MENTORS, MAVERICKS, AND MALPRACTICE

Diane Komp

Early Childhood

My parents met during the Great Depression at a New York jazz club. A mild-mannered clerk by day, Dick Komp and his trumpet warmed up weekend crowds gathered to hear the more famous Ozzie and Harriet Nelson Band. He also warmed the heart of a redheaded club groupie named Flo Daly. They married and moved in with her parents as America worried about a second European war. This Irish-German-English-Flemish-French union produced identical twin daughters. I beat my sister into the world by five minutes.

I have strong memories of Flatbush in the years after Pearl Harbor. The family next door joined the German American Bund and went from door to door to peddle der Fuehrer's glory. My Irish grandfather was ready for them. When the Bund came calling, Grandpa summoned The Twins and asked us to "Show us Hitler's face." Marge and I obligingly dropped our ruffled panties and hoisted our bare bottoms at the hastily departing Nazis. Grandpa was my first and favorite maverick.

My other strong memory of those years was of sickness and death. On my fourth birthday, I learned that "cancer" was a reason for adults to lie to children and each other. This disease that took Grandpa Bill was cushioned in hushed whispers and euphemisms. Someone forgot to tell the adults that children know how to read the body language of those they love.

When I was seven years old I learned about a second dread and deadly disease. Our daily path to school took us past the coal yard at the Flatbush-Nostrand Junction. One day as we reached that yawning black abyss, Mom told us that one of our classmates had died from polio. For years thereafter, I walked on the opposite side of the street to avoid the coal yard. That magical action did not restore a world where children lived safely in the bosom of omnipotent families. I had nightmares about iron lungs. Even my favorite dolls betrayed me. In comic book ads, Raggedy Ann and Andy posed next to an iron lung for the March of Dimes. I banished the Raggedies to the closet and breathed as deeply as I could – for as long as I could. I worried about thunderstorms. What if I were in an iron lung when the power went out? I had two deep fears I wanted to avoid at all costs: dreadful illness and dreadfully ill children.

Diane Komp, Professor Emeritus of Pediatrics, joined the Yale faculty in 1978. She grew up in Brooklyn, New York, where she enjoyed Midwood High School's scientific, musical, and art opportunities. She firmly believes that science and the arts are fundamental to enjoyment of a long, happy life. After Houghton College and State University Downstate Medical Center, she practiced medicine in an academic setting, first at the University of Virginia and then at Yale. Through all those years she has sung classical sacred music, most recently with Bethesda Lutheran Church's music series. After retirement, she built an art studio and has exhibited widely, including an exhibition at the Henry Koerner Center. In addition to her scientific publications, Komp has published nine books directed at a more general audience. In retirement, she has volunteered her time at the Overseas Ministries Study Center, primarily as art curator.

High School and College

Midwood High was the first chance my sister and I had to go separate ways. We stopped dressing alike. Marge was inclined to the humanities; I jumped into science, math, and music. One course that grabbed my attention was a basic medical technology course instituted at Midwood during World War II.

I loved looking at peripheral blood smears under the microscope and converted a piggy bank at home into a microscope procurement fund. I extorted pocket change from family members, friends, and anyone unfortunate enough to come to our front door. In one of my textbooks, I read about the thick blood smear used to diagnose malaria, the "Komp thick smear." It was named after entomologist William H. Wood Komp. I had never heard the surname "Komp" outside my family. I learned that my namesake had served in the Public Health Service during WWII. Bug Boy, as I called him, documented the need for mosquito control to eradicate malaria from the Panama Canal Zone. I raided the piggy bank to buy my own copies of books that boasted his name. I consumed other books like Eleven Blue Men, a medical whodunit starring epidemiological detectives, and Victor Heiser's whimsical autobiography, An American Doctor's Odyssey: Adventures in Forty-Five Countries. My favorite chapter of the Odyssey was titled "Parasites Lost and Parasites Regained." Through these authors I learned that science, like music, held sway in a world where imagination, color, personality, and culture played undeniable parts. Science struts its stuff on a far wider and fairer stage than Brooklyn, New York, and the left side of my brain. Let the strut begin!

Through this laboratory technique course, two possible trajectories for my future came into focus. Like William H. Wood or Dr. Vic, I could take a long path to serious science. Or I could pursue a lab career in medical technology through two years in college followed by a practical year in a hospital lab. I chose a small college where the premed tech program was identical with premed.

The summer after my freshman college year, I came home hoping to work in a hospital lab. But who would hire a seventeen-year-old med tech wannabe? Fortunately my pastor's daughter got married. At her wedding reception, the chaplain of Brooklyn Methodist Hospital boasted that he remembered The Twins when we sang in St. Mark's cherub choir. I wasn't sure if the chaplain had ever met us, but I was sure that I now had a plan. On Monday I appeared in his office. The trapped chaplain took me to the office of Dr. Carlos Montoya, director of clinical pathology. I started in the hematology lab the following day.

I felt very much at home in the lab, but the job had serious detractions. Adults willingly gave you a finger to stick for blood, but children made you sweat. Nor was it pleasant to accompany the pathologist when he performed bone marrow aspirates on children to diagnose leukemia. He prepped the sternal area to receive the offending needle. Would he crash through to the heart? I wondered. How can the patient pretend it's not happening when the frightful needle is right under her nose? All this, mind you, was to diagnose a disease with no hope for recovery in 1957. Investigative science was looking better than the clinic all the time.

Medical school won out over medical technology. I came home to Brooklyn to start at the brand new Downstate Medical Center, ten blocks from our home and across the street from the world's largest hospital. A progressive institution, Downstate generously admitted women up to 10 percent of the class. The day I received my acceptance letter, I visited our neighborhood pharmacy in search of an egg cream soda and the chance to nonchalantly drop the good news. But my mother had beaten me there. Jimmy Maltese summoned me to join him in his inner pharmacy sanctum and tapped a stack of waiting prescriptions. "Get in here!" he bellowed. "I'm going to get to you before they ruin you up the road." He waved in the direction of my new Mecca. "Rewrite the names of these drugs so that anyone can read them." The handwriting was so bad that Jimmy had to translate every script, but he didn't bother translating the doctors' signatures. "That," he sighed, "is a cross the pharmacist alone must bear." I plodded home with my first pharmacology lesson in hand.

Medical School

Six of my high school classmates were in my medical school class, all of us living at home. Grandma padded into my bedroom each evening and struck an angelic pose as she watched me study. My father was confused by the new dialect of English that had taken over our nightly table talk. "You used to speak excellent English," he complained one evening at supper. "What do you mean about the hot AP in the ER who needed a CBC and UA?" Over dinner, I subjected the entire family to the weekly CPC, the Clinical-Pathological-Conference case. This medical whodunit was popular in all medical schools in my youth, but in these latter years has sadly gone out of fashion. Even my grandmother liked to guess the diagnosis.

The piggy bank microscope fund fell short of the required amount for purchase, but I now owned a binocular microscope, which I loved like a firstborn child. But all my lab experiences were not as pleasant.

In physiology lab, each group was asked to fetch a dog for the experiment. My partner picked a black curly haired mutt that looked like my family dog. I melted into tears when I saw the poor victim and slumped to the tiled floor. All the dogs in the lab read the message in my tears, jumped their tables, and surrounded me with wet woofs. "Help me, lady!" they cried. The lab instructor complained that in Ph.D. school they taught him nothing about dealing with female students. The end result was that I never cried again for many years. And I vowed never to do animal research.

A tunnel ran under Kings County Hospital between its massive buildings. Each time I took the tunnel to the pathology lab, I relived a flash of PTSD. The Salk and Sabin vaccines had eradicated polio from the Western world, but the iron lungs were stored in Kings County's bowels, obstructing my passage from hospital to the morgue. That damn disease would just not go away!

My early sojourn in the lab helped me with one important trajectory decision: I wanted to be a hematologist. But how to pursue that dream was still an issue: internal

medicine or pediatrics? Two pediatric mentors in particular, neither of them hematologists, helped sway me in that direction.

Ramón Rodríguez-Torres was the only pediatric cardiologist in Cuba before his escape. Dr. Torres made his way from Havana to Brooklyn and the faculty of Downstate. A new board exam in pediatric cardiology required that he retrace his steps and serve one year of pediatric residency. The chairman of pediatrics offered him the chief residency, but Dr. Torres refused. If he was going to invest a year of his life, he wanted to learn. He enlisted instead as a junior resident, losing as much sleep as much younger doctors. When I was a third-year student, he was my resident.

One morning on rounds, an intern confessed that he was unable to start an IV on a baby much in need of antibiotics. Dr. Torres delayed rounds and sat by the crib for half an hour, patiently probing for a willing vein. When the needle finally slipped in, the intern was very embarrassed. "Dr. Torres, he said, "I was cursing after five minutes. You sat there patiently until the job was done." Torres put his arm around the younger man's shoulders. "Stuart," he said, "after Castro that was nothing."

My second pediatric persuader was the department chairman, Jonathan Lanman. Our pediatric wards were overcrowded with children suffering brain damage from lead poisoning they had acquired from paint chips in their ghetto housing. Despite the desperate overcrowding on Kings County's wards, Lanman blackmailed two huge bureaucracies in the City of New York to solve the problem. He refused to discharge any lead-poisoned child home to lodgings the Housing Authority had not yet repaired. To raise the ante, he installed a hotline on his desk with a direct line to the city lead lab. Each day the lead levels were reported directly to him. He pitted the two huge city bureaucracies against each other – and won. Housing was repaired. Children were safely discharged. I told you I liked mavericks.

Not all senior pediatricians encouraged me into the field. One older gentleman, father of daughters, told me that women should not be exposed to suffering children. I asked him about his daughters, all doctors. He had steered them into dermatology. Let me fast-forward for a moment to finish his story. After Dr. Lanman's retirement, I was invited back to Downstate for a Festschrift by his former students who had made him proud. I could not limit my remarks to my scientific paper. At the luncheon that followed, I offered a musical postscript, sung to the tune of "Saint Patrick Was a Gentleman." In this ditty, I chronicled Dr. Lanman's feats of valor taking on the city and state of New York. The older pediatrician who tried to steer me to dermatology was there that day. "Now I remember you," he said, after I put down my guitar. "You always were a maverick."

During my fourth year of medical school, my mother had a stroke, my grandmother was treated for breast cancer, and my father learned that his job was moving to Cleveland. For the first time since their marriage, my parents had the chance to buy their own home, one suitable for my handicapped mother. There was no money left, my father told me, to pay for my living expenses in Brooklyn. I went back to Methodist Hospital and again begged Dr. Montoya for a job.

Every third night my final year of medical school, I was the only technician overnight for the laboratory and blood bank of Methodist Hospital. Every other third night, I was on call at Kings County as a medical student, leaving only one night out of three to get some sleep. Kings County cafeteria fed me dinner and breakfast when I was on call, but the lab job at Methodist did not come with meal tickets. The interns at Methodist, however, got their midnight snacks free. My new best friends! At 10 p.m. every third night, the Methodist house officers each took an extra item on their trays as they passed through the food line. By the time I got to the cafeteria, they had set out my supper before me, often my only meal of the day.

I saw evidence of progress at Methodist Hospital. The site for bone marrow aspirates had moved from the sternum to the hipbone – my fears of unwanted cardiac biopsies apparently were warranted. An internist had replaced the pathologist for all living things hematological. I introduced myself to Dr. Leone as a med student contemplating a career in hematology. I became his new best friend.

Methodist Hospital was in an Italian neighborhood with a high incidence of Rh negative multiparous mothers. My most important job in the lab was to identify Rh-affected babies from their cord blood, perform hemoglobins and bilirubins, and procure and prepare blood for exchange transfusion. When I saw the first clue, I called Dr. Leone at home to alert him and let him know what time the blood would be ready. At least he could get a few extra winks of sleep, even if an Rh baby meant an all-nighter for me. He showed his gratitude by hiring me to work in his private office for a few hours my one night out of three off at a more generous rate of reimbursement than the hospital.

Methodist Hospital may have saved me from poverty, but I was in love with the world's largest hospital. Following graduation I stayed on at Kings County. During my first pediatric year, Dr. Lanman called me into his office and offered me the chief residency for my final year. I thanked him, but shared my dream to fast-track into a hematology-oncology fellowship. He asked his secretary to hold his calls and closed the door. "In that case," he said, "it's time for you to cross the river." The euphemistic river he asked me to cross was far wider than the East River to Manhattan. Lanman sent me to the newly integrated South.

University of Virginia

In 1967 there were few women at Mr. Jefferson's university in Charlottesville and damn few Yankees. My new chief, William Thurman, was a young man of thirty-eight with a gentle southern accent and encouraging spirit. We named him "Big Daddy."

Big Daddy was an ideal mentor. He protected my laboratory time and opened doors to the future for me. Each year during March Madness, Big Daddy and his friends from his own fellowship days met in one corner of North Carolina or another for the "Somewhat Southern Pediatric Blood Club." Some of these Boston-trained carpetbaggers had returned north, thus the "Somewhat" in the title, since they returned annually for this event. As fellows of these fellows, my peers and I had the opportunity to present our work-in-progress to an impressive array of professors. When in the late spring our work came to the podium of the national research meetings, we had a cloud of friendly witnesses in the audience cheering us on.

I stayed on in Charlottesville for eleven years, rising to full professor and division chief before I left. As a junior faculty member, I was able to spend most of my time in the lab and maintain distance from the children with cancer who needed bone marrow aspirates and died shortly thereafter. Both in North and South, the survival rate of childhood leukemia had only leaped from zero to 4 percent. An unexpected turn of events changed my trajectory in the direction of the children.

The colleague who did most of the clinical work left for another medical school, but his patients stayed behind. Big Daddy was willing to hire someone else to do oncology, but I said I would first give it a try. To my amazement, I found that the closer I got to children with cancer, the easier the job became. Instead of sapping my energy, these children seemed to give me life.

I've told you about mavericks and mentors, but now is the time to talk of malpractice. While I was in Virginia, I chaired a multi-institutional study of childhood leukemia that sought to reduce the side effects of treatment. The study randomized children to either receive cranial radiation—the standard for the era—or not. At a national meeting I presented the results and shocked the investigator who had first introduced cranial radiation. His face turned red. He sputtered, "That's malpractice!" he whined into the microphone. Today no child with lymphoblastic leukemia receives cranial radiation as a routine matter, but the cry of "malpractice" can sometimes be heard from those unhappy with change that they themselves did not initiate.

Yale

In 1978 Howard Pearson invited me to come to Yale to run the division. One of the first things I noted was that the Yale treatment plan for leukemia did not include the monthly bone marrow aspirates that most of us around the country were performing. Now I faced more than fuming and sputtering colleagues. Connecticut parents, accustomed to bone marrows every six months, would be sorely vexed to switch to a once-a-month schedule.

I brought records with me from Virginia that allowed me to directly compare the two institutions for the same time period and see if the frequency of bone marrows made a difference in outcome. I published the results in the leading pediatric journal. Once again at a spring research meeting, I faced a national audience. The results showed that it didn't matter how often you did the bone marrows to monitor treatment – the relapses all broke through in between the most frequently performed. Again I heard the cry of "malpractice," but this time with a price tag attached. The major clinical income of pediatric oncologists came from performance and interpretation of those studies. As one of my former friends said, "You have singlehandedly destroyed the economy of our specialty." By the time I retired at the turn of the century, automated cytochemistry and flow cytometry had replaced "old-fashioned" microscopy as the primary tools to diagnosis leukemia. Cranial radiation was no longer standard treatment, and bone marrow aspirates were performed only rarely. More importantly, the five-year survival rate of child-hood leukemia had risen from zero to 90 percent. My long-term survivors "friend" me on Facebook and publish thank-you notes on their birthdays. I attend more weddings than funerals. Fifty years ago there was no division of Pediatric Hematology-Oncology at Yale. Can we be bold enough to hope that by the time our new young colleagues of the next fifty years reach the Koerner age, they will have worked themselves out of a job?

Postscript

In my bookcase at home are the books for which I broke into my piggy bank, slightly musty now, still lovingly underlined and highlighted, still inviting me to that world where imagination, color, personality, and culture play their parts. My name appears in the medical literature more often than William H. Wood Komp or Victor Heiser, but I wondered about the larger world in which they played their part. What would happen if a sheltered specialist from Yale fell off the ivory tower and into the real world?

In November 2002, shortly after the end of a ten-year civil war in Sierra Leone, I flew into the country on a Russian-built helicopter piloted by a Ukrainian fueled on vodka. With a World Hope International team, I traveled up-country on roads scarred by the war, to bush villages that hadn't seen a doctor, vaccines, or vitamins in ten years. I arrived just in time for an outbreak of polio. But that, my friends, is a story for another day.

Thank you.