

Perspectives

Julie Freischlag
The Conversation

PAGE 2

Teams at Work

Melanoma Program
Exploring Skin Cancer

PAGE 2



Changing Lives
Through Research

Center for Outcomes Research

PAGE 3

On the Job

David Hunt
Perioperative Safety Nurse

PAGE 3

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“Thank You for Saving Mrs. Scopel”

Rosemary Scopel has the sunny disposition one associates with an elementary school principal. She is, by her own admission, a “glass-is-half-full person.” This year, that optimism was tested by the biggest crisis of her life. She took comfort in her own close-knit family, but she also had a groundswell of support that most of us would envy from her workplace, made up of 489 kids, their parents and teachers.

On a Friday in late January, Scopel, who is the principal of Barnard Elementary School in Troy, Mich., experienced what she thought was a routine stomach virus. But

when her intestinal pain and vomiting stretched into the following week, she knew something else must be wrong. When her doctor noted

that her eyes looked yellow, he sent her to the emergency room, and she was admitted to her local community hospital.

Tests revealed that the head of her pancreas was inflamed and her bile duct was blocked. She was transferred to the University of Michigan Hospital, where doctors told her they couldn't rule out a cancerous tumor. It was an unnerv-

ing time; her physicians sent her home for three weeks to wait for the inflammation in her pancreas to subside before they could perform a biopsy.

“I read too much, way more than I wanted to know, about pancreatic cancer,” says Scopel, who is 56.

The overall mortality rate for pancreatic cancer is 96 percent. The American Cancer Society predicts that about 33,730 Americans will be diagnosed with the disease in 2006, and about 32,300 will die of it. Its symptoms are often silent; by the time most people—some 80 percent—realize anything is wrong, the cancer has already spread to other organs. The remaining 20 percent are candidates for surgery, which is the only chance of cure.

On March 7, four days after her biopsy, Scopel received her diagnosis of cancer. She was still too sick to do much for herself, so her family started researching her options. “We decided to get a second opinion,” recalls Scopel, “and people kept telling us about Johns Hopkins.” The family was referred to surgeon Christopher Wolfgang's office and began the laborious process of collecting Scopel's records. Wolfgang thought the tumor looked operable and told them to come to Baltimore.

Scopel felt an instant connection to Wolfgang. “I'm here to



Rosemary Scopel with some of the students from Barnard Elementary.

tell you that within five minutes I just knew that this was where I wanted my surgery done,” recalls Scopel. “We were so impressed with his thoroughness, confidence and compassion.”

Wolfgang spent one and a half hours with the family, explaining and drawing pictures of the complex operation, called the Whipple procedure, Scopel would undergo. His nurse then took two hours giving the family a tour of the intensive care unit and the Weinberg Building, where Scopel would recover. “We felt so comfortable and prepared,” she says.

On March 23, Scopel underwent a six-hour operation with no complications. Her pathology report showed uninvolved margins and negative lymph nodes. The news couldn't have been better.

While she recuperated, Scopel was flooded daily with cards, pictures, videos, and even food from her school. “The nurses voted my room as ‘most uplifting.’” One day, Wolfgang, who without fail came to visit twice a day, showed her a book of 22 letters he'd received from some of Scopel's second-graders. She could tell he was touched. “Do you know that he wrote back to every one of those kids personally?”

Scopel, who is back at work while receiving her chemotherapy and radiation treatment locally, was greeted with “hugs, kisses and tears” on the first day of school this year. “I always knew I was blessed,” she says, her voice breaking, “but who would've thought there would be this huge network of support.” ■

The Surgeon Speaks

“She had node-negative disease, which is amazing.”

Even though Rosemary Scopel traveled from Michigan for her Whipple or pancreaticoduodenectomy operation, that is not unusual for Hopkins. We have the busiest pancreatic surgery program in the world—we do about 250 Whipples and a total of 400 pancreatic resections a year. Studies have shown that these procedures should be done at high-volume centers. I trained under [surgeon] John Cameron here, who perfected the Whipple and has done more than 1,400. When he started doing this operation, the mortality rate was as high as 20 percent; now it's less than 2 percent.



The goal is to remove the tumor with margins free of cancer. What makes this technically difficult is that a main vein and artery run through the area where the tumor grows. It can be tricky to dissect the tumor off that artery since the space is very small. In cases like Mrs. Scopel's with a large tumor extending into the neck of the pancreas, we take out the distal stomach, the distal bile duct, the gallbladder, duodenum, and, of course, the tumor. Then we reconstruct the intestinal tract.

The good news for Mrs. Scopel is that her pathology report shows that her margins were negative, and she had all 19 lymph nodes negative for cancer. She turned out to have node-negative disease, which is amazing. It's the minority.

It's been rewarding to care for her: It's not every day I receive letters from kids. Her school also donated about \$900 on her behalf for pancreatic cancer research. It points out what a special lady she is. ■

— Christopher Wolfgang



From Julie Freischlag
Director of Surgery

The Conversation

For years we've been taking time out at the beginning of an operation to make sure we're doing the right procedure in the right place with the right intent. Within the last few months at Hopkins, we've expanded the time-out to address the nuances. It's a checklist we run through before and after surgery that we call briefing/debriefing. Using the tool, we check to see if antibiotics were administered or if the equipment we need is in the room. Afterwards, there's a chance to evaluate the case, make sure specimens are properly labeled and discuss the plan for transition to intensive care.

Some people wonder if it makes a difference to have this conversation. I see it as a preventive measure. Even if it avoids just one or two errors a year, it would be worth it.

But there are other ways it improves the OR environment. When we make sure we all know each other's names, it makes teamwork easier. We feel freer to ask questions and raise concerns. It creates a less stressful workplace where people enjoy their jobs; that may even lead to better faculty and staff retention.

I think that having this conversation probably saves time as well. I've already noticed that by making sure we have the equipment we need from the start, we can avoid surprises that make us wait during surgery. The shorter the operation, the less chance of infection there is for the patient. Plus, it gives us more time to do more procedures.

Our new perioperative safety nurse, David Hunt (see page 3), has produced a video on the briefing/debriefing that was shown at Grand Rounds last month. In the future, all new employees and residents will view it as well. This month, we'll be presenting the video at the American College of Surgeons meeting, where we will also run a panel on the topic. This suggests to me that when it comes to having conversations in the OR, Hopkins is leading the pack. ■

Exploring Skin Cancer

A deep research bench will distinguish a new center.

The Program: Researchers and clinicians at Johns Hopkins have been teaming up to work on melanoma for years. But until June 1, there was never a formal program. "Now we have an official structure and a new mission," says the program's new director, Suzanne Topalian, "which is the translation of basic science into the clinic." This status means that the Hopkins Melanoma Program is integrated with the Sidney Kimmel Comprehensive Cancer Center and is supported by its core resources for clinical and basic research.

Hopkins sees approximately 250 to 300 patients a year with melanoma, a severe form of skin cancer that is prone to spread. It accounts for only 4 percent of new skin cancer cases in the United States annually, but about 80 percent of skin cancer deaths.

The Melanoma Program has a network of cooperating clinics. Most patients with a primary skin lesion are evaluated by a dermatologist first for biopsy and diagnosis, then referred for further care according to their stage of disease. Those with early disease that is limited to the skin or has spread to draining lymph nodes are seen by surgery. Medical oncologists address more advanced cases. Patients who have failed traditional treatments are offered access to clinical trials.

Topalian, who left the National Cancer Institute to join Hopkins this summer, points out that, in fact, the strength of the program "is going to rest on the science that we have available here on campus, which is, in my opinion, unparalleled."

She has studied the anti-tumor immune response in melanoma patients for more than 20 years and discovered important information on the development of immune-based treatments for melanoma and other cancers. Here, she'll continue with her basic research and spend the majority of her time translating scientific discoveries into clinical trials.

Surgeon Charles Balch, a world-renowned expert in the clinical care of melanoma patients and a pioneer in the area of sentinel lymph node biopsy, also is heading up a clinical trials group within



Suzanne Topalian (left) and a scientific meeting of the Hopkins Melanoma Program.



the department. Balch recently established that the presence of even microscopic tumor in the draining lymph nodes has a strong influence on a patient's prognosis. He will be participating in a national, multicenter study to look at what should be done with the information from lymph node biopsies. Will removing the lymph nodes be of sufficient long-term benefit for the patient to outweigh the risks?

The Players: Because caring for melanoma patients can be complex, it requires a team management approach. Topalian, Balch and Julie Lange, who is a clinical co-director of the Melanoma Program, make up the surgical oncology group. Others who attend weekly multidisciplinary conferences include dermatologists, plastic surgeons, head and neck surgeons, medical and radiation oncologists, radiologists, ophthalmologists, dermatopathologists and surgical pathologists. Physicians with practices at Hopkins' Green Spring Station and the Bayview Medical Center also attend these meetings.

"The correct diagnosis is the key to

everything in these challenging cases," says Topalian. "Sometimes you have to do more intensive investigations that involve molecular biology approaches. You may have to go beyond the standard, garden-variety slide staining to get to the bottom of it."

The Results: While practitioners currently offer excellent patient care, clinical trials recently opened or under development look to the future. One is a blood collection study from patients with metastatic melanoma to see if a particular protein in the blood correlates with the presence of melanoma. Another trial is evaluating whether a new oral cancer medicine helps chemotherapy work better in patients with advanced disease. There are also studies to evaluate melanoma vaccines and agents that modulate the activity of the anti-melanoma immune response. "I do believe that we're positioned to do great things," says Topalian. ■

For more information, go to www.hopkinsmelanoma.org, or call patient coordinator Robin Lewis at 410-614-1022.

Let's Meet: James Black and Thomas Reifsnyder

Although they are both vascular surgeons, Jim Black and Tom Reifsnyder specialize in different operations and are at different points in their careers. Black, who joined the faculty in July 2004 (he finished his general surgery residency at Hopkins in 2002), has just begun his practice. After 12 years in private practice, Reifsnyder made a mid-career move here in January.

Black finds himself in the unusual position of performing more open vascular than endovascular surgery. "Most vascular practices are going the other way," he says. Black specializes in complex aortic surgery, repairing thoracic and thoracoabdominal aneurysms during challenging operations that last all day. Many of his patients have Marfan or Loeys-Dietz syndrome. Black works with medical genetics, as well as with cardiology, cardiac surgery and radiology. "It takes a team to properly diagnose and triage these patients." He plans to collaborate with medical geneticist Hal Dietz on research on connective tissue disease.

After more than a decade in private practice in Pittsburgh, where he was affiliated with Western Pennsylvania Hospital, Reifsnyder joins Hopkins as chief of vascular surgery at Bayview Medical Center. His first months have been spent building an "almost non-existent" division from scratch; he has hired support staff, found a director for the vascular lab and gotten the vascular clinic up and running. His forte is performing limb salvage surgery on the lower extremity. "If you've done a lot of it and can do it efficiently and with sophistication, you can save most of those legs," he says. He is also a believer in the physical examination. "Ninety-five percent of the time, if you talk to and examine the patient, you know what the disease is and what you have to do to fix it." For one of his first research projects, he plans to study whether vein maps are necessary before operating on patients to create dialysis access. ■



James Black



Tom Reifsnyder

A Marriage of Surgery and Public Health

There is a palpable sense of retribution in Martin Makary's quiet, deliberate voice when he tells of how as a future surgeon "I was almost laughed out of my medical school class" for taking the time to get a master's degree in public health. His decision was born out of his love of statistics and, particularly, the statistical science of medical errors. The idea of preventable harm in the operating room seemed like "the perfect application of public health principles of prevention in a highly technical environment." That background led to an interest in measuring hospital quality and, particularly, outcomes research. Today, he finds himself perfectly placed in a wide-open field that is suddenly in the spotlight at national surgical meetings and prestigious academic hospitals.

On Sept. 1, the Department of Surgery launched its Center for Outcomes Research and put Makary in charge. "We are

going to build a center where people can go to pose surgical questions from their observations and collaborate with mentors in the [Bloomberg] School of Public Health," says the young assistant professor. "That's our mission."

Whereas traditionally measures like laboratory tests were used to judge the end results of a health care intervention, outcomes research

measures how people function after leaving the hospital and their experiences with care—often the things that matter most to patients. Using national databases, Makary

is studying the impact of minimally invasive surgery, as well as transplant and vascular surgery, on outcomes. For another grant, he is looking at the safety of surgery in the elderly to see if frailty influences surgical outcomes.

When Makary is not working on his own projects, he is running the center (he still spends half his time in the



Martin Makary on outcomes research: "There's a lot of momentum in the field right now. So much of what we do is high profile and the stakes are big."

"We are going to build a center where people can go to pose surgical questions from their observations. That's our mission"

operating room, specializing in pancreas surgery and advanced laparoscopy). There is no shortage of interest; already several residents and medical students are doing formal course work in public health. "People are hungry for this stuff," says Makary.

One of the center's main initiatives is participation in the National Surgical Quality Improvement Program. Led by the American College of Surgeons, the program tracks patient outcomes on a national basis, then makes the data available so that areas of improvement can be quickly identified and fixed. There are about 100 participating hospitals.

Among its services, the cen-

ter will offer biostatistical and grant support and is also creating forums for those who want to collaborate on specific topics; groups already exist on quality-of-life and foregut issues, national databases and Medicare policy. It will also create a conceptual database library, bringing together the nation's big databases, and aid people on how to make queries. "We as doctors tend to have the great clinical questions, but these obstacles sometimes prevent us from doing great work, especially when we're taking about busy surgeons."

Makary does not believe in doing research for the sake of producing research, and he

clearly would like to make an impact with his work some day. "Traditionally, surgeons have not been politically active," says the Washington, D.C., resident. "They've focused on what they do best, like operations. Now we're realizing that unless we voice our concerns, Medicare will continue to be cut every year, there will be no hope for malpractice reform, and we'll have more formalized policies and procedures that are handed to us and not developed from within our field. Those are some of the areas I'm passionate about, and I hope they'll fuel some of the project ideas the students run with." ■

On the Job

David Hunt, Perioperative Safety Nurse

Raised in England, David Hunt came to the United States in 1994 and landed at Johns Hopkins as a critical care nurse in cardiac surgery. There he stayed, eventually rising to become the clinical educator for the cardiac SICU. Recently, when leaders in the Department of Surgery created a new position of perioperative safety nurse, they approached Hunt. He started the new job on July 1.

What will you be doing in your new role?

I'm working directly with the operating room teams, the pre-admission and post-anesthesia care units to look at and drive some of the quality and safety projects that are being done in those areas. I'm also working closely with a multicenter collaborative that includes Yale, New York Presbyterian, Columbia, Cornell and Rochester hospitals. It will address organizational safety culture, reduction in specimen-related problems, surgery-related infections and effective strategies to combat deep

venous thrombosis and pulmonary embolism.

Is there such a thing as a typical day for you?

No. One of my most important jobs is to be in the operating and recovery rooms, meeting and talking with teams. People have been great. Since day one they have been coming and telling me stories—very strong and compelling stories.

What about?

Most of them involve challenges with communication between disciplines. Certainly senior management is creating systems by which we commu-



nicate with one another on an equal basis, such as the briefing/debriefing checklist during surgery. While everyone sees the importance of this, it remains a challenge because we're asking people in a busy, time-limited environment to

slow down. It's a big change and it takes time and patience. But in a perioperative environment, everybody has an important voice when it comes to patient care and patient safety.

Have you set particular goals?

To effectively track and reduce surgical site infections, to reduce the incidence of venous thromboembolism in the perioperative environment, to help perioperative teams communicate more effectively and to be an advocate for patient and staff safety. I want people to know me by first name and come to me with their issues and concerns. ■

Aiding Pancreatic Cancer Research

When the test results came back from Cornell, Joel Cohen immediately consulted his trusted internist in Manhattan. What's the next step when you've been told you have pancreatic cancer, Cohen asked. "He said the best man in the world on this subject was Dr. John Cameron at Johns Hopkins," he recalls, "so we made an appointment."

Cameron confirmed the diagnosis and scheduled Cohen for his signature operation, a pancreaticoduodenectomy or Whipple procedure (see page 1).

Cohen's wife, Lillian, felt a boost in confidence after meeting Cameron. "He was very upbeat, although he didn't make us any promises. I had this strong feeling that we were in very good hands, the best place we could be."

After the six-hour surgery, Cameron came out of the OR beaming. "I'll never forget it," says

Lillian. Cohen had an islet cell tumor, a rare, slow-growing cancer of the endocrine pancreas (95 percent of pancreatic cancers begin in the exocrine pancreas). Cameron told the family that he had gotten all of the tumor out with good margins.

Cohen's stay in the hospital (his first) tied a record at five days, although even now, three and a half years later, he hasn't forgotten the experience. "When my nurse said I had to get out of bed the day after the operation,

I said, You must be kidding me," Cohen says. "They were tough, but also helpful and nice. Everybody, from the maintenance staff to the doctors, they were just really terrific."

Cohen now gets follow-up CT scans every six months in New York. He only returned to Hopkins a year ago after getting an invitation to tour Cameron's labs. The

"He was very upbeat. I had this strong feeling that we were in very good hands, the best place we could be."



Joel and Lillian Cohen gave \$1 million to Hopkins because of "the fact that I'm still alive frankly," says Joel.

Cohens were now all too aware of what a devastating disease pancreatic cancer can be. They decided to give \$1 million for research. This year, the gift is providing funding for Jon Davisson, who conducts studies with zebrafish in surgical oncologist Steven Leach's lab.

Cohen, now 68, is enjoying a full life. After his surgery, the former lawyer started an independent investment banking firm called Sagent Advisors that now employs

60 people. "I like interacting with people," he says. "I like buying and selling companies. I like the people I work with." Cohen has tried retirement more than once, but says he doesn't like it much. "I've got to keep busy. It's good for you." ■

To make a gift to the Department of Surgery, contact Boi Carpenter-Mellady at 410-516-5483 or bmellady@jhmi.edu. To no longer receive information about supporting the department, contact her using the information above.

FACULTY NEWS

Steven Leach, chief of surgical oncology, received a \$750,000 grant from the Lustgarten Foundation for pancreatic cancer research to support drug discovery studies using a new zebrafish model of pancreatic cancer developed in his lab ■ **Paul Manson**, chief of plastic surgery, stepped down in May as president of the American Association of Plastic Surgeons ■ **Bruce Perler**, director of vascular surgery, has been named president of the Eastern Vascular Society ■ **Robert Scheu**, R.N., has joined the department as director of perioperative services. He will be organizing processes and scheduling in all perioperative areas. Scheu held a similar position at Pennsylvania Hospital.

GENERAL SURGERY REORGANIZED

Once divided into the gold and blue services, the Division of General Surgery has been restructured into smaller entities to help facilitate the 80-hour workweek for residents. They are named for chairs in the department.

The Cameron Service will cover pancreatic and gastrointestinal surgery and will be headed by **Richard Schulick**. Faculty on that service include **Nita Ahuja**, **John Cameron**, **Kurtis Campbell**, **Steven Leach** and **Christopher Wolfgang**.

Michael Choti is chief of the Handelsman Service, covering surgical oncology. The team includes liver specialist **Timothy Pawlik**, breast surgeons **Ted Tsangaris** and **Lisa Jacobs**, melanoma specialists **Suzanne Topalian**, **Charles Balch** and **Julie Lange**, and endocrine surgeons **Martha Zeiger** and **Alan Dackiw**.

Frederic Eckhauser occupies the Mark Ravitch chair and is chief of the Ravitch Service. In addition to Eckhauser, faculty include **Susan Gearhart**, **Anne Lidor**, **Martin Makary** and **Michael Marohn**. ■

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