** Dr. Steve Pandol  
**Date of Grant:** 10/01/2007 – 09/30/2011  
**Funding Institutions:** Department of Veterans Affairs  
**Total Amount:** \$500,000  
**Description:** ***Inflammation Mediates Necrosis in Pancreatitis***  
This project is to determine the effects of infiltrating neutrophils; NADPH oxidase; pharmacologic and genetic inhibition of PI 3kinase; and genetic inhibition of PTEN on pancreatic apoptosis, necrosis, PTEN/Akt system and its downstream pro-apoptotic targets during experimental pancreatitis.



**AGA Foundation**

**Recipient:**  
**Date of Grant:**  
**Funding Institution:**  
**Total Amount:**  
**Description:**

Dr. Olga Mareninova  
07/01/2007 – 06/30/2010  
Designated Research Scholar Award in Pancreatitis  
\$250,000  
***Bcl-2 Proteins Regulate Death Responses of Acute Pancreatitis***  
The project is designed to determine the roles of mPTP and the Bcl-xL and the Bcl-2 proteins in regulating acinar cell death, in particular necrosis, in pancreatitis.

**AACR Foundation**

**Recipient:**  
**Date of Grant:**  
**Funding Institution:**  
**Total Amount:**  
**Description:**

Dr. David Dawson  
07/01/2008 – 06/30/2010  
American Association of Cancer Research  
\$200,000  
***Wnt signaling in pancreatic cancer***



## **BOARD OF DIRECTORS**

### **DIRECTORS & TRUSTEES:**

Agi Hirshberg, President & Founder  
Lisa Manheim, Director  
Jon Hirshberg, Trustee  
Michael Berliner, Trustee  
Stephen C. Prince, CPA  
Michael Scott, LLP

### **SCIENTIFIC ADVISORY BOARD:**

Vay Liang W. Go, MD: Professor of Medicine, David Geffen School of Medicine at UCLA; Associate Director, UCLA-NIH Clinical Nutrition Research Unit; Editor-in-Chief, Pancreas; Chief of the Hirshberg Scientific Advisory Board

Laszlo G. Boros, MD: Associate Professor, Department of Pediatrics, Harbor UCLA; Co-Director of STABLE Isotope Research Laboratory at Harbor-UCLA; Chief Scientific Advisor – Sidmap, Los Angeles

Murray Korc, MD: Professor of Medicine and Pharmacology & Toxicology at Dartmouth Medical School and Chair of Medicine at Dartmouth Hitchcock Medical Center; Board Certified in Internal Medicine and in Endocrinology, Diabetes and Metabolism

Laurence J. Miller, MD: Director for Research and Director of Cancer Center-Mayo Clinic Arizona; Professor of Medicine, Biochemistry and Molecular Biology

Stephen J. Pandol, MD: Professor of Medicine, School of Medicine at UCLA, Los Angeles, CA; Department of Veterans Affairs Medical Center, West Los Angeles, CA; Co-Director of USC-UCLA Research Center for Alcoholic Liver and Pancreatic Injury; Co-Director of UCLA Center for Excellence in Pancreatic Diseases, University of California, Los Angeles, Los Angeles, CA

Howard A. Reber, MD: Professor of Surgery & Chief, Section of Gastrointestinal Surgery, David Geffen School of Medicine at UCLA; Director of Ronald S. Hirshberg Translational Pancreatic Cancer Research Laboratory

Lee S. Rosen, MD: Premiere Oncology, affiliated with the John Wayne Cancer Institute and St. John's Health Center

Diane M. Simeone, MD: Surgical Director, Multidisciplinary Pancreatic Tumor Clinic, University of Michigan Cancer Center; Co-Director of GI Oncology program, University of Michigan Comprehensive Cancer Center; Director, Pancreatic Cancer Destination Program, University of Michigan Medical Center



## **PANCREATIC CANCER FACTS**

- An estimated 44,030 Americans will be diagnosed with pancreatic cancer in the U.S., and over 37,660 will die from the disease.
- Pancreatic cancer is one of the few cancers for which survival has not improved substantially over nearly 40 years.
- Pancreatic cancer is the 4th leading cause of cancer-related death in the United States.
- Pancreatic cancer has the highest mortality rate of all major cancers. 94% of pancreatic cancer patients will die within five years of diagnosis – only 6% will survive more than five years. 74% of patients die within the first year of diagnosis.
- The average life expectancy after diagnosis with metastatic disease is just three to six months.
- Few risk factors for developing pancreatic cancer are defined. Family history of the disease, smoking, age, and diabetes are risk factors.
- Pancreatic cancer may cause only vague symptoms that could indicate many different conditions within the abdomen or gastrointestinal tract. Symptoms include pain (usually abdominal or back pain), weight loss, jaundice (yellowing of the skin and eyes), loss of appetite, nausea, changes in stool, and diabetes.
- Treatment options for pancreatic cancer are limited. Surgical removal of the tumor is possible in less than 20% of patients diagnosed with pancreatic cancer. Chemotherapy or chemotherapy together with radiation is typically offered to patients whose tumors cannot be removed surgically. Only three drugs are FDA-approved for the treatment of pancreatic cancer: fluorouracil (5-FU), gemcitabine (Gemzar®), and erlotinib (Tarceva®).
- Pancreatic cancer is a leading cause of cancer death largely because there are no detection tools to diagnose the disease in its early stages when surgical removal of the tumor is still possible.
- The National Cancer Institute (NCI) spent an estimated \$97.1 million on pancreatic cancer research in 2010. This represented a mere 2% of the NCI's approximate \$5 billion cancer research budget for that year.

*Source for statistics: American Cancer Society: Cancer Facts & Figures 2011 and NCI Funded Research Portfolio.*



## **WAYS YOU CAN HELP FIND A CURE FOR PANCREATIC CANCER**

- Honor your loved ones on birthdays, anniversaries, Mothers Day/Fathers Day, Christmas, Hanukkah, Easter, Valentine's Day or any other occasion with a donation to the Hirshberg Foundation.
- Ask your friends or relatives to give a donation on your wedding day, birthday, anniversary, shower or other special occasion in lieu of a gift. Or, if you are hosting a baby shower, wedding shower, Holiday party, Bar/Bat Mitzvah or special occasion party, make a donation to the Hirshberg Foundation in lieu of favors.
- When you host a party, dinner or house warming, let guests know that you would prefer that a small donation be given to the Hirshberg Foundation in lieu of a hostess gift.
- Host a fundraising dinner. Invite your guests to a party or dinner at your home and request a twenty-five to fifty dollar donation per person. The donation is tax deductible, and so is the expense of the party.
- Ask your doctor if you can leave Hirshberg Pancreatic Cancer Research Center brochures in the office waiting room, as a resource for other patients. Call other oncologists in your area, and ask them to do the same.
- Ask your church, synagogue, school, or country club to hold a fundraiser in your beloved's honor – a dance, dinner, golf or tennis tournament, bake sale, car wash, rummage sale.
- Participate in our biggest annual fundraising event, the LA Cancer Challenge 5K/10K Run, held each Halloween weekend in the Fall. Become a member of the planning committee, volunteer or participate on event day, or raise pledges. Or, join the Hirshberg Training Team.
- Host a fundraiser in your local area. A walk-a-thon, bicycle race, ski event or dance marathon are just a few ideas. Don't be afraid to start small. We can offer suggestions and guidance.
- Help build our mailing list. Send us names of friends, relatives and colleagues who have been touched by pancreatic or other gastrointestinal cancer. We will keep them informed of upcoming events and current findings.
- Stay informed about upcoming events and ways that you can get involved to help fight the battle against pancreatic cancer.
- Wear the purple wristbands or foundation apparel to help get the word out.
- When you make a purchase through our FlowerPetal.com site (including flowers, candy, spa baskets and more) they will donate 12% of your purchase directly to us – Visit [www.pancreatic.flowerpetal.com](http://www.pancreatic.flowerpetal.com)
- Earn money for the Hirshberg Foundation while you shop! By signing up your Ralph's Club card, Food 4 Less or Food Co. Club card using the Hirshberg Foundation non-profit number, we receive a percentage back from your purchases. Sign up for the Community Contribution Program.

The Hirshberg Foundation for Pancreatic Cancer Research is a national 501(c)3 non-profit organization incorporated in the State of California. Although encouraging strides are being made, pancreatic cancer research is urgently in need of increased funding.

Please donate, volunteer, and participate in events to be part of the fight to find a cure!



## PAST CORPORATE SPONSORS (1998 – 2009)

The Hirshberg Foundation for Pancreatic Cancer Research acknowledges the generous support of our corporate sponsors who have made the fight against this deadly disease possible.





## **RESEARCH PROGRAM UPDATE 2011**

### **About the Foundation:**

Founded in 1997, the Hirshberg Foundation is a national non-profit organization dedicated to the advancement of pancreatic cancer research through seed grants. It provides resources and information support to pancreatic cancer patients, their families, and community awareness programs. The Foundation also supports national and international academic meetings and Symposiums.

### **Research Accomplishments at UCLA:**

**SURGERY:** Through UCLA Ronald S. Hirshberg Translational Pancreatic Cancer program and UCLA's Center for Pancreatic Diseases, patients with Stage 1 disease who have their cancer removed can now expect a 5 year survival rate of at least 35%--two to three times better than the national average.

**DIGESTIVE DISEASES:** Early detection for pancreatic cancer is now possible in a screening program (both invasive and non-invasive) to detect early pancreatic cancer with high predictive value in high risk population.

**PATHOLOGY:** The establishment of the UCLA Pancreatic Cancer Tissue Bank created a key national resource for investigators with current inventories of over 250 patient specimens.

### **National Seed Grant Program Accomplishments:**

Major national research programs are currently supported through the Hirshberg Foundation Seed Grant Program. Several studies have received National Institutes of Health funding including:

- Investigation of key molecular and cellular pathways that control pancreatic cancer cell growth and survival
- Understanding the microenvironment for pancreatic cancer cell growth and the interaction with inflammatory processes
- Efficacy of phytonutrients to inhibit pancreatic cancer development and growth in preclinical models and human clinical trial studies
- Technological development of genetically engineered mouse models for pancreatic cancer for investigation
- Pioneering tracer metabolomics to investigate metabolic alterations in pancreatic cancer
- The role of anti-diabetic drug on inhibiting pancreatic cancer cell growth
- Investigating the concept of pancreatic cancer stem cells and their relationship to drug resistance

Our goal is to continue to award the best pancreatic cancer research presentations at national and international meetings and sponsor Symposiums and conferences, newsletters and websites.

Past recipients of the Hirshberg Foundation Seed Grant Program include UCLA, City of Hope, Fox Chase Cancer Center, Harbor-UCLA Medical Center, Loma Linda University, University of Minnesota, Mayo Clinic and Mayo College of Medicine, Johns Hopkins University, Columbia University, University of Pittsburgh, Memorial Sloan-Kettering Cancer Center, MD Anderson and Dana-Farber Cancer Institute.