
LEGENDS IN UROLOGY

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I was truly honored to be asked by Dr. Gabriel Haas to submit this essay to the journal's Legends in Urology series. Though surprised by the invitation, I accepted it with alacrity hoping that my story will inspire aspiring International Medical Graduates (IMG) who plan to establish their career in this great nation of the United States of America.

So, how did this IMG from the Philippines reach the pinnacle of this very competitive medical profession, especially in academics and medical administrative arena?

I learned the leadership and people skill from my father, Pedro, formerly Chief of Police and Mayor of San Luis, Batangas, Philippines, 75 miles south of Manila, where I was born on August 13, 1942. Our family name is uncommon but well recognized. My namesake is my Grand uncle, General Ananias, who led in the Filipino-Spanish war in 1890's (www.geni.com/people/Ananias-Diokno). His son became a Justice of the Supreme Court and his grandson, a Senator. My two older brothers became a Mayor and Congressman.

I received my MD degree in 1965 at the University of Santo Tomas (UST) before I turned 23 years old because I started the 6 year public elementary education at age 6, then 4-year private high school, 2-year premed, 4-year medical school and an internship year, a prerequisite for graduation. In high school, I graduated first honorable mention (third).

My interest was in horticulture/agriculture, however, after declining my family's wish for me to be a priest, I accepted their second option of being a doctor. In the Philippines, going to college financed by the family is the tradition.

UST admitted 1000 medical students with almost equal distribution of genders assigned in separate classes during my first year. After the first year, I was assigned to the men's top bracket section based of our first year GPA. For internship, I was one of the 12 students selected at the US Air Force Base Clark Hospital, a coveted position chosen from among 200 Filipino senior students from the various Philippine medical schools. UST sent their top bracket men's class to compete in a whole day screening of written exams and personal interviews by three panels of two physicians per panel. The internship was my introduction to US medicine and specifically to Urology.

Providentially, my first rotation was Urology led by Stanford trained urologist Dr. Joseph Hart and assisted by general medical officer Dr. Robert Ross. After internship, I was offered a year of urology residency under Mayo trained Dr. Frank Leary. During my residency, I learned about Dr. Jack Lapidés. Drs. Ross and Leary wrote letters of recommendation for me to be selected at Wayne County General Hospital in Michigan.

Although I was offered a residency in Orthopedics during my first rotation, I declined because my mind was focused on Urology. I was pleasantly surprised that just after the first month in Urology, Dr. Lapidés offered me the Urology residency. During my first year of residency at Wayne County, Dr. Lapidés was appointed Chair of Urology at the University of Michigan (UM). He combined the two programs and I became a UM resident. After my residency, Dr. Lapidés offered me a year of fellowship in Neurourology and Urodynamics.

From the start, I felt comfortable working and learning from Dr. Lapidés although almost everyone feared him. He was a disciplinarian, demanding complete and accurate case presentations, and never use any abbreviations, which suited me fine.

I received excellent urologic training at UM with rotations at Wayne County General, Veterans Administration, Children's, St Joseph Mercy, and the University Hospital. But my greatest training was in urologic research, teaching, training and management which came handy when I was offered the chairmanship of the Department of Urology at Beaumont Hospital in Royal Oak, Michigan in 1984.

My research experience started as Chief Resident, Dr. Lapides handed me a bottle of Oxybutynin Chloride and asked me to dispense the 5 mg tablet to our patients with urinary frequency and urgency following transurethral prostatectomy. The medicine was available in Mexico as an antispasmodic drug for peptic ulcer. A week later, we knew that Oxybutynin relieves frequency and urgency. The next assignment was to perform serial cytometric examinations in a paraplegic with detrusor hyperreflexia before and after taking Oxybutynin to observe the effect and duration of action on detrusor contractions. The result was dramatic, significantly delaying the onset of detrusor contraction and a duration of action of at least 8 hours. These findings led to a prospective randomized controlled study funded by Marion Laboratories. The rest is history. In 1974, FDA approved Oxybutynin, named Ditropan for its dual action of anticholinergic and antispasmodic effects, the first drug ever to receive an FDA approval for bladder overactivity. Oxybutynin became the gold standard for future anticholinergic drugs for bladder overactivity. This project led to my first publication in the *Journal of Urology*¹ and served as my passport to the world of Urology with lectures in several countries in Asia, South America, Europe and Scandinavia.

My second assignment was reviewing charts on clean intermittent self-catheterization (CIC). Dr. Sherman Silber, then one of our residents helped with the review. The findings astonished us but not Dr. Lapides. This CIC project when reported to the world did not get an easy, warm reception from many centers and experts. I recalled having to argue with Professor Guttman when he visited the UM Rehabilitation center because he was opposed to CIC and favored the use of gown, mask and sterile gloves. As the urologist consultant for the UM spinal cord injury center, I stood my ground with Professor Guttman. The rest is history which I was fortunate to document with a video interview of Jack Lapides in May 1995 commissioned by the AUA's Eminent Urologist Series.

My fellowship project was studying canine's pelvic nerve innervation to the bladder using electrical stimulation that led me to pursue neurosurgical therapies for bladder dysfunction including selective sacral nerve rhizotomy to sacral nerve neuromodulation. It also served as a springboard in studying the relationship of the detrusor and the striated urinary external sphincter by doing combined cystometry and perineal electromyography which led to the discovery of the various categories of detrusor sphincter dyssynergia, useful in understanding the proper rehabilitation of neurogenic bladders. Our scientific exhibit on this topic won the first prize award at the AUA meeting in Miami in 1975.

I also collaborated with two outstanding nurse scientists, Thelma Wells, PhD and Carol Brink, opening the first geriatric continence clinic in America. We introduced behavioral and pharmacologic therapies at the clinic as well as developing the Brink test for estimating pelvic floor muscle strength.

A major break came in 1980 when Dr. Lapides assigned me to participate in a National Institute on Aging (NIA) workshop convened by Dr. T. Franklin Williams and assisted by Dr. Evan Hadley to establish bladder research priorities. With leaders including Drs. Saul Boyarsky and William Bradley, the priorities were established including understanding more about geriatric urinary incontinence (UI). Upon returning to Ann Arbor, I immediately prepared a grant application about the epidemiology of elderly continence and incontinence and to further understand the pathophysiology of UI. I submitted a Center grant for my first ever NIH grant application with collaboration with UM School of Public Health, Institute for Social Research and the Division of Geriatrics. I received my first (\$1.9 million) of many NIH grants as the PI for a 5-year grant that started in 1983. MESA (Medical Epidemiologic and Social Aspects of Aging) was born. These projects became my long term research projects spanning 33 years that started as epidemiology, characterizing lower urinary tract symptoms (LUTS) and UI in the elderly, the clinical and urodynamic characteristics, impacts and consequences of UI, then the use of behavioral, pharmacologic and surgical therapies, to prevention of UI. We introduced the MESA questionnaire to identify and quantify the severity of stress and urge UI. Lastly, we mined the MESA data for risk factors that helped established a Continence Index questionnaire to predict future UI in elderly continent women.

While at UM, the medical students honored me with the Kaiser Permanente Award for teaching excellence, the Urology resident's Silver Cystoscope Award, nominated to the Henry Russel Award, and promotions from Instructor in 1971 to full Professor in 1982.

In 1984, a surprise call came from the acting Chief of Urology at Beaumont in Royal Oak, Michigan, Dr. Jose Gonzalez, inviting me for dinner with Beaumont leaders including the Chief Medical Officer (CMO) and the Chair of Surgery. I was offered the Chair of the Department of Urology which at that time was at the brink of being closed by the AUA residency committee for lack of academic activities. After I received commitments to expand the department's infrastructure, supporting the residency, expanding the faculty, acquiring advanced urological instrumentations, and establishing a research laboratory, I accepted the position. We appointed a full time Pediatric Urologist, Dr. Evan Kass, Director of Education, Dr. Jay Hollander, Director of Urology Research, Bruce Steinert, PhD, and acquired one of the first three ESWL units in Michigan. Within a year, we received full accreditation and increased the complement of residents from one to two/year. Within a few years, our Department was ranked by US News and world report as one of the top 50 in the country. Our resident applicants increased from a few to over 250 per year for two positions. The original eight urology attending staffs grew to 38 by the time I stepped down in 2007 after 23 years of Urology Chairmanship, to devote full time as the Chief Medical Officer (CMO) and Executive Vice President of the Beaumont Health System, a \$1.2 billion operation.

During my Beaumont tenure, I was elected President of the Michigan Urologic, North Central Section of the AUA, Philippine-American Urologic, The Reed Nesbit Society and the Geriatric Urologic Society. I received the NIH MERIT Award, AUA Presidential Citation, the Victor Politano Award, SUFU lifetime achievement award, Philippine government Outstanding Filipino Overseas, UST Outstanding Medical Alumni Award and the Beaumont Quadruple Threat Award for Clinical, Teaching, Research and Administrative Excellence. I published four books, over 50 chapters and over 200 peer reviewed papers. I co-chaired the first ever Government sponsored Guidelines for Urinary Incontinence in Adults, appointed Associate editor for the Journal, International Urology and Nephrology in 2006 and promoted to Editor in Chief, urology section in 2011. We trained 37 Urology residents and 44 International fellows, many are now practicing in academic, clinical and or administrative leadership roles in the United States, Asia, Africa, Europe and South America.

I did not dream of being a CMO. One day in June 2006, the CEO, Mr. Kenneth Matzick, came to my office and informed me that he planned to appoint a new CMO. He was looking for someone who is a well-respected clinician by the medical staff, a well recognized educator and teacher, and a rainmaker and successful in obtaining NIH grants. I thought he was going to ask my recommendation and had no inkling he was going to offer it to me until he described his last criteria which at Beaumont I was the only one with such credential; having sustained NIH funding, and establishing a first at Beaumont, the Peter & Florine Ministrelli Chair in Urology, funded by this grateful family. After I said no because I lack business and financial background, he told me that he was looking for medical leadership, which I have been successful in leading the urologists at Beaumont. Well the rest is history. During my 7-year tenure, I helped in acquiring a third hospital, and at my retirement, for their gratefulness, they named a street, Diokno Drive, in my honor. We were one of the first in the country to totally convert the hospital system into using the EPIC Electronic Medical Record and established a robust system-wide quality and safety department. I was the medical leader of the four leaders that created a new Medical school, Oakland University William Beaumont School of Medicine (OUWSOM) in 2008. We established a Beaumont medical group and a faculty practice plan, and hired over a dozen Department Chairs to improve the academics. During my retirement from my CMO position, Beaumont under CEO Mr. Gene Michalski, named the administrative medical library, AC Diokno library in my honor.

The story is not complete without recognizing my wife of 52 years, Lourdes, my four married children and 13 grandkids. These 22 people are the wind under my wings and without their support, encouragement and love, I could not have flown this high. Carpe Diem!

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References

1. Diokno AC, Lapidus J. Oxybutynin: A new drug with analgesic and anticholinergic properties. *J Urol* 1972;108(2):307-309.