Jefferson Aortic Center Targets ‘Silent Killers’ with Individualized Care, Innovative Research

The experience of 79-year-old Jane Collins illustrates the unique challenges of diagnosing and treating aortic disease. Her experience also demonstrates the value of the Jefferson Aortic Center – one of only a few in the nation to provide this complex care at a high volume. Like an estimated 95% of people with aortic disease, Collins had no symptoms, and her diagnosis was incidental. An X-ray to explore back pain revealed that she had an abdominal aortic aneurysm, an enlarged area in the lower part of the aorta. Jefferson vascular surgeons determined that the abdominal aneurysm was too small to require intervention at that time and referred her to a cardiologist. The cardiologist performed an echocardiogram that uncovered an even more urgent issue: a large thoracic aortic aneurysm in her ascending aorta. This weakened area in the upper part of this vital blood vessel measured 8.1 cm and put Collins at high risk of rupture (breakage of the vessel). A subsequent CT scan revealed a third aneurysm measuring 5.5 cm in the descending thoracic aorta.

“An aortic aneurysm and ruptures are often called the ‘silent killers’ because they aren’t usually identified until the late stages of disease,” Dr. Plestis explains. “We are a destination center for comprehensive, individualized patient care and a focal point for research and education.”

Offering patient care in both Center City, Philadelphia and Abington, Penn., the Center collaborates with cardiothoracic surgery, vascular and endovascular surgery, cardiology, interventional cardiology, radiology, genetics, internists and other specialists. Dr. Plestis explains that most patients with aortic aneurysms have heritable thoracic aortic disease (that is, the disease is present in more than one first-degree relative). For these patients, the Center can recommend genetic evaluation of family members to help assess their risk. The Center also focuses on patients with Marfan syndrome, a congenital condition in which patients are born with faulty connective tissue that can weaken the aorta and need care starting at a relatively young age. He adds that with some patients, there is no clear-cut etiology; they simply develop an aortic aneurysm.

“Aortic aneurysms and ruptures are often called the ‘silent killers’ because they aren’t usually identified until the late stages of disease,” Dr. Plestis explains. “We are developing the infrastructure necessary to identify aortic conditions sooner, so that patients can undergo the least invasive interventions possible.”

Patients are referred to the Jefferson Aortic Center by cardiologists, primary care physicians and other physicians who find aneurysms through echocardiograms, X-rays, CT scans and other tests. Where appropriate, patients are scheduled for minimally invasive surgery. When an aneurysm is too small to need surgical correction, the patient may be referred to the Center’s Marfan Clinic. Established by Jacqueline McGee, and physician assistant, Colin King. They manage patients with a patient’s aortic aneurysm, among other parameters, so the Center can intervene as soon as possible.

Although Collins required open surgery due to the size and complexity of her thoracic aortic aneurysm, the Center can perform up to 70% of surgeries using minimally invasive techniques. The Center also conducts research on minimally invasive techniques for complex aortic cases and shares findings at national meetings and in peer-reviewed journals. The Jefferson Aortic Center is also part of the International Registry of Acute Aortic Dissections (IRAD), which collects data from 30 large referral centers in 11 countries to improve operative and post-operative care of people with these complex conditions.

For more information or to make an appointment, please visit JeffersonHealth.org/AorticCenter.
Finally – A Measure of Normalcy

After two very abnormal years of celebrations, our Department of Surgery Annual Banquet returned in its style this past June 17. The event was well attended, and while it was a welcome event, it was much anticipated, and did not disappoint. Finally – a measure of normalcy.

We gathered for cocktails, shared a meal and were treated to amazing presentations from our outgoing Chief Residents: Drs. Alvarez, Dwin, O'Malley, Roy, Diamond, Wootz, and Zheng. The style of Ben Franklin, standing tall at the center of the room, served as a magnet for photos – and proved to be an imposing sup-ervisor of our festivities. While many awards were distributed – research awards, RESESS, etc., the most impressive were the two most prestigious awards were presented to Dr. Alincisr. Willis – the award for Best Chief Residents, and Dr. Tomatoe (the residents) and to Dr. Atrocasa and Peter Aithel – the co-creative of the Tomatoe Addison Resident Teaching Award (as voted by the medical students).

This was a special right for many reasons. Two of our seven graduating Chief Residents were born out of the U.S. (Indiana and Venezuela) and immediately here for education. The other five were born in the U.S. to immigrant parents from Poland and China. This was a special night for many reasons. Two of our seven new categorical and five preliminary interns, new members of our Department of Surgery, Dr. Macchiavelli and Dr. Jain, were recognized for their 38 years and 18 years of service, respectively. Donna Guinto was recognized for her 38 years of service. Our Department of Surgery received an additional $150,000 from the committee for the General Surgery Residency Program. The Jefferson Pancreas, Biliary and Related Cancer Center received more new awareness and patients than any other in the tri-state region. Each year, the center’s team treats more than 200 patients who have cancerous, neoplastic or pre-cancerous lesions.

It’s a level of care and volume of patients that presents a powerful opportunity: using molecular profiling to gather extensive data about pancreatic tumors. Molecular profiling can be a valuable tool in treating pancreatic cancer – now the third-leading cause of cancer-related deaths with a five-year overall survival rate of just 11%.

“We recognized the importance of profiling early on,” says Jino John, MD, Professor of Pathology and Laboratory Medicine and Head of the Laboratory of Applied Cancer Profiling at Jefferson. “Our lab has been doing this work for over a decade, and we’ve been able to develop a comprehensive clinical and molecular database. Cancer research can use these large repositories to both generate and test new hypotheses for many years to come.”

Insurance currently covers molecular profiling only for patients with advanced-stage pancreatic disease. A $50,000 gift from a grateful patient is laying the groundwork to profile all patients. Now the Department of Surgery needs an additional $55,000 to cover patient testing and specimen collection, processing and storage that insurance won’t fund. The initial contributions, along with sustaining gifts, will support downstream research projects that leverage the information gathered.

For more information, please contact Kelly M. Austin at 215-955-6383 or kelly.austin@jefferson.edu.

On the Job

Gratitude for Guinto

“Their resilience and flexibility, staying ahead of the game with ever-changing educational formats, has been a key component to the success of the program. Their tireless work has ensured that our program is at the forefront of innovation in surgical education.”

As the team continues to take shape, Mayor Maguier is looking forward to bringing new members to the team. “We will have to become more innovative and strategic to attract new talent to the residency program.”

Paul Hazen

Hazen joined Jefferson from Einstein Health, where he was a residency coordinator and then a fellowship coordinator. Prior to that, he served as program manager for Emergency Medicine at Drexel Hahnemann and held administrative roles at Georgetown University in Washington, DC.

At Jefferson, Hazen is focusing on centralizing the Department of Surgery’s educational programs and streamlining and standardizing the supporting processes. The longer-term vision is to make sure that our coordinators dedicated time to helping to ensure that all learners receive consistent and excellent service. Hazen’s own education focused on jazz piano (his specialty: the saxophone). “These days, he doesn’t play much sax but does enjoy participating in a musical (improv) team. While on stage, the team takes a suggestion from the audience. The pianist runs with the idea, and he joins his teammates in creating a musical in real time.”

Brielle Maugeri

As the team continues to take shape, Mayor Maguier is looking forward to bringing new members to the team. “We will have to become more innovative and strategic to attract new talent to the residency program.”

Brielle Maugeri has been the most rewarding part of her job. “I have loved working with medical students and then become professors in their specialty. The other day I pulled Dr. Chojacki’s interview application from 1995. Since then, I’ve watched her grow into the amazing person and now the residency program director and a leader at Jefferson.”

For an appointment with a Jefferson Surgeon, call 1-800-JEFF-NOW

Residency Program Receives Five-Year Accreditation, Reorganizes to Serve Growing Program

The General Surgery Residency Program within the Department of Surgery received full accreditation for five years from the Accreditation Council for Graduate Medical Education (ACGME) in January 2022. In March, the Residency Program completed a successful match—selecting seven categorical residents from about 1,600 applications. As of June 1, it is expected that all residency program coordinators have been appointed.

The surgeons are focused on making our residency program as attractive as possible for new residents. This includes improving the clinical experiences, expanding the number of fellowship options, and making the residency program more attractive to residents.

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Graduate for Good

“I remember just graduating medical school and walking into Donna’s office,” Dr. Chojacki says. “It’s unbelievable to think about Donna not being there. The residents have been especially coordinated during this time. She came to Jefferson after serving as special events coordinator on the team that opened the Hard Rock Hotel & Casino in Atlantic City, NJ, in 2016. Although this is her first experience in higher education, the field is “all in the family.”

Maugeri’s mother has a similar position at another university – providing a detailed understanding of the role and the skills and strengths that lead to success. While earning a bachelor’s degree in communications, Maugeri landed a student job in the Jefferson Dental School Hospitals. She supported the parade and fireworks at the Magic Kingdom theme park – and still visits Orlando any chance she gets.

For an appointment with a Jefferson Surgeon, call 1-800-JEFF-NOW
Finally – A Measure of Normalcy!

After two very abysmal years of celebrations, our Department of Surgery Annual Banquet returned in full style this past June 17. The evening, dedicated to recognizing our Jefferson Surgery family. The importance of immigration to the U.S. was on full display. Also on display were those born in the U.S. to immigrant parents from Poland and China. This was a special night for many reasons. Two of our seven co-winners of the Philip J. Wolfson Resident Teaching Award (as well as several other candidates), dedicated to ensuring that all learners receive consistent and excellent service. Hazen’s own education focused on jazz performance (his specialty: the saxophone). These days, he doesn’t play much sax but does enjoy participating in a musical improv team. While on stage, the team takes a suggestion from the audience. The pianist runs with the idea, and he joins his teammates in creating a musical in real time.

Pancreatitic Researchers Advance Next-Generation Molecular Profiling

The Jefferson Pancreas, Biliary and Related Cancer Center performs more pancreas surgeries than any other center in the tri-state region. Each year, the center’s team treats more than 200 patients who have pancreatic, neoplastic or pre-cancerous lesions. It’s a level of care and volume of patients that presents a powerful opportunity: using molecular profiling to gather extensive data about pancreatic tumors. Molecular profiling can be a valuable tool in treating pancreatic cancer – now the third-leading cause of cancer-related deaths with a five-year overall survival rate of just 11%.

“With molecular profiling, we’re looking for patterns and signatures within the underlying genetic structure of an individual tumor,” says Adrián J. Núñez, PhD, Research Instructor in the Department of Surgery. Dr. Núñez is the recipient of the 2021 Pancreatic Cancer Action Network (PanCAN) Career Development Award, a two-year, $200,000 grant for “Targeting Pancreatic Ductal Adenocarcinoma.”

Together with Dr. Jain, Núñez studied the role of DNA methylation in pancreatic ductal adenocarcinoma. DNA methylation is the addition of a methyl group to cytosine bases in the DNA sequence, which can silence gene expression.

Through 3PM PaC, the team will conduct testing to identify biomarkers in pancreatic ductal adenocarcinoma (PDAC) tumors. In addition to helping inform possible tumor-specific treatments, these biomarkers potentially could predict both disease recurrence and signatures of drug response.

“At an individual level, molecular profiling can help to determine targeted treatments for patients. This has already been established in the ‘Pancreatic Tumor PanCAN initiative,’ Dr. Núñez explains. ‘At a global level, we can aggregate these data across centers to create large, comprehensive clinical and molecular datasets. Cancer researchers can use these large repositories both to generate and test new hypotheses for many years to come.’

Insurance coverage currently allows molecular profiling only for patients with advanced-stage pancreatic disease. A $55,000.00 gift from a grateful patient is laying the groundwork to profile all patients. Now the Department of Surgery needs an additional $150,000 to cover patient testing and specimen collection, processing and storage that insurance won’t fund. The initial contributions, along with sustaining gifts, will support downstream research projects that leverage the information gathered.

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On the Job

Brielle Maugeri

As the team continues to take shape, Maugeri continues to groom more coordinators and take over aspects of day-to-day coordination and administration. She came to Jefferson after serving as special events coordinator on the team that opened the Hard Rock Hotel & Casino in Atlantic City, N.J., in 2018.

Although this is her first exposure in higher education, the field is “all in the family.” Maugeri’s mother has a similar position at another university — providing a detailed understanding of the role and the skills and strengths that lead to success.

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Gratitude for Gifts

“I remember just graduating medical school and walking into Donna’s office,” Dr. Chopiacki says. “It’s unbelievable to think how Donna not being there (for Guinto) supporting learners like me. Dr. Chojnacki has been the most rewarding part of her job. I have loved watching medical students apply and then become proficient in their specialty. The other day I pulled Dr. Chopiacki’s interview application from 1995. Since then, I’ve watched her grow into this amazing person and now the residency program director and a leader at Jefferson.”

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The Department hired Paul Haazen as program administrator across all three education levels (undergraduate, graduate and fellowship) as residency program director. Currently, various departmental secretaries and other staff changes, Associate Dean of GME, Surgical Division, Karen A. Chopiacki, MD, Program Director Class of 2000.
Naming Opportunities at New Jefferson Specialty Care Pavilion

On schedule to open to patients in spring 2024, the 30-story building will provide more than 1 million square feet of space for a variety of specialties, including surgery – in 450,000 square feet at 601 Chestnut Street. It will feature emerging technologies to support an intelligent, responsive approach to care, as well as a seamless in-person and virtual experience for patients. Every floor – including outpatient healing spaces, more convenient parking and amenities like a café, pharmacy and non-invasive testing areas – will prioritize the comfort of patients and their families.

The Department of Surgery will have dedicated outpatient space on the fourth floor of the Specialty Care Pavilion, Level 7, in-house Ambulatory Surgery Center, while Level 8 will house General Surgery (along with the Digestive Health Institute). Surgeons will also practice on other floors housing multidisciplinary center departments. The Department of Surgery is seeking philanthropic support, partners, faculty and staff, and other generosity to help us continue to build in recognition of their contributions.

There are team rooms, education rooms, team rooms and even spacious rooms available for naming Pipe Kelly Austin, Acting Assistant Vice President of Development in the Office of Institutional Advancement. “It’s meaningful way to preserve a family legacy, pay tributes to the strength and resolve of a friend or loved one or honor a physician or other member of your care team.”

Already, grateful patients have pledged their support of the Specialty Care Pavilion, including Pat Halick, in honor of Edward C. Choyce; Bob Bolta, in honor of Gerald A. Isenberg, MD; and Greg and Beth Weisberger, in memory of Greg’s father. Jefferson faculty also are demonstrating their support of the facility through personal contributions. These include Drs. Warren R. and Meghan Maloney, and Drs. Charles and Theresa Yeo. In addition, contributions from colleagues and friends in memory of Dr. Gary Rosoff will dedicate a Team Room in the Ambulatory Surgery Center.

To learn more or to make a gift online, please visit: specialtycare.jeffersonhealth.org

For more news about the Department follow us on social media: JeffersonSurgery @JeffersonSurgery

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Jefferson Aortic Center Targets ‘Silent Killers’ with Individualized Care, Innovative Research

In late September 2021, Collins came to the Jefferson Aortic Center, directed by Konstadinos A. Plestis, MD, who directs the Aortic Center – one of only a few in the nation to provide this complex care at a high volume. Like an estimated 95% of people with aortic disease, Collins had no symptoms, and her diagnosis was incidental. An X-ray to explore back pain revealed that she had an abdominal aortic aneurysm, an enlarged area in the lower part of the aorta. Jefferson vascular surgeons determined that the abdominal aneurysm was too small to require intervention at that time and referred her to a cardiologist. The cardiologist performed an echocardiogram that uncovered an even more urgent issue: a large thoracic aortic aneurysm in her ascending aorta. This weakened area in the upper part of this vital blood vessel measured 8.1 cm and put Collins at high risk of dissection (an injury to the lining of an abdominal or thoracic aortic aneurysm) or rupture (breakage of the vessel). A subsequent CT scan revealed a third aneurysm measuring 5.5 cm in the descending thoracic aorta.

In September 2021, Collins came to the Jefferson Aortic Center – thus providing world-class care with aortic disease care for more than 2,000 patients a year. Jefferson offers specialized care for aortic aneurysms – the most common of which is abdominal aortic aneurysm, or AAA – and thoracic aortic aneurysm – which frequently affects the aortic arch.