

UCLA AGI HIRSHBERG CENTER FOR PANCREATIC DISEASES 2025 ACTIVITY REPORT

Prepared for the
Hirshberg Foundation for Pancreatic Cancer Research

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OVERVIEW

UCLA Health is fortunate to partner with the Hirshberg Foundation for Pancreatic Cancer Research and its founder Agi Hirshberg in their fight against pancreatic diseases. For more than a quarter-century, this relationship has advanced patient care and science while cultivating the next generation of leading clinicians and investigators. The collaboration continues to evolve in meaningful ways. Together, the academic medical center and the foundation will find a cure for pancreatic cancer.

The past year has produced abundant reasons to be hopeful. Professionals at UCLA and beyond have made remarkable progress, including promising vaccines and treatments. Early detection, which would significantly increase survival rates, is in reach thanks to encouraging new tests.

For decades, the Hirshberg Foundation has inspired researchers, physicians and patients alike. The history of the foundation and its five pillars was the focus of a recent UCLA Alumni Association interview with executive director Lisa Manheim. Pillar one is establishing a premier pancreatic cancer center capable of meeting patients' every need and delivering leading-edge treatment in a single location. The second pillar is funding projects and programs designed to improve patient care, treatment and, ultimately, pancreatic cancer survival rates.

Pillar three is gaining widespread recognition as a resource for pancreatic cancer patients and their families. Pillar four is uniting generations young and old for opportunities to exercise while raising awareness and money for pancreatic cancer research. The first four pillars have been achieved. The fifth remains more elusive but within grasp: finding a cure for pancreatic cancer in honor of Ron Hirshberg and the thousands of people diagnosed with this disease each year.



At UCLA, **Timothy Donahue, MD**, continues to lead the charge as director of the center. Dr. Donahue also serves as chief of the UCLA Division of Surgical Oncology and executive vice chair of the UCLA Department of Surgery. A nationally recognized expert in pancreatic cancer, he holds the Garry Shandling Chair in Pancreatic Surgery as well as the title of medical director of cancer services for UCLA Health. In addition to his clinical activities, Dr. Donahue runs a laboratory sponsored by the National Institutes of Health (NIH) focused on pancreatic cancer tumor biology and metabolism. In 2025, he published findings in several journals — including the esteemed *JAMA Surgery* and *Cancer Research* — while continuing to conduct investigations funded by various prestigious NIH Research Project (R01) Grants. In November, Dr. Donahue was appointed to the scientific advisory board of RenovoRX, a life sciences company developing targeted oncology therapies.

ACCOMPLISHMENTS AND RESEARCH

The experienced team of surgical oncologists at the center performs more pancreatic surgeries than any other hospital in Southern California. More importantly, the center is a crucial hub for pancreatic cancer research and groundbreaking treatments. In one place, patients have access to the latest diagnostic technology, specialized oncology providers and ongoing clinical trials. Medical professionals deliver precise, compassionate care tailored to each individual. Patients benefit not only from expert clinical attention but also from coordinated support services that guide them through every stage of their pancreatic cancer journey. Furthermore, the center offers dietary, integrative and psychosocial resources, as well as genetic testing. Funded by the Hirshberg Foundation, a dedicated patient navigator helps people maximize these opportunities, facilitating thoughtful, comprehensive and efficient care.

Conducting novel research is a principal mission of the center. As of this writing, 52 clinical trials for pancreatic cancer are underway. Clinical trials allow patients to undergo emerging treatments designed to attack their cancer more aggressively. Ideally, these trials will yield affirmative, reproducible results that can lead to better treatment for all patients.

Building on its ongoing efforts in germline sequencing, the center has recently begun sequencing all tumors from surgical patients to generate mutational profiles and determine eligibility for novel clinical trials. These trials target specific mutations, including KRAS mutations, which are found in up to 90% of pancreatic tumors.

Off-the-shelf CAR-NKT-cell therapy



Caius Radu, MD, and his team at UCLA have developed an off-the-shelf chimeric antigen receptor-natural killer T (CAR-NKT)-cell therapy for pancreatic cancer that shows considerable promise. The new therapy demonstrated far greater effectiveness than current immunotherapies in multiple scientific models of pancreatic cancer, including aggressive metastatic forms. Unlike personalized CAR-T treatments that take weeks to manufacture, this therapy can be mass-produced from donor stem cells, stored for immediate use and administered at a dramatically

lower price of approximately \$5,000 per dose. Other personalized cell therapies can cost hundreds of thousands of dollars and require weeks of manufacturing. These barriers can delay treatment — possibly beyond the time a patient has left. In preclinical studies, the engineered NKT cells successfully infiltrated even the toughest-to-reach tumor sites, such as the liver and lungs, while maintaining strong antitumor activity without the exhaustion that often limits other cell therapies.

Because the CAR-NKT-cell therapy targets mesothelin — a protein common in pancreatic, breast, ovarian and lung cancers — a single product could potentially treat multiple tumor types. The UCLA team has already delivered favorable results in preclinical models of triple-negative breast and ovarian cancers. The preclinical stage is now complete, and researchers are preparing to seek FDA approval for clinical trials. These trials have the potential to unlock a potent, scalable and more accessible treatment option for patients facing one of the deadliest and most treatment-resistant cancers.

ELI-002 7P pancreatic cancer vaccine



In a multisite phase 1 clinical trial, almost 80% of patients with heavily pretreated advanced/metastatic pancreatic cancer achieved disease control with ELI-002 7P — a new cancer vaccine that activates the immune system against KRAS-driven tumors. KRAS mutations are common in pancreatic and colorectal cancers. The study was helmed in part by investigators at the UCLA Health Jonsson Comprehensive Cancer Center (UCLA Health JCCC) — including first author **Zev Wainberg, MD**. Dr. Wainberg is the holder of the Estelle, Abe

and Marjorie Sanders Chair in Cancer Research, a professor of medicine, and co-director of the gastrointestinal (GI) oncology program at the university. During nearly 20 months of follow-up, the vaccine produced strong and lasting KRAS-specific T-cell responses in most participants, and some patients cleared tumor-associated biomarkers entirely. Those who generated stronger immune responses had far longer relapse-free and overall survival than historically expected, suggesting that the vaccine may help delay or prevent recurrence in high-risk patients. Many also developed immune responses to additional tumor-related mutations, indicating broader antitumor potential.

The vaccine uses amphiphile technology to deliver antigens directly to lymph nodes, producing a potent immune reaction without the need for personalized manufacturing. The study followed 25 patients who had undergone surgery but still showed signs of minimal residual disease. Dr. Wainberg noted that KRAS has long been a difficult target in oncology, and these results show that ELI-002 7P can safely train the immune system to recognize and attack cancer-driving mutations. A larger phase 2 trial of the ELI-002 7P vaccine has completed enrollment at the Hirshberg Center.

These findings were presented at the American Society of Clinical Oncology GI Cancers Symposium and published in *Nature Medicine*. The study has garnered major national attention, elevating the profile of the center and its faculty.

Adenosine as immune-based therapy for PDAC

In July 2024, UCLA researchers obtained a \$4 million grant from the National Cancer Institute (NCI) to research immunotherapy — particularly adenosine — for pancreatic ductal adenocarcinoma (PDAC). Dr. Donahue is the principal investigator of the study, and Drs. Wainberg and Radu are co-principal investigators.

The project is progressing well; phase 1 enrollment is complete. The researchers are currently analyzing patient tumors and blood to assess the ongoing effectiveness of the combination therapy. They have continued to record excellent outcomes. Based on these encouraging phase 1 results, the investigators are now enrolling patients for phase 2.

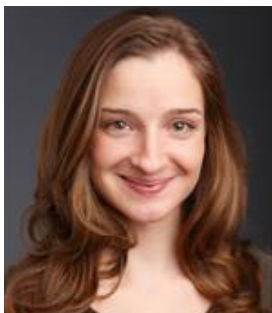
Collaboration is key

With the support of the Hirshberg Foundation, the center pursues collaborations with other pancreatic disease centers of excellence to accelerate improvements in patient care and treatment. The University of California Cancer Consortium was established in 2017. The consortium comprises NCI-designated comprehensive cancer centers located at UCLA,

UC Davis, UC Irvine, UC San Diego and UC San Francisco. The UC Pancreatic Cancer Consortium (UCPCC) was established shortly after, harnessing the wide-ranging expertise of clinician-scientists specializing in pancreatic cancer and shared resources. The goal of the UCPCC is to improve the lives of people diagnosed with pancreatic cancer by translating innovative research into leading-edge clinical care. The UCPCC held a symposium Nov. 15 at the Helen Diller Family Comprehensive Cancer Center on the San Francisco campus. Presentations spanned basic and clinical research while a poster session allowed participants to share information, exchange ideas and generate new insights in a highly collaborative environment.

Dr. Donahue leads the UCLA branch of the national Pancreatic Cancer Early Detection (PRECEDE) Consortium. The PRECEDE Consortium is an observational, longitudinal prospective cohort study that entails biosample collection every six to 12 months, as well as standardized clinical and imaging data acquisition for high-risk groups. The study reached a major milestone in 2025 when enrollment surpassed 10,000 participants. The goal is to enroll 20,000. The consortium now encompasses more than 60 academic medical centers around the world, maximizing the exchange of data aimed at extending the five-year average pancreatic cancer survival rate. The consortium's mission is to increase that rate by 10% to 50% within a decade.

Advancing patient-centered care through Carevive and the Canopy Cancer Collective



Over the past year the Hirshberg Center has made significant strides toward stronger patient-centered care through the Canopy Cancer Collective. The UCLA branch of the collective is led by **Emily Martin, MD**, director of inpatient palliative care, assistant clinical professor of medicine and physician informaticist. The Canopy Grant provided the initial infrastructure for this initiative. However, the most meaningful advances can be attributed to the Hirshberg Foundation's sustained support. Funding for a patient navigator and dietitian has

been essential, allowing the program to build and maintain the staffing required to turn early concepts into lasting systems of care.

UCLA Health and the Canopy Cancer Collective launched the Carevive patient self-reporting platform in late 2024. The Carevive baseline survey captures a thorough picture of each patient's experience, including quality of life, functional status, communication preferences, symptoms and care priorities. Patients may then opt into ongoing reassessment through the Carevive Prompt app, which circulates shorter surveys every two months. These follow-up

assessments track changes in symptoms and quality of life while monitoring whether patients feel heard and understood by their clinical teams. This structure proactively identifies unmet needs — from pancreatic enzyme insufficiency to emotional or logistical challenges — and ensures timely connection to appropriate resources. Formal data collection began in January 2025 following workflow development and staffing transitions. The project overcame early obstacles and exceeded its targets for patient participation.

The success of Carevive at UCLA Health demonstrates how the powerful combination of technology and human support can enhance the patient experience. Funded by the Hirshberg Foundation, the patient navigator plays a central role in reviewing survey alerts, standardizing questions and guiding patients to the appropriate providers. This approach treats patients as individuals rather than a collection of symptoms. It also reinforces a consistent standard of care across a large, complex health system spanning various locations and patient populations.

Additional features include referrals to palliative care, nutrition services and the Simms/Mann UCLA Center for Integrative Oncology. This integrated model distinguishes the Hirshberg Center from other cancer facilities. The unwavering support of oncology and surgical oncology leadership has been crucial, embedding these resources directly into the care process instead of adding them as an afterthought.

Although seed funding for the Canopy Cancer Collective expired in 2024, the collaborative framework lives on. UCLA remains an active participant in the collective, sharing insights and refining approaches to care coordination. The team is now exploring further Carevive functions, such as tools to help survivors navigate the transition out of treatment and address long-term physical and emotional needs.

Research funding

A cure for pancreatic cancer cannot be achieved without well-informed research. The Hirshberg Foundation has generously funded various research programs. The seed grant program continues to reap rewards and contribute to the demystification of pancreatic diseases. Now leaders in the field, former awardees often credit the seed grant program for propelling their careers.

The new Hirshberg UCLA Catalyst Grant Program in Pancreatic Cancer Research promises to accelerate progress by funding three years of extended investigation and scientific collaboration. With these resources, UCLA Health intends to build an interdepartmental community of pancreatic disease experts, maximizing the academic medical center's capacity to contribute to translational research and pursue further funding opportunities.

The seed grant program: celebrating 20 years of impact

For two decades, the Hirshberg Foundation seed grant program has ignited scientific discovery in pancreatic cancer treatment. The program — which provides early, flexible support for investigators exploring new frontiers — stands out as one of the foundation’s most influential investments. This anniversary presents an opportunity to reflect on the program’s humble beginnings and marvel at its evolution into an unstoppable force for innovation.

In 2005, the seed grant program began offering \$30,000 awards to a small pool of applicants. As the research landscape changed and the need for early-stage funding intensified, the foundation and its scientific advisory board worked diligently to fortify and modernize the program. Over time, the award amount increased to \$75,000.

To date, the foundation has awarded more than 135 seed grants to researchers at 55 institutions leading the fight against pancreatic cancer, including UCLA, Johns Hopkins University, Mayo Clinic, University of Texas MD Anderson Cancer Center and Memorial Sloan Kettering Cancer Center.

The 2025 program attracted a record amount of 178 applicants, more than doubling the pool from the previous year. Rising interest in pancreatic cancer research, widespread funding uncertainty and the foundation’s sterling reputation contributed to this massive spike. The growth of the program — which once drew 25 to 30 applications — has been dramatic. Managing such volume has required considerable administrative refinement. Over the past three years, the foundation has formalized the entire award process, introducing a structured grant agreement, clear reporting expectations and a streamlined online application system.

An official 20th anniversary celebration spotlighted the seed grant program’s career-defining legacy and took place during the American Pancreatic Association’s (APA) 2025 meeting.



The program was also featured in an **ABC7 Eyewitness News** segment containing interviews with Manheim and **Evan Abt, PhD** — a 2022 seed grant recipient and inaugural Catalyst Grant awardee.

Looking forward to the next decade, the program’s influence continues to grow. Its effect is palpable among the expanding community of scientists who launched illustrious careers and transformational research with the help of a seed grant.

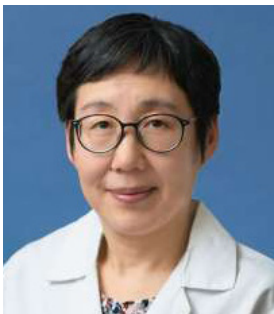
Two UCLA faculty members received seed grant funding from the Hirshberg Foundation to pursue projects in 2025.



Mark Girgis, MD, assistant professor of surgery and director of robotic surgery at UCLA, received a seed grant for his study “Molecular Testing of Pancreatic Cystic Neoplasms: Enhancing the Malignant Yield of Pancreatectomy.” Pancreatic cysts appear in approximately 2.5% of the general population and are commonly detected as incidental findings during cross-sectional imaging. The cysts can range from benign to malignant, rendering further examination essential. Although most cysts do not progress to cancer, a rigorous diagnostic workup is necessary

to assess risk. Based on these results, clinicians must decide between surgical resection and active surveillance. Currently, 80% of resected pancreatic cysts are found to be benign, underscoring the need for better diagnostic tools to avoid unnecessary surgeries.

Dr. Girgis’ study evaluates a new, 74-gene molecular assay used to analyze pancreatic cyst fluid with the goal of better distinguishing between high-risk and low-risk lesions. Through this molecular profiling, he hopes to refine risk stratification, permitting caregivers to safely monitor low-risk patients and only perform procedures when necessary.



Liying Zhang, MD, PhD, professor of pathology and laboratory medicine and director of the Advanced Molecular Diagnostics Service at UCLA, received a seed grant for her study “Identifying circulating biomarkers for predicting response to neoadjuvant immunotherapy in pancreatic cancer.” Current immunotherapies have not been effective for PDAC patients, but recent research suggests that blocking specific receptors could change that reality. Dr. Zhang and her team have embarked on a clinical trial to test a combination of novel interventions —

including checkpoint inhibitors and antibodies targeting adenosine receptors — alongside chemotherapy to treat PDAC. This form of pancreatic cancer is particularly difficult to treat, and surgery is currently the only chance of achieving long-term survival. In the past, a major hurdle was the lack of reliable blood tests — or biomarkers — to predict how well these therapies would work. Dr. Zhang is implementing advanced genomic analysis of blood samples to identify new biomarkers, which could help personalize treatment plans, improve outcomes and reduce side effects.

A constellation of superstars: 20 years of awardees

Previous seed grant awardees have made monumental contributions in the quest for a cure. The following are just a handful of those trailblazers:



Anna S. Gukovskaya, PhD, is an inaugural seed grant recipient, director of the pancreatic research group at UCLA and professor-in-residence at the West Los Angeles Veterans Affairs Medical Center. She was awarded the 2025 George E. Palade Prize, the highest honor from the International Association of Pancreatology. The prize is bestowed on scientists whose work has significantly enhanced the understanding of pancreatic biology and disease. Dr. Gukovskaya was recognized for her research on the molecular and cellular mechanisms underlying pancreatitis and pancreatic cancer.



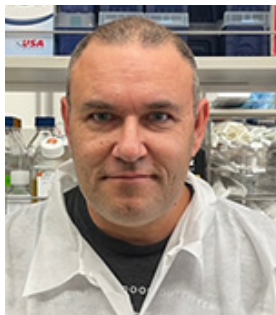
Stephen J. Pandol, MD, is an inaugural seed grant recipient and director of basic and translational pancreas research at Cedars-Sinai Medical Center. Dr. Pandol was the first recipient of the Vay Liang W. (Bill) Go MD Endowed Lectureship in Nutrition and Pancreatic Diseases. He also teaches medicine at Cedars-Sinai and UCLA.



Diane Harris, PhD, is a 2006 seed grant recipient. She now works to prevent pancreatic and other conditions at the Centers for Disease Control and Prevention (CDC). Dr. Harris is a health scientist in the Division of Nutrition, Physical Activity and Obesity and head of the Healthy Food Environments Team in the Obesity Prevention and Control Branch at the CDC.



Timothy Donahue, MD, is a 2009 seed grant recipient and director of the Hirshberg Center. He was awarded a seed grant during his first year as a UCLA faculty member for his study “Identifying the Malignant Signatures Associated with the Development of Human Pancreatic Cancer.”



Yaroslav Teper, PhD, is a 2021 seed grant recipient and project scientist at the David Geffen School of Medicine at UCLA. He was the first co-author of a groundbreaking study showing that chronic stress and obesity work together to accelerate pancreatic cancer development and growth.

Beyond the Seed: Bridge to Breakthroughs

The Hirshberg Foundation launched its Beyond the Seed: Bridge to Breakthroughs initiative to bridge critical funding gaps and ensure research continues, particularly at UCLA. In 2025, the foundation generously invested in the Miklos Sahin-Toth Research Fund and the Ronald S. Hirshberg Translational Pancreatic Cancer Research Laboratory amid federal funding challenges.

Hirshberg UCLA Catalyst Grant Program in Pancreatic Cancer Research

The partnership between the Hirshberg Foundation and UCLA continues to prosper through the Catalyst Grant Program, which is exclusive to UCLA researchers. Yearly awardees will receive three annual payments of \$75,000. This extended support gives investigators more time, resources and flexibility to fully develop their projects and join forces with their colleagues. The long-term goal of the program is to foster internal collaboration at UCLA and build a campuswide network for pancreatic cancer research that will qualify for larger funding opportunities, such as Research Program Project (P01) or Specialized Programs of Research Excellence (SPORE) Grants from the NIH and the NCI.

Three researchers were awarded Catalyst Grants in 2025:



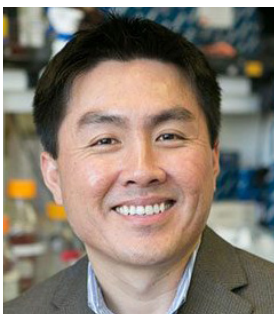
Evan Abt, PhD, is an assistant professor in the UCLA Department of Molecular and Medical Pharmacology and a member of the tumor immunology and immunotherapy research program at the UCLA Health JCCC. He received a Catalyst Grant for his study “Leveraging T-Cell Responses Unleashed by Adenosine-Targeting Immunotherapy in Pancreatic Cancer.” Dr. Abt’s novel clinical trial explores ways to enhance tumor-specific T cells’ ability to recognize and attack pancreatic tumors through adenosine-blocking CD73 inhibitors

combined with chemotherapy and immunotherapy. The goal of the study is to identify new therapeutic targets that complement existing immunotherapies and lead to more durable treatment responses.



Jason Link, PhD, is an associate adjunct professor in the UCLA Division of Surgical Oncology, as well as a member of the tumor immunology and immunotherapy and signal transduction and therapeutics research programs at the UCLA Health JCCC. He received a Catalyst Grant for his study “Harnessing the Adaptive Immune Response from Patients with Effective, Natural PDAC Immunity.” Dr. Link is investigating why a rare group of patients’ immune systems prevent their pancreatic cancer from significant progression over a long period of time. He is identifying

the unique, tumor-specific targets their T-cell receptors recognize and comparing the immune responses of long-term survivors to those of patients with more aggressive forms of the disease. He hopes that insight into this phenomenon could reveal new strategies for training or improving immune protection in other pancreatic cancer patients.



Roger Lo, MD, PhD, is a professor in the UCLA Division of Dermatology and runs his own laboratory at the UCLA Health JCCC. He received a Catalyst Grant for his study “Linking Cellular and Genomic Mechanisms of Acquired Resistance to KRAS Inhibition in PDAC.” Dr. Lo’s area of expertise, melanoma, is not typically associated with pancreatic cancer research. However, his knowledge of cancer signaling and therapy resistance transcends disciplines. Mutations in the KRAS gene drive more than 90% of pancreatic cancers and for decades were considered

impervious to drugs. Although recent advances have produced promising KRAS inhibitors, most patients develop resistance soon after treatment begins.

Dr. Lo’s research aims to understand and overcome this resistance. His research on melanoma has uncovered that targeted therapies can cause genomic instability, enabling cancer cells to acquire more genetic mutations and escape treatment. Dr. Lo plans to investigate whether KRAS inhibitors in pancreatic cancer trigger similar genomic instability. He will also explore whether combining KRAS inhibitors with drugs that stabilize cancer cell genomes — such as rho kinase inhibitors — can limit acquired resistance and prolong treatment responses. He will use pancreatic cancer cell lines and patient-derived models to identify the molecular mechanisms behind resistance and discover potential biomarkers to inform future combination therapies.

Symposia for the patient and scientific communities alike



UCLA and the Hirshberg Foundation’s 19th Symposium on Pancreatic Cancer took place April 5, 2025, at the Meyer and Renee Luskin Conference Center. This annual event never fails to provide a warm, inviting space for patients, survivors and their loved ones to form community and learn about the latest developments in pancreatic cancer care.

Hirshberg and Manheim delivered opening remarks, and Dr. Martin discussed “Navigating Your Pancreatic Cancer Treatment Right from the Start.” Dr. Donahue gave an annual progress report on pancreatic cancer research. Jon King, MD — who received a Hirshberg Foundation seed grant in 2016 and serves as an assistant professor in the UCLA Division of General Surgery — spoke about “Surgical Treatment of Pancreatic Cancer.”



Registered dietitian Shelby Yaceczko, DCN, emphasized the importance of nutrition and movement throughout treatment, while registered nurse Barbara Demman, MSN, exalted the power of mindfulness. Ziva Cooper, PhD, professor-in-residence in the UCLA Department of Psychiatry and Biobehavioral Sciences, revealed what patients should know about cannabis and oncology. Rounding out the program was Annette Stanton,

PhD, a 2016 seed grant recipient and professor in the Department of Psychiatry and Biobehavioral Sciences, who led the popular panel discussion “Perspectives from Pancreatic Cancer Survivors and Caregivers.”

Per tradition, the survivors in the room gathered for a celebratory photo before lunch. The 20th Symposium on Pancreatic Cancer will take place on April 11, 2026.

A second symposium occurred on Oct. 10, 2025, to commemorate the 20th anniversary of the seed grant program. The UCLA Scientific Symposium on Pancreatic Cancer Research was held at the Faculty Club following a Hirshberg Foundation Scientific Advisory Board meeting. The group was honored to have Hirshberg and Manheim in attendance to reflect on two decades of investigative excellence.



Manheim, Dr. Donahue and Hirshberg Center Co-Director Miklos Sahin-Toth, MD, PhD, welcomed participants to the event. **O. Joe Hines, MD**, a 2022 collaborative seed grant awardee, former director of the Hirshberg Center and holder of the William P. Longmire, Jr., Chair in Surgery, introduced Eileen O'Reilly, MD. Dr. O'Reilly, the current holder of the Vay Liang W. (Bill) Go MD Endowed Lectureship in Nutrition and Pancreatic Diseases, discussed the modern era of biomarker-directed therapy. Other guest speakers included Dr. Pandolf; Diane Simeone, MD, director of UC San Diego Moores Cancer Center; Rushika Perera, PhD, professor of anatomy and Deborah Cowan Endowed Professor at UC San Francisco; and Bomi Lee, PhD, a 2023 seed grant recipient and assistant professor of pediatrics specializing in gastroenterology, hepatology and nutrition at Stanford Medicine.



Additional Hirshberg Center speakers included Drs. Girgis, Gukovskaya and Zhang, as well as Guido Eibl, MD, a professor-in-residence in the UCLA Department of Surgery who received an individual seed grant in 2010 and a collaborative seed grant in 2020; Randy Hecht, MD, professor of clinical medicine and director of the GI oncology program at UCLA; and **Slavica Tudzarova-Trajkovska, PhD**, an assistant adjunct professor in the UCLA Division of Endocrinology, Diabetes and Metabolism who received a collaborative seed grant in 2023. Topics ranged from diabetes in pancreatic cancer to autophagy in pancreatitis.

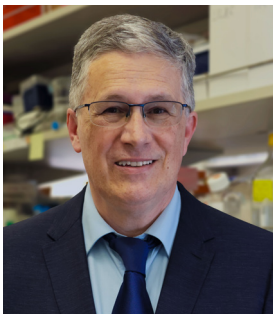
L.A. Cancer Challenge 5K Walk/Run

The 2025 L.A. Cancer Challenge (LACC) 5K Walk/Run took place Oct. 26 at UCLA's Wilson Plaza. Dr. Abt served as the honorary medical chair, and UCLA Health nurses were among the honorees. As usual, the Hirshberg Center formed a team for the event, which was featured in the aforementioned UCLA Alumni Association article.



Last year's walk/run raised roughly \$735,000 for pancreatic cancer research, amounting to 105% of the foundation's \$700,000 goal. Since its founding in 1998, the LACC has raised \$12.1 million.

Miklos Sahin-Toth Research Fund



Dr. Sahin-Toth is co-director of the Hirshberg Center, chair of the Hirshberg Foundation Scientific Advisory Board, holder of the Garry Shandling Chair in Pancreatic Diseases and a professor of surgery at UCLA. He is a leading pancreatic disease researcher specializing in chronic pancreatitis. In his capacity as board chair and center co-director, Dr. Sahin-Toth oversees the seed grant program.

In 2025, the Sahin-Toth Laboratory continued to enhance the understanding of pancreatitis through a combination of innovative molecular research, collaborative scholarship and sustained extramural funding. The lab is grateful for the Bridge to Breakthroughs Grant as well as the Hirshberg Foundation for its unwavering generosity. Under the leadership of Dr. Sahin-Toth, the team expanded its contributions to the field with a series of high-impact publications, national presentations and ongoing federally funded research programs. The lab's work remains pivotal to defining the molecular mechanisms that drive pancreatitis and identifying new therapeutic strategies.

The lab comprises a dedicated and diverse team of researchers. In addition to Dr. Sahin-Toth, the group includes Alexandra Demcsak, MD, PhD, a 2022 seed grant recipient and assistant professor in the UCLA Department of Surgery; Vera Sahin-Toth, MS, staff research associate; and Yasmin Kaman, undergraduate researcher. Also employed by the lab are postdoctoral scholars Zoltán Attila Nagy, PhD; Gergő Berke, MD, PhD; and Mate Sandor, MD. Together, they had a remarkably productive year, authoring 12 peer-reviewed publications in leading journals such as *Gut*, *JCI Insight*, *Pancreatology*, *Science Reports*, and *Cellular and Molecular Gastroenterology and Hepatology*. These studies addressed a broad spectrum of pancreatitis-related mechanisms — including misfolding-induced cellular stress, genetic susceptibility and protease inhibitor interactions — as well as the development of improved experimental models. Several publications stand out for their translational value. Drs. Sahin-Toth and Berke demonstrated the therapeutic potential of intron-mediated enhancement of serine peptidase inhibitor Kazal type 1 expression, offering a promising avenue for future gene-based

interventions. Dr. Sandor and colleagues shed new light on the pathogenicity of carboxypeptidase A1 variants and the consequences of misfolded digestive enzymes in both human disease and preclinical models. Additional investigations explored phenomena ranging from engineered proteases with enhanced trypsinogen-degrading capacity to the molecular determinants of protease inhibitor interactions. Collectively, these findings deepen the understanding of how genetic and biochemical factors converge to initiate pancreatic injury.

The lab's productivity was further supported by a strong portfolio of competitive grant funding. Awards in 2025 included an NIH R01 Grant for a project helmed by Dr. Sahin-Toth focused on the role of chymotrypsin in pancreatitis, two federal grants for an investigation led by Drs. Sahin-Toth and Demcsak examining trypsin-dependent disease mechanisms, and an APA Foundation Young Investigator in Pancreatology Grant for research spearheaded by Dr. Sandor on TRPV6-mediated pancreatic channelopathies. These funding streams reaffirm the lab's reputation as a national leader in high-impact, mechanism-driven research.

Members of the Sahin-Toth Laboratory are highly active in the scientific community. Dr. Sahin-Toth was invited to deliver lectures during Digestive Disease Week, the APA Annual Meeting and the Hungarian Pancreatic Study Group Conference. Dr. Berke was invited to present at the Cedars-Sinai Pancreas Mini-Symposium and the APA meeting.

Ronald S. Hirshberg Translational Pancreatic Cancer Research Laboratory



Dr. Eibl oversees the Ronald S. Hirshberg Translational Pancreatic Cancer Research Laboratory. The lab's goal is to conduct investigations that directly shape pancreatic cancer treatment. Dr. Eibl and his colleagues remain focused on conditions that contribute to the proliferation of cancer, such as obesity, inflammation and stress. Dr. Teper and Mineh Markarian also work in the Hirshberg Lab.

Dr. Eibl was cited multiple times last year in high-impact journals. A paper published by Dr. Eibl and his colleagues in *Nature Cancer* in July 2025 explored the link between oxidative stress and cancer growth. Many individuals have pancreatic intraepithelial neoplasia — dormant cells that are often the precursor to cancer. When these cells encounter oxidative stress — as a result of either inflammation or exposure to molecules including hydrogen peroxide — a cascading series of protein interactions occurs between nuclear factor erythroid 2-related factor 2 and enhancer of zeste homolog 2 that amplifies their signals and increases their metabolic demands. This novel epigenetic mechanism, or switch, presents a new explanation for the rapid growth of cancer tumors in patients with chronic inflammation.

Dr. Eibl also authored a review article alongside Enrique Rozengurt, PhD, in *Signal Transduction and Targeted Therapy*. The article takes a comprehensive look at the development of PDAC, its relationship to the KRAS gene, and how chronic stress and obesity combine to accelerate cancer growth. Drs. Eibl and Rozengurt have found that several FDA-approved drugs — including beta blockers, metformin, statins and glucagon-like peptide-1 (GLP-1) receptor agonists — could help prevent cancer. Their article emphasizes the need to develop new molecules that directly target RAS and yes-associated proteins.

Though Dr. Eibl's application for a P01 Grant was not initially approved, he remains in contact with the NCI to learn from the experience and improve the lab's chances of obtaining funding in the future. Dr. Eibl is also actively working with colleagues across campus to compile grant proposals spanning other areas of focus, including the effect of bariatric surgery on pancreatic cancer risk. This pivot aligns with a recent NCI directive to include research on human cells/tissues in all grant proposals, as opposed to studies limited to scientific models.

Dr. Eibl and his team deeply appreciate the support of the Hirshberg Foundation. During uncertain times, private philanthropy is particularly integral to their work.

UCLA Pancreas Tissue Bank



David Dawson, MD, PhD, is a professor in the UCLA Department of Pathology and Laboratory Medicine, co-director of the UCLA-Caltech Medical Scientist Training Program, and director of the UCLA Pancreas Tissue Bank. Since 2005, the bank has been fundamental to basic, translational and clinical research led by preeminent pancreatic disease investigators. It procures and distributes patient-derived biospecimens while consulting on histology and pathology for discovery and validation studies involving preclinical models, patient samples and archival

datasets. Additional services — supporting spatial transcriptomics, patient-derived organoids and whole-tissue slices of patient tumors for *ex vivo* manipulation — facilitate pioneering pancreas research.

The backing of the Hirshberg Foundation enables the bank to offer many of its resources to investigators free of charge. The bank amplifies the translational impact of research and boosts investigators' competitiveness for extramural funding from the NIH and other sources. Several clinicians and researchers affiliated with UCLA and the Hirshberg Center benefit from the bank. The bank is currently assisting scientists exploring imaging modalities for the diagnosis and management of pancreatic cancer; the impact of diet and inflammation on pancreatic tumorigenesis; and the biologic effects of treatments targeting signaling, metabolism, inflammation and immune response in patient samples.

In 2025, the bank elevated research published in several prestigious journals, including *Science*, *Nature Cancer*, *Nature Communications*, *JCI Insight* and the *Journal of Clinical Investigation*. It is actively supporting the NIH-funded projects of several investigators at UCLA, UC San Diego, UC San Francisco and the Sanford Burnham Prebys Medical Discovery Institute.

The bank is thankful for Agi Hirshberg and the Hirshberg Foundation. Their longstanding commitment to sophisticated biobanking, pathology services and translational research brings the world closer to a cure for pancreatic cancer and other diseases.

Psychosocial care at the Simms/Mann Center



Shannon La Cava, PsyD



Valentina Ogaryan, PhD



Ali Wong, PhD

The Simms/Mann Center provides psychosocial, psychiatric, nutritional and spiritual support for patients and families facing various forms of cancer — including pancreatic. The center is led by **Shannon La Cava, PsyD**, senior director, and **Valentina Ogaryan, PhD**, clinical director and Darcie Denkert Notkin Leader of Psychosocial Oncology Care. Dr. La Cava oversees a talented team of psychiatrists, chaplains, nutritionists and other providers. Dr. Ogaryan manages an expert clinical staff of social workers and psychologists, as well as the center’s training program. In April 2025, the center named **Ali Wong, PhD**, director of integrative services. Dr. Wong helms the center’s nutrition, psychiatry and support group facilitation teams. The center’s services span 20 UCLA Health hematology/oncology community clinics across Central and Southern California, including the new Atascadero Cancer Care Center.

Simms/Mann Center leadership made several notable contributions to the field over the past year. Dr. La Cava delivered the keynote address “Finding Purpose, Perspective and Professional Development Through the Lens of Patient Experience” at the UCLA Palliative Care Symposium in April 2025. Dr. Ogaryan participated in various webinars, including the UCLA Health JCCC Wildfire and Cancer Symposium in April 2025, and presented multiple lectures, including “Psychosocial Oncology and Distress Screening” at the UCLA Joe C. Wen School of Nursing in May 2025. She was also invited to speak at the American Psychosocial Oncology Society Conference in New Orleans in March 2026.



Social worker **Katie Pool, MSW**, is the Simms/Mann Center’s dedicated pancreatic cancer clinician. As a member of the integrated practice unit (IPU) and the Canopy Cancer Collective, she cares for both new and returning patients every Tuesday in addition to attending weekly IPU tumor board meetings. This past year, the Simms/Mann Center recorded 484 pancreatic cancer visits from 139 individual patients, demonstrating a noteworthy continuum of care beyond initial diagnosis. Pool and her colleagues delivered the presentation “Leveraging Patient-Reported Outcomes to Drive Whole-Person Care and Demonstrate Value” at the Canopy Cancer Collective Learning Session in Dallas in October 2025.

Pancreatic cancer patients and their families are encouraged to take advantage of the Simms/Mann Center’s vast array of educational workshops and programs throughout the year. Popular offerings in 2025 included “The Thread: Discovering the Thread that Weaves Through Life’s Journey,” led by board-certified clinical chaplain Michael Eselun, BA, and “Sweet Truths: How Sugar Affects Your Body and Cancer Risk,” led by registered dietitian Deborah Hong, MS. Jenny Tran, PhD, leads a monthly workshop titled “Navigating GI Cancer: UCLA Resources and Support.”

The Simms/Mann Center staff extends its appreciation to Agi Hirshberg and the Hirshberg Foundation for their investment, which allows Pool and other care providers to devote ample time and resources to pancreatic cancer patients.

Ronald S. Hirshberg Chair in Translational Pancreatic Cancer Research



Dr. Rozengurt holds the Ronald S. Hirshberg Chair in Translational Pancreatic Cancer Research. He is a distinguished professor and chief of research in the UCLA Vatche and Tamar Manoukian Division of Digestive Diseases. He also runs his own lab focused on signal transduction and cell proliferation.

Dr. Rozengurt and his team identify advanced targets and strategies for the prevention and treatment of pancreatic cancer. In a series of studies that have opened a new avenue of research, Dr. Rozengurt and his collaborators have made inroads while attempting to define the interaction between stress and diet-induced obesity in pancreatic cancer development. After securing an Exploratory/Developmental (R21) Grant from the NCI for the early stages of their investigation, the team is seeking further funding via a P01 Grant from the NIH. They recently earned a pair of R01 Grants to expand their research on cell-signaling mechanisms.

The team's latest findings indicate that the combination of chronic stress and an unhealthy diet may play a role in the early development of pancreatic cancer, shedding light on how lifestyle factors contribute to the disease. Using preclinical models, the scientists identified a key mechanism by which stress-related neurotransmitters and obesity-related hormones activate the cancer-promoting cAMP-response element binding protein via distinct pathways.

Stress hormones activate the beta-adrenergic receptor/protein kinase A pathway, while obesity-related signals primarily activate the protein kinase D pathway — a signaling route discovered by Dr. Rozengurt. The research suggests that while stress or obesity can separately initiate pancreatic cancer growth, the risk increases when their mechanisms converge. In preclinical experiments, a high-fat diet alone led to the growth of precancerous pancreatic lesions. However, significantly more advanced lesions developed when social isolation stress was added to the equation. The investigators also found that estrogen and heightened beta-adrenergic receptor activity may increase susceptibility to stress-related cancer risk.

The research points to the possibility of repurposing existing medications to reduce pancreatic cancer risk. Because beta-adrenergic receptors appear central to stress-driven tumor promotion, commonly prescribed beta blockers may offer a promising avenue for intervention. This study, printed in *Molecular Cancer Research*, ranks in the top 5% of all articles scored by research impact tracker Altmetrics.

Dr. Rozengurt has also recently published work in other leading journals such as *Nature Reviews in Gastroenterology & Hepatology*, *Cancers*, *ImmunoHorizons*, and the *American Journal of Transplantation*.

Dr. Rozengurt's scientific authority is reflected in more than 46,700 citations and an h-index of 118, placing him among the world's most influential biomedical researchers. ScholarGPS puts him in the global top 0.05% of scholars.

Patient navigator: expanding support for people with pancreatic diseases

The Hirshberg Center's first patient navigator Janette Villa has quickly become a cornerstone of its approach to patient-centered care. Villa was able to define and become more confident in her role during her first full year on staff.

Villa provides consistent, personalized support at every stage of the care process, from diagnosis to treatment and survivorship. Each week she meets with several new patients, establishing a reliable point of contact to alleviate the confusion and emotional response that often stem from a diagnosis. Her total case load surpasses 100 patients.

Villa's attendance at weekly tumor board meetings — during which physicians introduce new patients, review diagnostic findings, clarify disease statuses and determine individualized treatment plans — is crucial. Her involvement ensures that once decisions are made, patients receive clear explanations of next steps and the full range of available resources.

Each day, Villa reviews Carevive alerts related to nutrition, nausea, distress and weight loss and relays updates to the appropriate medical team members. She also coordinates referrals to support services based on patient-reported concerns. Individuals experiencing emotional distress are connected with psychosocial services at the Simms/Mann Center. Those experiencing appetite or weight challenges are referred to the center's registered dietitian. And nearly all patients are offered palliative care consultations. This integrated approach ensures that physical, emotional and practical needs are addressed in tandem.

Villa also manages patient communications, scheduling imaging sessions, arranging preoperative clearances and answering questions about treatment logistics. Each patient receives a comprehensive resource folder and direct contact information for Villa and the medical team, reducing barriers to timely support and helping patients feel grounded during treatment. The packet also includes an overview of services provided by the Hirshberg Foundation and contact information for Amy Reiss, its director of patient programs.

The Hirshberg Foundation plays an indispensable role in this care ecosystem. Patients are regularly informed about foundation events, including the annual symposium and the LACC 5K Walk/Run. In the October 2025 edition of *U News* — a newsletter sent to UCLA Health faculty and staff — Villa raised additional awareness for the 5K. For patients facing financial hardship, the foundation provides direct assistance often through personal outreach from its leadership. Patients value this engagement, which transcends the clinical environment and fosters a sense of community.

Villa's work has recently taken on a deeper personal meaning following her father's cancer diagnosis over the holidays. This experience has strengthened her resolve to provide the level of compassion, clarity and advocacy she would want for her own family. It has also enhanced her understanding of the emotional landscape that patients and caregivers navigate on a daily basis. Looking ahead, Villa is focused on expanding outreach to non-English-speaking patients. As a bilingual Spanish-English speaker, she is committed to ensuring that all patients comprehend the resources available to them and feel fully supported regardless of language.

Nutrition for Safer Surgeries and PrepU Prehabilitation

Nutrition for Safer Surgeries and PrepU Prehabilitation are multidisciplinary initiatives launched by UCLA Health's gastrointestinal nutrition team for patients undergoing surgery. Nutrition care is tailored to each patient to strengthen the body before and promote healing after surgery. The goal of this strategy is to optimize quality of life, recovery and clinical outcomes.

Dr. Yaceczko oversees this work for the Hirshberg Center, monitoring patients through all stages of cancer care. Her continuous involvement enables her to coordinate seamlessly with clinical, psychosocial and palliative support services, upholding an integrated approach to surgical oncology.

Dr. Yaceczko has also spearheaded multiple projects with the Canopy Cancer Collective that will help practitioners recognize symptoms of malnutrition and exocrine pancreatic insufficiency (EPI) in pancreatic cancer patients. In 2025, she co-authored the first national white paper intended to standardize the diagnosis and treatment of EPI within pancreatic oncology. Many pancreatic cancer patients have EPI due to tumor-related duct obstruction or surgical resection.

WITH GRATITUDE

The visionary contributions of Agi Hirshberg and the Hirshberg Foundation have shaped pancreatic disease research and care in ways that could not have been foreseen when the Ronald S. Hirshberg Translational Pancreatic Cancer Research Laboratory was established in 1998. The foundation's special relationship with UCLA Health continues to evolve and push the boundaries of discovery, resulting in the direct improvement of treatment and patient services. The legacy of this partnership exists in the lives of survivors and careers of clinician-scientists that have benefited from the Hirshberg family's dedication.

Now more than ever, the UCLA Agi Hirshberg Center for Pancreatic Diseases, university leadership and the pancreatic disease patient community are profoundly grateful for your ongoing support.