

# Alumnus Profile

## Gerald J. Marks, MD '49

### An Artist Inside and Outside the Operating Room

"Without my patients, I am nothing."

Since graduating from Jefferson 66 years ago, Gerald Marks, MD '49, has forged an extraordinary career that has opened countless doors and taken him across the country and around the globe. But no experience has fulfilled him as much as caring for and building relationships with his patients, which he calls "the most glorious opportunity in the world."

Marks has done wonders for many of those patients, who have traveled from near and far for decades to obtain his care. A renowned colorectal surgeon, he has pioneered techniques that forever changed standards for the diagnosis and management of rectal cancer — techniques that have drastically improved both survival rates and quality of life for those suffering with the disease.

Among his most groundbreaking surgical developments have been two procedures: combined abdominal trans-sacral resection of the rectum (CATS), introduced in 1960, and transanal abdominal/transanal radical proctosigmoidectomy with coloanal anastomosis (TATA), introduced in 1984. These methods have proved invaluable in that they enable the preservation of sphincter function following rectal surgery.

"The dominant issue for rectal cancer patients is psychological — the fear of having a permanent colostomy. They are so fearful that they will try to avoid the doctor altogether," Marks says. "Seeing this during my residency made me want to find a way to preserve normal function for these patients. I didn't know how I would do it, but I was going to figure it out."

#### A Career Takes Shape

Marks had plenty of exposure to rectal surgery through his experience as the private resident of Thomas A. Shallow, MD, the Samuel D. Gross Professor of Surgery at Jefferson and one of the most prolific surgeons in the Philadelphia region in the early 1950s. He completed his training

under the legendary John H. Gibbon, Jr., MD '27, who was impressed by pulmonary physiology research Marks had conducted while serving in the U.S. Air Force during his internship — and therefore urged him to consider becoming Jefferson's first anesthesiologist.

But Marks was committed to continuing surgery and following his passion of helping rectal cancer patients, a passion he realized as the result of what he refers to as "many happy accidents." One early "accident" stemmed from his enlistment in the U.S. Navy during World War II. He completed one semester at Villanova University before turning 18 and leaving for boot camp, after which the Navy offered him the choice of enrolling in the Naval Academy in Annapolis, Md., or returning to Villanova for pre-medical studies. He chose the latter, and the Navy subsequently sent him to Jefferson.

"Had I been born a year sooner or later, perhaps I never would have been able to become a physician," he says. "The Second World War and its timing made my career possible."

Postgraduate training in Shallow's operating room influenced Marks' life personally as much as professionally; there, he worked side by side with Shallow's "stunning" suture nurse, a 1947 graduate of the Jefferson School of Nursing named Barbara Ann Hendershot (who happened to be the grand-niece of J. Parsons Schaeffer, MD, PhD, iconic professor of anatomy and director of the Daniel Baugh Institute of Anatomy at Jefferson). Meeting Barbara was another event that led to good fortune; the couple fell in love and married in 1950.

A few years later, the arrival of Simon Kramer, MD, from London as the founding chair of Jefferson's Department of Radiation Oncology further shaped Marks' life and career.

"I was chief resident when Simon Kramer came over, and meeting him was

also a happy accident. Our friendship led me to develop pre-operative radiation for rectal cancer," Marks says. One of the defining achievements of Marks' career, his treatment of rectal cancer patients with high-dose neo-adjuvant radiation began in collaboration with Kramer and expanded through his work as a Jefferson faculty member. In 1976, Marks initiated the first program and study involving the use of high-dose pre-operative radiation in combination with his CATS method of sphincter preservation surgery, and "the data were striking," showing drastically improved survival rates.

"Traditionally, surgeons were taught that rectal cancer would not respond to radiation. We proved them wrong," Marks says. "The surgical community rejected this for many years, but we knew we had the goods."

#### Beyond Surgery

In parallel with his work to improve surgical protocols, Marks was becoming a frontrunner in uncovering the value of colonoscopy in the diagnosis and treatment of rectal disorders. Using his own savings (and keeping it a secret from his wife), in 1969 he purchased the first flexible model colonoscope in the United States.

"I saw this new flexible instrument and thought, 'I have to have it to investigate radiation injuries of the colon,'" he remembers. "I didn't immediately sense the clinical importance of colonoscopy. Removing polyps during colonoscopy demonstrated the power of this instrument, which so changed my life."

Under the auspices of the dean's office at Jefferson, Marks co-chaired and directed the first-ever colonoscopy conference in 1974; he followed it with another successful symposium two years later. His influence extended nationally and internationally as he went on to serve as founding president of the Society of American Gastrointestinal Endoscopic Surgeons



Examples of Marks' watercolor paintings.  
Top, Isola di Burano, Venice, Italy.  
Bottom, Tigertail Beach, Marco Island, Fla.



Photo by Bill Cain.

(SAGES) — which became the largest general surgery society in the United States — and later as founding president of the International Federation of Societies of Endoscopic Surgeons (IFSES), a group representing more than 100,000 surgeons worldwide.

As he passed all of these milestones, Marks was simultaneously climbing the ranks to full professor at Jefferson. In the late 1960s, he was instrumental in forming the Jefferson Volunteer Faculty Association, which became a model for medical schools nationwide. Determined to build an official colorectal cancer program on campus, with the shared vision of Dean Joseph Gonnella, MD, he established a formal Division of Colorectal Surgery and colorectal surgery residency training program in 1984, the same year he created the Comprehensive Rectal Cancer Center, Jefferson's first multidisciplinary cancer unit. He also nurtured a relationship between Jefferson and the University of Rome, a structured scientific and cultural partnership that led to collaborative training and meetings. In 1992, the Gerald J. Marks Professorship of Colorectal Surgery — the first such professorship — was established at Jefferson.

Marks also served as founding chief of the Section of Colorectal Surgery at Pennsylvania Hospital and subsequently

at Hahnemann University Hospital; he held full professorships at both Penn and Drexel. In 1998, he and his son and partner, John H Marks, MD '89 — a colorectal surgeon and minimally invasive surgery expert who is now director of the Colorectal Surgery Center and chief of the Section of Colorectal Surgery for Main Line Health — established Marks Colorectal Surgical Associates at Lankenau Hospital in Wynnewood, Pa., where they continue to practice today. Their team, using its signature methods, boasts an 86 percent five-year survival rate and a 5.3 percent local recurrence rate for rectal cancer patients — figures significantly better than national averages. They also lead the Marks Colorectal Surgical Foundation, which supports colorectal surgical research and education.

#### The Ultimate Art Form

Marks' illustrious career has not prevented him from pursuing interests beyond the clinic. He and Barbara raised three sons: John as well as Richard M Marks, MD '88, now an orthopaedic surgeon at the Medical College of Wisconsin, and James M Marks, who works in finance in suburban Philadelphia.

As children, the boys were all athletic, and Marks joined in many of their activities. At 90, he continues to play golf and

tennis; he and Richard have ranked in the National Super Senior Father and Son Tennis Championships. Time on the tennis court and the golf course has helped Marks cope with the passing of Barbara, who died in August 2013.

Perhaps his greatest gratification outside of patient care comes from watercolor painting. A recognized and published watercolorist, Marks has shown his work nationally and internationally. Currently, a combined exhibit with the oil paintings of his colleague Patricia Wong, MD, hangs in Lankenau's Annenberg Center for Medical Education.

"Being an artist is a gift," Marks says. "It makes you look at the world differently. When driving to work, most people see the road and the traffic. Me? I see the sun, the sky and the ever-changing forms and contrasts of color and light."

Marks says he would consider himself an artist with or without his watercolor talent, for he feels surgery to be the ultimate visual and performance art form.

"The art of surgery combined with a true sense of fulfillment in caring for patients is truly a blessing beyond my wildest dreams."

— Karen L. Brooks