# LEGENDS IN UROLOGY

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The journey started in December 1957 at Port Georgetown, Guyana aboard the SS Amakura, a small cargo steamship bound for England. Three weeks later we were in Liverpool, and I saw snow for the first time - pretty but cold. Onward to Ireland where Trinity College, University of Dublin, had accepted me into their "School of Physic" (Medical School). I still know not why. A long demanding course of study then followed - quite enjoyable overall. The usual strictures - many are called, few are chosen!

**The Dublin Years**

Trinity was a delightful place, in the middle of one of Europe's finest capital cities, with a rich culture and history and a profound respect for tradition. There was a generosity of Spirit in the Medical School –Dean D. Torrens, Prof. P. Gatenby, Prof. G. Fegan who introduced me to Mr. Terence Millin, Prof. D. Weir and others who made it their business to help callow "kindergarteners" like myself. I graduated BA in 1963 and M.B., B.Ch., B.A.O. in 1964 as a well-rounded physician with a solid foundation of clinical training. Trinity was the last of the ancient universities of Great Britain and Ireland to insist on a full liberal arts B.A. degree for its medical school graduates, much maligned at the time but now much appreciated.

I was invited to teach Physiology after graduation - hugely beneficial in my subsequent surgical career. Later, I was appointed a Medical Research Council of Ireland Fellow to work in the Trinity Professorial Unit, exposing me to the rigors of experimental and research methodology. In 1967, I passed the Primary Surgical Fellowship (FRCSI) examination and successfully defended my post-graduate MD thesis entitled "Some Aspects of Nutrition and Gastric Secretion Studies following Vagotomy and Pyloroplasty".

During my surgical training I benefited enormously from the kind and meticulous mentoring of Mr. David Lane, Consultant Surgeon at the Meath Hospital – a major Trinity College teaching hospital. I also met the internationally known English surgeon Mr. Norman Tanner who recommended that I obtain a large notebook and enter all my surgical cases - fantastic advice then and now! I suppose the Ipad and laptop have now replaced the hard copy notebook. I passed the Final Surgical Fellowship (FRCSI) in 1968 and won the Dublin University Surgical Travelling Scholarship and Edward Hallaran Bennett Medal in Surgery just before leaving Dublin in 1969 to return home to the now newly independent Guyana. Here began my career as a general surgeon. Mr. Freddie Penco from Trinidad, a fellow medical student in Dublin who subsequently became a distinguished cardio-thoracic surgeon in his native country, advised that I apply for the Smith and Nephew Foundation Fellowship, then the premier scholarship for young surgical trainees from the British Commonwealth. I was lucky to be awarded the Fellowship at the Institute of Urology in the UK. I believe Mr. Millin's reference decided my selection. And so I returned to England in 1972 by overnight aircraft flight this time.

**Urologic Odyssey**

The Trinity "connection" proved invaluable in the UK as I was welcomed by a distinguished graduate who helped me join the North Middlesex Urology Department headed by Mr. Basil Page, then the pre-eminent prostate resectionist in the UK. Upon completion of my Fellowship in 1973 I returned home as Guyana's first and only urologist. Guyana is a Caribbean developing country located at the top of the South American continent. Sub-specialization in urology is uncommon so one is expected to deal with the entire gamut of urological conditions - the common, the complex and the esoteric.

I introduced the TURP technique for surgical treatment of benign prostatic hyperplasia (BPH). There were no cameras, no Xenon light sources and it was a difficult operation. The main difficulty was the restricted vision caused by bleeding. By 1993, an anesthetic angel of mercy had shown the way: Dr. Alexandra Harvey - a Guyanese trainee in the anesthesia program at the University of the West Indies (UWI), Jamaica - had seen gynecologists inject vasopressin prior to fibroid removal - a technique that reduced bleeding. Could intra-lesional vasopressin reduce bleeding during TURP?

Library references and internet searching were unavailable in Guyana at that time so I consulted many distinguished overseas experts. All were unaware of any relevant studies. We would have to do the investigations ourselves. Our final answer was a single bolus of 10 units vasopressin diluted with 9.5 mL isotonic saline injected trans-rectally into the prostate immediately before TURP. Blood loss was measured by the old-fashioned Nesbit technique. Blood loss was HALVED! Vasopressin is a powerful vasoconstrictor and considerably improved vision during the TURP procedure with no specialized equipment needed. Sterile water prepared in our hospital is used as TURP irrigant. It is cheap and easily obtained but the seminal work of D. Creevy warned of its danger in causing the TUR syndrome - if water enters the circulation. Could the vasoconstriction produced by vasopressin restrict or prevent water from entering the circulation?

Professor Robert Hahn of the Karolinska Institute in Stockholm generously loaned us an Alcolmeter so we could measure irrigant (water) entry into the circulation during TURP, using previously added alcohol as an indicator. We were breathalyzing men before our National Police acquired breathalyzers! We found that very little irrigant entered the circulation during the vasopressin TURP rendering water irrigation safe and affordable, benefitting patients in developing countries.

The post-infective urethral stricture was a formidable challenge. At the Institute, Prof. John Blandy and Mr. Richard Turner-Warwick introduced me to urethroplasty surgery. My problem in Guyana was working with poor lighting and suction. So I adapted the Blandy-Leadbetter technique, avoiding the need for sutures by pulling the apex of the perineo-scrotal flap through the index finger dilated bladder neck (Turner-Warwick tip) and tied it over a rolled-up gauze swab placed onto the supra-pubic wound. This anchored the flap and allowed the raw underside to stick to the raw strictured area stretched by the index finger. No dissection is required, so there is no risk of sphincteric damage. The technique provides dependent bladder drainage that the patient controls. At a second operation the perineal urethrostomy is closed, which allows the man to void normally from the tip of his penis.

This simplified procedure offered a solution to the long, tortuous urethral stricture and watering-can perineum – common presentations of urethral strictures in the Caribbean. It is also useful for men who present with a fractured pelvis and disrupted posterior urethra.

The management of prostate cancer in Guyana remains a challenge. Our patients usually present late with advanced and/or metastatic disease and hardly ever meet the criteria for a radical prostatectomy. Contemplation of a radical requires a detailed conversation with patient, relatives and operating surgeon. Artificial sphincters are not readily available. Urinary incontinence is a tragedy in developing countries.

Locally invasive or metastatic prostatic cancer often responds for many years to intermittent, low dosage Stilboestrol therapy. This improves the quality of life at very low cost. Very few of my patients can afford LHRH agonists or antagonists. I have not seen a single case of oestrogen-related thrombo-embolism in over 40 years of urological practice. I do see gynecomastia and patients complain of breast tenderness but accept these conditions when explanations are provided.

Renal tract calculi are very common in Guyana. I always thought that incisional lithotomies (open surgery) were illogical, but were all we had. In 1984, I renewed an old friendship with Dr. Mike Kellett at the Stone Centre in London who kindly introduced me to the wonders of ESWL and percutaneous nephrolithotomy (PCNL) with Mr. John Wickham. However, it was Miss Jean McDonald FRCS, a Jamaica born urologist of the North Middlesex Hospital, who led me through the steps of the logical and affordable retrograde ureteroscopic procedures in 2000. She remains Auntie Jean to my son Davendra, a Consultant urological surgeon in London.

**National and International Connections**
I was President of the Guyana Medical Association in the 1980s, later elected to membership of the British Association of Urological Surgeons (BAUS) and Urolink. I was one of thirteen urologists who established the Caribbean Urological Association (CURA) in 1999 and in 2003 was elected its President and subsequently inaugural Honoree. CURA plays a vital role in urological training to specialist level in the Caribbean. This is accomplished with the support of our overseas partners. Mike Kellett visited us partly through the British Association of Urological Surgeons (BAUS) Urolink connection. He taught PCNL techniques to CURA members - a wonderful hands-on experience.

Mike Wallace of the UK supported my membership of the Societé International d'Urologie (SIU) in the 1990s. This allowed CURA to become an affiliate of SIU with attendant privileges and designation of the San Fernando General Hospital in Trinidad as an SIU Training Centre in 2010. Luc Valiquette and the late Mostafa Elhilali became specially valued SIU colleagues. I am a CURA/country SIU delegate and in 2016 organized a full session on developing world urology at the SIU conference in Argentina. It was probably the first time this topic was so prominently featured at an International Urological conference. Full house – standing room only!

**Very Special Linkages**
Then there was Professor John Fitzpatrick, Editor-in-Chief of *The British Journal of Urology International* (BJUI), sadly no longer with us. John was an inspiration to the expanded CURA membership and helped propel us onto the international stage. The BJUI is now the official journal of CURA. It shares in BJUI scholarships, receives BJUI speakers at its annual conferences, and meeting abstracts are published on-line by BJUI. The current Editor-in-Chief, Prof. Prokar Das Gupta continues to support the BJUI/CURA relationship. By 2013, I was elected to the Editorial Board of BJUI and also became a full referee of the *Journal of Endourology*.

CURA also benefits from American Urological Association (AUA) support with special privileges for Caribbean trainees. The AUA funds a speaker for our annual meeting and CURA has representation on the AUA's International Committee.

Additionally, CURA has developed a special relationship with the Pan African Urological Surgeons Association (PAUSA). CURA/PAUSA share a scientific session during the Annual AUA meeting where Caribbean urologists interact with their African colleagues and trainees have opportunities to present. Professor Serigne Magueye Gueye (Senegal and PAUSA) remains a valued friend of CURA.

Prof Arthur Burnet of the Johns Hopkins hospital adopted CURA, offering numerous surgical workshops. Mahesh Desai and Sanjay Kulkarni (India) willingly share their expertise. Professor Grannum Sant (Boston, USA), remains a "Caribbean man" and a guiding spirit for CURA and the UWI training Programs. Thank you Grannum! Kurt McCammon is our most recent surgical mentor – an outstanding human and an expert on genitourinary reconstruction.

Fifteen years ago, the English Royal College of Surgeons came to the Caribbean - the first time in their two hundred year history they had met as a full college outside the United Kingdom.

They suggested the formation of a local Caribbean College, and offered their support to such a venture. They provided easily accessible skills courses and we welcomed Presidents Bernie Ribiero - now Baron Ribiero - and Norman Williams who stimulated our membership with their professional presentations. The Caribbean College of Surgeons (CCOS) was also honored by William Fitzgerald (Fitz), past President of the Canadian College, who made a popular presentation on training opportunities in Canada. Prof. Eddie Hoover represented the US interest in the CCOS and this proved crucially important in the development of further US training opportunities for young members of the College. In 2010, I was elected to serve as President, and inducted as a college Honoree.

**University of Guyana Era**
I served the University of Guyana as Senior Lecturer in Surgery, Director of the Medical School and subsequently Dean of the Faculty of Health Sciences (1992 -2000). This exposed me to other kinds of disciplines (negotiation, fiscal responsibility, diplomacy, mentoring and team-building) and further developed and embellished relationships with colleagues across the Caribbean – Prof. Sir Errol Walrond and Prof George Nicholson (Barbados), Prof. Vijay Naraynsingh and Prof. Alan Butler (Trinidad), Prof. Owen Morgan, and Prof Peter Fletcher (Jamaica). This was an

especially exciting period for me- fashioning young minds for the demands of a medical vocation while ensuring that the patient is central to all that is done. I firmly believe that research and continuous learning remain pillars of our medical profession.

As Dean of the Faculty of Health Sciences, the first local medical postgraduate training program was developed, recognized by the Royal College of Surgeons of Edinburgh. We convinced the UK General Medical Council that English is our official language and so dispensed with the need to pass an English language examination for UK registration. This surgical program was developed and delivered with the help of the Canadian Association of General Surgeons (CAGS). Teaching was provided in the local academic hospital and in Canadian centres mostly associated with McMaster University. Some fine people helped the process - Robert Taylor then president of CAGS, Prof. Brian Cameron as chief accoucheur, and Rob Fairful-Smith who meticulously developed the examination template. A small but important step in the development of surgical knowledge, as well as our own self-esteem. Thereafter, other local postgraduate programs evolved. The particular strength of local training is that more candidates can be trained, and they tend to stay, work, and move their vocation higher in country. A gem I learnt from an ex-President of the Canadian College is that our graduates not only stand taller but stand on our shoulders! You haven't seen my shoulders!

**EXEUNT**

The Republic of Ireland appointed me their Honorary Consul in Guyana 20 years ago. A small service to repay all they had given me. The local air carrier Caribbean Airlines made me a medical adviser 30 years ago - another honorary position but initially with travel privileges, used by my children studying abroad to visit Guyana during vacations. These visits home enabled them to keep in touch with their birth country and remember their "roots". They remain committed Guyanese.

The practice of Urology in a Third World setting presents different challenges - financial constraints, material shortages, large numbers of patients who present with detailed documentation from their overseas relations on the need for green light laser treatment etc. Quite fun and I thank them for teaching me so much. I am grateful to Mr. Millin for his help and encouragement during the early days of my urological career. One final thank you - to Lester Goetz of Trinidad and Tobago, inaugural President of CURA, for being such a powerful force in the creation and development of the organization and for other personal favors over the years. Urology is my special passion but I also enjoy tennis (nowadays more watching than playing), gardening, books and music. I was blessed with a partner and to her is due much of the credit for whatever I have achieved personally and professionally. Without her guidance and support I would probably be playing marbles on a Sunday and consorting with actors – strictly forbidden by the rules of Trinity College Dublin!

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