

Surgical Solutions

Jefferson Transplant Institute Enters New Chapter of Innovation, Growth and National Impact



James V. Guarrera, MD (center), joined the Jefferson Transplant Institute last year and recruited Anthony Watkins, MD, and Grace Lee-Riddle, MD, MSME, to the growing transplant team.

When James V. Guarrera, MD, joined Jefferson last summer as the Nicoletti Family Professor of Transplantation Surgery and executive director of the Jefferson Transplant Institute, he arrived with a clear conviction about what makes a transplant program succeed.

"Transplantation is the epitome of a team sport," Dr. Guarrera says. "My charge is to take all of the talent and dedication already present at Jefferson and continue building on it clinically and academically, including making this a destination for innovation and training the next generation of transplant surgeons."

Since his appointment, this philosophy has been translated into measurable momentum across the Institute.

In late 2025, Dr. Guarrera and Ashesh P. Shah, MD, Surgical Director of the Liver Transplant Program, led a team including Adam S. Bodzin, MD, and Jaime M. Glorioso, MD, to perform North America's first Living Donor Resection and Partial Liver Transplantation with Delayed Total Hepatectomy (LD-RAPID) for a patient

with colorectal cancer metastases in their liver (see *The Surgeon Speaks*).

Dr. Guarrera also brings his own pioneering body of work in ex vivo machine perfusion – the technique of continuously circulating preservation solution through a donor liver outside the body rather than storing it on ice. He performed and published the first such liver transplant series worldwide in the early 2000s, and the approach has since transformed the field. Today, more than 70% of liver transplants nationwide use some form of organ perfusion, and Jefferson is expanding its use across all its hospital sites.

Strategic recruitment has also accelerated. Dr. Guarrera brought Grace S. Lee-Riddle, MD, MSME, along from his previous program and, in March, welcomed Anthony Watkins, MD, to Jefferson as Enterprise Director of Kidney Transplantation. A nationally recognized leader in the field, Dr. Watkins nearly doubled the kidney transplant volume at another institution, making it one of the largest programs in the country.

"Dr. Watkins' impact at Jefferson has been immediate," Dr. Guarrera says. "In April 2026, Thomas Jefferson University Hospital performed 18 kidney transplants – a 500% increase from April of last year. Dr. Watkins has also introduced new protocols that are expanding the utilization of deceased donor organs."

Looking ahead, the Institute is preparing for further integration of transplant services across Jefferson Health.

Dr. Guarrera explains, "We want the Jefferson Transplant Institute to be visible nationally and internationally for clinical, academic, innovation and research excellence."

The Surgeon Speaks



Ashesh P. Shah, MD

Associate Professor of Surgery

Director, Division of Transplant Surgery

Surgical Director, Liver Transplant Program

"Living donor RAPID transplantation is a new surgical strategy designed to expand access to liver transplantation while keeping both donors and recipients safe.

"We transplant a small portion of liver from a living donor first, and that partial liver grows inside the recipient over time, usually about two weeks. Once it's grown enough to function on its own, we remove the remaining diseased liver, including the cancer, in a planned second operation. This staged approach allows us to use a smaller graft and reduces our reliance on deceased donor organs.

"For patients with colorectal cancer that has spread only to the liver, LD-RAPID may offer a new chance at long-term survival when other treatments are no longer effective."

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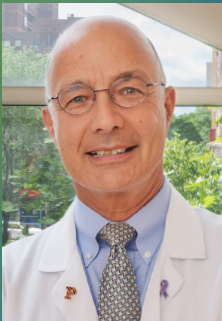
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Overview



Science: Targeting the ‘Undruggable’ in Pancreatic and Other Cancers

by **Charles J. Yeo, MD, FACS**
*Samuel D. Gross Professor and Chairman, Department of Surgery
Senior Vice President and Chair, Enterprise Surgery, Jefferson Health*

Scientific discoveries and advances often come in an unpredictable cadence. Over the course of my 40 years as a surgeon treating patients with pancreatic and related cancers, we have seen overall five-year patient survival rates improve more than six-fold from under 2% to over 13%. This improvement has its genesis in many areas – improved patient selection and surgical results, better imaging, advances in nursing and critical care and new oncologic treatment options. One area that has eluded progress for decades has been targeting the RAS oncogene mutations common in nearly all pancreatic cancers.

Therapeutic targeting of RAS with a drug had been thought impossible. But in the last few years, the development of covalent KRAS G12C inhibitors, which lock the mutant protein in an “off” state, has shown that targeting RAS is feasible (although only 2% of patients harbor a G12C KRAS mutation). Now, a recently discovered orally bioavailable RAS multi-selective, non-covalent inhibitor with activity against all RAS mutants has been studied – daraxonrasib.

While it is unlikely that this particular drug will ultimately be the sought-after panacea for patients with pancreatic cancer, the early results indicate reasonable anti-tumor activity with manageable side effects. There are certain to be other pan-RAS inhibitors that will improve patient outcomes (not only in patients with pancreatic cancers, but in other RAS-driven tumors such as lung, colorectal, appendiceal, small bowel and endometrial cancers).

Progress in science may be unpredictable, and the cadence of progress may vary widely, but it is heartening to see advances in the field of oncology yield meaningful results for patients. Science is, after all, the systematic process of gathering knowledge about the physical world through observation, testable hypotheses and experimentation.

Clinical Integration

In the Spotlight



Joseph Boback, MBA, joined Jefferson in 2022 as a clinic operations assistant in the Department of Neurology and Neurosurgery. Although he initially viewed it as a “gap year” position before pursuing physician assistant (PA) studies, his manager had other ideas. Recognizing his instincts with people and his

potential as a leader, she encouraged him to apply for an open practice-manager position. He agreed, telling himself he’d give it a year or two. Within his first year, Boback had a change of heart.

“I think this is my calling,” he recalls realizing. He pivoted from PA school to Jefferson’s MBA program, completing the degree in 18 months. Last June, he stepped into his current role as Director of Clinical Operations for the Department of Surgery.

Boback now oversees the clinical operations of all 12 divisions within the Department. He leads three practice managers and a coding team of seven, with a total of 40+ staff across the divisions, including administrative assistants, surgery schedulers, patient service associates and RNs. He also ensures that physicians are meeting enterprise performance and revenue benchmarks, oversees medical billing and operative report review, and serves as the central point of contact for operational matters across the Department.

Boback says that what he most enjoys is the breadth of the work. Coming from a neuroscience background – he studied the field as an undergraduate at Temple University – the world of surgical subspecialties has been a new education. He also values everything he’s learning about all the roles reporting up to him. “I’m gaining a more holistic view of clinical practice operations,” he says.

Boback grew up in Bucks County and now lives in South Philadelphia with his husband. During COVID, he developed a passion for houseplants and currently cares for about 65 of them.



Jefferson Trauma Surgeon and Resident Reflect on Honduras Medical Mission Trip

For one week each February, Jefferson trauma surgeon Kris R. Kaulback, MD, trades the operating rooms of suburban Philadelphia for a surgical center in rural Honduras. While there, he performs procedures on patients who have often waited years, sometimes decades, for surgical care they couldn’t otherwise afford or access.

The annual medical mission trip, now in its fourth year, is led by Dr. Kaulback and Nina Kalawadia, MD, Chief of Anesthesiology at Paoli Hospital, and run through One World Surgery. This nonprofit operates a permanent surgical center on the grounds of Nuestros Pequeños Hermanos, a long-established orphanage on more than 2,000 acres about an hour from the capital city, Tegucigalpa.

For each of the past three years, Dr. Kaulback has invited a Jefferson surgical resident to join him during their research year, with funding support from Charles J. Yeo, MD, Enterprise Chair of Surgery. This year, the resident was Haley Kittle, MD. “I’ve always wanted to do global surgery and give back,” Dr. Kittle says. “It’s not easy to do as a resident, so as soon as I heard about this trip, I jumped at the opportunity.”

Dr. Kaulback notes that the cases come quickly and are often far advanced. Conditions like hernias, gallbladder disease and ovarian tumors – routine to treat in the United States – present in Honduras at a much more challenging stage. “These are people who, when they have problems, don’t seek healthcare because they can’t be out of work for a week,” Dr. Kaulback explains. “They would lose their jobs, and their kids would go hungry.”

For Dr. Kittle, the breadth of the work was a clinical gift. Because gynecologists were also part of the volunteer team, she scrubbed in on cases she wouldn’t ordinarily get to perform, including a myomectomy – a procedure to remove uterine fibroids. “The patient was a young woman who had lived with large fibroids for several years,” Dr. Kittle says. “She wants to start a family, and now hopefully she’ll be able to do so.”

For both Dr. Kaulback and Dr. Kittle, the experience is highly rewarding. “When you go on a trip like this, it reminds you why you chose this career,” Dr. Kittle says. “You really are helping people.” Dr. Kaulback agrees: “As much as we’re helping people, it reinvigorates everyone who goes. We’re probably the ones who benefit the most.”

Pilot Grant Lays Groundwork for New Standard in Ventral Hernia Recovery



Co-investigators Christopher Keating, PT, DPT, PhD, and Sami Tannouri, MD, MS, are establishing personalized physical therapy protocols for patients recovering from ventral hernia repair.

Over the past several years, the Department of Surgery Pilot Grant Program has supported a wide range of disease-oriented research among faculty and trainees. These projects explore ways to improve the quality and safety of surgical care. What follows is an update on one study funded in 2025 that has demonstrated meaningful progress and long-term potential to transform patient outcomes.

Study: Creation of an Evidence-Based Model for Physiotherapy-Enhanced Ventral Hernia Repair (IMPACT Study)

Patients who undergo orthopedic procedures, such as knee replacements, hip replacements or spine surgery, follow well-established rehabilitation protocols. The week-by-week progression is standardized, taught in physical therapy programs and practiced worldwide. Ventral hernia repair – which also involves a surgical implant placed into one of the body’s most functionally critical regions – has no equivalent standard.

Current recovery guidance varies widely from surgeon to surgeon and patient to patient. Some patients are told not to get out of bed for a week. Some are sent home with an abdominal compression garment. Some are told to do “whatever doesn’t hurt.” The same vague instructions are given to power lifters, warehouse workers, service members and desk workers alike.

“Ventral hernia repair is among the most common abdominal procedures,” explains Sami Tannouri, MD, MS, an abdominal wall and general surgeon at Jefferson. “A meaningful share of these patients will end up experiencing persistent pain, pelvic floor dysfunction, downstream spine issues and reduced function. Yet these long-term consequences have been under-measured and under-managed, largely because we’ve lacked the interprofessional framework needed to address them.”

That’s the gap the IMPACT Study aims to close. Dr. Tannouri is collaborating on the study with Christopher Keating, PT, DPT, PhD, Associate Professor in the Department of Physical Therapy, as well as Nicole L. Dugan, PT, DPT, and Trish Crane, PT, DPT, who specialize in pelvic floor therapy.

The team has already completed two foundational manuscripts – one defining the scope of the problem and one reviewing existing recovery recommendations – and used that work to shape a 12-week core rehabilitation protocol. The pilot grant funded the ultrasound equipment and database infrastructure needed to measure specific biomechanical markers in the clinic, turning the concept into a randomized clinical trial.

The trial, “**The IMPACT Study: Personalized Physical Therapy for Better Recovery and a Stronger Core After Hernia Surgery,**” is undergoing Institutional Review Board review, with recruitment targeted to

begin in summer 2026. Eligible participants are adults ages 18 to 75 with a ventral hernia between 4 cm and 10 cm who are scheduled for elective repair. The long-term goal is to create a Jefferson-wide protocol for rehabilitating the core after abdominal wall reconstruction – and, ultimately, a model that can be adopted across the field.

Patients interested in participating in the trial should contact Dr. Tannouri’s practice (215-955-8666), as enrollment includes the hernia repair procedure.

If you wish to support the Department of Surgery Pilot Grant Program, please contact Kelly Austin at 215-955-6383 or kelly.austin@jefferson.edu.

2026 Department of Surgery Pilot Grant Awardees

Khaled Nouehed, MD, and Tyler Grenda, MD, MS

Robotic versus open diaphragm plication: A national analysis of perioperative and short-term outcomes using the STS general thoracic surgery database.

Lee Ocuin, MD

Impact of extended postoperative antibiotic therapy on clinically relevant pancreatic fistula after pancreatoduodenectomy in elevated risk glands: A multi-phase institutional analysis and prospective registry.

Michael Mazzei, MD

Anatomic exposures and team dynamics in a maximum-fidelity, perfused and ventilated cadaveric model of traumatic hemorrhage.

Ashesh P. Shah, MD

Identification of TCRs responsible for the allo- and xeno-immune response.

Please Welcome

New Faculty



David G. McKeown, MD, MCh, MRCS, FACS, FASCRS, has joined the Division of Colorectal Surgery. Dr. McKeown earned his medical degree and a Master in Surgery (MCh) from the Royal College of Surgeons in Ireland. In 2019, he graduated from our General Surgery Residency Program and then completed a colorectal surgery fellowship at Rutgers Robert Wood Johnson Medical School. He is double board-certified in Colon and Rectal Surgery and Surgery. In 2024, Dr. McKeown returned to Jefferson Abington Hospital as an attending surgeon and recently transitioned to Thomas Jefferson University Hospital, where he is also serving as director of the Colorectal Fellowship Program.



Anthony Watkins, MD, FACS, has joined the Division of Transplant Surgery as Enterprise Director of Kidney Transplantation. Dr. Watkins earned his medical degree at the University of Tennessee Health Science Center College of Medicine. He then completed general surgery residency at Rutgers New Jersey Medical School, followed by an abdominal multi-organ transplant surgery fellowship at Columbia University Medical Center. He is board certified in Surgery and cares for patients at Thomas Jefferson University Hospital.

Those Who Give

Hollingsworth Family’s Gratitude Endows a Lasting Legacy



Dr. Palazzo and the Hollingsworth Family were celebrated at the November 2025 investiture event.

Jefferson has been part of Kim and Steve Hollingsworth’s lives for decades. Kim’s healthcare consulting firm began partnering with Jefferson in the early 2000s to implement a new hospital-information system. Across three generations, family members have turned to Jefferson for medical care. Their philanthropic relationship with Jefferson spans years, as well. Through the Hollingsworth Family Foundation, they have supported the COVID-19 Better Together Fund, pancreatic cancer research and the naming of the Sidney Kimmel Comprehensive Cancer Center’s Clinical Trials Family Gathering Area in the Honickman Center.

Their most recent gift – endowing the Hollingsworth Family Professorship in Surgery, which honors Francesco Palazzo, MD, FACS, FASMBS, FCPP – marks a meaningful shift. As Steve explains, the couple previously gave on an institutional basis. This time, he says, “We wanted to recognize and honor a specific individual.”

The decision stems from a June 2024 emergency involving their son, Michael, then 26 years old. The Lehigh University graduate and software engineer was preparing for an imminent move to New York City when severe abdominal pain sent him to the Emergency Department at Thomas Jefferson

University Hospital. The diagnosis was a perforated colon, a condition rarely seen in someone so young. Dr. Palazzo was on call, and what followed shaped the family’s gratitude.

Kim describes Dr. Palazzo as “a calming force – confident, knowledgeable and an exceptional communicator.” As they navigated the crisis, he reframed the path forward: It was not a matter of if Michael would fully recover, but when. Dr. Palazzo made a deliberate technical decision, tailoring the initial surgical procedure to facilitate an easier follow-up procedure months later.

The nursing team matched that excellence, adapting expertly to a young patient with this diagnosis. In fact, the Hollingsworths nominated Nkeiruka (Nikki) Uduma, BSN, RN, for a DAISY Award in recognition of her exceptional care.

Michael’s second procedure was successfully completed at Jefferson Methodist Hospital in November 2024. He has since made a full recovery and moved to New York.

“It was a difficult situation, but he couldn’t have had a better experience,” Kim concludes. “We’re so grateful he was in their hands.”

To learn more, contact Kelly Austin at 215-955-6383.

News in Brief



On March 25, **Talar Tatarian, MD**, received a 2026 Barbara Berci Memorial Award for leadership growth and career development from the Society of American Gastrointestinal and Endoscopic Surgeons at the annual meeting in Tampa.

Geno Merli, MD, was honored with UNICO National’s Marconi Science Award at the 2026 Mid-Year Meeting in Atlantic City, NJ. Established in 1995, the award recognizes a living scientist who exemplifies Guglielmo Marconi’s vast scientific and creative accomplishments.

On April 30, **Stanton B. Miller, MD, MPH**, Executive Director of the Jefferson Center for Injury Research & Prevention (JCIRP), accepted a CeaseFirePA Keystone Courage Award on behalf of JCIRP for the center’s efforts to end gun violence.

Nader Hanna, MD, Enterprise Surgeon Leader for Surgical Oncology, was elected to membership in the prestigious Southern Surgical Association in December 2025.

Karen Chojnacki, MD, George Koenig, DO, Joshua Marks, MD, Dawn Salvatore, MD, Talar Tatarian, MD, and Renee Tholey, MD, were elected to membership in the Society of University Surgeons in March 2026.