CONTENTS

Preface: Against the Grain
CHAPTER 1 ACCIDENTAL DESTINY
CHAPTER 2 SEASONED IN THE ARMY, LAUNCHED INTO THE LAB
CHAPTER 3 BREATH IN, BREATH OUT: INNOVATIONS IN LUNG TRANSPLANTATION
CHAPTER 4 THE ART OF LIMB SALVAGE
CHAPTER 5 THE ENDOVASCULAR REVOLUTION
CHAPTER 6 VALIANT CRUSADE: RECOGNIZING VASCULAR SURGERY AS AN INDEPENDENT SPECIALTY
CHAPTER 7 ALL UNDER ONE TENT: THE VEITHSYMPOSIUM
CHAPTER 8 MENTORSHIP: THE LASTING LEGACY
Epilogue: Looking Forward
Acknowledgments
Appendix

CHAPTER ONE

ACCIDENTAL DESTINY

erhaps medicine was always in my genes.
My mother, Elsie, was a nurse who served during WWI. Tragically, she died in childbirth, leaving my shocked father alone. Dad immediately hired a registered nurse named Joan O'Sullivan, a strong, funny, positive person. From the moment we came home from the hospital, she cared for me as if she were my own mother. Ultimately, she stayed on with our family and married my father when I was five.

Mom was a staunch Irish Catholic, born in Ireland and trained in London. She worked as a field nurse in the Black and Tan War, fighting for Ireland against England before coming to the US. By the time I was born in August 1931, she was working at Doctor's Hospital in New York City.

As I think back on it now, her nursing work might have nudged me in the direction of a medical career. But it was my favorite paternal uncle, James, a dentist, who was always talking to me about the attraction of being a physician. Uncle James was also an avid outdoorsman who passed on to me his love of sports.

During our outings together fishing and hunting in Maine and

upstate New York, he'd tell me about his best friend, Dr. Thompson, a general surgeon whom he greatly admired. Both of them were always touting the benefits of being a doctor. To an impressionable kid like me, it sounded kind of magical.

Of course, as I developed, I really didn't know what my future would be. But these influences definitely mattered, in addition to the odd coincidence of having two mothers who were nurses and an uncle who nudged me in the direction of medicine. All I know is that medicine seemed like a challenging and worthwhile thing to do.

I certainly never gravitated toward the profession of my father, Frank Veith Sr., who was a New York City lawyer specializing in estate planning, tax, and real estate. I later went into medicine in part because I was turned off by my father always coming home with so much paperwork to do. I never wanted that burden. (Ironically, in later years I did much more writing and academic paperwork than he ever did—penning thousands of articles, chapters, abstracts, and grant proposals as my career unfolded.)

Dad, who was a second-generation German, was a quiet, capable, more introverted person, less outgoing than either my mother or his brother James. It was my mother who was the dominating force, the disciplinarian at home, not my easygoing dad.

In fact, my father was amazingly nonaggressive for an attorney. He was never pushy, but he conveyed a clear example of right and wrong and a vital sense of ethics, a quality that would become an intrinsic part of my personality later on when I went against the grain of the Medical Mafia to fight for what I thought was right.

But all that controversy was eons away for a kid growing up in on the Upper East Side of Manhattan near the Guggenheim Museum and Central Park at Eighty-Eighth Street. It was an upper-middle-class upbringing, though we were conservative and

never showy. My parents were in a contented marriage and gave me a rather carefree, uneventful childhood.

As an only child, I guess I got used to the limelight, which may have been another psychological factor that led to my managerial sense, the feeling that I liked being in charge of things, which every surgeon requires. With me being the center of their world, my parents spoiled me a bit, yes, and treated me like an adult. I had the good fortune of always being included in their weekend and seasonal getaways, summer vacations to Maine and winter trips to Florida. I enjoyed swimming, canoeing, fishing, and hiking, particularly in Maine. There were family cruises too. This exposure to New York, Florida, and Maine was an advantage not to be taken for granted, a definite asset in expanding my view of the world.

As a kid, I always preferred being outdoors to being stuck inside at school. In fact, during my early years at Public School 6, I was never highly motivated as a student—but I did skip two grades in grammar school, so I must have been okay. Still, my marks were only slightly above average.

By the time my parents enrolled me at Horace Mann, a prestigious high school in Riverdale, I was not particularly outstanding as a student. I was much more interested in playing intramural sports with friends than in book work. Personality-wise, I was always socially shy, though physically outgoing and filled with energy. Despite my desire to get outside and play, I was also interested in current events—especially the battles of the Second World War, which I followed daily in the *New York Times*.

Overall, I remained less than highly motivated from an academic standpoint, yet my dad, a Cornell graduate, wanted me to follow in his footsteps. That didn't seem very likely. Actually, I was told by my high school guidance counselors that I didn't have a

chance of getting into an Ivy League college like Cornell due to my average grades and lack of extracurricular activities. I don't remember being active in any club or charity. I didn't have any notable talent, nor did I earn a varsity letter.

Yet I did manage to get into Dad's alma mater. How so? I probably did better on the SAT than I realized. I never knew.



Once I got onto the Ithaca campus, surrounded by all those brainiacs who had earned straight A's in high school, it wasn't long before I had a drastic coming of age. My attitude toward studying was transformed. For the first time in my life, I felt intimidated, fearful that I wasn't going to do very well. I could no longer just get by.

With a vague notion of becoming a doctor, I majored in zoology and pursued a pre-medical curriculum. I buckled down and immersed myself in the animal sciences department. It offered an opportunity to study animal biology and other life sciences, chemistry, animal evolution and development, anatomy, and physiology.

The curriculum at Cornell was extremely flexible, which somewhat whetted my appetite for the *human* kind of medicine too. (I enjoyed performing first aid remedies on family members and fellow students, little things such as removing a splinter from a hand, which gave me a feel for medicine and helping others.)

Still, at this point I wasn't greatly turned on by the idea of becoming a doctor. Why not? I had worked as an orderly at a local hospital during college and found it rather boring. But to a rather immature kid in his late teens with a fascination for animal physiology and anatomy (and no interest in a chemistry major) it seemed like the best option, a career choice by default.

So, after three years of undergraduate work, you might say I sort of stumbled into medical school with mixed feelings. I had worked hard and managed to get top grades, not only in zoology but in all my undergraduate courses. I applied to various medical schools and was accepted at Harvard and Cornell. Unwisely, I chose Cornell because I had won a New York State scholarship and could get a blended AB and MD degree, which was not possible at Harvard Medical School. I would later view this youthful decision as an error because I considered Harvard a better medical school.

In med school I still felt insecure, worried that I might not be able to keep up my grades. But as things turned out, I didn't find the course work that tough. It was hard work for sure, with much memorization, but I was able to master it pretty well.

Still, as I mentioned in the Preface, I was extremely shy in medical school. Because of the formal setting of the classes and the imperious temperament of the professors, I wanted to be as inconspicuous as possible. Trust me, I never went against the grain *then*.

Outside of school, I enjoyed blowing off steam back in the dorm, horsing around with my mates. I especially liked playing touch football in the yard of our dormitory on the East River, establishing a true camaraderie with classmates who had been on college varsity teams. Within the dorm, there was a lot of wrestling. In one of these matches, I remember accidentally pushing the head of one of my classmates right through the flimsy plasterboard walls of the dorm. That sticks in my mind (and in his!), but it was all in good fun and no one got hurt.

After my sophomore year as an undergraduate, I had impulsively decided to volunteer at Cornell for senior ROTC out of a genuine interest in the military and a sense of patriotism. Unlike many kids my age (who were entirely self-focused) this was an

avenue that really drew me in. Little did I know that the Korean War would break out while I was undergoing basic infantry summer training. Without question, as new officer trainees, we were ripe candidates to be airlifted to Korea as second lieutenants to reinforce our troops—who were being pushed into the sea at Pusan by the Red Chinese Army.

Fortunately, the order to go was rescinded and I was allowed to return to college and then to med school. Not going to Korea probably saved my life, as the average lifespan of an infantry second lieutenant in battle was about ten minutes! But this attraction to the military definitely foreshadowed what would become my service in the army years later. More on that in a bit.

When I graduated from medical school in 1955, I ranked first in my class—which was a surprise to me, as we were not informed of our grades, although I had been elected to Alpha Omega Alpha, a medical school honorary society. It was now time to choose what to do next. I thought about going into internal medicine—which was considered the more intellectually demanding field back then. However, because I really liked and excelled in the hands-on aspects of animal surgery, I took a surgical internship. (My uncle had told me that general surgeons were the true stars of medicine. That might have been true in 1935, but it certainly is not true today.)

I remember one particular event that nudged me toward surgery. It was the gratifying experience of caring for a patient with a perforated ulcer, seeing him totally cured by a simple operation at which I assisted. Witnessing this positive outcome fueled my resolve to continue on a surgical path.

For my surgical internship, I applied to Massachusetts General, Peter Bent Brigham, and Columbia-Presbyterian Medical Center. Because I wanted to stay close to my parents in New York, I ulti-

mately chose a general surgery internship at Columbia-Presbyterian. But honestly, attending Columbia was another mistake, just as choosing Cornell over Harvard had been. Why? Because the Brigham (again, at Harvard) was a better training program.

At Columbia, the atmosphere was highly competitive, as we were all vying for the top spots and the favor of the attending surgeons. Each of us wanted to be assigned to interesting cases and to participate in surgeries—supervised, of course, by senior residents or an attending physician.

My first experiences as the operating surgeon were procedures like an appendectomy or a hernia repair. Although it was great training, I only stayed at Columbia for one year. When I completed my internship, I received a Berry Plan deferment—meaning I could defer my obligatory military service until I completed my residency training—but this was not possible at Columbia. They required that I go into the army immediately after my internship.

So I obtained a surgical residency position at the Brigham, a teaching affiliate of Harvard Medical School. This institution was renowned for its groundbreaking biomedical research and excellence in treating multiple categories of disease. The Brigham would allow me to use my deferment so that I could complete my training and go into the services as a trained surgeon, not just a general medical officer.

This new beginning in Boston was a defining period in my training and professional life. I spent a total of five years there as a resident surgeon, with two additional years as chief of surgery at a large army hospital in Fort Carson near Colorado Springs.

The history of my surgical training went like this: one year of internship in New York; four years of general surgery residency at the Brigham; two years in the army; capped by a fifth year as chief

resident at the Brigham. I then stayed on at the Brigham as the prestigious Arthur Tracy Cabot Research Fellow—working under the future Nobel laureate Dr. Joseph Murray in transplant research. (Dr. Murray and his Brigham colleagues were early world leaders in the exciting field of human kidney transplantation.)

From the start, the Brigham was a fascinating place to be. While it has grown into a 793-bed hospital which draws patients from 120 countries, back in the fifties it was much smaller, with ample chances for a young resident to shine. I felt fortunate to be a junior member of the surgical house staff, as my fellows were all superstars, the top people in their classes from whichever medical school they came from.

Like all surgical internships of the day, it was a pyramidal system, highly competitive. Ten to twelve surgical trainees started as interns or junior residents, and only one finished at the top of the pyramid, all the others having been eliminated or drawn into other specialties. (Today, everyone who starts as an intern can finish their training.) Ultimately, whoever became chief resident in surgery was a lucky guy. It was a very prestigious and important position, because that person became the second most powerful surgeon in the hospital, second only to the chairman or chief of surgery.

The chief resident's duties included running the entire non-private surgical service, training junior residents, picking patients for rounds, inviting guest speakers, organizing important conferences, and much more.

For your time in the sun, you were treated like a king! And then, at the end of a year, it was over. Regrettably, you lost your power and returned to the normal reality of a young surgeon. You were nothing. You were out. And somebody else would come on and become chief resident.

Everyone knew who the real boss was anyway: the chairman of surgery, Dr. Francis Moore, a giant of twentieth-century surgery who had even appeared on the cover of *Time*. Moore was the most prominent surgeon of his day, and had made profound contributions to the understanding of how bodily fluids and electrolytes change during surgery. He was also a trailblazer in the development of organ transplantation and the care of critically ill surgical patients.

He was a perfect role model, someone who did virtually everything well. He was a trailblazing researcher, a charismatic speaker, a wise educator, a brilliant technical surgeon—tops in everything. (He was also a world-class sailor and a skilled accordion player!)

To say the least, Dr. Moore was intimidating. And he liked being in total charge. In fact, I believe that the structure of his surgical department was purposefully designed to maintain his authority and unquestioned leadership. That aside, he was the jewel of the hospital and we were lucky to have him. In my eyes, he was just an all-round great person. Stimulated by his spectacular example, I aspired to be even half the surgeon he was. We all looked up to the mighty Dr. Moore.

As green-behind-the-ears junior surgical residents, our day-today relationships were, however, more focused on working with the senior residents and attending staffs. They became mentors to us, unlike the colder approach at Columbia, where staff and residents comprised two different strata, never equals in status or social contact.

As surgical residents at the Brigham, we worked unbelievably hard by today's standards and performed many tasks that would be done today by nurses or technicians. Sometimes it was just the simple lab work, or transporting patients back and forth to the operating room; other times we served as intensivists, staffing both the

recovery room and the intensive care unit, providing all services imaginable.

For example, while taking care of sick postoperative cardiac or thoracic surgery patients, you'd be up all night. Why? Back in the late 1950s, ventilators were unreliable so we would end up having to "bag" the patient, i.e., ventilate their lungs manually with a compressible bag, taking turns throughout the entire night, one breath at a time. It was a physically and emotionally exhausting process with a patient's life literally in your hands. No room for error. Even on so-called nights "off," you might only get four hours of sleep, all of it spent in a cramped room or in the hospital corridor.

Though it was a very challenging regimen, it produced endurance and an ability to weather the stressful demands of a surgical career or an ICU, no matter what they might be.

On some nights, we were tasked with hunting down the so-called White Elephant. I'll explain. Before surgeries, patients had to be weighed. At the Brigham, we had a massive portable scale we nicknamed the White Elephant. It was huge and heavy and required two of us to move from one ward to another, usually at 5:30 in the morning before the first operation started.

First, we would have to find the scale, which involved a page operator sending an all-hospital call out. We would eventually deliver it, weigh the patient, and transport him or her to the operating room where we would assist with or perform the operation. Ah, those were the days. It was like a Barnum and Bailey version of a medical center.

One night, one of my fellow residents and I were providing post-operative ICU care to a patient who had had cardiac surgery. The patient suddenly started to bleed profusely. Unlike protocols today, which have blood products ready to go, we didn't have any

fresh blood on hand. So I, as the senior resident, and Alan Birch, a superstar junior resident, rushed down to the blood bank to give a unit of our own blood for the patient! As we were sitting there with the IV tubing in our arms, we got a call notifying us that there was a cardiac arrest in the ICU.

Like maniacs, we pulled out our IVs, jumped off the cots, and started to run up one level to the ICU. Alan, lightheaded after giving a unit of blood, fainted and fell to the floor. Looking down at him semi-conscious, I said, "Alan, that's okay. You can stay down here. I'm going upstairs." This Keystone Cops kind of rushing around would never happen today in a major or even minor teaching hospital. But the entire event was symbolic of what residents did in those days: everything!

It was all great training for us. Even though we at first were assistant residents—the lowest of the low—we were a band of brothers and sisters and we supported one another. Most of the staff did also.

There was, however, one chief resident superior to me who was a real tyrant. He took great pleasure in disciplining, actually torturing his junior residents. In one case he stressed out a junior resident so much that the poor guy had a gastrointestinal bleed! And this chief resident took some apparent satisfaction in knowing that he was the tough guy who caused it! I was the total opposite in temperament, certainly not a tyrant, then or ever. I may have been tough, but I never wanted to hurt any of my colleagues.

Throughout this period, Dr. Moore had an enormous influence over our lives. Like all great mentors, he established a close relationship with his residents, and treated us with respect even as subordinates. His example would inspire me to do everything I could years later to mentor and pass on my knowledge, a subject to be covered in Chapter 8.

Another legendary figure at the hospital was plastic surgeon Joseph Murray, who ran the Brigham's early and successful human kidney transplant program. It had started auspiciously with identical twin transplants in 1954. For his great path-breaking achievements, Dr. Murray was awarded the 1990 Nobel Prize in Medicine. His pioneering work led to the possibility of other human organ transplants. Murray was not only a brilliant surgeon, but a very down-to-earth, regular kind of guy who regarded residents as colleagues and friends rather than faceless subordinates.

When I first got to the Brigham as a junior resident, Dr. Murray invited all the staff to his house for a party. We had a softball game in which I was pitching. I managed to strike out Dr. Moore two times running, not due to my great athletic ability but because he was constantly swinging and missing! I felt badly, figuring this wouldn't help my future career. But it was all in fun and had no detrimental effect. Joe Murray's hospitality that day typified the good relationships that existed between house and attending staffs, one that I would strive to emulate when I headed up my own service.

Throughout my career, I was meticulous, cool, and calm in the operating room, only demanding in the sense that I wanted everything done in the best way possible. As any surgeon would, I felt it was critical to be in control of things, including my own temper. If I got angry, it was usually because of an administrative error, but even then, I always held myself in check and never reverted to an expression of nastiness. There are enough prima donnas who lose emotional control from time to time.