Researchers receive \$4 million to advance immunotherapy treatment for pancreatic cancer

We are proud to share that our collaborative efforts with the UCLA Health Jonsson Comprehensive Cancer Center have led to a transformative \$4 million grant from the National Cancer Institute (NCI). This grant aims to advance immune-based therapies for pancreatic ductal adenocarcinoma (PDAC) to improve treatment and patient outcomes.

Immunotherapy employs drugs to boost the immune system's ability to identify and attack cancer cells. Under the guidance of Dr. Timothy Donahue, Director of the Agi Hirshberg Center for Pancreatic Diseases, Dr. Zev Wainberg, co-director of the UCLA Health GI Oncology Program, and Dr. Caius Radu, professor of molecular and medical pharmacology, a multidisciplinary team is delving deep into the role of adenosine in the immune suppression associated with pancreatic cancer. Their work seeks to understand how adenosine, a molecule in the body, affects the tumor environment and interactions between immune and cancer cells.

The grant will also fund a follow-up clinical trial examining a small molecule inhibitor combined with the existing combination of PD-1, an immunotherapy drug, and chemotherapy before surgery. Building on promising initial results, this trial seeks to diminish adenosine production within tumors, potentially boosting the immune system's ability to fight cancer more effectively. Previous Hirshberg Foundation Seed Grant Awardees, Dr. Thuc Le and Dr. Evan Abt, have also been working to study

adenosine.

"By introducing a small molecule inhibitor to the existing chemotherapy and PD-1 inhibition regimen, we hope to limit adenosine production in the tumor microenvironment, thereby enhancing the immune response against the cancer," said Donahue in the article published by UCLA Health. "We are hopeful this strategy will help the body's natural defenses fight the cancer more effectively, leading to better treatments for people with pancreatic cancer."

This substantial grant is a beacon of hope. We are optimistic that this research will uncover new therapeutic strategies that target adenosine, enhancing patient outcomes and leading to better treatments.

27th Annual LACC Honorary Starter is 9-Year Pancreatic Cancer Survivor, Tom Arai!

The Hirshberg Foundation is thrilled to introduce Tom, our Honorary Starter for this year's 27th Annual LA Cancer Challenge. Tom's story is one of remarkable resilience, determination, and hope—a true testament to the spirit of our pancreatic cancer community.

Nine years ago, at 65 years old, Tom received a diagnosis that would change his life: stage 4 pancreatic cancer. At that time, the five-year survival rate was less than 3%, so Tom focused on one day at a time, maintaining a remarkable attitude and calm

demeanor that inspired everyone around him.

Throughout his journey, Tom's wife, Toni, has been a pillar of support. Once diagnosed, she tirelessly researched to find a great medical oncologist, which led them to Dr. Tara Seery, who they deeply respect and admire.

Immediately after his diagnosis, Tom began a clinical trial that would ultimately change the course of his disease. Through his medical team's dedication and unwavering commitment to treatment, Tom achieved what many thought was impossible. Following the trial, he was considered to have no detectable cancer—a moment of triumph and hope for him and his loved ones. Today, at 74, Tom takes Lynparza, a maintenance chemotherapy drug. His youthful spirit and positivity have kept him strong and made him a beacon of hope for others facing similar battles.

Driven by the challenges he's experienced and inspired by the incredible support he's received; Tom has dedicated himself to giving back. Encouraged by his primary care physician, he started talking to other patients to offer insight, tips, and support. Before long, with another survivor, he founded a weekly Zoom support group for pancreatic cancer patients and caregivers across the U.S., creating a space for sharing experiences and building a community of strength and solidarity.

Before his diagnosis, Tom was an avid cyclist for 25 years, riding up to 20 miles daily. His passion for cycling kept him physically fit and mentally strong, preparing him for the battle ahead. In 2018, Tom took a leap of faith—literally—when he jumped out of an airplane with other pancreatic cancer survivors to celebrate their shared journey. Refusing to let pancreatic cancer take away their enjoyment of life and adventure, Tom and his fellow survivors went skydiving in Perris, California.

Before the LACC 5k race begins, Tom will take the stage to share

his journey, offering all participants words of wisdom and encouragement. His story is about surviving, thriving, and finding joy and purpose every day. He embodies the message that while cancer can change the course of our lives, it does not define who we are or limit what we can achieve.

We invite you to join us at the LA Cancer Challenge, not only to support pancreatic cancer research but also to be inspired by individuals like Tom. Whether you are running, walking, or cheering from the sidelines, your participation makes a difference in the fight against pancreatic cancer.

Tom's story is a beacon of hope and a testament to the progress in cancer research and treatment. Let his journey inspire you to push through your challenges and support those fighting theirs. See you at the starting line!

Our Summer Momentum Newsletter

As summer kicks into gear with family vacations, hot temps, and cool adventures, the Hirshberg Foundation looks forward to sharing the latest updates with our foundation family. Your efforts throughout the year, from fundraising to event participation, have ushered in another season of groundbreaking scientific advances and patient support. Soon researchers will submit proposals for our annual Seed Grant Program, as patients, caregivers, and families gather again for seasonal events that educate and energize our community. We thank you for your continued support as we raise awareness and Never Give Up in the fight for a cure!

A Pancreatic Cancer Progress Report

At our Annual Hirshberg Symposium on Pancreatic Cancer we had the pleasure of welcoming Dr. Eileen O'Reilly, a member of our Scientific Advisory Board from Memorial Sloan Kettering Cancer Center, to speak. She discussed the genetics of the disease and the latest developments in pancreatic cancer treatments, immunotherapy, and vaccine approaches currently in development. With a new FDA-approved drug for pancreatic cancer, targeted treatments, and other emerging approaches, Dr. O'Reilly shared, "You'll see that there's real progress happening, and we're on the cusp of important developments in this disease that hopefully will translate to improved outcomes."

Read Progress Report →

Supporting & Educating Patients in June

In June, we honored the courage of pancreatic cancer survivors around the world throughout National Cancer Survivors Month. Survivors, caregivers, and families impacted by this disease generously shared messages of hope and expressed support for patients and survivors setting out on a journey to wellness. This was on the heels of our spring Symposium and the release of educational videos that educate and empower both patients and caregivers. This year's Symposium included important topics such as improving patient care through a partnership with Canopy Cancer Collective, genetic testing, pancreatic enzyme education, survivorship in pancreatic cancer and PRECEDE, the international collaborative study to improve early detection. We encourage everyone to check out the wide array of topics, especially our inspiring panel discussion, where survivors and

caregivers share their experiences, wisdom, and hope.

Watch the videos now →

Esteemed Journal Shares Agi Hirshberg's Journey

In July, *Pancreas*, a scientific journal of pancreatic diseases, published a beautiful article spotlighting our founder Agi Hirshberg's story, and her unwavering commitment to cure pancreatic cancer. It is a story that all of us can connect with; every family's journey with pancreatic cancer is unique and yet so familiar. At the heart of these stories is a desire to empower loved ones, ensure that no one faces this disease alone, and ultimately, eradicate pancreatic cancer once and for all. In the article, titled <u>Our Lady of Hope</u>, writer Shweta Lavania shares "a tale of compassion, inspiration, and true labor of love." This interview will resonate with you, and we hope you'll check it out.

Read the Article →

Registration is Open for the 27th Annual LA Cancer Challenge

Our signature event, the <u>LA Cancer Challenge</u> 5K Walk/Run is coming up on October 27th and registration is officially open. This incredible event unites families, survivors, and the medical community for an extraordinary day raising awareness. The LACC is more than a 5K, this event will inspire you! Come participate in our Fit Family Expo, Candyland Kids Zone, Halloween costume contests, and much more. Join us <u>in-person</u> at

UCLA or <u>virtually</u> from wherever you are, and know that your participation brings us closer to a cure.

Register Today →

Make a Lasting Impact on Research for Make-A-Will Month

National Make-A-Will Month is coming up in August. In the spirit of supporting our mission and advancing pancreatic cancer research in the future, we invite you to learn more about estate planning. A gift in your will has the power to change patient outcomes and drive cancer research forward beyond your lifetime. Through FreeWill: a free online state planning tool, you can support your loved ones, protect your possessions, continue philanthropic efforts, and secure your legacy. We also encourage you to learn about other ways to give from matching event gifts to Donor Advised Funds. Thank you for your shared commitment to cure pancreatic cancer!

<u>Learn About Planned Giving</u> →

Tour De Pier Rides for Love and Raises \$1.5 Million

In its 12th year, <u>Tour De Pier</u> offers the ride of your life and a unique experience for participants. This year, we embraced our theme of "Ride for Love," and together, we packed more love into the day than we ever thought possible. Thanks to everyone who participated the outdoor stationary cycling fundraiser, our community raised a remarkable \$1.5 million and counting. TDP's success and our ability to support research and patient services

rely directly on supporters harnessing the power of their community. Together we ride for fun, ride for love, ride for hope, and ride to cure cancer. We can't wait to see you on May 18, 2025 for year 13!

Learn More →

2024 Upcoming Events

Hirshberg Training Team 2025: October 5, 2024 - March 16, 2025

LA Cancer Challenge: Sunday, October 27, 2024

Pancreatic Cancer Awareness Month: November 2024

World Pancreatic Cancer Day: November 21, 2024

Giving Tuesday: December 3, 2024<</pre>

Pancreatic Cancer Progress Report 2024

On April 13, 2024, the Hirshberg Foundation held the 18th Annual Symposium on Pancreatic Cancer. It was an honor to welcome Scientific Advisory Board member, Dr. Eileen O'Reilly to share a progress report on the state of pancreatic cancer research. Dr. O'Reilly is a professor of medicine at the Weill Cornell College of Medicine, a medical oncologist at Memorial Sloan Kettering Cancer Center, a principal investigator of multiple phase one, two, and three clinical trials for pancreatic cancer, and an international leader in finding ways to better treat this disease.

Dr. O'Reilly provides an overview of pancreatic ductal adenocarcinoma (PDAC), the current treatment landscape, and the shifting epidemiology of the disease. She focuses on the current and evolving treatments for advanced-stage pancreas cancer, DNA-damage-directed therapies, KRAS-directed therapies, and new emerging approaches.

A decade ago, the primary form of treatment for pancreatic cancer was limited to chemotherapy based on our understanding of the disease. Now, pancreas cancer is approached as a KRAS-altered disease, which provides a few more avenues for treatment. The current standard therapy includes three main chemotherapy options: mFOLFIRINOX, Gemcitabine with nab-paclitaxel, and NALIRIFOX. There is also emerging evidence for more use of maintenance therapy or a de-escalated chemotherapy. For certain patients, there is also the option for integration of local therapies such as radiation, surgery, or ablation.

One main area of research for pancreas cancer treatment is KRAS, as about 88 to 90% of people with pancreas cancer will have an alteration in KRAS. KRAS, an important signaling pathway in pancreas cancer, is involved in the growth and metastatic potential of this disease, and it comes in various flavors. Most common in pancreas cancer is something called KRAS G12D, followed by G12V, followed by G12R. One KRAS alteration to highlight is G12C because current regulatory approvals and drugs are available for use in the clinic to treat the small subset of individuals with this specific mutation. Targeting KRAS directly or indirectly, tackling the protein, working on the gene itself, looking to different versions of the gene, and combining it with other things are avenues of current investigation for pancreatic cancer.

Genetic targeting, in terms of BRCA1, BRCA2, and PALB2, is another important topic for pancreatic cancer treatment.

Although these cases comprise 5 to 8% of this disease, they're a very important subset that can benefit from specific treatments. These treatment options include platinum-based therapy and PARP inhibitors. Genetic targeting also influences future treatment directions, and some very interesting areas are being studied.

A great deal is happening around the globe to advance research and treatment options for pancreatic cancer. As Dr. O'Reilly said, "you'll see that there's real progress happening and we're just on the cusp of I think very important developments in this disease that hopefully will translate into improvements and outcomes for people." We thank Dr. O'Reilly for her presentation and look forward to sharing more as these treatment options develop.

Watch the <u>full presentation</u> →

Treatment Decisions: Questions to Ask Your Doctors

Ensuring your comfort with the cancer treatment you select is crucial. This process begins by engaging in open and candid discussions with your healthcare team. It's common to struggle with which questions to ask or to forget them during appointments. The following set of questions, originally featured in the NCCN Guidelines for Patients, aims to empower you with information. Whether you use these or create your own, gaining clarity on your treatment goals and expectations is essential.

Questions about cancer testing

- 1. What tests will I have?
- 2. Do the tests have any risks?
- 3. Do I need to do anything to prepare for testing?
- 4. Should I bring someone with me to the appointments?
- 5. Where do I go for testing and how long will it take?
- 6. If any of the tests hurt, what will you do to make me comfortable?
- 7. How soon will I know the results, and who will explain them to me?
- 8. How can I get a copy of the pathology report and other test results?
- 9. Is there an online portal with my test results?

Questions about treatment options

- 1. What are my treatment options?
- 2. Is a clinical trial an option for me?
- 3. What will happen if I do nothing?
- 4. Are you suggesting options other than what NCCN recommends? If yes, why?
- 5. How do my age, sex, overall health, and other factors affect my symptoms?
- 6. What if I am pregnant or planning to become pregnant?
- 7. Does any option offer a cure or long-term cancer control?
- 8. What are the side effects of the treatments?
- 9. How do I get a second opinion?
- 10. How long do I have to decide about treatment and is there a social worker or someone who can help me decide?

Questions about what to expect

- 1. Does this hospital or cancer center offer the best treatment for me?
- 2. Do I have a choice of when to begin treatment?
- 3. How long will treatment last?
- 4. Whom should I contact with questions or concerns if the office is closed?
- 5. How will you know if treatment is working?
- 6. What are the chances of the cancer worsening or returning?
- 7. What follow up care is needed after treatment?
- 8. What happens if treatment stops working?

Questions about side effects

- 1. What are the possible complications and side effects of treatment?
- 2. Does the cancer itself cause any side effects?
- 3. Which side effects are most common and how long do they usually last?
- 4. Which side effects are serious or life-threatening?
- 5. Are there any long-term or permanent side effects?
- 6. What symptoms should I report right away and whom do I contact?
- 7. What can I do to prevent or relieve the side effects of treatment?
- 8. Do any medications worsen side effects?
- 9. Do any side effects lessen or worsen in severity overtime?
- 10. Will you stop or change treatment if there are serious side effects?

Questions about clinical trials

- 1. Do you recommend that I consider a clinical trial for treatment?
- 2. How do I find clinical trials in which I can participate?
- 3. What are the treatments used in the clinical trial?
- 4. Has the treatment been used for other types of cancer?
- 5. What are the risks and benefits of this treatment?
- 6. What side effects should I expect, and how will they be managed?
- 7. How long will I be in the clinical trial?
- 8. Will I be able to get other treatment if this doesn't work?
- 9. How will you know if the treatment is working?
- 10. Will the clinical trial cost me anything?

Questions about your care team's experience?

- 1. What is your experience, as well as your team's experience, with treating my type of cancer?
- 2. How many patients like me (of the same age, gender, race) have you treated?
- 3. Will you be consulting with experts to discuss my care? Whom will you consult?
- 4. Is this treatment (or procedure) a major part of your practice? How often have you done this treatment (or procedure) in the last year?
- 5. How many of your patients have had complications? What were the complications?

Questions about supportive care?

- 1. What supportive care and services are available to me and my caregiver?
- 2. Are there any programs to help pay for out-of-pocket costs of cancer care?
- 3. Does this center provide transportation to and from appointments? What about childcare during health care appointments?
- 4. Is there help for basic needs like food and housing?
- 5. Where can I get legal advice? Is my job legally protected if I take a leave from work?
- 6. Who can help me cope with stress? Is there a support group that would be a good fit for me?
- 7. Who can advise me and my family about end-of life concerns?

We are here to help. For more support throughout your cancer journey, please <u>contact us</u>.

Agi Hirshberg: Our Lady of Hope

PANCREAS SPOTLIGHT By Shweta Lavania

This article originally appeared in Pancreas, Volume 53, Number 6, July 2024. It can be downloaded at www.pancreasjournal.com

Selfless service in cancer research is the embodiment of compassion in action. It is through service that we truly

connect with the world around us, leaving a legacy of love, generosity, and empathy. No one has understood this fact better than Agi Hirshberg. From finding inspiration through her tragic loss, Agi's unwavering commitment to the cause of supporting and advocating for Pancreatic Cancer patients is simply a tale of compassion, inspiration, and true labor of love. We, here at Pancreas are honored to celebrate the life and philanthropy of the remarkable Agi Hirshberg by featuring her in our inaugural Pancreas Spotlight series.

I spoke with Ms. Hirshberg on a sunny Fall afternoon to try and decode the secret sauce that flows through the veins of this impossibly sunny, vivacious, 78-year- (young!) old and came back inspired by her humility, her boundless optimism ("the cure is just so close now, I can feel it") and her love and support for the tiny but growing community of pancreatic cancer research that punches well above its weight in the fight for patients' lives!

Agi's inspiring life story which begins in 1946 has all the hallmarks of the upheaval of the Post World War era that forced her parents, Edmund, a Holocaust survivor, and Sarah Mandel, to leave Hungary and emigrate to the United States of America. Like all immigrants, America eventually embraced and assimilated this hardworking family with all its fervor and thus began little Agi's journey to a life of hard work and boundless optimism towards a better destiny. From Miami to eventually Los Angeles, armed with limited English, Agi set out to complete her education eventually receiving her bachelor's degree at Woodbury University in Business and Design. A career in creative designs and marketing beckoned which eventually led to a chance encounter with a "handsome gentle giant", who went on to change the course of her life, both personally and professionally. In 1986 Agi met, fell in love and eventually married the love of her life, Ronald Hirshberg, a "retail genius". Together, they

established a successful business by becoming the exclusive licensee for Adidas accessories, all over the world. Life was perfect until fate intervened. In 1997, Ron was diagnosed with Pancreatic Cancer which eventually led to his demise at the age of 54 after a hard-fought battle of 8 months and seven days. Those who are familiar with the ravages of this disease know the stealth nature by which it manifests in the form of innocuous symptoms which are often ignored until it is well too late to stage a successful therapeutic intervention. While losing one's beloved husband in the prime of his life might have broken the spirits of a lesser mortal. Agi Hirshberg found new strength and a clarity of purpose that led to the establishment of the Hirshberg Foundation for Pancreatic Cancer Research a mere 6 weeks after Ronalds's death.

One can say now, with hindsight, that the mission almost chose Agi way before she chose it herself. Her phenomenal instincts as an entrepreneur coupled with her unapparelled belief in the urgency of her mission led her to recruit and collaborate with some of the brightest minds in the field of Pancreatic cancer research to raise awareness, brainstorm new treatment guidelines and above all, place the needs of patients first and foremost, in any clinical and research scenario. Merely 6 months after Ron's untimely loss, the Hirshberg Foundation was up and running at UCLA under the leadership of Dr. Howard Reber. Since its inception, the Hirshberg Foundation has touched the lives of countless patients by raising more than \$32 million in funding that is used for providing financial aid to patients, establishing the Seed grant program that provides critical funding to support medical research in pancreatic cancer, establish research institutions that focus on pancreatic cancer pathobiology and treatment, establishing tissue data banks to support research, provide support for inter-disciplinary cancer research to spur new innovations and support professional research organizations such as the American Pancreatic Association (APA), Japan Pancreas Society, and the European Pancreatic Club's Annual Meetings to name a few. One might assume that Agi's legacy as a champion of Pancreatic Research is all but assured and she may well afford to relax as the years go by. One couldn't be more wrong because the messianic zeal which fuels Agi is far from diminished, and she continues to criscross across the world marshaling her phenomenal resources to bring together new collaborators, supporting new researchers, and throwing fundraisers and spending time with pancreatic cancer patients and supporting them through the tough journey that defines their destiny from diagnosis to treatment and management of symptoms. She is ably supported in this mission by her daughter, Ms. Lisa Manheim, Director of the Hirshberg Foundation for Pancreatic Cancer Research, who shares her mother's boundless optimism and passion for pancreatic cancer patient advocacy and research. Ms. Manheim has taken over the rigors of the day- to-day operations of the foundation while Ms. Hirshberg continues to draw up ambitious plans and alliance to thwart the march of pancreatic cancer.

Agi Hirshberg is one rare human being who has turned her personal loss into a cause that transcends her own pain and provides support and meaning to countless pancreatic cancer patients all over the world. Thank you for being a true friend & cheerleader of the Pancreas & the Pancreatic Cancer community!

Below are some of the excerpts from our meet-up session:

What is your opinion about the status of research in the field and how close we are to finding a cure?

Agi: I almost think that with AI and all the new technology that we have now, we are as close as we can be to finding a cure. (On her optimist outlook) Listen, I live with the word "we are going

to beat it (Cancer)! Hope springs eternal.

Did you ever envision that your life's work would ever involve establishing a foundation for the patient support, advocacy and fundraising for pancreatic cancer research?

Agi: Absolutely not! I am an immigrant, grew up in Hungary, arrived in US as an 11-year-old only child (tie breaker child!) with limited English. This humble start to life made me realize the importance of a strong work ethic and boundless optimism. After finishing my education, I started as a fashion designer and then I met the love of my life Ronnie and together we set up our business, I designed the Adidas products, and he built our global distribution business up and running and we were a successful team! Then Ronnie's loss spurred me to approach Dr. Howard Reber at UCLA, and the Hirshberg Foundation came to life, and we have never looked back!

For someone who has spent 26 years working with pancreatic cancer patients and their loved ones, supporting them, and giving their suffering a voice and positive direction to inspire changes, please share some of your favorite memories of interactions.

Agi: I must tell you that while I am truly proud of all the efforts and resources that we (Hirshberg Foundation) have provided to the Basic and Clinical research community, what I am really focused on is providing support to the patients. I am proud of the network of support and services that we can call upon all over the country, best centers, best physicians, and staff to refer these patients for treatment and help them in every possible way as they battle this dreaded disease. Providing these patients with all the support and help remains my primary focus to date. To celebrate their courage and to inspire other patients and survivors, I host Agi's Backyard

Barbecue (see pictures), an annual get together where in 60-80 patients, their loved ones come over and share their stories. Every year it so happens that we have newly diagnosed patients that sit on one side and on the other side we get patients who are thriving even after 7,18 and even 23 years post cancer diagnosis! This allows the "newbies" and the "veterans" to share their experiences and support one another and celebrate life. I can tell you no one wants to go home by the end of the night! That sort of energy is infectious and inspires me to do what I do.

Lastly, Tell us your secret Agi? At 78, you look like you've cracked the code to a life well lived!

Agi: You can't help but become sisters and brothers with the patient, so the emotion is always with the patient and that they have the long life. What else could I say? I am an eternal optimist, and I am sure that the cure is just out there, all we got to do is keep going. We can beat CANCER!