LEGENDS IN UROLOGY

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Early Life

This is not a description of a legend, but just a simple story...about me, my family, and my career. I was born in the 1950s (the Baby Boomer generation), a time of great economic and population expansion. World War 2 had ended, and the Cold War had begun. I grew up in San Francisco, a second generation American. My grandparents, like many at the time, had emigrated to the US from Europe passing through Ellis Island seeking a better life, which they found. My parents graduated from high school and went right to work. They were tireless workers. Indeed, work was our family's core cultural competency. It really didn't matter much what you did, if you worked hard and did it well. I had numerous jobs growing up – paper boy (paper on porch before 6 am!), flower delivery, busboy, janitor, vendor at San Francisco Giants Games (started out selling soda, graduated to peanuts and ended up with hot dogs and souvenirs, too young to sell beer), bike mechanic and working summers for the San Francisco Water Department. This inherited work ethic has sustained me. Despite my parents not going to college my brothers and I all did. My twin brother Bill is a very well - known Pediatric Oncologist at NYU and my older brother Michael, led a very successful career as an academic sociologist, author and educator.

I was not destined to be a physician (was a marginal student in high school), but my life changed dramatically, in an instant and this formed the basis for my best piece of advice (at this stage of my career I am often asked for advice)—fall in love with the right people! I did, I met Laura Presti whose father, Joseph, was a urologist. Because of this I have been blessed with a great family and career, both passions. Our children - Ryan, Savannah and Lauren, son in law Matt, and my grandchildren - Caroline (Scout), Luke, Nick (N. Peter) and Sophie, (who call me "Chief") bring me great joy (and energy).

Early Career

I graduated from University of California, Berkeley and went to medical school at Georgetown. I returned to San Francisco and completed my Urology residency at UCSF where Emil Tanagho was Chair. I benefitted greatly by his mentorship as well as that of Drs. McAninch and Williams. I had a chance some years ago to reread the "personal statement" I submitted with my application for residency. Let me just say, I am not sure I would select a resident today with a similar statement! It was too tentative, and I said nothing about academic aspirations.

Although I initially had an interest in pediatric urology (this may surprise many) I was ultimately drawn to the field of Urologic Oncology. Like many seeking world-class training in this field, I completed a Fellowship at Memorial Sloan Kettering Cancer Center. The mentorship and the transformative training I received were critical to any success I have had in my chosen field. Drs Fair, Whitmore, Herr and Sogani were inspirational. After finishing my fellowship, I interviewed for a faculty position widely. A bit of advice I was given on one of the interviews at the time has stayed with me. Murray Brennan, Chief of Surgery at MSKCC told me during an interview that "you take a position for one of two reasons. Either you really want the position, or you don't want anyone else to have the position!" In an instant I made my decision to return to UCSF as an assistant professor. I could see a great opportunity to build a program there. Ten years later I was appointed the Chair of Urology at UCSF, its 4th. The Dean at the time, Haile Debas, evidently saw something in an untested, young early career, faculty member that I did not! I learned early in my career that opportunity and culture trump start up packages, space, etc. when it comes to choosing jobs. UCSF was and is a place of great opportunity and culture, it is aspirational, collegial and never shies from tackling the world's most challenging healthcare problems. AIDS in the 1970s (when I arrived)

and COVID, more recently are examples. UCSF is inclusive, respectful of all and I know of no other institution where health equity is so highly regarded.

Leadership/Program Building

Ibelieve in practice whether it be related to medicine, athletics (I run, a lot), hobbies or, importantly, your personal life. I became Chair when I was young and practiced being the best leader I could be. I pursued all domains simultaneously and early (education, clinical care and research). I believe when something needs to be done, it should be done now (see Peter's Laws which was not authored by me but bears a striking resemblance to my outlook). Starting as Chair, I was blessed to have Drs. McAninch, Lue, Stoller, Baskin, Shinohara and Presti (Joseph Presti, Jr) as early and supportive colleagues. I, and those around me, favored a culture which was aspirational and inclusive and valued both professional and personal (our families') achievements. We honor both equally. At UCSF, we strive to be more "horizontal rather than vertical", acknowledging the efforts and value of all. I felt that we should have a training program and faculty that mirror in many ways those we treat. We attract top talent who happen to be diverse. We, our patients and those communities in which we serve, have benefited greatly by this. We have consistently strived to offer the highest quality urological care, the most innovative research and train future leaders in the field. My greatest professional pride has been the people I have had the honor to work with and learn from. Many have gone on to lead other departments. Our impact is felt widely. I have held many positions at UCSF: its first Surgeon in Chief of the Cancer Center, Prostate Cancer Program co-leader, Helen Diller Family – UCSF Comprehensive Cancer Center, Associate Dean, and Interim Cancer Center Director to name a few.

Medical research, when well done, is the foundation for better health care and maintenance. Research has always been a core value of the Department honored by the leaders that came before me – Drs. Hinman (Sr. and Jr.), Smith and Tanagho. I sought to build a research program which was broad and took full advantage of the immense opportunities at UCSF. We recruited the best scientists from around the country, most all of whom had not worked on urological disease. With time they did, and they have been hugely successful. We have consistently been one of largest recipients of peer – reviewed funding. Research and education are under – funded mandates. To have great programs requires support. Philanthropy has been critical to the success of these programs. Developing strong relationships, articulating a crisp future vision of health care that attracts the enthusiasm of donors, listening to their interests and learning from them, saying thank you and showing them the value of their support (what you did with it) are essential. Today, UCSF Urology is a powerhouse of innovation and research. It has grown to now include 26 full time and superb clinicians (clinician scientists and educators) and 6 full time basic scientists with a research portfolio of over 6 million dollars annually. The support and resources raised have been used across departments, divisions and the campus.

A department's impact should be felt not just on the discipline it serves, but also on the environment (university, health care system) in which it resides. Alignment, sharing of value, interest and support across departments and divisions elevates the productivity and status of that department. This is critical for relatively small departments, like urology. I successfully led the Department of Urology at UCSF for 23 years stepping down because I wanted to give someone else the opportunity I had. You don't have to stay in a position just because you do it well! The department's current Chair, Dr. Benjamin Breyer, will bring UCSF to even newer heights.

Research and Clinical Interests

Being a busy surgeon, I gravitated to translational and health outcomes research. I realized the importance of good information – prediction science. Knowing our outcomes of care allows us to advise patients better and get better by learning from these outcomes. I wanted to build infrastructure early. Although I was trained to be a full spectrum urological oncologist which I pursued over the first half of my clinical career, more and more of my practice became prostate cancer specific.

I developed, with many colleagues, notably Mark Litwin, the Cancer of the Prostate Research Endeavor (CaPSURE) in the 1990s, a registry of a diverse group of 15,000 men with prostate cancer from 40 sites across the US.² Sociodemographic, clinical information, patterns of care and health outcomes, including health related quality of life, were tracked. The academic output of this endeavor continues to be significant and has given us considerable insight in patterns of prostate cancer diagnosis, variations in patterns, costs and clinical outcomes and uniquely

the impact of diagnosis on changes in quality of life. More than 150 manuscripts have been published based on this accumulated data. There have been numerous highlights, but one lasting example was how one could predict biochemical – free survival, overall and prostate cancer specific survival at diagnosis using a straightforward tool, encompassing a few simple clinical and demographic variables – patient age, serum PSA, Gleason score, tumor volume and stage. Matt Cooperberg, who led the project, created the UCSF - CAPRA score, a multivariable risk assessment tool that has been used around the world and has set the standard for how to use clinicopathologic information wisely.³ It allows us to determine whether new biomarkers improve risk prediction.

At the same time, I developed our own registry at UCSF, this time linked to a very large biorepository. We have carefully chronicled the outcomes of 10,000 men who have undergone surgery or managed initially with active surveillance. Although it might seem to be intuitive to follow the outcomes of those you treat, this is done rarely, even at many academic institutions. The fact that we had outcome data inked to such specimens has allowed to develop and validate a host of biomarkers and brought new technology to UCSF to be developed or validated. An ongoing example is project where we scan histologic images and develop/validate an AI algorithm to predict outcomes without the use of expensive companion diagnostics.

Although I was trained as a surgeon at a time when anyone with a cancer diagnosed was treated, I became concerned about the risk of over - detection and - treatment of low-risk prostate cancer brought about by widespread and repeated use of serum PSA. We have developed one of the largest and best characterized cohorts of men managed with active surveillance in the world. We have shown what predicts for progression, the safety of this option and the impact of treatment of those who do progress. We have learned to operate on those who best benefit from it. I have worked relentlessly to improve surgical technique and currently believe that image (currently being refined at UCSF) or radio – guided surgery will improve outcomes.

I have authored or co-authored more than 750 publications on a whole host of topics – prediction science, biomarker development and validation, the natural history of various states of prostate cancer (at diagnosis and recurrence), advanced imaging, etc. I have been lucky to work with many, at UCSF, nationally and internationally as we have partnered with many. I continue to strive to ask important questions and answer them (my new research ideas often come to me when I run in the early AM hours)! I have a baseball mentality when it comes to authorship, I strive for a high on base percentage!

Honors and Awards

I have had the honor to lecture and be a visiting professor widely and internationally. I have made lasting friendships with colleagues in this country and abroad. I have been lucky to be honored. I hold the Ken and Donna Derr-Chevron Distinguished Professorship passing the Taube Family Distinguished Professorship to Ben Breyer. I have been president of the American Board of Urology. In 2010, I was awarded the Eugene Fuller Triennial Prostate Award and the SUO Medal from the American Urological Association and the Society of Urologic Oncology, respectively. In 2014, I received the Barringer Medal from the American Association of Genitourinary Surgeons, in 2019, the Société Internationale d'Urologie SIU Mostafa M. Elhilali Award, in 2023, the Ramon Guiteras Award from the American Urological Association and in 2024, the San Francisco Firefighter's White Helmet Award. Most recently, I received UCSF's Exceptional Physician Award, an award I highly value given my primary role as a caregiver at UCSF.

Parting Thoughts

In life, you should have more than one job, I have had many and plan many more. My legacy is not the national rankings, awards or my H factor, but the people in my life who have made me what I am and will be – my family, the faculty and trainees who have supported and inspired me, and the patients I have had the honor to have served and learn from. When I was young, I would never have imagined the life that I have!

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