

Surgical Solutions

Vascular Medicine Team Contributes to Unique Approach of Jefferson Vascular Center



In May, Geno Merli, MD, was recognized for his contributions during 40+ years of service at Jefferson. Over the years, he has held many titles, including Co-Director of the Jefferson Vascular Center. John Kairys, MD, Senior Vice President/CMIO, and vascular surgeons Babak Abai, MD, and Paul J. DiMuzio, MD, were on hand to congratulate their colleague.

Patients who need vascular care enjoy "one-stop shopping" at the Jefferson Vascular Center (JVC), which offers appointments with medical and surgical experts, as well as access to a vascular diagnostic lab and endovascular suites for routine and complex interventional procedures. The JVC is co-lead by surgeon Paul J. DiMuzio, MD, MBA, and internist Geno J. Merli, MD. Dr. Merli's Vascular Medicine team consists of Luis H. Eraso, MD, Taki Galanis MD, Walter K. Kraft, MD, and Geoffrey O. Ouma, DO, as well as Lynda Thompson, Pharm D, nurse practitioners Dina Orapallo and Heather Yenser, and support staff Julia Spross and Veronika Dubrovina.

In addition to offering care in Center City and at Jefferson Methodist Hospital in South Philadelphia, Dr. Merli and his team provide 24/7 consultative services for vascular-related disorders in patients at Jefferson, Methodist and Jefferson Hospital for Neuroscience. The Vascular Medicine team also offers specialty services. For example,

Thompson, the Center's pharmacist, supports the Jefferson Anti-Thrombotic Service for managing patients on blood-thinning medications, while Dr. Galanis and Orapallo run a special program for patients with peripheral artery disease.

By following the PERT procedures, we've reduced length of stay in the ICU and in the hospital.

Dr. Merli's team is also at the forefront of research in vascular medicine. Jefferson is a founding member of the Pulmonary Embolism Response Team Consortium (PERT), a national organization that advocates a team approach to caring for patients who come into hospitals with blood clots in their lungs. When such a patient is admitted, an alert goes out to PERT members, who use secure messaging to assemble a team with representation from pulmonary critical care, vascular medicine and interventional radiology.

"We then get on the phone to discuss the patient or visit the patient in person. By following the PERT procedures, we've reduced length of stay in the ICU and in the hospital," Dr. Merli explains, adding that PERT treated their 100th patient earlier this year.

Another benefit of PERT Consortium membership is the participation in the National PERT database which analyzes performance across the 120 PERT hospitals in the U.S. Recently the Division completed the ADIOS Study, evaluating 130 patients who take blood thinners for atrial fibrillation and had to stop taking them prior to surgery. The study found that the anticoagulants are cleared from the system within 72 hours and thus safe to proceed with surgery.

Another noteworthy endeavor is Jefferson's Facilitated Anti-Coagulation for Safe Transitions (FAST) study, which developed a model for prescribing blood thinners to treat and release patients who come to the ER with a blood clot. FAST is now a national effort with involvement by the Society of Hospital Medicine, and plans are underway to extend the FAST study to eight hospitals across the U.S.

"I'm proud of the way the Division has evolved over time," Dr. Merli says. "We have faculty appointments in the Department of Medicine and Surgery. We are a unique model that demonstrates that integration and collaboration are the way we have to go. It's wonderful to work this way."

For more information about the Jefferson Vascular Center, please visit: JeffersonHealth.org/JVC

The Consult Guys



Drs. Howard Weitz & Geno Merli (aka The Consult Guys) host an eponymous podcast featuring equal doses of clinical expertise and humor.

In addition to co-leading the Jefferson Vascular Center, Dr. Merli co-hosts the *Annals of Internal Medicine's* "Consult Guys" series with Howard H. Weitz, MD, the Bernard L. Segal Professor of Clinical Cardiology.

Each month, physicians across the country tune in to a seven-minute episode of "Consult Guys" on the *Annals of Internal Medicine* website. They can then take an online exam and earn Continuing Medical Education (CME) credits in their specialty of Internal Medicine.

Drs. Merli and Weitz typically do two shoots a year to generate twelve to fourteen episodes. In addition, they do the show live once a year at the American College of Physicians' National Meeting – most recently in Philadelphia, April 11 to 13, 2019.

Whether busting myths or solving stumpers, Dr. Merli says they aim to infuse some humor as they cover serious topics (think: NPR's "Car Talk" but for the medical set). He notes that "Consult Guys" can be helpful to patients, too, with the most recent episode always publicly posted on YouTube.

In this issue

Clinical Integration

Wellness Committee Explores Intersection of Patient Care and Self-Care – Page 2

Changing Lives Through Research

Innovative Colorectal Research Targets Key Tumor-Suppressing Molecule – Page 3

On the Job

Candace Caldwell and Michael Varallo – Page 3

Those Who Give

Grateful Patient, Grateful Students: Churchill's Gift Gives Early Access to Surgical Skill Development – Page 4



Charles J. Yeo, MD, FACS

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

Transitions

Transitions – defined by Merriam-Webster as “passage from one state, stage, subject or place to another” but also as “an abrupt change in energy state or level (as of an atomic nucleus or molecule).” Transitions are a hallmark of academic surgery.

The coming of spring leads me to reflect on the annual professional transitions that we experience – beginning with the National Resident Matching Program, aka “The Match,” in March. Our Sidney Kimmel Medical College students learned where they will commence their post-medical school training. Our Department did exceptionally well again this year, and we will be welcoming our new group of surgical interns in mid-June; interns who will spend 6 or 7 years with us at Jefferson.

As we welcome new interns, we also bid farewell to our outgoing chief residents and fellows. These amazing young surgeons go forward, for more training, fellowships, or their first positions as newly minted fellowship-trained surgeons. Their emotions of excitement, trepidation, achievement, fulfillment and anxiety are palpable.

For our faculty complement, the summer months commonly bring change. We typically welcome new faculty who will be joining our Jefferson family (this spring and summer it appears we will be welcoming 8 or 9 new faculty members). We also have several faculty members departing Jefferson – one for new professional challenges (promotion and leadership opportunities), one or two for new experiences (change of practice focus) and one who will be completing their active surgical career (retirement from active practice). We wish those departing our very best, and congratulate them on their many contributions to Jefferson.

Transitions: we will experience an impressive number this summer of 2019.

In the Spotlight



David Greene, Practice Manager

Whether seeking an initial consultation or receiving post-surgical care, patients of Jefferson’s colorectal, general, and trauma surgeons see their physicians at Jefferson’s Medical Office Building (MOB) at 11th and Walnut Streets.

Since October 2016, David Greene has served as Practice Manager at “5MOB”. Greene came to Jefferson after managing other area practices for five years.

“I work with a great staff who makes my job as manager a little easier. We work very hard to ensure every patient has the ideal experience every time they interact with our office. I look forward to many more productive years here at Jefferson and am very excited about the direction the institution is heading.”



In addition to their clinical duties, transplant surgeon Ashesh Shah, MD (right), and surgical resident Brock Hewitt, MD, are leading the Department’s newly formed Wellness Committee.

Wellness Committee Explores Intersection of Patient Care and Self-Care

Growing up, Ashesh Shah, MD, watched his parents balance their dual medical careers with the demands of family life. Back then, he says, they set their own clinic hours based on their children’s schedules and went home together for lunch. Even administrative challenges were simple, with unpaid bills filed in a recipe box.

“When it comes to well-being and work-life balance, times have changed,” Dr. Shah says. “The consequences can be dire.”

Last May, Michael S. Weinstein, MD, FCCM, brought surgeon wellness to the forefront with his “Out of the Straitjacket” column in *The New England Journal of Medicine*. Dr. Weinstein wrote about his personal battle with depression and burnout while working as a trauma surgeon at Jefferson. His candor contributed to the launch of the Department of Surgery Wellness Committee last summer. Now led by Dr. Shah and Surgical Resident Brock Hewitt, MD, the committee aims to “foster a supportive community that promotes the well-being of each individual within our department.”

“There’s been a push to acknowledge that things aren’t always perfect for physicians and we need to take care of ourselves as we take care of others,” says Dr. Hewitt. Indeed, Dr. Shah believes physician wellness is vital to patient care: “If you’re feeling stressed or unappreciated, it’s hard to provide the emotional support you need to give patients so they will feel well cared for.”

The Committee’s first initiative was a formal survey to understand how the

Department compares to national benchmarks on wellness. They selected an instrument called the Well-being Index – a brief, anonymous survey that is helping identify where the Committee should focus its efforts.

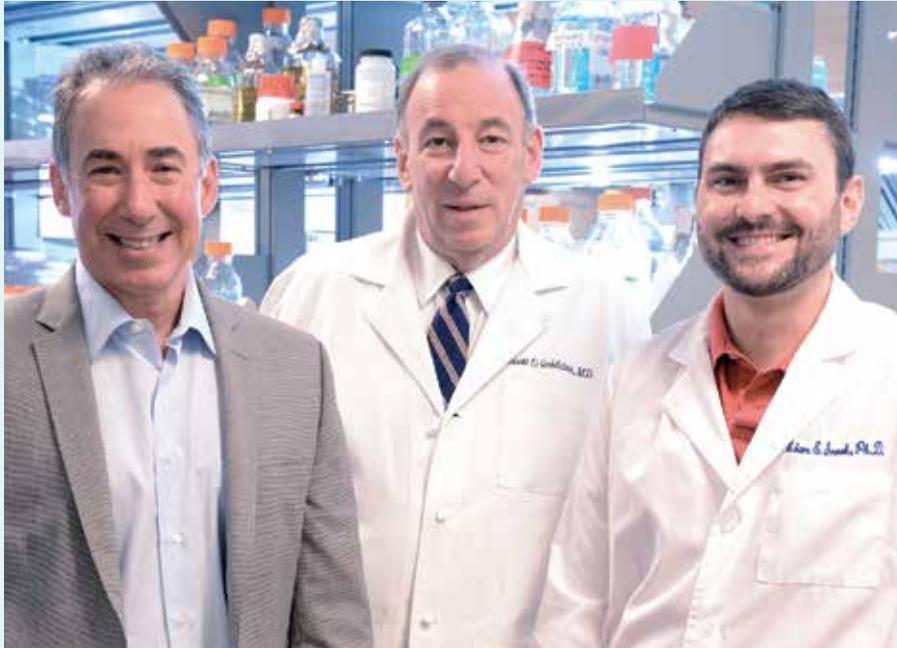
“If you’re feeling stressed or unappreciated, it’s hard to provide the emotional support you need to give patients so they will feel well cared for.”

About two-thirds of the Department completed the survey, revealing that employees’ wellness is generally comparable to national averages for attending physicians, resident physicians and other clinical and non-clinical employees. Advanced practice professionals (physician’s assistants and nurse practitioners) were the only cohort with slightly above-average levels of stress. The survey also identified a trend of higher stress during the first three years of residency and the first few years of working as an attending physician.

The Committee is now soliciting suggestions for how to enhance wellness in the Department. Preliminary possibilities range from adding more staff to facilitating on-the-job exercise, on-site massage and group social outings.

“Effective wellness solutions are all very local, so we’re hopeful we’ll be able to derive some good ideas from the people in the Department,” Dr. Shah says. “Over time, we want to make changes to bring our wellness levels above the national averages.”

Innovative Colorectal Research Targets Key Tumor-Suppressing Molecule



Researchers Scott Waldman, MD, PhD (left), and immunologist Adam Snook, PhD (right) have made tremendous progress in colorectal research with the help of tissue samples provided by colorectal surgeon Scott Goldstein, MD (center) and his surgical colleagues in colorectal surgery.

If there were a “golden ticket” in the fight against colorectal cancer, it would be guanylyl cyclase C (GCC) – a molecule that plays a critical role in the suppression of colorectal tumors. Most colorectal tumors form or grow larger when GCC is silenced by the hormones that regulate it. Researchers at Jefferson are working to find ways to manipulate these hormones so GCC can get back to work suppressing tumors.

Leading the efforts are clinical pharmacologist Scott A. Waldman, MD, PhD, and immunologist Adam Snook, PhD, of the Waldman-Snook Laboratory. As they study GCC and the associated hormones, Drs. Waldman and Snook collaborate closely with colorectal surgeons Scott D. Goldstein, MD, FACS, Gerald A. Isenberg, MD, FACS, and Benjamin R. Phillips, MD, FACS, FASCRS, as well as physicians from the Division of Gastroenterology.

“The Department of Surgery’s collaboration with the Waldman-Snook Laboratory is helping to improve outcomes and quality of life for those coming to Jefferson for care,” says Dr. Goldstein. “Our team is at the forefront of innovative colorectal cancer research.”

One such project is studying how commercially available gastrointestinal hormones could be deployed to combat colorectal cancer. Funded by the U.S. Department of Defense, the study is using tissue samples gathered by gastroenterologists during colonoscopies and by colorectal surgeons during resections.

“We have mapped the mechanism by which the hormones are lost,” Dr. Waldman explains. “It’s a reflection of the very first mutation in the gene APC, which triggers the cascade of events that leads to tumorigenesis. When APC is mutated, a complicated signaling mechanism shuts off the synthesis of these hormones.” The study’s hypothesis is that dosing patients with commercially available hormone analogs could help turn GCC back on, halting development or progression of colorectal tumors.

In addition to mapping how the hormones are lost, Drs. Waldman and Snook want to understand the precise signaling mechanisms that lead from activation of GCC to the *prevention* of tumor initiation and progression. Another study is supporting that effort, and again, Drs. Goldstein, Isenberg and Phillips are contributing colon and rectal tissue specimens to be studied in the lab. The team is studying these normal and diseased samples both in animals and in test tubes.

“In the mice, we’re letting the tumors grow to see if we can manipulate the GCC and determine what signaling mechanisms are being turned on or off and what proteins are changing,” Dr. Waldman says. “In the test tubes, we’re literally creating ‘mini guts’ so we can get a good read on what downstream molecular pathways are being activated by the tumor-suppressing system. We couldn’t do any of this without our colleagues in Colorectal Surgery.”



Candace Caldwell and Michael Varallo

Last October, Candace Caldwell made a big move—relocating from Portland, Oregon to Philadelphia to join the Department of Surgery. As the Department’s first Operations Analyst, she’s taking on a variety of evolving responsibilities. Among them: data analysis and reporting, expense tracking and process improvement.

With a degree from Oregon State University in Public Health, Health Management and Policy, Caldwell enjoys using data to tell a story about current performance and identify opportunities to improve in the future. She said she also enjoys collaborating with her colleagues.

For Caldwell, exploring a new city has brought some surprises. For example, she’s still adjusting to Philly weather (Portland stays green in winter). Even more surprising: the warmth and friendliness of her co-workers and neighbors.

“People warned me about an abrupt, cold attitude,” she recalls. “But that hasn’t happened at all. Everyone is so nice.”

“In the test tubes, we’re literally creating ‘mini guts’ so we can get a good read on what downstream molecular pathways are being activated by the tumor-suppressing system.”

In addition to those studies, the Waldman-Snook Laboratory is working with colorectal surgeons on the second phase of a colorectal cancer vaccine study that showed great promise in Phase 1. Patient enrollment will begin in late summer or early fall. Beyond that, Dr. Waldman says the colorectal

One of those friendly co-workers is Michael Varallo, who started as the Department’s Business Manager on Christmas Eve 2018. It’s a role that brought the 34-year-old South Philly native full circle: he started working at Jefferson at age 16 as a runner for the Department of Surgery, a job he held through college.

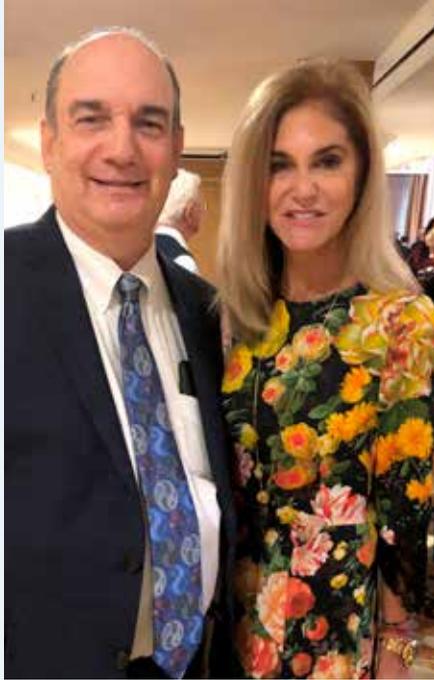
After graduating from Neumann University with a degree in Finance, Varallo began working in Thomas Jefferson University’s Controller’s Office. Since then, he has moved through progressively responsible positions within the Jefferson enterprise.

As Business Manager, Varallo is responsible for planning and tracking the Department’s budget and managing profit-and-loss statements to ensure revenues and costs are properly accounted for.

Outside work, Varallo and his fiancée are settling in to a new home in the suburbs and planning their October wedding. Looking to this next phase of his life, Varallo jokes, “I’ve put *myself* on a budget!”

surgeons will be highly engaged in an upcoming study involving patients with active metastatic disease.

“With this study, we’ll take ‘killer’ immune cells from the patients’ own bodies and genetically reprogram them outside the body to recognize the specific target – in this case, GCC being expressed on metastatic cancer cells,” Dr. Waldman explains. “We will create billions of those genetically reprogrammed cells, and each one will be a ‘smart bomb’ that ignites when it sees a target on a cancer cell in the lung or liver. In short, these ‘smart bombs’ will home in on the metastatic cancer cells but won’t harm normal lung or liver cells.”



Ellen Churchill (right) and her husband, Win, honored her physicians, Gerald Isenberg, MD (left), and Sidney Cohen, MD, with a generous gift to support surgical education.

Grateful Patient, Grateful Students: Churchills' Gift Gives Early Access to Surgical Skill Development

If a medical school has a laparoscopic surgical simulator, it's usually available only to third- and fourth-year students with an interest in the field. At Sidney Kimmel Medical College, students can explore surgery – and build their skills – starting in year one. It's a unique opportunity made possible by the generosity of Ellen Churchill and her husband, Win.

Churchill underwent re-operative intestinal surgery at Jefferson five years ago. Today she remains a grateful patient of Gerald A. Isenberg MD, FACS, Director of Surgical Undergraduate Education, and Program Director, Colorectal Residency, and Sidney Cohen, MD, Co-Director, Gastrointestinal Motility Program.

Churchill lauds Drs. Isenberg and Cohen not only for their clinical expertise, but also for their good hearts: "Both of them give you peace of mind. I have tremendous confidence in them, and in the outstanding care I receive at Jefferson." She says that when Dr. Isenberg told

her how much he believed in the educational value of the laparoscopic simulator, she thought, "What could be better than having young people learn from him?"

The simulator is part of the Simultaneous Curriculum for Advanced Learning and Preparation for Entering Life as a Surgeon (SCALPELS) – a program Dr. Isenberg envisioned and students now run through the Gibbon Surgical Society. As students learn about each organ system in the regular curriculum, SCALPELS offers extracurricular activities related to surgery in each of those systems. Although it's too soon to gauge how it is affecting the pipeline of surgical residents, interest has been strong, with 60 to 70 students, or about 25 percent of the class, participating each year since the program's founding in 2016.

One such student is Elwin Tham, a fourth-year student who is playing a leadership role in SCALPELS and was the first to complete all 40 of

the simulator modules. He praises the program overall and the simulator in particular for helping students gain a better understanding of what it means to be a surgeon. For Tham, the experience cemented his plans to pursue a career in surgery and accelerated his skill development.

"To my knowledge, no other academic institution offers first- and second-year medical students access to a lap sim," says Tham, who presented the SCALPELS curriculum at a national conference. "It's truly a privilege to have this access."

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

Surgical Solutions

Jefferson Department of Surgery
620 Curtis Building
1015 Walnut Street
Philadelphia, PA 19107
JeffersonHealth.org/Surgery

Jefferson Surgical Solutions
is published by
Thomas Jefferson University and
Thomas Jefferson University Hospital.
Jennifer Brumbaugh, MA, Editor-in-Chief
Susan Murphy, Writer

Information in Surgical Solutions
is not intended to provide advice
on personal medical matters
or to substitute for consultation
with a physician.

Editorial Board

Kelly Austin
Adam Berger, MD
Jonathan Brody, PhD
Adam Frank, MD
Gerald Isenberg, MD
Theodore Tsangaris, MD, MBA
Florence Williams
Charles J. Yeo, MD

CS 19-1970

620 Curtis Building
1015 Walnut Street
Philadelphia, PA 19107

Non Profit Org.
US Postage
PAID
Phila., PA
Permit #276

News in Brief



Warren R. Maley, MD, was named the Nicoletti Family Professor of Transplantation Surgery. The Nicoletti family endowed the professorship in 2008 after patriarch Robert Nicoletti's life was saved by a living donor kidney transplant. The living donor was his daughter, Lori Peruto.



Sung Whang, DNP, MSN, CRNP, CTTS, received a Doctorate in Nursing Practice (DNP) from Thomas Jefferson University. She has been a nurse practitioner in the Division of Thoracic Surgery since 2014.



Eighty-four pancreatic cancer survivors attended the 2018 patient symposium.

Save the Date: Jefferson will host the 14th Annual Pancreatic Cancer and Related Diseases Patient Symposium on Saturday, November 16, 2019. The event gives patients and their loved ones an opportunity to connect with expert physicians, scientists and staff and learn about the latest developments in research and treatment. Seating is limited for this free event. Registration is required. Please contact OIA Events at 215-955-9100 or events@jefferson.edu to request an invitation. For more information, visit **Jefferson.edu/PancreasEvent**