

# SurgicalSolutions

A publication for friends and colleagues of Jefferson's Department of Surgery Fall 2013 Volume 8, Number 2

## Breast Care Center Welcomes New Leadership, Offers Latest Surgical Techniques



In August, Theodore Tsangaris, MD, (second from right) was appointed the new Surgical Director of the Jefferson Breast Care Center. The Center's surgical team includes plastic surgeons Stephen Copit, MD, and Patrick Greaney, MD, (see sidebar) and breast surgeons Anne Rosenberg, MD, Adam Berger, MD, and Melissa Lazar, MD.

With a team of top medical oncologists, surgeons, plastic surgeons, radiation oncologists and pathologists, the Jefferson Breast Care Center has long provided high-quality, integrated care to women with diseases of the breast. With the recent appointment of new leadership – Massimo Cristofanilli, MD,

as Director of the Breast Care Center and Deputy Director of Translational Research at the Kimmel Cancer Center and Theodore N. Tsangaris, MD, FACS, as Surgical Director – the Center is poised for further growth and evolution.

The Center has also welcomed Melissa Lazar, MD, a Jefferson residency program graduate who recently completed fellowship training in Breast Oncology at Northwestern Memorial Hospital. Drs. Cristofanilli, Lazar and Tsangaris have joined a well-established team of surgeons and clinicians – including breast surgeons Adam Berger, MD, FACS, and Anne Rosenberg, MD, FACS, and plastic surgeons Steven E. Copit, MD, Director of the Division of Plastic Surgery, and Patrick J. Greaney, MD.

"Ours is not a 'virtual' breast center. It's an actual center with one physical location where specialists come together and see patients in tandem."

Offering the most advanced screening and treatment options, the Center has extensive experience in inflammatory breast cancer, breast cancer during pregnancy, breast cancer in young women, breast cancer in men and rare breast tumors, as well as early and advanced breast cancer. It also offers surgical expertise in nipplesparing mastectomy with free-flap reconstruction (see "Surgeon Speaks").

Dr. Tsangaris joined Jefferson from the Yale School of Medicine where he held

the position of Director of Outpatient Breast Services at the Smilow Cancer Hospital Network, after spending more than a decade at Johns Hopkins. His practice has been focused exclusively on breast surgery for some 20 years. As he notes, women with a known predisposition to breast cancer are increasingly choosing prophylactic mastectomy. Dr. Tsangaris has gained expertise in mastectomy that can cosmetically preserve the nipple. He has also honed techniques designed to respect the anatomical boundaries of breast tissue.

As the most recent addition to the team, Dr. Tsangaris sees tremendous value and potential in the Jefferson Breast Care Center: "Ours is not a 'virtual' breast center. It's an actual center with one physical location where specialists come together and see patients in tandem. We have breast imaging one floor above the Center, and at any given time, we have a medical oncologist, surgeon or radiation oncologist seeing patients here." Looking to the future, he would like to explore opportunities to extend the Center's capabilities beyond Center City - offering patients care closer to where they live and work.

"Our patients benefit from our specially trained support teams that include nurses, social workers, therapists and techs," says Dr. Cristofanilli, whose research centers on inflammatory breast cancer, locally advanced breast cancer, and genomic and biomarkers development – with a focus of developing better, more personalized therapies. "We work hard to provide coordinated, personalized treatment and care to all of our patients."

To learn more visit: www.jeffersonhospital.org/breast

#### Surgeon Speaks

"After mastectomy, a woman can undergo reconstructive surgery using breast implants or using her own tissue.

"Implants remain a viable option, but they are not free of risk. Women with implants may experience shell rupture, infection and/or visible rippling over time. Also, implants have an average lifespan of just 10 years. Thus, some women, particularly younger patients, simply aren't comfortable using implants. Other women have previously undergone radiation therapy, leaving their skin unsuitable for an implantbased reconstruction.

"In such cases, using a woman's own tissue for reconstructive surgery may be the best choice. In the past, this type of surgery required use of large muscle tissue – typically an abdominal muscle with skin attached to it. With free-flap reconstruction, we are often able to perform reconstruction without using muscle tissue. Instead, we harvest skin and fat from a patient's belly, buttock or thigh.

"Free-flap reconstruction, offered through the Jefferson Breast Care Center, is typically a more complex surgery than implant-based reconstruction. However, for many women, this option produces a very natural, comfortable and long-lasting result."



Patrick J. Greaney, MD Assistant Professor

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#### *Clinical Integration*

Overview



#### Charles J. Yeo, MD, FACS Samuel D. Gross Professor and

Chair, Department of Surgery

#### Honor Roll!

Congratulations to the faculty, staff, residents and fellows here at Jefferson. We have achieved a distinction obtained by less than 0.5% of all American hospitals – this July we were notified that we have joined the *U.S.News & World Report* Best Hospitals Honor Roll. This represents a major accomplishment, led and enabled by Thomas Jefferson University Hospitals President David McQuaid, FACHE, and Jefferson Medical College Dean Mark Tykocinski, MD, and brought to reality by the many Jeffersonians who contribute to patient care at Jefferson. This is a big deal. Enjoy it!

We in the Department of Surgery touch many of the 12 specialty areas ranked as the nation's best such as Orthopedics (#7), Pulmonology (#14), Cancer (#17), Diabetes and Endocrinology (#18), Gastroenterology (#21), Gynecology (#28), and Neurology/ Neurosurgery (#32). Our Acute Care Surgery Division cares for surgical patients in all these specialty areas, and our thoracic and transplant surgeons, general surgeons, colorectal surgeons, and minimally-invasive surgeons serve patients with cancer, chest diseases and alimentary tract diseases. So, although "Surgery" per se has never been a specific and defined component for the 24 years of rankings, we should all be proud of this recognition.

The Jefferson medical community will persist in our efforts to achieve superior patient care, focused innovative research and exceptional educational opportunities for our student and resident learners. **The Honor Roll**. This is a big deal! Now, the bar is set high – and we must redouble our attention to quality initiatives, patient safety, compassionate care at the highest level, and innovation in the clinics and the labs. We want to become a fixture of the **Honor Roll**.



### Robotic Technology in General Surgery Procedures – Including Innovative Single-Incision Cholecystectomy

Since their introduction some 30 years ago, laparoscopic techniques have become the standard for a number of general surgery procedures – enabling patients to enjoy less scarring, shorter hospital stays and faster recoveries. Today, Jefferson surgeons are using the latest robotic technology to perform many laparoscopic procedures, including adrenalectomy, cholecystectomy (gallbladder removal), Heller myotomy, liver resection, thymectomy, repair of hiatal hernia, and distal pancreatectomy for tumors in the tail of pancreas.

At this time, six surgeons in the Department of Surgery are using the robot, which is manufactured by da Vinci\*. They include Karen Chojnacki, MD, FACS, Associate Professor and Residency Program Director; Cataldo Doria, MD, PhD, FACS, Nicoletti Family Professor of Transplant Surgery and Director, Division of Transplantation Surgery; Nathaniel R. Evans, MD, FACS, FCCP, Assistant Professor, and Director, Minimally Invasive Thoracic Surgery Program; Francesco Palazzo, MD, FACS, Assistant Professor and interim Vice Chair, Department of Surgery; Michael J. Pucci, MD, Assistant Professor; and Ernest (Gary) Rosato, MD, FACS, Professor and Director, Division of General Surgery. At Jefferson, the robot was first used for general surgery procedures in 2007 – to date over 115 robotic general surgery procedures have been performed. In early September 2013, Dr. Palazzo completed the first general surgery robotic procedure - a cholecystectomy – at Methodist Hospital where he is the interim Chief of Surgery.

#### SingleSite® Surgery

Jefferson is among the first hospitals in Philadelphia to use da Vinci<sup>\*</sup> SingleSite<sup>\*</sup> Surgery – which allows surgeons to perform a cholecystectomy with a single, two-centimeter incision in the patient's belly button. As Dr. Chojnacki explains, the da Vinci system delivers a magnified, three-dimensional and high-definition view and includes instruments suitable for single-site surgery.

Dr. Chojnacki notes that the single-site instruments are not yet as sophisticated as those she and her colleagues use with the robot during traditional laparoscopic procedures: "When using the robot with multiple incisions, the wristed instruments



Surgeons Cataldo Doria, MD, PhD, Karen Chojnacki, MD, Harish Lavu, MD, Francesco Palazzo, MD and Michael Pucci, MD utilize the da Vinci<sup>®</sup> Surgical System (shown in the background) for a variety of general surgery procedures.

actually offer a higher degree of freedom than the human wrist. At present, the single-site instruments have only two degrees of freedom, but we expect the wristed instruments to be available in the future."

Results for single-incision cholecystectomy have been excellent. Among the potential benefits: a low rate of major complications and a low conversion rate to open surgery. While the small "keyhole" scars of multiport laparoscopic surgery were once considered a breakthrough, single-incision surgery through the navel can virtually eliminate surgical scarring. To date, the Food and Drug Administration (FDA) has approved da Vinci<sup>®</sup> SingleSite<sup>®</sup> Surgery only for gallbladder removal, benign hysterectomy, and removal of the fallopian tubes and ovaries (salpingooophorectomy). But Dr. Chojnacki believes there is tremendous potential for singleincision surgery: "As the technology improves, there will clearly be opportunities to use this technique for gastrectomies (stomach resection), liver resection, bile duct procedures and pancreatectomy," she says. "The possibilities are virtually limitless."

Meet Our Surgical Interns



The Department has welcomed an impressive new group of categorical interns, selected from over one thousand applicants to our program. These doctors, who recently matched with Jefferson, started on June 20, 2013. Just a few months into their Jefferson surgical residency, we have all noticed their dedication to patient care, their energy and their excitement in joining the Jefferson community.

Front row: **Katerina Dukleska**, **MD**, University of Medicine and Dentistry of New Jersey; **Jessica Latona**, **MD**, University of Medicine and Dentistry of New Jersey; **Anisha Kshetrapal**, **MD**, Florida International University, **Allison Aka**, **MD**, Loma Linda University.

Back row: **Brock Hewitt, MD,** Texas Tech University and **Andrew Brown, MD,** Jefferson Medical College.

We are also pleased to welcome back the following Jefferson Medical College 2013 graduates as preliminary interns in general surgery: **Harold Hsu, MD** and **Wei Phin Tan, MD**.

#### *Changing Lives Through Research*



Liz Enyenihi, 15, of Knoxville, TN, spent last summer working in a basic science laboratory in the Department of Surgery as a participant in the national Physician Scientist Training Program.

## Tennessee High School Student Spends Summer Sequencing DNA

Many students spend summer at camp or the pool. Not Liz Enyenihi – now a 15-year-old sophomore at Farragut High School outside Knoxville, TN. She spent her summer working eight-hour days in the laboratory of Jefferson's Director of Surgical Research, Jonathan R. Brody, PhD, and living in a University of Pennsylvania dormitory.

Enyenihi is part of the Physician Scientist Training Program (PSTP) offered by the Distance Learning Center - a nonprofit organization dedicated to developing and supporting the next generation of minority students in science, technology, engineering, and math. The PSTP supports a national pool of minority child prodigies across a 10-year regimen (typically from seventh grade through the college senior year). With a multiinstitutional approach, the program rotates these "whiz kids" through basic science labs in academia, the National Institutes of Health (NIH), and the pharmaceutical industry.

Enyenihi joined the program after eighth grade and spent the summer of 2012 at Southern Methodist University, where she took science courses and classes about research writing, giving presentations, and statistics. The goal: to prepare her to work in a real lab. According to the Jefferson scientists she worked alongside, Enyenihi was indeed well prepared to jump in and participate. During her time in Philadelphia, she worked on DNA subcloning using polymerase chain reaction (PCR) to amplify DNA.

"I also did a lot of DNA sequencing in order to subclone a piece of mutant DNA," Enyenihi says. "By sequencing DNA, we were trying to identify a mutation." She notes that she also had a chance to perform gel electrophoresis – a technique used to separate DNA based on its size. "Before the summer, I'd learned about gel electrophoresis, but I had never actually done it – or used the centrifuge, microcentrifuge, and incubators," she says. "It was scary at first, but it all went well."

She adds that she was pleasantly surprised by the autonomy she enjoyed during the program: "Although I received a great deal of support from Dr. Brody and his team, no one from PSTP was looking over my shoulder," she recalls. "Only at the end – when I delivered my presentation, abstract, paper, and poster – did they see what I had gained from the experience."

#### Eleanor Fitzpatrick, RN, MSN, CCRN

Eleanor "Elly" Fitzpatrick joined Jefferson in 1987 as a clinical nurse specialist. Initially serving in the Intermediate Surgical Intensive Care Unit (ISICU), she soon became clinical nurse specialist for the Surgical ICU (SICU), as well. While her title has stayed the same, over the past 26 years Fitzpatrick has embraced and championed significant changes in nursing care – most recently, the growing emphasis on evidence-based initiatives.

With primary responsibility for staff education, Fitzpatrick trains and supports new nurses coming into the units. The two critical-care units are staffed by more than 80 nurses; at one time or another, Fitzpatrick has worked closely with every one of them. Fitzpatrick also develops and communicates policies and procedures for new equipment, tools and techniques. She serves as co-chair of the central venous catheter safety committee and represents her units as part of the ongoing Magnet re-designation process. The Magnet Recognition Program® recognizes health care organizations for quality patient care, nursing excellence and innovations in professional nursing practice.

Fitzpatrick takes a highly collaborative approach to her multi-faceted role. She is quick to praise the intelligence and dedication of Jefferson's nursing professionals: "Our staff nurses know what it's like to do the work, and they're unbelievably smart. I welcome their insights and talents in helping educate other nurses and in developing procedures."

"It was great to have a frontrow seat to Liz's development into a young scientist during the summer... she came away with an 'I can really do this or anything' type attitude, which is what makes this program so special to be a part of."

Enyenihi demonstrated a great deal of knowledge and perseverance in the lab, and despite being a self-described "shy person," she also excelled at presenting her key findings. She delivered the presentation twice – once to more than 40 PSTP staff and students in a large University of Pennsylvania lecture hall and again to the laboratory faculty and staff at Jefferson. She received top marks for her PSTP talk and left her Jefferson mentor and co-workers equally impressed.



Fitzpatrick also remains an active clinician with a strong commitment to patientcentric care. When working directly with patients, she strives to provide the level of care she would want for her own loved ones. And she enjoys not only the human connection of patient care, but also the direct experience with ever-evolving nursing tools and procedures.

Finally, Fitzpatrick appreciates the chance to participate in nursing research projects, including a study of early and progressive mobility after surgery (which resulted in a reduction in ventilator days and a slight reduction in SICU length of stay) and another focused on limiting sedation on ventilated patients to support early breathing tube removal. "Nursing research is driving the evidence-based approach, and the way we do things is changing rapidly," Fitzpatrick concludes. "Keeping nurses aware of best practices is more important than ever."

"It was great to have a front-row seat to Liz's development into a young scientist during the summer," says Dr. Brody. "I think she came away with an 'I can really do this or anything' type attitude, which is what makes this program so special to be a part of." He will have the chance to work with Enyenihi again, as she returns to his laboratory next summer.

Though she's long planned to become a physician, Enyenihi says her summer in Philadelphia exposed her to a new world: the life of a scientist. "Until this experience, I never really understood what a scientist does. I had only learned about it in class and in textbooks. I really enjoyed doing the work in the lab, and now I'm considering an MD-PhD program," she concludes – adding that she hasn't made a final decision. (That can wait until she's at least 16!)

#### On <u>the Job</u>

#### Those Who Give

#### Art and Gail Pasquarella Support Jefferson Transplant Institute



Art Pasquarella is a donor in every sense of the word. He gave a kidney as a living donor to one of his brothers. He gives his time as a volunteer for the National Kidney Foundation. And he and his wife, Gail, have made a very generous gift to support the vision for the Jefferson Transplant Institute.

As Art explains, the Pasquarellas had more than one reason to support transplant services at Jefferson. The first reason was a kidney transplant for Art's late father, Valentino H. Pasquarella, Sr., in the mid-1990s. "Jefferson did a fabulous job for my father," Art recalls, "That started our family's affinity toward Jefferson."

Some 15 years later, Art's oldest brother, Valentino H. Pasquarella, Jr., was suffering from another type of kidney disease, which had developed from an illness during infancy. Art and his other brother, Joe, underwent the battery of tests to determine compatibility. After discovering that he was a 100 percent match, Art signed on to be a living donor. In November 2010, Adam Frank, MD, FACS, and Carlo Gerardo Ramirez, MD, FACS, operated on Art and Val, respectively. The operations were both successful, and today the Pasquarella family continues to enjoy spending time together. Art is thankful that his big brother still joins him at the table: "Val has one heck of a sense of humor," Art laughs. "He's the

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'entertainer' at our family dinners, and my daughters and nephews are quick to indicate their disappointment if their Uncle Val is going to miss a family dinner."

When he isn't enjoying time with his family, Art works as executive vice president and chief operating officer of Equus Capital Partners, Ltd., in Center City. Since 2006, he has also been active with the National Kidney Foundation. For two years, he served as chair of the Delaware Valley Board of the National Kidney Foundation. In 2011, he joined the National Board of the National Kidney Foundation and will soon become chair of the National Board's Development Committee.

"It's one thing to support a charity by writing checks and soliciting for donations," he says. "Being a living donor has brought it all really close to home. You realize you have the opportunity to actually change someone's life." With their generous donation, the Pasquarellas hope to change more lives by supporting Cataldo Doria, MD, PhD, FACS, the Nicoletti Family Professor of Transplant Surgery and Director, Division of Transplant Surgery, in developing and implementing the Transplant Institute. As Dr. Doria explains, the Transplant Institute represents a multi-institutional alignment of the transplant programs within the Jefferson Health System: "Our goal is for participating hospitals to collaborate on strategic, clinical, quality and financial initiatives - thereby strengthening our collective performance," he says. "The Institute will work to promote standardized clinical pathways and protocols and to deliver a streamlined experience for the patient."

For information about planned giving, or to make a contribution to the Department of Surgery, please contact Lara Goldstein in the Jefferson Foundation at 215-955-8797 or lara.goldstein@jefferson.edu

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#### Adam Berger, MD Jonathan Brody, PhD Cataldo Doria, MD, PhD Adam Frank, MD Gerald Isenberg, MD Charles J. Yeo, MD Lara Allan Goldstein Florence Williams

Editorial Board



#### News in Brief



Michael R. Kammerer, MD, has joined the Division of General Surgery. Dr. Kammerer completed residency training at Orlando Regional Medical Center in Florida and a Bariatric Surgery Fellowship at Jefferson. He specializes in bariatric surgery and will practice in Center City and at Methodist Hospital.



Michael J. Pucci, MD, has joined the Division of General Surgery. Dr. Pucci (JMC '07) began residency training at St. Vincent's Hospital and Medical Center in New York and completed training at Jefferson where he remained for an Advanced Gastrointestinal, Hepatopancreaticobiliary and Minimally Invasive Surgery Fellowship. He specializes in minimally invasive surgery and will practice in Center City and at Methodist Hospital.



Ashesh P. Shah, MD, has joined the Division of Transplant Surgery. Dr. Shah completed residency training and a two-year Transplant Surgery Fellowship at Indiana University. He was an Assistant Professor of Surgery at Indiana University School of Medicine before being recruited to Jefferson. He will practice at Jefferson, Lankenau Hospital, and the Alfred I. duPont Hospital for Children.

#### Save the Date:

Jefferson will host its **8th Annual Pancreatic Cancer and Related Diseases Symposium** on Saturday, November 9, 2013 from 9 a.m. to 2 p.m. 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 **Jennifer.Miller@jefferson.edu (215-955-9100)** by November 1, 2013. For more information, visit **www.jeffersonhospital.org/pancreasevent** 

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