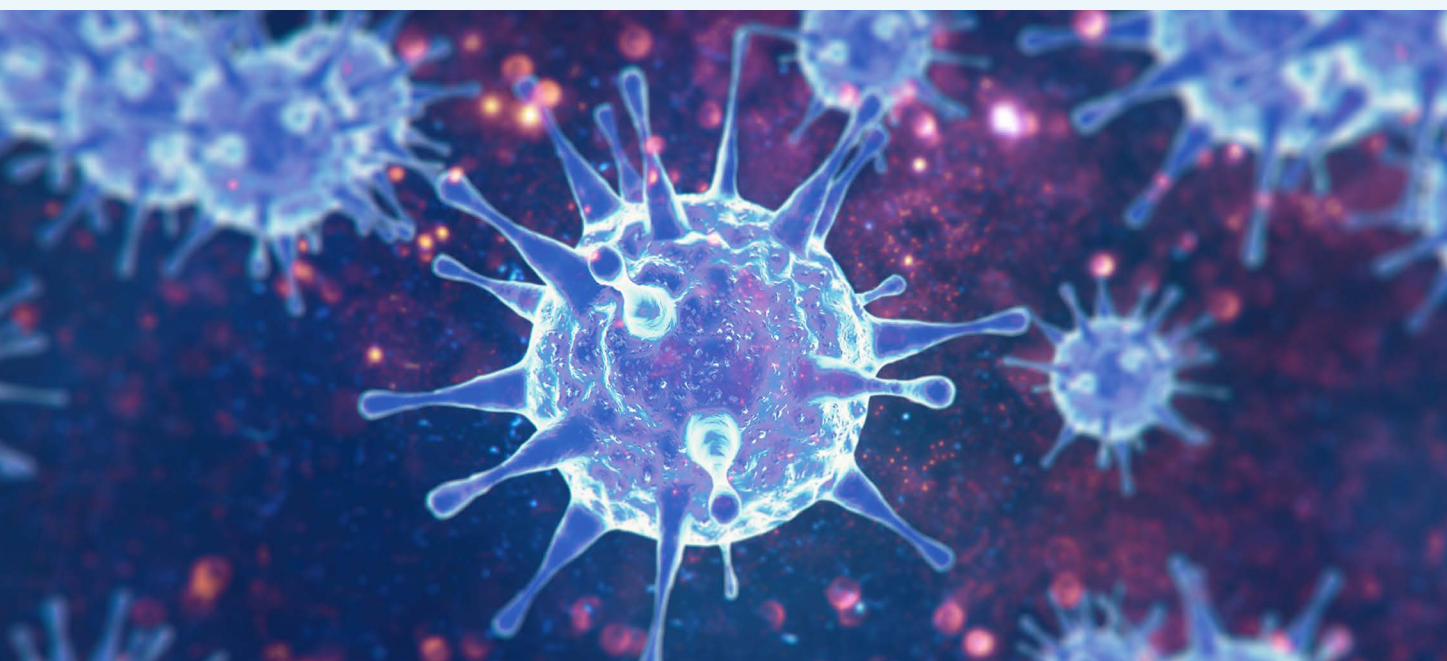


Surgical Solutions

Adapting a Teaching Hospital to a COVID Environment



The last ten days have been unlike any other we have known. People throughout the world are acting to slow the spread of a dangerous virus that threatens to strain the capacity of our hospitals and our caregivers; and its effects have already deeply impacted normal day to day life. I ask for your support and forbearance during this difficult time.

Charles J. Yeo, MD, FACS, Enterprise Chair of Surgery, shared those words in a letter to the Department of Surgery on March 19, 2020. In the days and weeks following, the Department came together to meet the unprecedented challenges – adapting clinical and educational operations to support the mission without compromising safety.

Patients scheduled for elective surgery in March and April and all new elective cases were rescheduled for June. Ernest L. Rosato, MD, FACS, led the committee that reviewed requests to proceed with surgery during the shutdown.

"We approved only medically necessary, time-sensitive cases, and at the lowest point, we were operating at 35 percent of our usual capacity," Dr. Rosato says. "Since mid-May, we have been able to resume elective procedures, and we have now returned to our full capacity."

The Department consolidated most outpatient offices to operate from one location at 1100 Walnut Street and established two rotating teams of patient registrars, appointment schedulers, medical assistants and clinical coordinators to support in-person visits. Other personnel – from nurses and dieticians to billers and finance professionals – worked remotely, and most in-person visits were converted to telemedicine appointments (see page 2 for more about telemedicine).

As Administrator Florence Williams explains, "In addition to disinfecting the waiting area at the Medical Office Building every two hours, we implemented direct rooming to minimize or eliminate time spent sitting in a waiting area." She adds that all patients and staff are required to wear masks and all patient-facing employees must wear face shields.

At any teaching hospital, clinical operations and education go hand in hand. From an educational perspective, cancelling and postponing almost all surgery created significant disruption, says Karen A. Chojnacki, MD, Program Director, General Surgery Residency and Vice Chair for Education.

"Our surgical residents were still involved in the care of COVID-19 patients because they have technical skills for placing IV lines. While they gained some additional education in critical care, infectious disease, pulmonary disease and epidemiology, they lost weeks of operative education and experience evaluating and caring for surgical patients,"

Dr. Chojnacki explains. She adds that residents continued the didactic portion of their education through structured lectures, mock oral exams and virtual office hours using Zoom.

The impact of the pandemic was also great for Sidney Kimmel Medical College students, who were not permitted to enter the hospital. That left third-year students unable to complete the customary six weeks in General Surgery and fourth-year students interested in pursuing surgery missing several months of their rotation. To help offset those lost opportunities, the College offered creative alternatives, such as requiring students to tie three feet of knots and practicing sutures on chicken wings and orange peels.

"For our fourth-year students, we ran a month-long elective, and each student prepared and delivered a presentation on a surgical case," says Renee Tholey, MD, Director of Surgical Undergraduate Education. "They researched the literature and explained how to do the procedure to the faculty who's precepting." She says the medical students adapted remarkably well, aided in part by one-to-one mentoring sessions with faculty. Fourth-year students returned to clinical duties on June 8, with third-year students coming back one week later.

Amid so much upheaval, Dr. Chojnacki says she has been overwhelmed by residents' responses: "More than anything, they've been frustrated that COVID-19 is a medical disease that doesn't require surgical intervention. They wish they could contribute even more."

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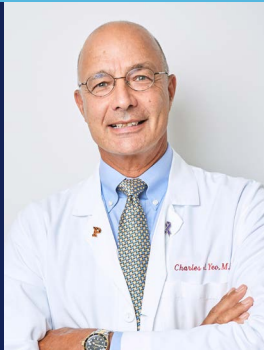
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Charles J. Yeo, MD, FACS

Samuel D. Gross Professor and Chairman of Department of Surgery
Senior Vice President and Chair,
Enterprise Surgery, Jefferson Health

The Research Agenda

This issue is dedicated to our Department's response to the novel coronavirus. One of many positives to arise out of this pandemic was the focus of our faculty on their research projects. This Spring, we were able to fund the highest number of Saligman Pilot Grants – six (6), the most ever!

I just read the 2008 Nobel Laureate (in Economics), Paul Krugman's latest book – *Arguing with Zombies*. I recommend it to those with an interest in basic (Keynesian) economics, public policy, and two decades of discourse regarding the U.S., Social Security, Obamacare, the Euro, the housing bubble of 2008, etc. He also discusses his perspective on research.

Krugman offers his four basic rules for research:

- 1) Listen to the Gentiles – “pay attention to what intelligent people are saying, even if they do not have your customs or speak your analytical language.”
- 2) Question the question – ask if people are working on the proper questions, and be prepared for pushback from the establishment!
- 3) Dare to be silly – embrace new assumptions, anticipate ridicule from critics, but have the courage to promote innovative and unique theses.
- 4) Simplify, simplify – strip down the concepts to a minimalist model and force yourself to clearly project the essence of your findings.

Krugman's four rules, though designed for economic theory, are very relevant to both clinical and bench science. Not all solutions need to be complicated, sophisticated and obtuse. Perhaps one of our six Saligman Pilot Grant Recipients will make a novel and innovative discovery taking these four rules to heart. It was very gratifying to read these six creative Saligman Pilot Grants submitted by our faculty.

Please Welcome



Claudia Lozano-Guzman, MD, has joined the Division of Acute Surgery. Dr. Lozano-Guzman received a Harvard Medical School and McGill University International Latin American Scholarship for clinical rotations during her senior year of medical school at Universidad El Bosque in Bogota, Columbia. She completed the General Surgery Residency Program at Beth Israel Medical Center and a Fellowship in Surgical Critical Care at Thomas Jefferson University Hospital (TJUH). She sees patients at three Trauma Centers staffed by Jefferson acute care surgeons: TJUH, Lankenau Hospital and Paoli Hospital.



Wilbur Bowne, MD, has joined the Division of General Surgery. Dr. Bowne completed his residency at the Mount Sinai School of Medicine, a Surgical Oncology Fellowship at Memorial Sloan-Kettering Cancer Center and a Laparoscopic/Minimally Invasive Fellowship at the State University of New York, Health Science Center of Brooklyn. As a surgical oncology specialist, he will be building a hyperthermic intraperitoneal chemotherapy (HIPEC) program at Jefferson. He sees patients at Thomas Jefferson University Hospital.



Konstadinos A. Plestis, MD, has joined the Division of Cardiac Surgery. A native of Greece, he completed medical school at Aristotelian University of Thessaloniki. Dr. Plestis completed the General Surgery Residency Program at Brooklyn Hospital Center and the Vascular Surgery Residency at Baylor College of Medicine. He then completed a Cardiothoracic Surgery Fellowship at Montefiore Medical Center and is triple board certified in Surgery, Vascular Surgery and Thoracic and Cardiac Surgery. Dr. Plestis is internationally known for his work on complex aortic surgery. He currently sees patients at Jefferson-Abington and is the Director of Jefferson Aorta Surgery.



The Doctor Is 'On': Telemedicine Takes Off During COVID-19

Thomas Jefferson University Hospital has offered telemedicine through the JeffConnect® service since 2015. Before the COVID-19 outbreak, the service averaged 40 to 60 scheduled daily visits. During the pandemic, it reached more than 3,000 per day system wide – giving patients and providers firsthand experience with this method of care delivery.

“Jefferson Health prepared for a worst-case scenario of a local pandemic that could leave our healthcare workers quarantined, sick or absent,” says Judd Hollander, MD, Professor of Emergency Medicine and Associate Dean for Strategic Health Initiatives, Sidney Kimmel Medical College. “By converting scheduled office visits to telemedicine visits, we enabled our clinicians to continue caring for established, nonexposed patients. We also used our telemedical services to triage patients exhibiting potential COVID-19 symptoms.”

Even before the pandemic, the Department of Surgery's use of telemedicine was already on the rise, according to Director of Clinical Operations, Andrea DelMastro. She notes that providers were easily attaining the Departmental goal of 700 visits per year. As of May 27, 2020, the year-to-date number already exceeds 2,900.

DelMastro notes that in the past, surgeons sometimes remarked that the technology was difficult to use, and making a phone call was the easier choice. “Now the technology has improved and made it much easier and more convenient for both patients and providers,” she says.

With telemedicine visits, both patients and clinicians can stay safely at home, greatly limiting travel and exposure

while enabling uninterrupted care. And unlike a traditional phone call, telemedicine enables providers to hear and see patients, which can be helpful especially when conducting post-op appointments.

Karen Chojnacki, MD, Program Director, General Surgery Residency and Vice Chair for Education, conducted telemedicine visits almost exclusively in March, April and early May. The only patients seen in the office were emergencies or those with post-operative complications.

“Now the technology has improved and made it much easier and more convenient for both patients and providers.”

“Now I am seeing about half of patients as telehealth visits. In fact, I have scheduled several patients for surgery having only met them virtually,” she says. “I meet them for the first time in person right before surgery. I find that very unusual, but patients seem very comfortable with it.”

Will this surge in adoption lead to enduring change? Dr. Hollander thinks it could: “Like every other new challenge, you have to try telemedicine to get comfortable with it. We have found it takes 12 to 15 visits for a provider to feel comfortable. Once they do 20 to 30, they will join the group of the telemedicine converted.”

For more information about using JeffConnect for on-demand or scheduled patient visits as well as remote consults and virtual rounds with family members, visit: Jefferson.edu/JeffConnect

Researchers Adapt to Telework, Grant Recipients Announced



Doctoral student Alex Haber working in the pancreatic cancer research laboratory before the pandemic.

Can pancreatic cancer research continue during a global pandemic? For the Jefferson Pancreas, Biliary and Related Cancer Center within the Department of Surgery, the answer has been a resounding “yes.” Graduate students Samantha Brown and Angelo Montenegro, and Drs. Charles J. Yeo, MD, and Jonathan Brody, PhD, share how Jefferson has made that happen in “Rules for scientific progress while living with the COVID-19 Pandemic: from ‘benchside’ to ‘fireside,’” in *Cancer Biology & Therapy*.

Here are the four strategies the Jefferson team outlines for navigating the uncertainty without compromising the science.

Strategy #1: Create a plan for essential lab work, wrapping up any existing experiments, terminating any non-essential work and limiting how many people must go in for animal work and other necessary ongoing experiments. With the list of essential research identified, build clear action plans to maintain morale and productivity.

“Our research teams designed a plan assuming that the pandemic could bring long-lasting changes to how and where we work,” said Dr. Yeo. “Having a clear structure has helped everyone develop new routines and adapt to new ways of working.”

Strategy #2: Set up and integrate a web-based communication infrastructure. This infrastructure needs to include tools for real-time updates and focused discussion, as well as video conferencing capabilities for “face-to-face” meetings. Zoom has been used extensively.

Strategy #3: Make the most of “found” time outside the lab. The authors note, “As bench scientists we often get caught

up in the minutiae of physical lab work (i.e., chasing after that piece of exciting data); however, now we can take this opportunity to spend work time catching up on the literature, learning about cutting-edge trends in the field, and allocating time for manuscripts, reviews and grants.” For the Jefferson team, that approach included shifting from weekly lab meetings to daily sessions of up to two hours via Google Hangouts.

Strategy #4: Use this opportunity to strengthen internal and external collaborations. As the article explains, “We aren’t in this alone. Many of our colleagues and peers around the globe are facing similar restrictions to [their] everyday lives.” To date, they have included some current collaborators in their sessions, as well as clinicians who have helped provide a clinical/translational perspective and basic science experts who have helped enhance the rigor of the lab’s work.



Elizabeth Mishler

Elizabeth “Liz” Mishler has worked as Administrative Assistant to the Enterprise Chair of Surgery, Charles J. Yeo, MD, FACS, since December 2017. During the COVID-19 outbreak, she took on an additional role: “Chief Zoom Officer” for the Department of Surgery.

“When COVID happened and everyone had to scramble, I quickly taught myself how to use Zoom,” Mishler says. “We’ve been using it for anything that used to be a meeting or a phone call. It has been fun teaching others, and I’m really proud of how much everyone learned.” To date, she has helped migrate fellowship interviews, Mortality and Morbidity Committee meetings, mini Grand Round presentations and numerous other gatherings to the digital communications platform.

Under “normal” circumstances, Mishler spends most of her time managing calendars, handling the Department’s appointments and promotions, and supporting Dr. Yeo in preparing a variety of written communications. Her focus is more academic than clinical, though she occasionally covers the phones when the Department’s clinical coordinators are busy with other tasks. Mishler, who joined Jefferson in 2015 as one of the hospital’s first telehealth coordinators, also supports clinicians with telehealth visits (those are not conducted via Zoom).

Outside work, Mishler enjoys spending time with her fiancé and two rescue pups, Charlie and Gus. She laughingly notes that Charlie is a female and was adopted before she came to work for Dr. Yeo aka “Charlie” to friends and family! She also enjoys hiking, dining out and shopping and looks forward to being able to resume those activities soon. And she loves spending time at the New Jersey shore – especially Long Beach Island, where she lived for most of her childhood before moving to Media, PA.

Saligman Family Surgery Pilot Project grant recipients announced

One sign that research is truly forging ahead—in May, the Department awarded grants for Saligman Family Surgery Pilot Projects. This program, funded in part by philanthropy, encourages faculty members, residents and fellows to apply for grants of up to \$15,000 per year to pursue independent research.

This year, six grants were awarded:

Adam Bodzin, MD – Using the Scientific Registry of Transplant Recipients Database to Evaluate Primary Non-function of Liver Allografts.

Karen Chojnacki, MD, and Team – Challenges to and Solutions for Resident Recruitment.

Tyler Grenda, MD – Evaluating Variations in Lung Cancer Surgical Outcomes Along Referral Pathways.

Melissa Lazar, MD, and Alliric Willis, MD – Outcomes and Appropriate Treatment Regimen for Breast Cancer in Women over 70.

Babak Abai, MD – Telemonitoring of Stent or Bypass Graft Patency Using Miniaturized Implantable Ultrasound Device.

Wilbur Bowne, MD – Developing a Syngeneic Mucinous PMP Tumor Model to Study Nanocarrier-delivered Immunotherapeutics.

“These projects reflect the diverse work underway in the Department of Surgery,” said Hien Dang, PhD, Director of the Dang Laboratory, who sat on the selection committee. “We look forward to reviewing the findings of these projects and building on them in future research.”

To learn more about supporting surgical research at Jefferson, please contact Kelly Austin in the Office of Institutional Advancement at 215-955-6383 or Kelly.Austin@jefferson.edu.



Grateful patient and generous benefactor, Mark Hankin (right) with his wife Helene (second from left) and their children, Alexander and Danielle.

30-Year Jefferson Patient Honors Vascular Surgeon

Mark Hankin's family has been affected by a pandemic, but it wasn't COVID-19. As the Erwinna, PA, resident explains, the Spanish Flu prompted his grandparents to move from Philadelphia to Montgomery County, where they became tenant farmers.

Eventually, his father realized it was more lucrative to "plant" concrete than to grow crops, and an enduring real estate and development business was born. A century later, Hankin and his children, Alexander and Danielle, work together in Hankin Management Company, which he founded in 1973.

For three generations, the Hankins have been managing marquee developments, including owning and running the George Washington Motor Lodge chain (which eventually merged with Days Inn) and the Willow Grove Park amusement park and Willow Grove Bowling Lanes, then the largest single-floor facility of its kind (now the Willow Grove Park Mall). Today,

Hankin Management Company continues to be active as builders, developers and managers of industrial and office properties in the Philadelphia metro area.

Hankin, 71, first became a patient of Jefferson Hospital about 30 years ago when he underwent cardiac bypass surgery with Bernard Segal, MD, Director Emeritus of Cardiology. Since then, he has received care for a number of conditions – most recently, a blockage in his carotid artery.

"I was in an arbitration for four days," he recalls. "When I was on the stand for a day, the left side of my face and my left arm went numb."

He went to see his cardiologist at Jefferson, John D. Ogilby, MD, who believed Hankin's carotid artery was 45 to 50 percent blocked and referred him to vascular surgeon Paul J. DiMuzio, MD, FACS. During the procedure, Dr. DiMuzio found that the carotid artery was

almost completely clogged with blood clots that did not show up in the diagnostic imagery. The clots were removed and Hankin has enjoyed a full recovery.

To show their appreciation, Hankin and his wife, Helene, donated to the Department of Vascular Surgery in honor of Dr. DiMuzio and to the Department of Cardiology in honor of Drs. David Ogilby and Bernard Segal.

He says his most recent experience is typical of his decades of care at Jefferson: "They're attentive and caring and really do an excellent job. The fact that you get personal attention from such a large institution is unusual, and the people there are just remarkable."

To learn more about how you can make an impact at Jefferson, please contact Katharine Geary at **215-519-8092** or **Katharine.Geary@jefferson.edu**.

News in Brief

Promotions:



Harish Lavu, MD (Hepatopancreatobiliary Surgery), and **Carlo Ramirez, MD** (Transplant Surgery) have each been promoted to Professor of Surgery.



Ehyal Shweiki, MD (Acute Care Surgery), and **Ashesh Shah, MD** (Transplant Surgery) have each been promoted to Associate Professor of Surgery.



Renee Tholey, MD, has been named Director of Surgical Undergraduate Education. Dr. Tholey is a 2009 graduate of Sidney Kimmel Medical College and graduate of our General Surgery Residency Program at Thomas Jefferson University Hospital.



we're all in this together

The COVID-19 Better Together Fund

The COVID-19 outbreak has impacted the world and challenged Jefferson to new levels. During this time of unprecedented uncertainty, Jefferson is committed to putting people first by providing the support necessary to ensure our employees and students are able to adapt to the ever-changing circumstances COVID-19 has presented. Our community came together and to date, the Fund has raised more than \$7.3 million from over 4,800 donors. These gifts help address the unexpected and immediate needs of our employee and student community.

To learn more and view stories of how we're Better Together, visit **Jefferson.edu/CovidFunding**.

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