



Doi:10.32604/cju.2025.070979

LEGENDS IN UROLOGY

Louis R Kavoussi, MD, MBA Professor of Surgery and Urology Zucker School of Medicine Hofstra/Northwell Chief of Tele-intervention Northwell Health



Academic Medicine: Family, Friends and Fun!

I greatly appreciate the honor and opportunity to contribute to the "Legends-in-Urology" series. We are all the product of the collective ideology of medicine and each one of us contributes to the betterment of mankind. How we provide value to society is on a spectrum and is an amalgam of our personality paired with opportunity. As such, I must credit my "alleged reputation" to factors such as my birth family, mentors and a good helping of happenstance. I'd consider myself more of an accidental tourist in the progression of academic urology and owe my career to true legendary mentors including Gerry Suffrin, Bill Catalona, Ralph Clayman, Herb Lepore, Alan Retick and Pat Walsh as well as colleagues and students I have met along the way.

I was fortunate in being born to immigrant parents: an Iranian general surgeon and an Italian homemaker. Their push on us first generation was the result of them seeing the potential of the American dream. Growing up in a tight knit working-class Italian Brooklyn neighborhood the definition of family included neighbors and friends. Everyone looked out for each other, especially the children. This family approach is how I continue to follow in practice, treating partners as relatives and watch over the residents and medical students as the young kids.

My parents put great emphasis on education, but I took many parallel breaks with my peers where I learned New York street smarts and took fights head on. This along with observing Pat Walsh and Bill Catalona could explain a conversation with a dean later in my career where he described me as intimidating to administrators.

I can't emphasize enough how observing my father work 16-h days as well as taking call was a real turn off to becoming a physician. I did my undergraduate studies at Columbia University with every intent into going into engineering. During my last year, my dad made me a generous financial offer if I would apply to medical school. I reached out to only MD PHD programs and got into one at the State University of New York at Buffalo. After my first year, I fell in love with clinical medicine and dropped the PhD.

So why did I pick urology? I was attracted to the technical aspect of surgery and knew I would like a procedure-based career. During my 3rd year, a preceptor asked what area of medicine I would be pursuing. After my expressing uncertainty, she suggested urology as my personality reminded her of her brother who was a urologist. As is the case today, urology was enigmatic but after checking it out I caught the bug. The Chair of Urology at Buffalo, Gerald Suffrin, was very kind to me and took time to educate as well as introduce me to the world of urology. He had just come from Washington University in St Louis and made a call to William Fair, the Chair, that evolved into a residency position.

During my internship year nearly the entire faculty left as Dr Fair moved to be Chief at Sloan-Kettering in NY. Dr. Catalona was appointed Chief and then recruited the most astonishing first year class of faculty: Ralph Clayman,

Gerald Andriole, Robert Bahnson and Herb Lepore. Talk about being lucky to be working with these young innovators, each of them eventually going on to become chairs and leaders in academic urology.

When finishing my residency in the late 1980s I was planning on going into community practice back on the east coast, however the job market was very tight with limited options. Ralph Clayman sat me down and warned me I would become bored doing general urology and offered for me to stay on staff as a second endourologist. This was a life changing decision.

At the time of completing my residency, Dr. Catalona had been trying to fill the position for the chief of urology at the Jewish Hospital of St Louis. This position was a political challenge during the time where Barnes Hospital was viewed as an interloper initiating merger efforts with the predominantly private Hospital. Due to few options, he offered me the position. Initially I was getting the cold shoulder from the staff but eventually through the power of availability, I was able to gain trust and grow a clinical practice.

In parallel, I continued academic projects with Ralph. Throughout my residency Ralph had a case of laparoscopic instruments provided to him by Stortz in his office. He would periodically exclaim that they could be used for removing a kidney. None of us were believers. At the 1990 AUA Bill Schusler, a private practitioner from Segine Texas presented his experience of laparoscopic pelvic node dissection for patients undergoing radiotherapy for prostate cancer. This was the catalyst that inspired Ralph to set up and invite me to be part of the lab where we performed a laparoscopic nephrectomy in a pig. After practice in a total of 5 pigs, the first human nephrectomy was performed in a human. This successful case gave us the confidence, credibility and momentum to partner with like-minded individuals to apply the technology to more complex cases, create educational programs and initiate research endeavors.

The urologic laparoscopic revolution was both exciting and consuming. I was fortunate to meet and collaborate with colleagues around the world, however the expense was time with the family. As my ever-supportive wife Julianne did miss family, we decided to leave St Louis and take a faculty position at the Brigham in Boston. It was a medical culture shock as east coast medicine was a bit more conservative than the midwest. I went from being a hospital chief to the junior most faculty with OR block time starting around 5 pm. However I had the opportunity to meet many luminaries in urology and the brightest spot was being greeted with great warmth by the faculty at Boston Children's Hospital. Alan Retick the chief was very supportive in beginning a minimally invasive pediatric program and introduced me to a lifelong dear friend Craig Peters as the point person.

At the end of my first year in Boston, Pat Walsh came up as visiting professor. Shortly after his visit, he reached out to inquire if I would have any interest in coming to Baltimore to head up the Francis Scott Key (now Bayview) campus of Hopkins Medicine. After visiting the Brady I was hooked and only after 2 years moved to Baltimore. During the 1990s and early 2000's Hopkins was a magical place. Pat Walsh was incredibly supportive. Surrounded by incredibly bright faculty and residents, we were able to further advance urologic surgery. A chance reunion with a transplant surgeon Lloyd Ratner who I knew when he was a fellow at Washington university led to the first laparoscopic donor nephrectomies. I also partnered with Ralph Clayman and Bill Schusler where we went to Texas and performed the first laparoscopic prostatectomies.

Call for travel to help with surgeries and teach minimally invasive courses was incessant. This piqued my interest in telesurgery and Don Coffey who ran the research labs gave me insight into how to approach this problem. This led me to finding a young mechanical engineering post doc Dan Stiovanovici to join the Brady to begin the first urobotics lab in the world. Partnering with Dan and Yulan Wong, the founder of Computer Motion a fledgling robotics company. we were able to demonstrate the feasibility of running robotic devices to Italy, brasil and Singapore over commercially available lines. There were significant issues with time delay and limited end effectors, but the proof of concept was cast. Working again with Yulan and his company In Touch Health along with incredible fellows like Peter Pinto, Fernando Kim, Mike Fabrizio and Lars Ellison hospital telerounding was developed. This was the gateway to the evolution of tele-stroke programs developing around the world and our team was acknowledged with a Smithsonian Computerworld Award.

Hopkins afforded so many opportunities for innovation, however after 12 years I felt the need for a challenge with the next step in leading a department. I interviewed for several Chair jobs and was finally offered a position at the fledgling Northwell Health. This was a system based around the LIJ Medical Center where Arthur Smith the father of endourology was stepping down. There were plans to open a new medical school in partnership with Hofstra University. It was a difficult decision but wanted a new challenge so in 2005 I moved to Long Island.

Being a Chair is a very different job. Administrative responsibilities are consuming and sadly academic pursuits had to be put on the back burner. The job was a huge challenge. The system was huge spanning, 14 hospitals when I first started, there were limited academic resources that I was accustomed to at the previous mature centers where I had worked. There was one small academic hub at the LIJ campus of 5 fulltime faculty and there was no blueprint for organizing the multiple campuses. This position provided a great education into the corporatization of American academic medicine. With the help of outstanding partners over a 20-year period we were able to build a vibrant diverse service of over 80 urologists covering 26 hospitals.

I am now at a point in my career I would like to move back towards academic problem solving. I have taken a position at Northwell to help advance this technology. Advances in robotics and telecommunication technologies have made telesurgery feasible. I believe his approach will help solve manpower issues while distributing quality care and improving wellbeing of our urological colleagues.

Based on my life experiences, I have several suggestions for the young surgical innovators starting out. First and foremost, have fun. Yes, we all have bad days but if you're not enjoying the craft of urology with great frequency, take corrective measures. This is very individual, and one does their best work when there is joy. There is no same in changing career choices.

Everyone has a vision of their future. Success depends upon persistence of pursuing the ideals that construct your perceived future. All too often barriers are effective in obstructing realization, however the key is persistence. Be patient with those around you who don't have the vision. Just keep explaining and describing. Eventually if it is correct, you will get the converts.

When innovating, you need to take some risks. You will take heat as change is challenging for physicians with ingrained and perceived successful practice patterns. Never overstate findings or results as this is a sure way to have any future claims mistrusted. And never take criticism personally. Proposed clinical change is difficult for all as conventional wisdom allows for predictable lives and its memorization a requisite for passing the boards. Not every working position is open to change and consider looking for a position elsewhere where it may be supported. Be kind to all you encounter. The expression, "you get more flies with honey", is so true. Conflict slows productivity and you never know who down the road will be partner in creativity.

While innovating, it is always easier to take risks with friends. It provides opportunities to flesh things out get a reality check from individuals you trust. Friends make sharing the failures easier to accept, and on the flip side, make success a real party. Be sure to share credit and in many cases give more credit. In all of innovation focus on self-satisfaction, not external accolades.

Finally, do regular internal reality checks to be true to yourself. Beware the comfort of inertia. This prevents one from being one's best. As life proceeds so do priorities as well as abilities evolve. Change presents new challenges, lessons and opportunities for personal growth. We are all fortunate to be physicians and our oath is for the benefit of our patients.

Louis R Kavoussi, MD, MBA

Professor of Surgery and Urology Zucker School of Medicine Hofstra/Northwell Chief of Tele-intervention Northwell Health