LEGENDS IN UROLOGY

Joseph A. Smith, Jr., MD
William L. Bray Professor and Chairman
Department of Urologic Surgery
Vanderbilt University School of Medicine
Nashville, Tennessee, USA

As I have read the stories of previous individuals chosen as "Legends in Urology", I have been struck by how often they found inspiration to be a physician at an early age. My journey is different. There were no physicians in my family and I did not know any doctors. In fact, until I went to college, my primary experience with a doctor was when I had to get my knee sutured after a Go Kart accident. I did not like the doctor. Since I was not supposed to be in the Go Kart in the first place, my parents made me pay the bill and I thought he charged too much.

My goal was to be an explorer. Growing up in the 60's, space was the horizon for adventure so I wanted to be an astronaut. I passed with flying colors physical, mental and personality testing to select those likely to succeed as an astronaut and did not even feel queasy when spun around under water in a gyroscope-like device. I received a scholarship for a pathway to future astronaut training and majored in college initially in aerospace engineering.

Two things altered my path. One was that in the 60's and 70's, astronauts were developed primarily via a military career. I participated through my scholarship in ROTC at the University of Notre Dame and, fortunately, had enough insight to realize that I was much too independent and rebellious to thrive in the military. The other was that my father passed away suddenly when I was a freshman in college. I remember well that I was unimpressed with both the hospital and the doctors in what was really my first introduction to medicine. I decided that, partly to honor my father's memory, I was going to be a doctor and do better. I forfeited my scholarship and, consequently, could no longer afford to attend Notre Dame. I transferred to the University of Tennessee which was also closer to my mother and six siblings.

After one year at the University of Tennessee, I learned of an early acceptance program for medical school that did not require a bachelor's degree so I pursued it. Being rather young for my class grade and attending college for only two years, I barely needed to shave when medical school classes started. I was paying my own way for things (starting with the Go Kart accident) so I worked from 11PM to 7AM starting IV's at the hospital. I found medical school to be energizing and the information fascinating so grabbing a few hours sleep here and there was plenty.

When I finished medical school after only a three year curriculum I was still very young (but needing to shave) and extraordinarily naive about the real world of medicine. I knew, though, that I wanted to be a surgeon. Back then, selection of a specialty track was not necessary until after the intern (PGY 1) year and I decided that I would check out different areas and choose the one that seemed to offer the greatest challenge. I started my surgery residency at the University of Texas Southwestern Medical Center in Dallas assuming that I would eventually choose trauma, cardiac, or neurosurgery. I rotated on those services but still was not ready to embrace one. I was assigned to urology and thought that month would be a break where I could formulate my thoughts and pursue one of the other areas.

The first day on the urology service, Dr. Paul Peters performed a radical cystectomy and ileal conduit. In his inimitable way, he kept up non stop pressure on the residents and the operation was long and bloody. I was hooked and decided that I wanted to do urology and, specifically, urologic cancer surgery as a career. Later, I used to tell Dr. Peters that he made that operation look so hard that it inspired me to go in to urology. Also, I liked all of the urology residents and their enthusiasm for the specialty. UT Southwestern was one of the leading urology programs in the country under Dr. Peters' leadership and I was fortunate to be offered a place in the residency program.

I was burning with wanderlust, though, and remembered well reading enclyclopedias as a child and staring at a picture of the Great Salt Lake, envisioning it as one of the most exoctic places on earth. I decided almost as a lark to interview at the University of Utah. That lark helped direct the rest of my life. The University of Utah was a new and a small program at that time and surely did not have the stature of UT Southwestern. The Chairman, Richard Middleton was young and recently appointed. Something about him, however, made me think that this was the person under whose influence I wanted to train. It is difficult to say exactly what led me to that conclusion but my instincts were correct. Dick Middleton is one of the most generous, honest, unassuming, and caring individuals I have ever known. On top of that, he is a terrific clinician and teacher. My three years of urology residency were not ones of marking time to complete training but filled with the comraderie of my fellow residents and a universal admiration and fondness for our mentors.

I gave my long term career little thought. I knew how happy I was in residency and in an academic environment and wanted continual challenge in my professional life. I maintained an almost single minded interest in oncology and remembered hearing Dr. Willet Whitmore talk about training "cutting surgeons". I wanted to be one of those (a phrase which at the time described almost all surgeons-something a little different from today). I applied for and was accepted for fellowship at Memorial Sloan Kettering Cancer Center and was off for New York.

Again, I enjoyed my friendship with the other fellows and was inspired by Dr. Whitmore and Dr. Harry Grabstald. I was also trained by two other young (at the time!) faculty who have become important life long friends, Pram Sogani and Harry Herr. Most fellows spent two years at Memorial and I found New York fascinating and Memorial a great place to be. I also felt quite confident in my clinical and surgical skills, though, and ready to move on, or, perhaps, back. Dick Middleton offered me a job at the University of Utah. There were not many details beyond that-no salary discussion, no description of job responsibilities, no promises. I did not need any. I trusted him implicitly and joined the University of Utah faculty.

I very quickly developed a robust surgical practice and was performing a large number of complex urologic cancer cases. Medical writing always came rather easily for me and I enjoyed studying our surgical results and producing scientific publications. I had an early interest in continent reconstruction after cystectomy and accumulated one of the largest US series of modified Camey ileal neobladders.

My first real mark, though, came with the development of laser surgery. Dr. John Dixon, a former Dean of the University of Utah, had one of the earliest interests in laser surgery and developed one of the first laser surgery centers in the world. I took advantage of the opportunity and explored laser surgical use in urology which was gaining attention primarily from work in Europe. My experience and views, though, were much less sanguine than those of others. I wrote a number of papers which failed to demonstrate some of the advantages touted by others for treatment of bladder cancer, prostatic enlargement, or urethral stricture. Lasers to treat ureteral calculus were still being developed. Really, the only condition for which I found laser surgery particularly beneficial was recurrent bleeding from bladder hemangioma, often associated with Klippel Trenauney Weber syndrome. I attracted patients from around the world with some very difficult problems and the laser was great for ablating large, bleeding vessels in the bladder. I remember well, though, when my paper on our experience, the largest in the history of the medical literature, was rejected by the *Journal of Urology* with the comment that we needed to perform a randomized trial. No commentary was provided on what should be the other arm of the randomization.

I became an active member of the Southwest Oncology Group and one of the top contributors to clinical trials. I was enthusiastic about the opportunities to evaluate new treatments and establish new therapeutic principles. Outside of SWOG, I became involved in the first trial of an LHRH analog for treatment of prostate cancer-leuprolide. I recall thinking it would be no better than orchiectomy but may have appeal to some patients. Even though I was an author on the first *New England Journal of Medicine* publication on this new medical therapy, I did not consider it a major breakthrough as it did not really extend life.

I would have been completely satisfied to remain on the faculty at the University of Utah under Dr. Middleton's leadership. I looked at several prominent Chair positions around the country but declined them. When I was contacted by Vanderbilt, I was intrigued by the excellence of the institution. I also knew Nashville to be a nice city but I no longer had any family living there and had been gone a long time. The fact that I had been raised there

was almost nothing more than a coincidence. I decided to interview at Vanderbilt, likely turn it down, and then just remain at the University of Utah and decline any future Chair interviews.

It did not turn out that way. It was a very close call and one which involved both professional and family considerations. I had a sense, though, that we could create something very special at Vanderbilt. Never up, never in (an old basketball phrase) so I decided to go for it and it was off to Nashville.

The urology department at Vanderbilt was well respected in the institution but small. Fred Kirchner moved on to become Associate Dean of Housestaff Affairs within a few years but Mike Koch was an invaluable asset and a great friend. Mike initiated programs for development of clinical pathways which gained international attention for our program. Few other hospitals were able to match our surgical results-a testimony to the studied manner in which we conducted perioperative care but also the surgical skills of our Vanderbilt urologists.

One of my first and undoubtedly best hires was John Brock to lead pediatric urology. This set the paradigm for much of my tenure as chair-hire the best people, set up a situation wherein they can thrive, and get out of their way. It clearly has been a formula for success. In virtually every subspecialty domain in urology, Vanderbilt urology has had world leaders. Even more important, though, is that this has occurred in a collegial and mutually supportive atmosphere. I surely would not tolerate anything less but it is the environment that surrounds Vanderbilt Urology that truly has made it exceptional.

We also created a bit of a monster. Our surgical volumes exploded, based largely on our reputation and results. I became a bit of an outlier amongst chairmen in that my own surgical volumes of oncology may have been the highest in the country. I liked doing surgery and taking care of patients and never tired of the challenge of assuming some of the most difficult cases. Our residency program expanded to four per year and we developed some of the top fellowships in urologic oncology, pediatric urology, female pelvic medicine and reconstruction, and minimally invasive surgery/endourology.

I started out in urologic oncology wanting to be a "cutting surgeon' and still enjoy open surgery the most. Times change, though, and I became an early adopter of robotic surgery. I was not convinced initially that it would be better than open surgical approaches but was prescient enough to see that we needed to become leaders in assessing this new technology. I had an experience with over 2500 open radical prostatectomies and never would have predicted that my robotic experience would exceed that but I have now been primary surgeon on over 5000 robotic prostatectomies. Despite that, I am still not convinced it is that much better!

Participation and leadership as Chairman of the Residency Review Committee for Urology and as President of the American Board of Urology have exposed me to the ability and dedication of so many of our colleagues. Sometimes, I wonder how a room full of so many smart people trying to do the right thing can produce a product that to others seems thoughtless. It has given me even more respect for the difficult issues that confront organized medicine and the efforts of those who attempt to address them.

The issues faced by academic urology and organized medicine pale in comparison to the medical needs of many in developing countries. I have had a career long interest in global surgical health and my own efforts in the last decade have been primarily in Africa. I have attempted to help establish training programs and surgical clinics with varying success. I have learned the considerable barriers to performing major surgical procedures in limited resource settings. I envision myself continuing in these efforts for as long as I am able.

Medical publishing has long been an interest of mine. As someone who obviously enjoys the challenges of the operating room, serving as Editor of the most recent edition of *Hinman's Atlas of Urologic Surgery* was a particularly satisfying venture. I have been selected to serve as the next Editor of the *Journal of Urology* and I will assume this new role on July 1, 2015. When I started in urology, the *Journal of Urology* was really the only peer reviewed scientific publication in the field. As the domain of urology has expanded, so has the number of journals but the Journal of Urology is still cited in other journals more than twice as often as any other urology journal. I look forward to enhancing even further the stature of the journal.

On January 1, 2015 I stepped down as Chairman of the Department of Urologic Surgery at Vanderbilt. I always intended to step down when it was best for my department and I am convinced that time is now. Our department is in great shape and there are four or five people within the department who would have been qualified to assume the chair position. Dr David Penson will be the next Chair and is a superb choice. I am convinced that David can lead the department to even greater stature. I am far from retiring, though. I intend to continue my surgical practice, my editorial work, and our global health initiatives.

I have mentioned some key individuals to whom I am indebted for their help and friendship. Many, many more are unnamed but of great significance to me. One of the best things about my career has been the friendships I have established throughout the worldwide urology community. This applies even more, though, to those closer to home including the faculty, residents, and fellows at Vanderbilt as well as the University of Utah.

Most important, though, has been my family. My wife, Barbara, has been with me since I graduated medical school and none of what I may have accomplished could have occurred without her. I have three terrific children-Carolyn, Brad, and Christine. I hope they know they have always been my greatest priority despite the demands of a professional medical and academic career. We delight in our four grandchildren. As honored as I am to be regarded as a "legend" in urology, what I want most is to be considered and remembered as a loving and devoted husband, father, and grandfather.

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