Cannabis and Oncology: What do we know?

Cannabis has been used as medicine for thousands of years across the globe. It was only in the early 20th Century that regulations were put in place to classify it as an illegal substance in the United States. Cannabis was officially outlawed at the federal level in the US in 1970. With the passage of California's Proposition 215 in 1996, cannabis for medical use has become increasingly popular. In 2012, states in the US began to legalize cannabis for recreational use. Today, there is more and more research being done to fully understand the medical and health benefits of cannabis.

For the cancer patient, <u>cannabis</u> has a number of potential benefits, especially in the management of symptoms. Many scientists and doctors tout the benefits of cannabis in managing the side effects of chemo and radiation therapies such as nausea, vomiting, pain, insomnia, and depression. The patients we are in contact with, often share how cannabis has helped them with various symptoms during and after treatment.

In a <u>study presented</u> at the 2019 annual meeting of the <u>American Society for Clinical Oncology</u> (ASCO), it was revealed that an overwhelming majority of oncologists strongly support and recommend the use of medical marijuana for cancer patients. The problem is that almost half of them feel they are not qualified to prescribe it as part of the treatment.

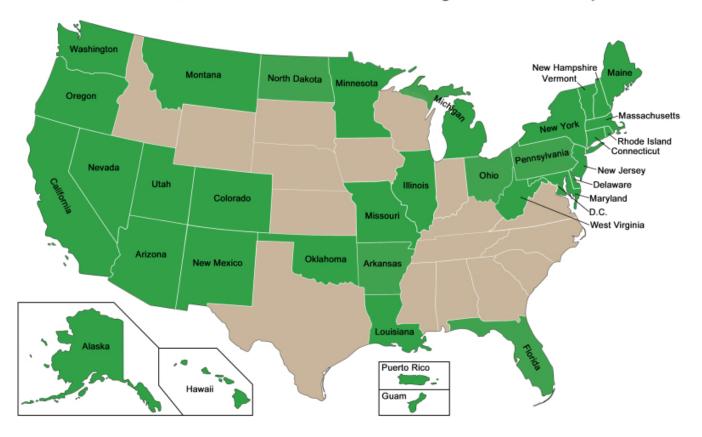
Dr. Noah Federman, who was first connected with the Hirshberg Foundation via the <u>3rd Annual UCLA Cannabis Research Symposium</u> in 2019, specializes in cannabis and oncology. His clinical oncology practice uses cannabis and cannabinoid compounds as

adjunctive therapies and has a keen interest in how they can help patients. After hearing his academic lecture on "Cannabis Use in Oncology" it was clear our pancreatic cancer community would benefit and appreciate hearing him present the latest information. Dr. Federman will share the science behind the anecdotal stories in this ever-emerging field.

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The NIH (National Institute of Health) has created a map showing the U.S. states and territories that have approved the medical use of cannabis. Last updated: 03/23/2020

States and Territories in Which Cannabis is Legal for Medical Purposes



In addition to Dr. Noah Federman's position as Director of the Pediatric Bone and Soft Tissue Sarcoma Program at UCLA, he is a faculty member of the UCLA Cannabis Research Initiative. The UCLA Cannabis Research Initiative (UCLA-CRI) is one of the first academic programs in the world dedicated to the study of cannabis.

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Breaking up with Pancreatic Cancer: Survivor Stories

While scientists are continuously working to better understand and treat pancreatic cancer, more energy is also going towards integrating a holistic approach that emphasizes active patient engagement with their well-being. Progress in the lab and through clinical trials is being made, but many patients and caregivers are still concerned with the mental attitude needed to tackle a cancer diagnosis.

We know that emotional health impacts over all well-being, so in our latest webinar, we turn to two long-term survivors who will share their tips for a wellness approach to pancreatic cancer. Wendy Hammers and Marisa Harris will explain how they learned to create the healthiest environment for themselves in order to have the best possible outcome pre-, during and post-treatment. They will discuss the importance of setting your own healthy path, tips and tools for moving forward and how taking charge can truly make a difference in the health and well-being of patients as well as their loved ones.

Wendy and Marisa met at a crucial point in Wendy's pancreatic cancer treatment. Wendy will share how their journeys intersected and the importance of her relationship with "Coach Marisa." Marisa is a 21-year, stage-4 pancreatic cancer survivor who also faced many choices the moment she was diagnosed. Her remarkable journey is an inspiration to anyone with a life-threatening health diagnosis. Marisa and Wendy will share more than just their stories, they offer the tools & tips they have both honed to lead healthy, happy lives where "cancer" is no longer center stage.

Wendy Hammers is an actress, speaker, dancer, published author, storyteller, producer, stand-up comic, foodie and creative community builder. She is also a 5-year pancreatic cancer survivor who took control early in her cancer journey to seek out healthy ways to live and to shine a positive light on this challenging time in her life. Wendy knew there had to be another component to battling cancer besides eating healthy and exercising.

Marisa Harris, a life coach and long-term cancer survivor who Wendy connected with early in her treatment. In 1998, Marisa was working at a Fortune 500 company when she was diagnosed with stage-4 pancreatic cancer and given 9 months to live. Refusing to accept this death sentence, she developed and implemented an integrative multidisciplinary healing program. She learned that healing takes place on the physical, mental, emotional, and spiritual level. To this day, Marisa is healthy and cancer-free. Marisa wholeheartedly believes in the transformational power of Integrative Coaching and now devotes her life to this work. She has coached hundreds of people who are in pain, in transition, or in an emotional malaise to a place of healing, passion, and joy.

Read Wendy's 10 tenets on Breaking up with Cancer »

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23 Years of Faithful Support Leads to Results!

Dear Hirshberg Foundation Family,

Long ago, the Hirshberg Foundation selected Never Give Up as our mantra, expressing our dedication to patients and long-standing commitment to funding early research for a cure. The message

continues to resonate with pancreatic cancer survivors, families and researchers. Our community doesn't give up! After 23 years of faithful support we have gained a better understanding of what causes this disease, we have a new standard of care, treatment options and clinical trials. This simply didn't exist before the Hirshberg Foundation was launched. As you read about our recent accomplishments, I ask that you help us continue working towards a cancer-free future and make a much-needed donation today.

Despite the COVID-19 pandemic, we've seen robust progress from our Seed Grant researchers. They have given us extraordinary forward momentum and the results speak for themselves.

- Dr. Tzatsos has received new funds from the National Institutes of Health to continue his Seed Grant project! He has identified a loss of the protein BAP1, linking chronic pancreatitis to pancreatic cancer may present a new tailored therapy.
- Our team of doctors at UCLA have been granted \$5.75 million from the National Cancer Institute (NIH) to fund 3 collaborative Seed Grant projects studying the role of obesity & inflammation in the development of pancreatic cancer.
- Our labs at UCLA are prioritizing pancreatic cancer while also actively helping us all in the fight against COVID-19.

Your vision for improved patient care, advances in science and medicine has allowed us to make extraordinary strides. Keeping survivors informed and empowered is a also personal priority of mine. Our new Patient & Family Webinar Series is one of many ways we're serving patients nationwide. Webinar topics include surgery, oncology, nutrition, genetics, clinical trials and 'a nurses guide' with more topics to come this year. We need your

help as we make sure our patients are never left behind. Please give what you can today so we may continue to propel forward in 2020.

With Gratitude,

Agi Hirshberg Founder

P.s. Register for our Nationwide <u>Virtual LA Cancer Challenge</u> Walk/Run today to support our efforts!

Chemotherapy for Pancreatic Cancer Patients: Less is More!

Our <u>Patient & Family Webinar</u> series continues with a presentation on chemotherapy for pancreatic cancer patients. Dr. Isacoff will present *Chemotherapy for Pancreatic Cancer Patients: Less is More!* We are excited to have him share his findings on why lower, more frequent doses of chemotherapy may be a more patient friendly treatment regimen, with fewer side effects and better survival rates.

Dr. William H. Isacoff, who leads the <u>Pancreatic Cancer Center of Los Angeles</u>, has earned a reputation as one of the foremost gastrointestinal oncologists within the United States. He has developed innovative treatments which have significantly extended the lives of pancreatic patients throughout the country. He has worked for decades to form better, safer and more effective treatments for patients battling pancreatic cancer and other gastrointestinal cancers.

With the use of low dose "metronomic" chemotherapy without radiation, Dr. Isacoff and the Pancreatic Surgical Team at UCLA have down staged more than 60 patients who upon initial diagnosis were felt to be inoperable. After successful "metronomic" treatment with a combination of chemotherapies, the patients were then able to become surgical candidates. Seventy-five percent of those patients were found to have lymph nodes that were uninvolved with metastatic disease as a result of the prolonged use of effective chemotherapy. Dr. Isacoff shares these promising results and more information on how lower, more frequent doses of chemotherapy may impact a patient's outcome.

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Dr. Isacoff's Metronomic Manuscript can be
seen here >>

<u>Learn more about Dr. Isacoff and schedule a</u>
phone consultation >>

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Research Identifies Loss of Protein Linking Chronic Pancreatitis to Pancreatic

Cancer, May Present New Tailored Therapy

Chronic pancreatitis is a known risk factor for the development of pancreatic cancer. However, the genetic alterations that cause this chronic inflammation and therefore predispose the patient to malignant transformation of the pancreas remain unknown. However, newly published research in *Nature Communications* by two-time Seed Grant Awardee, Alexandros Tzatsos, MD, PhD, has identified a protein that links chronic pancreatitis to pancreatic cancer.

Thanks to funding from the Hirshberg Foundation, Dr. Tzatsos's lab has identified that defective response to DNA damage stemming from the loss of BAP1 (BRCA1 associated protein-1) is a common denominator in pancreatic cancer patients with a history of chronic pancreatitis. Their research found that pancreasspecific deletion of BAP1 in models led to genomic instability, tissue damage, the development of chronic pancreatitis, and cooperates with oncogenic KRAS to promote pancreatic cancer.

In addition to genetic alterations, epigenetic mechanisms are central to the development of pancreatic cancer and contribute to shaping the immunosuppressive tumor microenvironment that hinders the therapeutic efforts to fight cancer growth. At the molecular level, BAP1 regulates genome stability. Their research also unveiled that BAP1-deficient pancreatic cancer showed sensitivity to platinum-based combination chemotherapy, such as those in FOLFIRINOX, and irradiation. This suggests that BAP1 loss can be used to identify patients who are likely to have a better response to these therapies.

Dr. Tzatsos's work is crucial to understanding the interplay of genetic and epigenetic alterations in pancreatic cancer while

seeking to develop patient tailored therapies. We are hopeful that this new research can begin to stratify patients to better predict their responsiveness to specific therapies. Dr. Tzatsos thanked the Hirshberg Foundation and its supporters for funding this critical work.

With support from the Hirshberg Foundation, over the past three years the Tzatsos Lab has been awarded R01 grants from the National Institutes of Health (NIH). Our early funding of innovative research projects has paid off and led to larger grants!

Dr. Tzatsos was awarded a Seed Grant in 2012 and again in 2018 to study the molecular foundations of pancreatic cancer to help develop tailored therapies. Dr. Tzatsos and the <u>Tzatsos Lab</u> at the Cancer Epigenetics Laboratory at George Washington University Cancer Center studies epigenetic programs and how they interact with genetic mutations to drive the development and spread of pancreatic cancer.

Read the original paper at https://www.nature.com/articles/s41467-020-16589-8

The ABC's of Finding A Clinical Trial with Dr. Anand

Clinical trials are scientific studies conducted to find better ways to prevent, screen for, diagnose, or treat disease. Clinical trials are used to study which medical approaches work best for certain illnesses or groups of people, with the goal to determine if a new treatment is safe and effective, often with

new medicines or protocols that the FDA has not yet approved. Clinical trials produce high-quality data for healthcare decision making, such as new ways to administer treatments, different doses, or using an approved drug on a different type of cancer. Clinical trials are a step in the long, careful research process, which may take many years.

It is up to the patient and their family to decide whether a clinical trial is the correct treatment option. There are hundreds of clinical trials happening across the globe as research institutions work towards improving treatment and finding a cure for cancer. If you've ever spent time researching clinical trials for you or a loved one diagnosed with pancreatic cancer, you know how challenging it can be. Although there are websites that share trial information with the list of qualifying criteria, it can still be quite daunting.

To help navigate the world of clinical trials, we asked Dr. Sidharth Anand, a medical oncologist and hematologist with UCLA, to share how to find a clinical trial and when it might be a prudent treatment option. Dr. Anand explains the phases of clinical trials as well as the various types of trials available, including randomized trials, double or single blind trials and single arm clinical trials. He discusses when to consider clinical trials as a sensible treatment option and how to maneuver the clinical trial database to be enrolled in a trial that will work for you or your loved one. Dr. Anand shared updates on current and hopeful pancreatic cancer clinical trials.

Dr. Sidharth Anand is a medical oncologist and hematologist who practices in Santa Monica and Westlake Village. He is a generalist with a specialized interest in gastrointestinal cancers, including pancreatic. He also has an interest in the application of integrative oncology, which means approaching

cancer care with traditional therapies, such as chemotherapy and immunotherapy, along with evidence-based integrative methods, including nutrition and exercise.

He received his medical degree from the USC Keck School of Medicine. Prior to that, he earned his MBA from Harvard Business School. He received his BA in Molecular Biology and a BS in Business Administration from UC Berkeley. Dr. Anand completed his internal medicine internship and residency at Cedars-Sinai Medical Center, where he was chief resident. He completed his hematology-oncology fellowship at UCLA. He is interested in technologies to help deliver higher quality care and access to clinical trials for patients.

Watch Webinar

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