

SIDNEY KIMMEL COMPREHENSIVE CANCER CENTER

Pancreatic Cancer and Related Diseases Program

2026 Update

Pancreatic Cancer and Related Diseases Multidisciplinary Team

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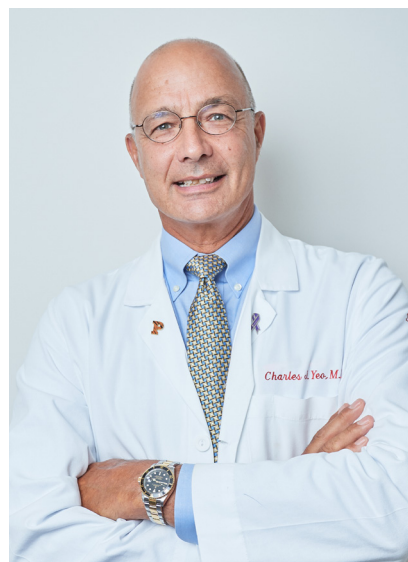
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Dear Friend:

As we celebrate the 250th anniversary of our nation's founding, I am struck by the enduring role Jefferson has played in advancing health and healing throughout American history. For 202 years in Philadelphia, the birthplace of American medicine, Jefferson has grown alongside the nation, helping shape the future of care through discovery, innovation, and compassion.

With visionary pioneers chairing the Department

of Surgery, like Dr. Samuel D. Gross who founded the American Surgical Association; Dr. John H. Gibbon Jr. who developed the heart-lung machine; and Dr. Francis E. Rosato Sr. who helped establish intraoperative radiation therapy as a standard cancer treatment, Jefferson has left an indelible mark on surgical practices over the centuries.

I am deeply proud of the Pancreas, Biliary and Related Cancer Center and the important place it holds in this storied history. For more than 20 years, our novel approach to pancreatic cancer has been revolutionizing how we treat this complex disease. In the following pages, you'll learn about some of our most recent breakthroughs, as well as how we are modeling what it means to provide comprehensive cancer care.

We could not do this lifesaving work without our incredible community of patients, families, philanthropic partners, and supporters like you. Together, we are transforming pancreatic cancer care and creating a brighter future for patients at Jefferson, in Philadelphia, and beyond.

Sincerely,

A handwritten signature in black ink that reads "Charles J. Yeo". The signature is stylized and fluid.

Charles J. Yeo, MD, FACS, MAMSE

8th Samuel D. Gross Professor and Chair of Surgery
Senior Vice President and Chair,
Enterprise Surgery, Jefferson Health
Co-Director, Pancreas, Biliary and Related Cancer Center

A Multidisciplinary Site of Care



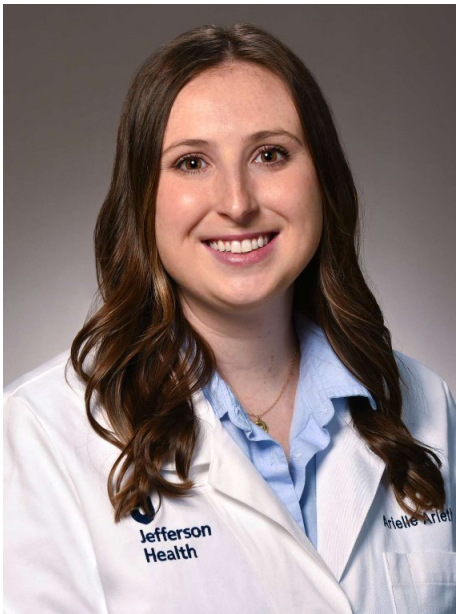
Jefferson's Pancreas, Biliary and Related Cancer Center is one of the most trusted pancreatic cancer programs in the nation. Each year, more than 300 new patients seek out surgical and medical care from our multidisciplinary team that helps them navigate every challenge arising from their diagnosis. With researchers developing innovative methods to tackle this disease; surgeons, nurses, and oncologists performing lifesaving resections and prescribing therapies; and dieticians, support staff, and financial coordinators helping patients address the nutritional, psychological, and financial demands of this disease, we ensure everyone has a personalized treatment plan that addresses their unique needs.

Nationally Renowned

- **1 of 58** NCI-Comprehensive Cancer Centers in the nation
- In the **top 2%** of highest-performing cancer centers in the nation for clinical trials
- Marked as **High Performing** in cancer care by *U.S. News & World Report*
- **#39** in Gastroenterology & GI Surgery by *U.S. News & World Report*
- **#60** in cancer care in America by *Newsweek*

SPOTLIGHT:

Arielle R. Arleth, CRNP



A nurse practitioner specializing in hepato-pancreato-biliary surgery and Thomas Jefferson University alumna, Arielle shares how Jefferson's comprehensive, team-based approach enhances the patient experience and improves outcomes.

What is a CRNP and how long have you held this role at Jefferson?

A certified registered nurse practitioner (CRNP) helps coordinate patient care throughout the entire treatment journey, from initial consultation through surgery and recovery. I work closely with nurses, physicians, and other specialists to ensure each patient receives comprehensive, individualized care. While I have been a CRNP since March 2026, I bring more than seven years of experience as an operating room nurse with the general surgery team. During that time, I had the opportunity to participate in numerous complex pancreatic operations, including Whipple procedures performed by Drs. Yeo, Lavu, and Nevler. This experience has given me a unique perspective on the surgical care of patients with pancreatic cancer and deepened my commitment to supporting them throughout their treatment journey.

How does the multidisciplinary pancreas team enhance patient care?

Pancreatic cancer care is complex, and no single specialty can address every aspect of a patient's needs. Our multidisciplinary team brings together surgical oncology, medical oncology, radiation oncology, gastroenterology, radiology, pathology, nursing, nutrition, supportive care, and other specialists to develop individualized treatment plans. This collaborative approach allows us to review cases from multiple perspectives, streamline care, and ensure patients have access to the most appropriate therapies and support services throughout their treatment journey.

What is a memorable moment you have from working with a pancreatic cancer patient?

One of the most meaningful parts of my role is seeing patients achieve milestones they once thought were out of reach. I have cared for patients who were understandably overwhelmed at the time of diagnosis but, with the support of their care team and loved ones, successfully completed chemotherapy and ultimately returned for surgical resection. Witnessing that journey and the hope it can restore is incredibly rewarding.

Are there any resources you'd highlight for patients and their loved ones navigating a pancreatic cancer diagnosis?

The Pancreatic Cancer Action Network (PanCAN) provides excellent information about treatment options, clinical trials, patient services, and support programs. I also recommend connecting with nutrition specialists, social workers, and support groups, as these resources can help patients and caregivers manage the emotional, practical, and physical challenges that often accompany a pancreatic cancer diagnosis.

A New Approach

Launched in 2024 by Drs. Hien T. Dang and Elda Grabocka, the **Consortium for Metabolic dysfunction-associated Pancreatic Cancer** (COMPAC) program is shifting our approach to this disease. Typically, pancreatic cancer is studied as a disease of the tumor. Here at Jefferson, we are studying it at every level—the cancer cell, the tissue around it, and the metabolism of the whole body—because our research shows it is a systemic disease driven by metabolic dysfunction. This means effective treatments must do more than attack the cancerous tumor. They must also address the underlying ways the body influences and sustains the disease. Our evidence for this approach: Metabolic dysfunction-associated steatotic liver disease (MASLD, formerly “fatty liver disease”). We have discovered that MASLD lowers survival rates without changing the tumor’s genetics and does so whether or not the patient is obese. This means metabolic dysfunction is the driver behind these worsening outcomes. These initial findings point to a chance to identify and protect high-risk patients earlier, tailoring treatments to the patient, not just the tumor.

This expanded approach builds upon our Jefferson Molecular Profiling of Pancreatic Cancer program. Leveraging our position as the region’s highest-volume center for pancreas resections, we launched a comprehensive biobanking initiative in 2022 to collect tumor tissue, blood, and clinical data from consenting surgical patients at Jefferson. By interrogating this data, we aim to uncover biomarkers that predict tumor recurrence, guide personalized treatment, and reveal new therapeutic targets. This profiling sits at the heart of our Consortium, as it provides a more comprehensive view of how pancreatic cancer forms and how it is connected to other bodily systems.

We are rapidly building the infrastructure needed to carry forward this ambitious model. In four years, we have grown from a single-site biorepository to a four-country consortium with standardized protocols, a unified data infrastructure, and an active trainee pipeline. Fueled by supportive benefactors and external grants—such as our recent grant from the Concern Foundation—we are developing new understandings of pancreatic cancer, learning better ways to fight it, and ensuring patients are connected to the right treatments at the right time.



Drs. Dang and Grabocka at the 20th Annual Symposium

Profiling in Action

Profiling does more than help us create the treatments of tomorrow—it is improving care today. As a quarter of pancreatic cancers have a mutation that can be targeted by an approved or investigational therapy, it is critical that we profile each patient so we can connect them with the most promising therapies for their tumor.

Philanthropic support helps fund this vital work, as insurance does not typically reimburse the \$1,500 it costs to profile each tumor.

PATIENTS IN THE REGISTRY

1,000+

BIOSPECIMENS BANKED

246+

COUNTRIES IN THE NETWORK

United States — Thomas Jefferson University

Germany — University of Mainz,
Translational Oncology (TRON)

Albania — University of Tirana Medical School

Thailand — Prince of Songkla University;
Chulabhorn Research Institute

Innovations from the Bench to the Bedside

Research holds the promise of change—change in treatments, care, and outcomes. Refusing to accept the status quo, our scientists are creating this necessary change for our patients, one discovery at a time. From reforming surgical practices today to laying the foundation for tomorrow’s therapies, we are revolutionizing pancreatic cancer care at Jefferson and across the nation.

Dr. Elda Grabocka is working to make obesity-associated pancreatic ductal adenocarcinoma (PDAC) more responsive to treatments. Eliminating stress granules is key, as they promote PDAC tumor growth and therapeutic resistance. Recently, Dr. Grabocka discovered that inhibiting the SPARK2 protein does just that. It stops stress granules in their tracks. This is a critical development for patients with obesity, as Dr. Grabocka has also revealed that the metabolic environment of obesity creates a “molecular shield” against even the most promising KRAS inhibitors like daraxonrasib (see below) from working. With current therapeutics less effective, discovering how to neutralize stress granules is necessary to create a promising pathway forward for those with obesity-associated PDAC.

The Patient Impact: Patients with obesity-associated PDAC will have interventions tailored to their specific tumor microenvironment.



Dr. Grabocka’s groundbreaking discoveries earned her a 2026 Early Career Investigators Award from Jefferson’s Sidney Kimmel Medical College.

Dr. Avinoam Nevler is addressing pancreatic tumor growth and therapy resistance from a different angle: hypercapnia. Along with his collaborator in the United Kingdom, Dr. Martin Cann, Dr. Nevler has discovered that hypercapnia—elevated levels of carbon dioxide—may be a driver of tumor growth and therapy resistance. Hypercapnia appears to foster mitochondrial regeneration, microenvironment remodeling, and immune suppression, and laboratory models show that when pancreatic cancer cells are altered to have elevated carbon dioxide levels, they end up growing into a larger tumor than control models.

The Patient Impact: If results continue to show a correlation between hypercapnia and cell growth, patients who suffer from both could receive specific interventions targeting carbon dioxide levels to slow down tumor growth and become more responsive to treatment.

Pyruvium Pamoate (PP), a drug historically used to treat pinworms, has the potential to be an effective anti-cancer therapy and alternative to chemotherapy. Through laboratory models, Dr. Nevler, along with Drs. Jonathan R. Brody and Christopher W. Shultz, have shown that PP disrupts cancerous cells’ metabolism but does not harm healthy cells. Through a Phase 1 clinical trial at Jefferson, they examined PP’s safety, tolerability, and effectiveness when given prior to surgery. Results were promising yet inconclusive, and some patients experienced abdominal discomfort. Along with partners in Granada, Spain, and Philadelphia, they are developing and testing improved PP formulas to boost effectiveness and limit side effects.

The Patient Impact: Helping destroy cancerous cells but leaving healthy ones alone, PP potentially offers an alternative to chemotherapy.

Simplistic in design yet holding powerful potential, the WASH trial (Water or Saline at High Volumes) is working to prevent cancer recurrence after surgery. With the theory that aggressively washing the surgical site will remove remaining cancerous cells that could spread or grow, the clinical team placed patients in three groups:

- 1) Those whose sites were washed with warm saltwater
- 2) Those whose sites were washed with sterile water
- 3) The control group, who did not receive any extensive washing

More than 840 patients participated in this trial, making it the largest single-center pancreatic surgical study in the world. The trial is now closed, and a biostatistician is formally assessing the data. Drs. Harish Lavu and Avinoam Nevler plan on presenting the findings at oncological conferences and publishing results in leading medical journals.

The Patient Impact: This trial has the potential to create a new standard practice in pancreatic resection surgery that will improve care and increase survival rates at Jefferson and across the nation.

Jefferson was the first in the region to offer daraxonrasib. Hailed as one of the most significant advancements in pancreatic cancer care in the past 20 years, this medication has doubled the survival time of patients with metastatic pancreatic cancer (from 6.7 months to 13.2 months) while having less side effects than chemotherapy. After this groundbreaking news was presented at the American Society of Clinical Oncology (ASCO) Annual Meeting in May 2026, Dr. Babar Bashir and Jefferson's Clinical Trials Office opened enrollment through the Expanded Access Program in just 14 business days, enrolling three patients on the very first day. Officially approved by the FDA on August 26, daraxonrasib is expected to quickly become part of standard treatment for metastatic pancreatic cancer.

The Patient Impact: By having access to this leading-edge treatment, Jefferson patients with metastatic pancreatic cancer have more time with loved ones and a higher quality of life.

Immunotherapeutic pancreatic cancer vaccines train a person's body to fight back against cancer, and Jefferson currently houses one of the few clinical trials in the region investigating this innovative approach. Supported by a generous gift from Peter and Odete Kelly, Dr. Suresh Nair is leading a randomized clinical trial at Lehigh Valley Topper Cancer Institute, part of Jefferson Health, that has shown promising early results. His team is evaluating the effectiveness the drug, ELI-002 7P, at "teaching" a person's T cells to detect the KRAS mutation, which is a primary driver in tumor development, and mount an immune response against it. Many patients have responded well to this experimental drug, remaining cancer-free well beyond the expected time frame for cancer recurrence. Thanks to funding from the Kelly Family, the Cancer Institute became the only Expanded Access Program site in the Northeast, bringing in patients from as far as Michigan and California and those close to home.

The Patient Impact: With pancreatic cancer's tendency to spread outside the pancreas, cancer vaccines could target cancerous cells that are missed by or are resistant to other forms of treatment, improving patient outcomes.



Scan the QR code to
explore all open oncology
clinical trials at Jefferson.

SPOTLIGHT:

Richard Zheng, MD, MHS, MS



Dr. Zheng is an assistant professor in our Division of Surgical Oncology and will be a featured speaker at our upcoming patient symposium. Here, you'll get a preview of his surgical work and clinical research as well as some reflections on his time as a surgical resident at Jefferson.

What is a memorable moment from your time at Jefferson?

Getting to train under Dr. Yeo—a fantastic teacher and technical surgeon—was a highlight of my residency. Working with him also connected me to the greater history of American surgery, as he, like his predecessors Drs. William Stewart Halsted and John L. Cameron, have elevated and transformed surgical practice. I feel lucky to be part of that legacy.

What drove you to specialize in surgery and become interested in pancreatic cancer?

Surgery appealed to me because it uses both your mental and physical skills to solve a problem. I was drawn to surgical oncology because surgery is the main pathway to cure most cancers, and as for deciding to focus on pancreatic cancer, I am committed to the challenge of tackling this tough disease. We need more people working on it to improve outcomes, and I want to be one of them.

Can you define surgical oncology?

Surgical oncology falls under the umbrella of general surgery, but it specifically is the practice of using surgery to treat cancer. Surgical oncologists partner with medical oncologists, radiologists, and other members of the care team to develop a comprehensive treatment plan. We have a deeper knowledge of tumor paradigms and cancer research than a general surgeon, meaning we often have a more robust understanding of how the cancer functions within the patient.

What do you find exciting about robotic surgery?

We still don't know the full extent of what robotic surgery is capable of, and it is exciting to push the boundaries of what is possible. I did a fair amount of robotic Whipple procedures at Johns Hopkins Hospital during my fellowship and have started to perform them at Jefferson. Students and residents have access to our Simulation Laboratory, and it is great to see robotics training happening earlier in surgeons' careers.

What gives you hope for the future of pancreatic cancer treatments?

There are promising new therapeutics that can transform the way we care for our patients at the molecular level. For instance, there are trials centered on an mRNA vaccine that targets the KRAS mutation, which plays a major role in tumor initiation and progression. We are still a few years away from being able to use this vaccine, but there is a lot of innovation in this space that gives me a lot of hope for the future.

What are you working on that excites you most?

Clinically, I am most excited about expanding Jefferson's robotic hepato-pancreato-biliary surgery program. With research, I am energized by our collaboration with Drexel University where we are understanding how the disease progresses from cysts to cancer. We are looking to identify better predictors so we can know what cysts will become cancer and if there are any therapies to prevent pre-malignancies from becoming cancer.

What makes Jefferson's surgery and pancreatic research programs special?

A research program needs to be paired with a strong clinical program to be effective, as it allows us to be better at biobanking and asking insightful questions based on real patient experiences. Jefferson has the clinical volume and expertise to do just that.

****To hear more from Dr. Zheng, attend this year's Symposium on November 7!***

A Holistic Approach to Care

No one should face cancer alone—and with our robust support services, no one has to. From diagnosis to treatment to recovery, we are there to help patients and their loved ones navigate all the changes and challenges that come with a cancer diagnosis.

The donor-supported **Patient Assistance Fund** provides relief to those who are struggling under the financial strain of their cancer diagnosis. With the support of community partners like Tester Construction Gives (TCGives), the Pancreatic Cancer Cure Foundation (PCCF), and individual benefactors, this past year we have:

- Provided a partial rent payment to a patient struggling to cover household expenses after she had to retire due to her diagnosis
- Purchased supplies for a patient with limited insurance coverage to manage an at-home biliary drain catheter until he was able to have the drain removed
- Ordered a 3-month supply of Ensure for a patient with significant nutritional deficits who was undergoing treatment for pancreatic cancer
- Sent a blood pressure cuff to a patient after she was asked to monitor her blood pressure daily but couldn't afford to purchase one herself
- Covered the copays of counseling sessions for a terminally ill patient and his wife so they could care for their mental health in the months leading up to his passing



Our flagship site in Center City, the Honickman Center, houses multiple support services.

In March 2025, we opened an in-person location for our **Connected Care Services (CCS)**. Staffed Monday through Friday from 9 a.m. – 5 p.m., CCS's referral specialists are experts on the full range of financial resources and support available, as well as eligibility requirements. Here, patients can learn how to secure assistance for food, transportation, utility bills, medications, and more.

The **Image Recovery Center** helps patients look and feel more like themselves by providing specialized cosmetology and aesthetic services for those affected by cancer. With the look and feel of a luxury spa, this site offers specialized services like oncology massage therapy, initial head shaving, post-treatment haircuts, and hair, wig, skin, and nail care. Trained to support patients with compromised immune systems due to treatments, specialists help boost their confidence and comfort in a safe environment. The Sidney Kimmel Comprehensive Cancer Center – Jefferson Health Asplundh Cancer Pavillion in Montgomery County houses a sister site for those who cannot easily travel into Center City.

The **Cancer Support and Welcome Center** offers a comprehensive range of free programs designed to address the physical, emotional, and practical challenges that arise with a cancer diagnosis. Open to everyone affected by cancer, they host programs in-person at the Honickman Center and additional care hubs across Jefferson as well as virtual sessions. Community members benefit from programs like:

- Specialized support groups for patients, caregivers, and family members
- Mindfulness programs, like meditation and sound bath sessions
- Educational programs, like nutritional counselling and how to manage immunotherapy's side effects
- Exercise programs, like yoga and dance



Scan the QR code to learn more about the Cancer Support and Welcome Center's programs.

Finding Hope in Community

Over the past year, we have continued to work with regional and national organizations to spread awareness, raise research and patient assistance dollars, and build community. We are grateful to the Pancreatic Cancer Cure Foundation (Amy's Ride/Run/Walk and Paint the Trail Purple), Fencing Academy of Philadelphia, Pancreatic Cancer Action Network (PanCAN), TCGives, and Wally's Warriors, who are helping patients and their families find the hope and encouragement to keep fighting.





SIDNEY KIMMEL COMPREHENSIVE CANCER CENTER

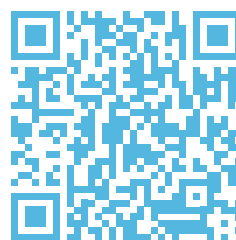
21ST ANNUAL
**Pancreatic Cancer
and Related Diseases
Patient Symposium**

Save the Date
NOVEMBER 7, 2026

Help honor Pancreatic Cancer Awareness Month by attending our 21st Annual Pancreatic Cancer and Related Diseases Patient Symposium this November.

A day when care teams, researchers, patients, and families can come together, our annual symposium provides us with the occasion to build community and foster hope. Through presentations, patient testimonials, and more, attendees will learn firsthand about scientific breakthroughs, patient resources, the power of philanthropy, and best practices.

To register, please scan the QR code or go to Attend.Jefferson.edu/event/PancreaticSymposium. We hope you can join us in Philadelphia on November 7, 2026!



Survivor Photo from our 20th Annual Symposium

SIDNEY KIMMEL COMPREHENSIVE CANCER CENTER

**If you would like to learn more or support any
of the initiatives detailed in this report,
please contact:**

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