
LEGENDS IN UROLOGY

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When asked to contribute to “Legends in Urology”, it was as if I was being asked to write my obituary. While hesitant, I figure that invisible strikes, curve balls, and serendipity may be more instructive than visible accomplishments.

Strikes, curve balls, and serendipity

Testimony to the changing face of medicine, I am no longer asked, “why medicine” or “why urology,” yet this was a common first question when I started. More informative may be “how and what happened”.

Curveball. I was the oldest of three siblings born in Boston. After Executive Order 9066 in April 1942, my mother, a 16-year-old daughter of a groundskeeper in Mountain View, California was sent to the Tanforan Assembly Center, then to “Bing Crosby’s Racetrack” in Santa Anita, and then to the Wyoming Heart Mountain Relocation Camp. My father, a 20-year-old Stanford senior was relocated to Tule Lake Camp with his Penryn based family. With luck my mother was sponsored for early release by the 7th Day Adventist Church; my father, upon arrival of his Stanford graduation certificate (he graduated only because he had summer school credits) was deployed to Lincoln, Nebraska to teach military personnel. They met, married, and moved to Boston after the war, so my father could attend graduate school and my mother start college. My parents decided we should return to California to be closer to relatives and others who looked like us when my brother brought home his “Japanese” classmate who turned out to be Italian.

The “camp experience” was indelible for my parents though invisible for me; we never discussed it. My parents encouraged us to enter jobs in which discrimination might be less. I returned to Cambridge to attend Harvard, because my Boston babysitter had. Once there, I concentrated in History and Science and filled “premed” prerequisites.

Strike 1. A month into college chemistry, I found the class incomprehensible. I stayed after class to ask the professor (William Weir PhD) what those “big D’s and little d’s” were. Clearly aghast, he asked how I got into his class. My advisor, a department of English graduate student, had signed off my course card admitting he didn’t know much about the science/math courses. The mid-term was impending, and it was too late to drop. In an act of kindness, the professor spent two evenings teaching me differential calculus. While I received my lowest grade, I passed.

Strike 2. At the end of junior year, I married Ted Shortliffe, a Harvard senior. His concentration was Applied Math (computer science), and he planned to apply to MD-PhD programs. After convincing him that Stanford was an option, we found that Harvard forbade outside coursework. That Spring, when the US bombed Cambodia, classes were cancelled. After some nagging, the college relented and allowed me to write my senior thesis “elsewhere” if a Harvard Professor would serve as advisor (Everett Mendelsohn, Professor History of Science).

Strike 3. In the Fall of 1970, I prepared my senior thesis (Shortliffe, The Toxin Theory as a Traditional Approach to the Theory of Schizophrenia Etiology, 1971, Schlesinger Library, Harvard University) at Stanford, and applied to medical schools. Dealing with the potential of failing to be admitted, I examined alternative careers and settled on

medical illustration. I wanted desperately to take Nathan Oliveira's (Professor of Art, leader in the Bay Area Figurative Movement) graduate figure drawing class. I was unqualified, clueless, and without an art portfolio, but he pitied my situation, and let me in his class as an experiment. I'd receive no special instruction and would need to figure it out.

I interviewed at two schools; Stanford said 'too many wife applicants' and unlikely they would accept me; UC (Davis) said I would be using a slot and knew I would come only if rejected by Stanford. In the 70's people said what they thought, so I knew the score and was depressed. I saw a psychiatrist who agreed-- a depressing situation and seeing him would not help. I had two strikes: a low grade in Chemistry, a marriage associated with a transcript "attended last year elsewhere." I concentrated on figure drawing.

Curveball. With unexpected luck I was accepted to Stanford. That Summer we returned to Cambridge. I had a position in Seymour Kety (Director Psychiatric Research Massachusetts General Hospital, MGH) and Steven Matthyse's lab to review literature on the genetic basis of schizophrenia (Matthyse and Shortliffe, *Neurosci Res Program Bull*, 1972). With my thesis and this experience, I was attracted to psychiatry.

I soon discovered psychiatry in the 1970's had little to do with neuroamines. An early experience with Donald Laub (Chief of Plastic and Reconstructive Surgery) that involved examining transsexual patients and children with craniofacial anomalies, and flying to a hand clinic in the San Joaquin Valley, meanwhile, hooked me on reconstructive surgery. When Laub left Stanford during my internship, I drifted back to general surgery. As I was unattached to a specific surgical program, my husband matched to internal medicine at the Massachusetts General Hospital that Spring.

Curveball vs. serendipity. Most Stanford medical students had little urology exposure. When I showed up as urology intern, Michael Droller, who I met during a rehabilitation rotation was now a Chief Resident; his co-residents were Tony Schaeffer and Rodney Anderson. I was surprised how interesting and varied urology was. Coinciding with my lost interest in "Plastics", urology had an empty billet when they learned one of their interns resigned. I was paged to Dr. Stamey's office (Thomas A. Stamey, Chair of Urology), and he told me they were considering a few people for an open position, and some staff (Anthony J. Schaeffer, Fuad S. Freiha and Duncan E. Govan) thought I might be a candidate. He mentioned that this could be, however, "a social stigma." I didn't understand him, but I puzzled enough about it that I remember those words.

Curveball. Convincing Ted that we should return to Stanford before we left was difficult, but we did it and returned from Boston. Stanford urology was more difficult than other surgical residencies, but my fellow residents were exceptional. And, surprisingly, I was passionate about the required research year. I worked with Dr. Stamey and Nancy Wehner on an antibody assay to measure immunity to infection. When flummoxed I recall walking around the corner to ask Irv Weissman (Associate Professor Pathology) whether my assay design would work, and he affirmed there was nothing wrong with the approach, but "whether it will work" is unknown without trying. My lab year was spent developing an assay to measure prostatic fluid immunoglobulins (Shortliffe et al, *J Clin Invest*, 1981).

In the last few months of Chief Residency, Dr. Stamey called me to his office again; he was concerned that I might not find a job. He asked whether I'd consider a position at the Veterans Administration Hospital (VAPA) when Dr. Elliot retired (James S. Elliot). Thinking of my father's concerns related to institutional discrimination, I was hesitant to work for Stanford, but thought if necessary, I could later leave to find a private practice position.

In 1981 I became Chief (and only faculty) at the VAPA. Dick Williams (Richard D. Williams, Chief of Urology, VA San Francisco) helped me understand the system. Attaining a VA Merit Review grant I investigated prostatitis using the 3 year old immunoassay. I learned protocol design for superficial and advanced bladder cancer with Frank Torti (Frank M. Torti, Assistant Professor Medicine, Director of Northern California Oncology Group).

Serendipity. Although I was interested in pediatric reconstruction, I was becoming more interested in oncology. I was worried that I would regret never trying pediatrics, therefore I applied for pediatric urology fellowships and scheduled visits to Children's Hospital of Philadelphia (CHOP), Children's Hospital Boston, and Toronto Sick

Children’s. On arrival to Philadelphia for the 2-day interview, I was dizzy and nauseated. I asked for an emesis basin when I entered Dr. Snyder’s office (Howard M. Snyder). When he returned with a cath tray, I promptly vomited. After an interview punctuated by my vomiting, the fellow took me to ENT for anti-emetic medication, so I could finish the first day. The Chief of ENT was perplexed by my arrival, until he noted nystagmus and diagnosed a fractured oval window (inner ear) presumably from the flight. Late the following day he surgically patched the lymphatic leak, and prohibited flying for 3 months. The next day I made rounds with John Duckett and the team, against medical advice, and completed the interview. I returned home in a 7-day train trip. Needless to say, trips to Boston and Toronto didn’t occur. Years later, I asked John why they decided to offer me a position. He said when I got out of bed to finish the interview, he figured I would finish the fellowship.

Curveball or serendipity. In the Summer of 1986, we arrived in Philadelphia with our 4-year old daughter Lindsay. I had not seen a pediatric patient for 5 or more years. My transition from adult to pediatric medical care, operations, and surgical techniques was trying, and not everyone was patient. I was board certified and appointed a staff member, so I could take staff call with the fellow Patrick Murphy or residents. Pat was a formidable surgeon, fully trained in general surgery, pediatric surgery, and completing a urology residency. Pat helped me survive the CHOP experience, and I treasure his help and friendship.

After 3 months, I was convinced this “fellowship” sabbatical was a mistake. I likened my experience to being in a third world country as I wasn’t learning surgical techniques and decision making. I had been already told not to talk during surgery and that I did the wrong operation. I asked Dr. Duckett to be released. He responded that people don’t leave CHOP, and I should be at the stage where I figured things out myself, and that I should stop trying to plan everything ahead of time; that was that.

This was a revelation. I stopped trying to parse out the next operation and the next day, and I started to take the curve balls as they came. John gave me the nudges and opportunities that caused me to persist and thrive in academic urology.

On return to Stanford I was both Chief of the VA and Chief of Pediatric Urology. I delivered Lauren our second daughter. Historically Stanford had few pediatric patients, so Stamey was concerned I would be neither profitable nor busy enough to practice pediatric urology full-time. I had a day a week to see and operate on children at Stanford with the majority of my time allotted to the VA. Within a year I was seeing enough pediatric patients to increase my Stanford time. I continued to investigate the immunology of prostatitis at the VA. Forgoing my VA research funding, I moved to Stanford full-time in 1989. Hard-working and bright residents (Thomas Smyth, Muta Issa, Barrett Cowan, Tien Pham), fellows (Jan Fichtner), and a medical student (Tain-Yen Hsia) worked on preliminary ideas that I developed into an NIH R01 (Effect of Pregnancy and Hormones on the Kidney and Urinary Tract).

Curveball. With difficulties in the department and school, the Dean (David Korn) planned a urology chair search in 1994; the school had limited recruitment resources. Isolated from these issues, I was on sabbatical learning smooth muscle assay techniques. For reasons unbeknownst to me, the Dean asked me to meet with him. Surprisingly, I was asked to consider the open position. Never privy to department balance sheets and finances before, the business manager paled when I asked him what all the parentheses on the balance sheets were. I abandoned sabbatical and was appointed Chair in 1995.

The invisible ends. After difficult decisions, we emerged with a positive budget. Two years after becoming Chair (1997), Stanford and UCSF merged, and I reserved a day a week for meetings at Candlestick Park—midway between. Setting up this entity (UCSF-Stanford Healthcare) was a 2-year time drain for an entity that lasted 3 years, and then several more for unwinding and restarting. During the intervening and next years, we increased our residency training program, started three fellowships, and recruited 18 subspecialty trained young faculty. With the help of John Duckett, Dick Williams, Ralph Clayman, Marty (Martin) Resnick, and Bob Flanigan (Robert Flanigan) among others I overcame stumbles and realized that our faculty should participate in national urology.

Base hits. I discovered that national service is rewarding for the institution and for personal relationships and growth. I am grateful for the opportunities I was given to serve as Chair for the Bladder Research Program Review

Group for the NIH, NIDDK that produced the report to guide national bladder funding (Overcoming Bladder Disease: A Strategic Plan for research. A report of the Bladder Research Program Review Group, National Institute of Diabetes & Digestive & Kidney Diseases, NIH, August 2002), as a member of the AUA/ABU Exam Review Committee, ABU oral examination Committee, Residency Review Committee for Urology, Clinical Society of Genitourinary Surgeons, Society of Pediatric Urological Surgeons (SPUS), Chair of the Section on Urology American Academy of Pediatrics, President of the Society of University Chairs and Program Directors, Vice President of the American Association of Genitourinary Surgeons (and next President AAGUS), and as Trustee and President of the American Board of Urology. In addition, I served as a Director for Avenidas (local nonprofit organization serving senior adults), Vivus Corporation, and a member of the California Council Science & Technology (a nonpartisan, nonprofit organization established by the California State Legislature in 1988). I thank those who recognized me to be featured in the National Library of Medicine Exhibit, “Changing the Face of Medicine” (Donald A.B. Lindberg, Director NLM, http://www.nlm.nih.gov/changingthefaceofmedicine/physicians/biography_293.html), and receive the 2015 American Urological Association Distinguished Service Award, 2016 Ferdinand C. Valentine Medal, New York Academy of Medicine, and 2018 Society of Women in Urology Inaugural Jean Fourcroy Leadership Award.

Becoming Chair of urology was an anomaly. I had many strikes but tried to avoid striking out. John Duckett taught me to avoid thinking through tomorrow too much, and to take the balls as they come. Most important, I learned that hard work, curiosity, serendipity, and a few acts of kindness from others, can and will lead one to places that cannot be planned. And, sometimes it’s hard to separate curve balls from home runs. I appreciate the sacrifices my parents, Norma Masako and Setsuo Dairiki, and daughters, Lindsay and Lauren, made while I learned these lessons. I appreciate the help and fortitude of the Stanford urology team on this journey.

I return to figure drawing.

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