

Perspectives

Julie Freischlag
Surgery from a
Personal Perspective

PAGE 2

Teams at Work

PA Residency Program
Class of 2005: Surgery's
Newest Residents

PAGE 2



Changing Lives Through Research

Is Genetics the Secret to
Healing After Injury?

PAGE 3

On the Job

Diana Call
Technical Director
Vascular Surgery Lab

PAGE 3

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Surviving Pancreatic Surgery

The trip Vincent Guida took to Puerto Rico in January 2001 brought out the tan in his olive skin and brought on some digestive problems he attributed to something he ate. When he returned to work at his legal practice in Columbia, a colleague pointed out that his tan, however, looked decidedly more yellow than golden. Vince's wife, Rita, had noticed it too, but had pushed back the thought.

"I [kept] thinking, No, I must be crazy," says Rita. "I was very much in denial." She knew that jaundice can be one of the first signs of pancreatic cancer because her father was diagnosed with the disease at 57—the very age her husband was then.

In retrospect, the Guidas feel lucky in having had that knowl-

edge. It motivated them to get a second opinion, which led to the CT scan that showed a mass in his pancreas.

Pancreatic cancer is a particularly lethal disease. By the time clinical symptoms like Vince Guida's are pieced together, 80 percent of pancreatic cancers have spread to other organs. The American Cancer Society predicts that about 32,180 Americans will be diagnosed with the disease in 2005, and about 31,800 will die of it.

Vince was literally one of five cases in a million. He had a rare islet cell tumor associated with longer survival.



Vince Guida, now 61, and his wife, Rita, met in college at the University of Maryland and have been married for 37 years. He practices law in Columbia and also owns a title company. She is an English professor at Howard Community College.

For the fraction of patients who prove eligible, surgery offers the only chance for a cure. Still, the pancreaticoduodenectomy, better known as the Whipple procedure, is thought to be one of the most complex operations in the realm of surgery and is not without its own risks. When performed at a low-volume center, complications and mortality rates can be unusually high. At Johns Hopkins, however, where more pancreatic resections are performed than anywhere in the world, the surgery has proved safe and effective.

After scouring the Internet for information on Vince's diagnosis, the Guidas were comforted that

that sort of expertise was a mere 20 miles from their home. They were referred to Charles Yeo, one of the busiest practitioners at Hopkins, who performs about 100 Whipples a year.

The results of Vince's five-hour procedure on March 6, 2001, were uncommonly good. Rita recalls that on that Tuesday, Yeo approached her and the couple's two sons in the waiting room and told them, "Short of opening him up and saying, 'Oops! We made a mistake; there's no tumor,' this is the next best thing that can happen."

Vince was literally one of five cases in a million. He had a rare islet cell tumor associated with

longer survival. It was completely removed and didn't involve other organs. He spent six complication-free days in the hospital and went back to work four weeks later.

In January 2004, Yeo found another lesion on Vince's liver that was resected, and Vince again returned to his normal life, which now includes his first grandson, named Vincent, born in February. He remains devoted to Yeo. "I would do anything for him. Doctors get criticized, and as a lawyer, I'm not the doctor's best friend, but you don't realize how hard they work, and how difficult the situations are that they work in." ■

The Surgeon Speaks

"Most people with pancreatic cancer can't be resected."

Vince Guida was an interesting case because he was so healthy. He took care of his body, he jogged, he didn't smoke, and he had no family history. The risk factors for pancreas tumors are cigarette smoking, obesity, inactivity and bad genes, and he didn't fit any of those.



Most people who turn yellow from pancreas tumors statistically are going to have an adenocarcinoma, and their average survival, post resection, will be a year or two. So he turned yellow and it was an islet cell tumor, which, if you have to have a pancreas cancer, is one of the better ones to have. He was able to be resected, which puts him in another lucky minority. Most people with pancreatic cancer can't be resected because the cancer has disseminated.

He's only had one metastasis—probably a few scattered cells traveled from the pancreas through the lymphatics or the venous system and lodged in the liver. But it took a couple years for those cells to grow and form a lump big enough to be seen by imaging. We identified and resected it.

I wish he'd never had any of this, but he's been lucky in many ways. He's been able to return to full activity with a normal quality of life, has a loving, caring family and a great outlook on life. We still think we have an incredibly great chance at curing him—which means living to be 100.

—Charles Yeo



From Julie Freischlag
Director of Surgery

Surgery from a Personal Perspective

Last summer, my mother had an MRI to look for the source of some back pain. Instead of revealing a bad back, her scan disclosed a large abdominal aortic aneurysm. This is frequently the way this silent disease is diagnosed, and the irony wasn't lost on me since I often treat the condition as a vascular surgeon.

There was no question that I wanted her here at Hopkins, so she and my father flew out from Decatur, Ill., for the procedure in October. It was a serious operation, which I handed off to my colleague Bruce Perler. I didn't manage her care or even look at her chart, but just tried to be there for her as a daughter. I was amazed at how calm I was throughout her two-week stay.

That's probably because everything about her care—from the time I checked her into pre-op until her discharge (which I actually missed because it was handled so efficiently)—seemed to happen with such ease.

I felt so proud of our staff, whom I'm sure felt anxious taking care of her. She was scared herself at first, because, at 77, this was her first hospitalization. But she was never afraid in the hospital, and she still talks about how kind everyone was—and how much she misses watching for helicopters from the window of her room on Nelson 7!

There were other positive outcomes from the experience, as well. I learned something important about my genetic background (both my mother's father and brother died suddenly in their 50s from what everyone assumed were heart attacks) and my mother finally realizes what I do for a living.

Thank you, everyone, for taking care of my mom.

A New Class of Residents

Physician Assistants Now Train Alongside Surgical Interns.

The Program: They work 80 hours a week and take call at night, don white coats and attend morbidity and mortality conferences. They are residents in the Department of Surgery to be sure, but they represent a new wrinkle in postgraduate education at Johns Hopkins: a half-dozen men and women, equally divided, who make up the inaugural class of physician assistant surgical residents.

Establishing such a program at Hopkins has been a long-held dream for Teresa Krosnick, who saw an opportunity to make it happen when the new 80-hour workweek regulations for residents went into effect in July 2003. Krosnick, a physician assistant in the Department of Surgery for eight years, knew a residency program could not only help fill the labor gap but also fit well into Hopkins' teaching mission.

One of 15 such programs in the nation, the 12-month residency is designed for PAs who choose to specialize after completing a master's preferred PA program. Compressing the clinical and didactic knowledge that normally takes PAs years of on-the-job training to absorb, the program offers residents rotations through Hopkins' intensive care units and various surgical specialties. Under physician supervision, the PAs see patients in clinic, perform histories and physicals, write notes, prepare patients for and assist in surgery, and take care of patients post operatively and in follow-up.

That is just the kind of work Heather Hall was looking for. A former MRI technologist, she obtained her master's from Duke University last August and started her postgraduate work at Hopkins a month later. "I wanted to be able to develop relationships with patients," she says. "As a PA, you get to do the fun stuff—do the work-up, diagnose the problem, present it to the doctor, admit the patient. And you have the time to explain to the patient about the procedures, the disease process, the options—more time than a physician who is running a small business."

Hall, who is from Idaho, expects to get a job in private practice. But she realizes there won't be a shortage of offers when she completes her training. The demand for physician assistants is expected to double by



Left to right: Julie Freischlag, director of surgery and medical director, PA residency; Teresa Krosnick, PA residency director; physician assistants Jonathan Cohen, Heather Hall, Robert Hill, Lisa Wylie, Eddie Delacruz and Lisa Rotellini-Coltvet; and surgeon Pamela Lipsett, director of surgical education.

2012, and more and more PAs are choosing the surgical specialties.

The Players: While Krosnick oversees the day-to-day operations of the program, several physicians have taken on key roles. Department chair Julie Freischlag is the medical director, and surgeon Pamela Lipsett, director of surgical education, is in charge of lectures and labs. Randy Brown, director of education in the Minimally Invasive Surgery Training Center, instructs PA residents in surgical techniques.

In addition, a productive relationship has formed between Krosnick and Deb Baker, manager of surgical advanced practice, who supervisors nurse practitioners and PAs in the department. "The nurse practitioners have taken our residents under wing and made our program work," says Krosnick. Baker has been instrumental in setting up the monthly lectures PA residents are required to attend, on topics ranging from breast cancer to cardiac care.

The Results: To monitor the program's progress, Krosnick has conducted informal surveys after each rotation. "[The residents] have a very strong work ethic and have been so well received," she says.

"They divide and conquer all the work that needs to be done," says pediatric surgeon Anne Fischer, "and we're in a land of plenty in that regard." In return, the program lets residents sample different types of practice patterns that can be invaluable when settling on a career "whether inside or outside the OR, in patient management or outpatient care."

Krosnick and Baker already have been talking about piloting a residency program that would combine NPs and PAs, one that could be a first in the nation. Although each profession brings its own expertise to a health care team, "NPs and PAs are both mature, seasoned, mid-level practitioners," says Krosnick. "So in the future, why don't we grow them up together?" ■

Let's Meet: Cardiac Surgeon Luca Vricella



Luca Vricella was born and raised in Rome, but during medical school, he spent summers in the United States dabbling in American medicine. By the time he graduated, there was no doubt that he would leave Italy, where the training opportunities for young physicians paled in comparison to what he'd observed in the States. "I thought the hands-on experience was just fantastic, phenomenal, the way they gradually brought you up to very high-level, complex cases," he says.

He collected an impressive roster of mentors—from Leonard Bailey of Loma Linda University, famous for transplanting a baboon heart into Baby Fae in 1984, to Bruce Reitz, chair of cardiothoracic surgery at Stanford (and former chief of cardiac surgery at Hopkins). After completing a fellowship in pediatric cardiac surgery at Great Ormond Street Hospital in London, he was recruited by Duke Cameron to help with Hopkins' growing congenital

cardiac surgery practice.

Vricella comes from a family of physicians, including his father, two uncles and his twin brother, who is a plastic surgeon, but his decision to become a pediatric cardiac surgeon occurred while he sat watching an open heart operation on a small black and white TV. "I thought, This is just absolutely fantastic!" He was 10 and never looked back.

"I love the anatomy, the attention to detail," he explains. "All the instruments are small, the field is small, the patient is small. Technically, I think it's one of the most wonderful disciplines in surgery.

"And I like the fact that it's the chance—how can you say?—to help a life that's developing. Dr. Cameron and I just operated on a baby that was 2 days old, 2.8 kilos, and she's just about to go home doing well. We establish a relationship with these families and patients, and it's a beautiful thing." ■

Is Genetics the Secret to Healing After Injury?

Trauma, says Antonio De Maio, is the Cinderella of science. While cardiovascular disease and cancer get the lion's share of the limelight, trauma is the poor relation, even though it's the third leading cause of death in developed countries, and a major killer of children.

The reason why, he maintains, is that people don't consider trauma a disease. But ever since De Maio arrived in Baltimore as a postdoc in 1988, under the tutelage of former Hopkins surgeon Timothy Buchman, his life's work has been to explore the connection. "If you and I have the same injury, why do you respond very well, and I struggle for days and die? One of the reasons, I believe, is because we're genetically different."

De Maio is an oddity—a

basic scientist residing in the Department of Surgery. During his early years at Hopkins, the native Venezuelan often went on rounds, and came up with his hypothesis by talking with frustrated physicians seeking an explanation for the tremendous variability in outcomes in patients with similar injuries. To him, genetics was the only possible rationale. "People said I was crazy."

De Maio uses mice to test his hypothesis—that the interaction of age, sex, environment and genetics accounts for the complex response to sepsis, a condition in which the inflammatory response goes haywire and cannot turn off. More than 750,000 cases of sepsis occur each year in the United States, initiated by traumatic injury and even elective surgery, and half of those are fatal.

In his experiments, De Maio induces an inflammatory

"If I spend 20 years working in the lab and I save one life, I save one more than everybody else."

ANTONIO DE MAIO



Basic scientist Antonio De Maio, Ph.D., with an A/J mouse that he is using in his research to understand sepsis.

response by injecting mice with endotoxin, and controls for every factor except genetics. Aided by physiology professor Roger Reeves, his lab has identified the first candidate gene, called macrophage scavenger receptor 1 (MSR1). Although it is a long way off, the next step will be to study the gene in the human population, a complex task given the confounding factors like smoking,

alcohol abuse or underlying disease that differentiate humans. His ultimate goal is preventive medicine. "The idea is if you have a series of markers, you can predict the possibility of kidney or lung failure and monitor it before it actually happens."

De Maio plans to recruit more basic scientists and build a center to study the problem. Meanwhile, he's thinking of

resurrecting his habit of attending rounds and bringing along his cohorts. "It's important for the younger generation to see that what you do in the lab is not just to see your name on a paper," he says. "It's because one day you expect that it can be applied to a person. My rationale is, if I spend 20 years working in the lab and I save one life, I save one more than everybody else." ■

On the Job

Diana Call: Technical Director, Vascular Surgery Lab

"I love to scan, but the patients make the job."

Diana Call first worked in medical photography at Georgetown University Medical Center, but her career took a turn toward vascular imaging after she helped on a project in neurology. By the late '80s, she had learned to do vascular ultrasound and came on staff at Hopkins 10 years ago.

What do vascular sonographers do?

We use ultrasound and noninvasive technology to look at arteries and veins throughout the body, anywhere other than the heart. The field emerged in the late 1970s, and it's growing rapidly—there's a huge short-

age of vascular sonographers—because it's noninvasive and cost effective compared to CT, MRI and angiography.

What kinds of patients do you see?

Patients with strokes, possible aneurysms, blood clots and circulation problems in the legs. We get referrals from all over—we've seen princes and people who live in the area—and many have had interventions elsewhere and come here as a last resort.

How has the technology changed?

Ten years ago, we didn't look at the vessels in the calf or many

of the smaller vessels in the abdomen because the machines weren't good enough to see them. Now it's standard protocol, and when you look in the calf or abdomen long enough, you learn when there's something unusual going on.

Where is the lab heading in the future?

We're now accredited, we have a database and we're working on trying to go digital. Those of us in the field don't want to just correlate with angiography; we actually want vascular ultrasound to become a gold standard in itself. As the surgeons



do more minimally invasive surgery, they're using less contrast, less angiography and that's where we in vascular ultrasound step in.

What's satisfying about the work you do?

We learn something every day because we pool from so many kinds of patients. The things we get to see in the OR aren't being done elsewhere. We work together with physician assistants, nurse practitioners and physicians to help decide how to treat patients, and they are always willing to listen to our suggestions. I love to scan, but the patients make the job. Most of them are elderly, and they all have their own stories to tell. We try to make it a good experience for them, and they remember us. I feel lucky to come home every night knowing I've helped someone. ■

An Inspired Gift

Although she preferred to stay behind the scenes on the house-keeping staff, the young woman periodically had to fill in as a waitress when the New England resort she worked for was short staffed. One of those occasions brought her to the attention of Matt and Rosetta DeVito. The woman (we'll call her "Kelly") approached with her head and hair hanging down and her eyes perpetually averted, trying to hide a severe cleft lip.

"We felt bad," says Rosetta, "and I thought, You know, we could do something for her. We give money here and there. Why not do something like this?"

The DeVitos wanted Kelly to come to Baltimore and be evaluated at Johns Hopkins. Matt, chairman of the Rouse Company at the time, had served on Hopkins' board of trustees. His connections led him to Paul Manson, chief of plastic, reconstructive and maxillo-facial surgery.

The couple approached Kelly through her employer and she



Rosetta and Mathias "Matt" DeVito are supporting the Division of Plastic, Reconstructive and Maxillofacial Surgery.

agreed, somewhat nervously, to the procedure in which tissue from parts of her mouth was grafted to form lips. Two surgeries later, "the result was absolutely extraordinary," says Matt, "not only in what she looked like, but in what she became. She was outgoing, she smiled and held her head up, she became a blonde! In some ways, it was the most rewarding thing we ever did in terms of giving."

That experience was the beginning of a long friendship among Manson, Craig Vander Kolk, director of the cleft and craniofacial program, and the DeVitos, who subsequently supported a camp for children with cleft lips and palates. Recently, the Ruxton couple pledged \$75,000 to fund a national Web

site for cleft lip and palate patients, and to help recruit talented young physicians to the division. Another portion was awarded to surgeon Richard Redett, who is investigating how to improve the ability of nerves to regenerate, work that holds promise in treating children with facial paralysis.

Matt DeVito, now 74 and still the director of several corporations, says enviously of Manson, "Knowing what he does and how he changes people's lives, that must be the most rewarding job in the world." ■

If you'd like to make a gift to the Department of Surgery, contact Boi Carpenter-Mellady, director of development, at 410-516-5483 or bmellady@jhmi.edu. To no longer receive information about supporting Hopkins' Department of Surgery, write to her at One Charles Center, Suite 421, 100 N. Charles St., Baltimore, MD 21201.

"The result was absolutely extraordinary, not only in what she looked like, but in what she became."

MATT DeVITO

UPCOMING LECTURES

March 17: Rienhoff Lecture. **Barbara L. Bass, MD, SACS**, professor of surgery, associate chair for academic affairs and research, University of Maryland School of Medicine. "Maintenance of Board Certification: Why Me?" 7 a.m., Turner Auditorium.

April 19: **Jonathan L. Meakins, OC, MD, DSc, FRCS**, Nuffield Professor of Surgery, University of Oxford, Oxford Radcliffe Hospital, will give the Johns Hopkins-Massachusetts General Hospital Visiting Professor Lectureship. 7 a.m., Turner Auditorium.

April 28: **John Tarpley, MD**, professor of surgery, Vanderbilt University Medical Center. "Alternative Careers in Academic Surgery." Grand Rounds, 7 a.m., Tilghman Auditorium.

May 5: Glick Lectureship. **Joe B. Putnam, MD**, Ingram Professor of Surgery; chair, Department of Thoracic Surgery; professor, Department of Biomedical Informatics, Vanderbilt Clinic. "Thoracic Surgery: An Academic Model for the 21st Century." 7 a.m., Tilghman Auditorium.

FACULTY NEWS

Surgeon **Frederic Eckhauser** recently became a reviewer for the *American Journal of Oncology Review*, which provides oncologists with new presentations of peer-reviewed literature and commentaries from independent experts to help apply research to practice ■ Johns Hopkins Bayview surgeon **John Harmon** will be made an honorary fellow of the Polish Academy of Surgery at the academy's annual meeting, to take place in Bialystok in September ■ Trauma surgeon **Elliott Haut** received an American College of Chest Physicians Young Investigator Award for his abstract "Anemia Management Program Reduces Transfusion Rates and Costs in a Surgical Intensive Care Unit: A Prospective Study" ■ Surgical oncologist **Steven Leach** received a \$200,000 grant from the Lustgarten Foundation for Pancreatic Cancer Research to develop a zebrafish model of pancreatic cancer ■ Plastic surgeon **Rick Redett** reports that his division has completed a cleft lip and palate Web site (www.hopkinscleft.com) containing information on diagnosis and treatment options, feeding, speech and dental issues, as well as postoperative instructions ■ Plastic surgeon **Navin Singh** has been appointed to the editorial board of *Aesthetic Surgery Journal* as statistical editor. He also won the "Best Research Paper Award" at the American Society for Reconstructive Microsurgery ■ Thoracic surgeon **Steven Yang** was elected to the American Association of Thoracic Surgeons.

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