The Pancreatic Cancer Program

2020 Update

UNTIL EVERY CANCER IS CURED
Hope. It’s a powerful force when facing pancreatic cancer—perhaps the most critical tool in our arsenal. Hope makes us stronger, enabling us to tackle any challenges head on. It can take many forms: from the love and care of family and friends, to positive clinical responses to treatment, to the belief in a brighter future through pancreatic cancer research.

Around the world, hope has been tested during this COVID-19 pandemic. But we are here for you. The NCI-designated Sidney Kimmel Cancer Center –Jefferson Health is ensuring the health and safety of our patients, their families, and our staff while continuing to provide comprehensive cancer care. We have adjusted how we deliver care—utilizing telehealth visits, more socially distant infusion therapy, life-saving surgeries, and empowering remote education through our SKCC Cancer Support and Welcome Center.

Patients choose the Jefferson Pancreas, Biliary, and Related Cancer Center for our world-class and compassionate team which is dedicated to your hope and healing. We call it Cancer Care 360—a comprehensive circle of care—research, treatment, and support—with you in the center. We have consistently stood at the forefront of the field, studying the mysteries of pancreatic cancer and establishing new therapeutic interventions that have redefined the standard of care.

As we look to the future, philanthropic support is vital to our continued success. By investing in Jefferson you place the next level of understanding, early detection, and treatment within our reach. You catalyze breakthroughs in the lab, innovations in the clinic, and advances in training future specialists. And you send a powerful message to current and future patients: never give up hope.

Sincerely,

Charles J. Yeo
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Senior Vice President and Chair, Enterprise Surgery, Jefferson Health
Co-Director, Pancreas, Biliary and Related Cancer Center
The Jefferson Difference

Jefferson’s pancreatic cancer program brings together specialists from surgery, medical oncology, radiation oncology, gastroenterology, cancer genetics, and pathology to deliver a comprehensive experience like no other. We work closely with patients and their loved ones to develop a personalized care plan addressing their specific goals and desires, working diligently to help every family achieve the best possible quality of life.

Our multidisciplinary team—many of whom are recognized on such prestigious lists as the Best Doctors in America®—contribute to leading scientific and medical journals, hold leadership positions in national and local cancer organizations, and provide every patient with the comprehensive and compassionate care they deserve.

What also sets us apart is our Jefferson Pancreas Tumor Registry, providing valuable insights into our patients’ risk factors and gene mutations, while also creating a community of survivors who inform us about the lived experiences of persons with pancreatic cancer. This “precious data” as we call it is updated with an annual survey and presentation at our November patient symposium. This symposium, and many community events throughout the year, is what truly differentiates Jefferson.

Why Choose Sidney Kimmel Cancer Center

Jefferson is consistently ranked among the top hospitals in the nation for cancer and GI surgery by U.S. News & World Report.

Our 2019-2020 Jefferson Pancreas Tumor Registry survey garnered nearly 200 responses yielding 907 total patients and family members in this important data set.

Pancreatic Cancer Rates:
- Sporadic PC, 64%
- Familiar PC, 12%
- Non-Affected Family, 12%
- Related Conditions, 12%

Our esteemed faculty are a fixture of the research community, publishing a prolific body of work in the world’s most prestigious scientific journals.

Jefferson has the highest surgical volume for pancreatic cancer and related diseases in the tri-state area.

SKCC is ranked in the top 5% of cancer centers nationwide for clinical trial enrollment—the most advanced form of cancer care—and our highest accruing therapeutic cancer trial is in the pancreas domain.
The Jefferson Pancreatic Cancer Research Institute

The Jefferson Pancreatic Cancer Research Institute (JPCRI) unifies expert faculty and post-doctoral and graduate students from various departments, disciplines, and specialties in a joint effort to study the many complexities of the disease. This bench-to-bedside model empowers the team to accelerate discovery and innovation, unlock the mysteries of pancreatic cancer, and translate scientific breakthroughs into clinical advances more rapidly than ever before.

An Institutional Cornerstone

By elevating pancreatic cancer research to a full-fledged institute, the JPCRI solidifies our reputation as a scientific cornerstone of the Jefferson enterprise. It demonstrates the strong commitment that institutional leadership has placed in our program. And it strengthens our standing with national/international collaborators, markedly amplifying the promise and potential of our life-changing work.

Path-Breaking Research Initiatives

The JPCRI prides itself on the unique collaboration between our scientists in the lab and our clinicians and surgeons on the front lines. This bench-to-bedside model ensures that our patients have access to the most advanced treatments and consistently receive the highest-quality care.

Some of the exciting projects coming out of the JPCRI include:

- Unleashing the immune system against pancreatic cancer
- Shuttling “off” the mutated KRAS gene to kill cancer cells
- Increased delivery of therapeutics via microbubble stimulation with ultrasound
- Targeting the HuR protein
- Observing the effect of hypercarbia (high CO2) on pancreatic cancer progression
- Supplementing with high protein for improved patient outcomes
- Advancing endoscopic technologies

Pancreatic cancer is the least-funded by the NIH among the major cancers in the United States. Over the years, philanthropy has supported advancing this important research, fellowships, and pilot grants, fueling new clinical interventions, high-impact research, and forward-thinking academic programs. Our work and collaborations bring us closer to new insights and interventions, providing the strength to fight today and the hope for a cure tomorrow.
The WASH Trial
Researchers have questioned whether microscopic cancer cells might be spread into the abdominal cavity during surgery, potentially resulting in cancer recurrence years later. In this trial, patients undergoing the Whipple procedure are randomized to receive 10 L of saline or distilled water lavage to the abdomen (after the pancreatic cancer has been removed) to remove any potential microscopic cancer cells from the surgical bed.

The study is designed to see if patients who undergo the lavage could potentially have better long-term outcomes. With 430 of 845 patients enrolled, WASH is currently the largest accruing therapeutic trial at the Sidney Kimmel Cancer Center, and when completed, will be the largest ever conducted on this topic.

Pyrvinium Pamoate
Researchers at Jefferson identified an FDA-approved compound called Pyrvinium Pamoate that could be used as a potent anti-cancer agent.

This over-the-counter medication, originally designed for the treatment of pinworms, has the ability to kill pancreatic cancer cells while sparing normal cells by targeting the HuR protein—a key survival mechanism for pancreatic cancer. This novel approach for surgical patients, close to clinical trial, represents a new frontier in pancreatic cancer care, and is just one of many ways our team is shaping the future of personalized medicine by exploiting biomarkers in the tumor cells.
The novel 2019 coronavirus pandemic has forced industries around the world to reexamine how the day-to-day workflow needs to operate—and the medical field is no exception.

In order to continue pushing our life-changing research forward, while still adhering to social distancing guidelines, in spring 2020, the team developed and published a 4-step plan to streamline research endeavors for optimal safety and efficiency.

1. **Implement a Plan for Essential Lab Work:**
   As the severity of COVID-19 became more apparent, our labs began to wrap up all non-essential work, set up safety parameters for ongoing animal testing, and established a rotating schedule to minimize in-person contact for essential lab work.

2. **Integrate Web-Based Communication:**
   In the wake of social distancing restrictions, establishing efficient new avenues of communication was paramount. Our labs have utilized platforms such as SLACK, Google Hangout, and Zoom to keep in touch with our colleagues, share presentations, and host live discussions.

3. **Review Existing Materials and Reevaluate Goals:**
   As bench scientists we often get caught up in the minutiae of physical lab work, but this time away from the lab has given us an opportunity to catch up on research topics, finalize figures, write manuscripts, and explore new paths for current research. The pandemic has provided us with a unique perspective to reexamine and evaluate our short and long-term goals.

4. **Strengthen Internal and External Collaborations:**
   COVID-19 has united the healthcare field around the globe in an unprecedented way. Departments within the Jefferson enterprise, other healthcare systems within Philadelphia, and institutions around the world are working together to overcome this virus. We have used this time away from the lab to strengthen existing collaborations and have taken the opportunity to form new ones.
The COVID-19 outbreak has impacted the world and challenged Jefferson on new levels. During this time of unprecedented uncertainty, Jefferson has remained steadfast in our mission of putting people first by providing the support necessary to ensure our employees and students are able to adapt to the ever-changing circumstances that COVID-19 has presented.

Thanks to the generosity of our physicians, patients, benefactors, and employees, we’ve been able to help the members of our Jefferson family who need it most.

Some of the highlights from the Better Together Fund include:

- Raising more than $7 million thanks to the benevolent support of nearly 5,000 donors
- Making a difference in the lives of more than 3,600 Jefferson employees
- Contributing to JeffSecure, providing emergency funding to over 150 students
- Supporting elder/child care for employees
- Purchasing Personal Protective Equipment (PPE) for our front-line workers
- Providing mental health counseling and psychosocial support services for our students, employees, and front-line heroes

Although we may be physically farther apart, the pandemic has brought the entire Jefferson family closer than ever before, and has definitively proven that we truly are better together.
To Learn More, Contact

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