

OPHTHALMIC PIONEER GEORGE WARING III PASSES AWAY AT AGE 73

George Waring III, MD, FRCOphth, who was influential in getting excimer laser vision correction surgery approved in the United States, passed away on January 27, 2015, at the age of 73.

Dr. Waring's career in ophthalmology spanned more than 30 years. Born in Buffalo, New York, he received his doctorate from Baylor Medical College in Houston. His ophthalmology training included a residency, followed by a Heed Fellowship in corneal disease and surgery at Wills Eye Hospital in Philadelphia.

Dr. Waring started his academic career in 1974, when he began teaching at University of California, Davis. There, he established the first eye bank in Northern California. In 1979, he joined the faculty at Emory University in Atlanta, where he would later become the school's professor emeritus of ophthalmology.

According to his biography on the Woodhams Eye Clinic's website,¹ in 1992, Dr. Waring received a National Institutes of Health Fogarty International Scholars Award to conduct research on laser corneal surgery at Hotel Dieu Hospital in Paris. From 1993 to 1995, he served as chairman of the Department of Ophthalmology and director of research at the Al-Magrabi Eye Hospital in Jeddah, Saudi Arabia, where he helped to develop the LASIK procedure.

He was a founder and managing director of the privately owned Vision Correction Group (Emory Vision/InView Vision Center) from 1994 to 2004. Starting in 2003 until his death, he practiced privately in Atlanta at the InView Center.

Among his many accomplishments, Dr. Waring's research included National Institutes of Health grants to study radial keratotomy (as national director of the Prospective Evaluation of Radial Keratotomy [PERK] Study) and excimer laser corneal surgery. He presented the data to the FDA that led to the first FDA-approved clinical excimer laser vision correction surgery in the United States. As the principal investigator of the Emory-sponsored studies of LASIK, he received the first physician-sponsored investigational device exemption from the FDA.

Dr. Waring published more than 500 articles and two textbooks. He received three American Academy of Ophthalmology Honor Awards and the Lifetime



Achievement Award from the International Society of Refractive Surgery.

In addition to his ophthalmic accomplishments, Dr. Waring was also known to enjoy sporting and outdoor activities. He was an avid snow skier and enjoyed squash, hiking, climbing, diving, and kayaking.

He is survived by four children, George O. IV, John Timothy, Joy Ailene, and Matthew George.

1. Woodhams Eye Clinic. <http://www.woodhamseye.com/GeorgeO.WaringIII-117>. Accessed February 2, 2015.

COLLEAGUES SHARE MEMORIES OF “ONE-OF-A-KIND” PHYSICIAN AND FRIEND

To those who practice ophthalmology, the academic and professional accomplishments of George

Waring III, MD, FRCOphth, distinguish him as one of the most influential contributors to the profession in the past 30 years. For those who knew Dr. Waring personally, however, his greatest qualities may be the free spirit and graciousness he showed in everyday life. After his death, several leading physicians and colleagues, without solicitation, started an e-mail chain to exchange personal stories of Dr. Waring's impact on each of them. With permission, *CRST* is publishing snippets of those messages.

Stephen Slade, MD, of Slade and Baker Vision in Houston

I first met George Waring III when I was interviewing for a corneal fellowship at Emory University. My last interview was with George. He was junior faculty in a tiny office, and he had a sleeping bag on the floor. I asked him about it. He was sleeping in the office to get more time to finish his RK [radial keratotomy] book,¹ which was massive if you have never seen it. He almost made me want to go there just to study with him. Years later when I abruptly decided to leave my first job under unpleasant circumstances, within about 30 minutes, somehow George found out, called, and offered me a partnership with him and his group. There's nothing like someone wanting you when you are alone.

George had a classic liberal arts education and taught me much more than any English teacher I ever had. He was one the best speakers I ever heard. One year at Aspen, his slides would not work, and he gave the entire talk, enthusiastically and perfectly, without them. It was mesmerizing. He lived up to his middle name, Oral.

Who could ever replace him? He lived as much as five people, offered me a job when I needed one, was my relationship counselor, took me heli-skiing, [and] made me laugh. A true, fun, gentle giant in our field.

I don't see anyone like him coming along again in my lifetime.

John A. Vukich, MD, partner at the Davis Duehr Dean Center for Refractive Surgery in Madison, Wisconsin

I was a third-year medical student at Emory when I met George while working in the department. Our friendship goes back to the very beginning of my career. It was during the "waking up blind" period, a very dark chapter in academic ophthalmology.² As busy as he was, he had time for a medical student.

George was famously eloquent. Much of what he "wrote" was dictated. He always had a microcassette with him, and he was constantly writing. The elevator would go quiet when George got in, and he would dictate a full page of a book chapter between floors while everyone listened. This was a daily occurrence. He never stopped. Early on, he casually said to me that the common denominator

of people who make a difference is what they accomplish in the last 2 hours before they go to bed. He lived by this philosophy.

George wrote a letter of recommendation for me that was the topic of every residency interview I went on. He dictated it in front of me as we walked together from his office to his car. This was the start of a 30-year friendship.

William F. Wiley, MD, Medical Director, Cleveland Eye Clinic

When I interviewed for residencies in 1997, I remember distinctly my visit to Emory. My father was a huge fan of George, and I had heard his name mentioned hundreds of times as I was growing up. I could not wait for my visit to Emory: the home of the renowned Dr. Waring. I remember interviewing with many of the department heads at the time. Unfortunately, I did not interview with George at that visit. I did ask a few times of some of the others attending, "How much interaction do the residents have with refractive surgery? And will we get to work with Dr. Waring? As a patient of RK, which my father performed on me, it would be a great honor to work as a resident under Dr. Waring." Needless to say, that was probably not the best thing to say to the uveitis or neuroophthalmology specialist whom I was interviewing with



Pictured from left to right, Dr. Wiley, Dr. Waring III, and Dr. Waring IV.

"I don't see anyone like him coming along again in my lifetime."

—Stephen Slade, MD

at the time. I was a bit naïve about academic politics and the relative infancy of refractive surgery in our field at the time. George was truly a pioneer and moved the market that we are all currently working in.

More recently, I had the honor of having George Waring III and George Waring IV visit our center in Cleveland. My whole staff thought I was a rock star to have two world-famous eye doctors visiting. Our senior laser technician, who started in ophthalmology through working with RK, sent me the following text: "I saw Waring this summer. I loved his passion and personality, very inspiring eye man. I loved him. He paid me the highest compliment a technician could every want. Makes all the hard work worth it!" My optometrist quickly ran home and grabbed his RK book for George to sign. George also made sure to prod all of us during his visit: "You have to publish the work you are doing. ... You mean to tell me you have data on CXL [corneal collagen cross-linking] and RK and it's not published?" Just 2 weeks ago, we had another surgeon visit who had recently seen George. The surgeon told us, "I am supposed to pass on a message from Dr. Waring. He asks how is the topography-guided study going? Is it ready for publication yet?"

Nancy Hayes, Administrative Assistant to Dr. Waring

I spent 20+ years with George Waring, side by side, almost every single day, unless he was climbing a mountain, heli-skiing, or enjoying some other kind of global adventure. I read with a smile on my face the comment about him that he always had a recorder in his hands, always dictating something. Well, I'm the person who typed up those thousands of dictation tapes. When he promised you something, I'm usually the one who made sure he didn't forget that promise to you. Or, if he dictated about wanting a Sherpa waiting at a certain elevation on a mountain climb with steel cut oatmeal, yes, I would be making those arrangements. If asked right now, I'm sure he would be the first to agree with that.

In so doing, the most amazing thing happened. Some of my best friends for life are people I met because of Dr. Waring. I couldn't begin to name them all for fear of

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—John A. Vukich, MD

leaving someone out. Katherine Garrett, his editor, will always be one of my very closest friends. Then, there are the physicians that I keep in touch with to this day, Robert Maloney, MD, and Price Kloess, MD, to name just a couple. Those of you physicians who came in and out of his world know what I mean. If you spent time with him at Emory, you met the cream of the crop—wicked smart, hilarious, absolutely a joy to be with. Those were the people who wanted to spend time with him and learn from him. And, I got to know each and every one of you.

And, no way can I leave out his kids. I watched George, Tim, and Joy grow up. How it thrills me to see how they have turned out! The last time we talked, he mentioned the book of letters that were compiled for his surprise 60th birthday party. If you wrote him a letter for that book, please know that he still would pull it out sometimes and have some chuckles or shed some tears over the kind words you wrote to him. We all have lots and lots of good Dr. Waring stories; some we can share, and some we can't. My life is so much richer having been in his orbit.

Stephen C. Coleman, MD, Director of Coleman Vision in Albuquerque, New Mexico

I'm heartbroken ... but for very selfish reasons. I didn't know George really at all, aside from Aspen, 15 years' worth. For me, at big meetings, he was almost too big, in a Bon Jovi kind of way—a very, very big deal and rightly so. Four years ago, we were talking after the morning session in Aspen, and he put his arm around me and said, "Steve (in that big booming voice), I see what you're trying to do here on Monday nights, and it's great, just great." Being late to the game, and this being George Waring, completely freaked me out.

That afternoon, Erica and I happened to get off the ski lift at Aspen Highlands about three chairs behind George. He had spoken to the ski school for the blind and was skiing blindfolded, with a group of blind teenagers, making his turns going downhill as the instructor barked orders from behind. He wanted to feel what it was like to ski without being able to see. Erica asked, "Who's that?" I said, "That's George Waring. He's a living legend."

EULOGY, FEBRUARY 21, 2015

BY ROBERT K. MALONEY, MD, DIRECTOR OF THE MALONEY VISION INSTITUTE IN LOS ANGELES

When George Oral Waring III passed away last month, there was a collective cry of sadness and loss and appreciation from the community of eye surgeons. Tributes to him appeared in articles and blogs, interviews and bulletin boards. It was unprecedented in my lifetime. I was a bit puzzled. Other great ophthalmologists have died, too, yet none had received such fanfare.

Many remembered him for his contributions to our field, a few of which I list:

- The PERK [Prospective Evaluation of Radial Keratotomy] Study, the first major study of a vision correction procedure
- His book *Refractive Keratotomy*,¹ the greatest book ever published in the specialty of refractive surgery
- The *Journal of Refractive Surgery*, which he edited for 21 years
- The first approval of a laser for vision correction in the United States, for which he was a principal investigator and for which he presented the data to the FDA
- Uniform standards for reporting refractive surgical results
- The word *LASIK*, which George coined
- 259 publications of various sorts in peer-reviewed journals
- Invited lectures in more than 60 countries
- A medal named after him, the Waring Medal, given every year to a young investigator. Even more remarkably, the medal was established while he was still alive

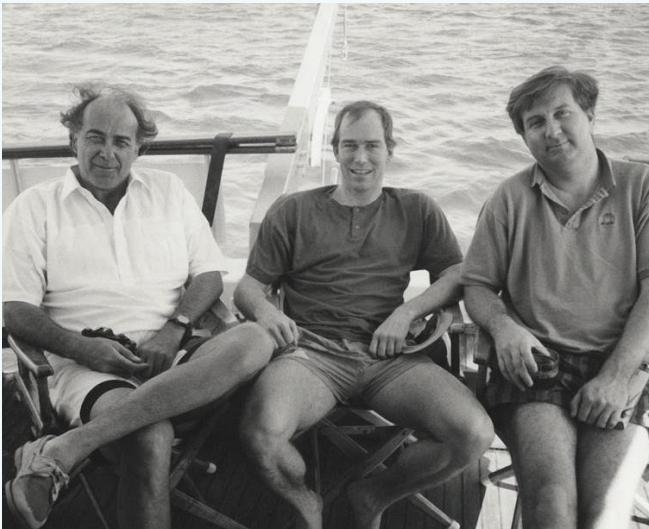
These accomplishments, though amazing, are not the reason his passing received so much attention. Many of the tributes recalled how unique George was. He was the only person we knew who would kayak to his wedding in a waterproof tuxedo. Who else would make a first ascent of a peak in Nepal but only after he had his secretary hire a Sherpa to deliver his favorite granola to base camp? Better than anyone, he could explain the most complex topic simply. He had a Dictaphone surgically implanted in his left wrist. He could cram 18 hours of work and 12 hours of play into a single day. He offended people by speaking the truth about bad ideas. His eyes would twinkle when he said something provocative, inviting us to react. He slept in a sleeping bag in his office for days at a time so he could get more work done. He reached out with encouraging words for young

investigators wherever he went in the world. He had a glowing warmth for us, his friends. His infectious enthusiasm made ophthalmology the most exciting thing in the world when we came into his orbit.

Many of these tributes recalled George's fearlessness. Most of us decide in adolescence that there are whole areas of human endeavor that we are no good at. I can't sing. I can't dance. I can't speak in front of an audience. I'm not an athlete. We stop doing these things because we don't [want] to venture into areas where people could judge us and find us wanting. George missed that important developmental milestone. He delighted in trying everything. He kayaked, mountain climbed, heli-skied, scuba-dived, collected African art and Italian art, became a jazz connoisseur, moved to Paris, moved back to Atlanta, moved to Saudi Arabia. He once said, "I don't take chances. I take risks. Risks are calculated."

In adolescence, most of us spend a lot of time worrying about what other people think of us. George missed that developmental milestone also. One day, George and I were scheduled to play squash. At the last possible moment, George showed up at the squash court. He stripped down to his underwear in the public hallway and put on his squash clothes. He didn't want to waste the time walking to the men's locker room and back to change. It didn't bother him at all that somebody might see an Emory professor in his skivvies in public. He had almost no fear of embarrassment. He was unafraid to make unusual choices to make his life better, regardless of what others may think.

I loved George in part because I owe my career to him. I had applied to George's fellowship because I wanted an academic career, and his fellowship program included an extra year of research. He offered, and I accepted a spot in his program. Then, I changed my mind; I had become disillusioned with the petty politics of my residency program and decided that I didn't want to be a professor after all. I certainly didn't want to waste an extra year doing research. I called George with great trepidation and broke the news that I [had] decided to look at my options elsewhere. I was sure that he would be furious, because I had taken a spot he could have given to some other highly qualified applicant. I expected a severe dressing down. Instead, I got a sympathetic ear. We had a long talk about my career goals, my disillusionment



Pictured from left to right, Dr. Waring, Dr. Maloney, and Peter McDonnell, MD, on the Red Sea for scuba diving.

with academics, and he blessed my search to find the right path for me. George connected to me that day in a deeply human way. In talking to him, I found again the excitement of discovery and the joy of a great teacher. He was everything I hoped a university professor would be. In the end, there was no one in the world I would rather work with. I spent 2 wonderful years with him and went on to a faculty appointment myself. I've had the richest career I can possibly imagine, thanks to him.

There's the answer: the extraordinary outpouring of emotion after his death reflected how many people he had profoundly touched, as he had touched me. You see, George had missed another developmental milestone in adolescence: he had failed to build layers of pretense and protection around his true self. His most remarkable act of fearlessness was that he held his heart and soul right up front, just below the surface, ready to touch and be touched by anyone who cared to connect. He was human in a way that few are.

His achievements were extraordinary, but a few others have achieved amazing things. What made him unique was that his spectacular career was just a vehicle to connect him to people. His achievements were the game he played so he could touch, inspire, and encourage people of all ages, all over the world. His life holds a lesson for all of us: be fearless in connection, fearless in passion, and fearless in creating a life that is completely unique.

1. Waring III GO. *Refractive Keratotomy for Myopia and Astigmatism*. St. Louis, MO: Mosby-Year Book; 1991.

"He became my biggest champion—both personally and professionally—a close friend, and a confidant. I could trust him implicitly and would use him as my primary sounding board when I needed advice."

— George O. Waring IV, MD

George O. Waring IV, MD, director of refractive surgery and an assistant professor of ophthalmology at Storm Eye Institute, Medical University of South Carolina, and medical director of the Magill Vision Center in Mt. Pleasant, South Carolina

My father was my first mentor. He was very good about letting his children find their own way in life, never pushing us to go into medicine. In fact, he always encouraged me to go into business, as reimbursements for medicine continued to decline. Hence, I obtained a degree in economics.

I vividly remember a turning point in our relationship, early one morning while sharing a tent in a remote village in the Dolpo region of western Nepal. We were the first westerners in this area in 27 years. Led by our dear friend Geoffrey Tabin, MD, we were attempting a first ascent of a major Himalayan peak, which we later called Kang Yaja after a successful summit.

That morning, I explained to my dad that, although I was interested in business, I wanted to pursue medicine. An argument ensued in the mountains, as my dad had major concerns about the fate of the medical profession with overregulation and underreimbursement. I held my ground and explained that I did not care about the golden age of medicine, as I would never know that time. Things changed that day in many ways: he embraced my desire to pursue my dreams, let go of his opinion, and supported my journey until the day of his passing.

This was one of hundreds of examples of precious moments in remote locations that we would share over our lifetime. He became my biggest champion—both personally and professionally—a close friend, and a confidant. I could trust him implicitly and would use him as my primary sounding board when I needed advice, which I often did, even just a week before his passing. In this way, not only was he my earliest mentor but also my most recent. I was lucky to be able to call him my father. ■

1. Waring III GO. *Refractive Keratotomy for Myopia and Astigmatism*. St. Louis, MO: Mosby-Year Book; 1991.
2. Harbin T. *Waking up Blind. Lawsuits Over Eye Surgery*. Minneapolis, MN: Langdon Street Press; 2009.