
LEGENDS IN UROLOGY

Colonel David G. McLeod, MD, JD, MC, USA
(Ret.) Professor Emeritus
Department of Surgery
Uniformed Services University of the Health Sciences
and the Walter Reed National Military Medical Center
Bethesda, MD, USA



It was both an honor and a surprise when the Editors of *The Canadian Journal of Urology* first asked me to reflect on my life focusing on military medicine. I successfully evaded them for several years as I did not feel comfortable with being a “legend.” However, their persistence wore me down, and I hope that my experiences are interesting.

I was born in Fayetteville, North Carolina, which is home to Fort Bragg. My father was a general practitioner, and my mother taught English and Latin in the high school in Fayetteville. In the back of my mind I was always interested in becoming a physician; however, it was on the back burner for this teenager.

During my sophomore year in high school, after a youthful prank, it was decided by my parents that I would do better in a military school environment. I was enrolled in Oak Ridge Military Academy near Greensboro, North Carolina. I did thrive in this disciplinary academic environment and graduated from high school in 1953. The Korean War was ongoing, and I told my parents I wanted to join the Marine Corps. My enlistment date was several days after the armistice was signed between North and South Korea. There was no trouble with boot camp; e.g., marching, the rifle range and commanding my peers in my squad. It was decided that I would be a small arms repairer/technician, and I served in this capacity at Camp Lejeune, North Carolina. In late 1954, I was transferred to Camp Fuji, Japan where I spent over a year as one of the armorers for a tank battalion. I ended my Marine Corps active duty back at Camp Lejeune as an armorer for an artillery battalion. Once my active duty time was up, I went to Campbell College in Buies Creek, North Carolina and subsequently graduated from the University of North Carolina becoming a member of Alpha Epsilon Delta Premedical Honor Society.

As we all know, decisions in life are made for many reasons. As an example, while studying with a colleague in my junior years, he informed me that there was an “Army Senior Student Program” where one would be on active duty and paid during the senior year of medical school. The person then becomes an intern in the Army. These were the days when the United States was preparing to get more involved in Vietnam, and I was assigned as a rotating intern to the Walter Reed Army Medical Center (WRAMC) finishing my internship in the summer of 1966. During the internship I decided that Urology was an interesting field, and a Urologist is what I wanted to become.

I was now a General Medical Officer and requested airborne training and an assignment to Vietnam. This decision was not easy, but I felt that a combat tour would almost guarantee a residency, especially since I had done very well in my internship. At this point I was married with a daughter and a son on the way. I had very mixed emotions how to convince my wife that this assignment would be a career advancement. There was no guarantee; but she as always, was wonderful and strong. She was, and is, my enabler. However, I twisted an ankle in jump school and did not finish the course.

I arrived to Vietnam in August 1966. Military medicine was changing in the field with the growing air evacuation made possible by the UH-1 Iroquois “Huey” helicopters. Nevertheless, in the fall of 1966, triage and treatment tents were set up in a Special Forces camp that was carved out from the jungle. Even later in my tour when the air evacuation was more mature there were always instances where people were wounded in the perimeter by

occasional mortar fire during probing attacks on the perimeter. As has been said before, there were moments of terror juxtaposed with hours of boredom.

Some of the physicians took turns flying in the medical evacuation (Med Evac) unarmed helicopters which were marked with three red crosses. One time we landed in elephant grass, and out of the jungle, soldiers brought several wounded and one apparently dead soldier. His buddy handed him over to me and asked that I take care of him, I replied that we would do all we could. That poignant memory is burned in my mind, because two years later I was recognized in Walter Reed by the soldier who had handed his comrade to me. “Doc, we really knew he was dead, but you tried. Thank you.”

It was in this Special Forces camp where I learned that I had been selected for the Urology Residency program at WRAMC, following a year of surgery at Fort Bragg. However, the road to urology was far away, and I was still in Vietnam.

In December we moved once again, and this time the medical company was next to an airfield near a Special Forces camp in the Central Highlands. Someone decided that the brigade would vie with the only other paratroop brigade in country – the 173rd Airborne Brigade. The plan was that one of these brigades would do a combat jump. To that end there were three days of refresher jumps. It took six jumps, to qualify the brigade. I spoke to a commander of one of the battalions and he said: “Doc, if you want to break your neck then come with us.” After two jumps with his battalion the next battalion commander said, “No.” However, his first sergeant took me under his wing for two more jumps, the first of the two almost landing on the battalion commander. He threw his helmet on the ground with a moderate degree of profanity, but he let me jump again. Then one more jump with another battalion, and I had my airborne wings, along with the South Vietnamese jump wings. I kept this endeavor out of the mail, but my wife heard about it on the news: “The oldest son of Dr. and Mrs. J.H. McLeod (David McLeod) obtained his jump wings after five practice jumps in Vietnam. There were about 30 men that had to be evacuated to hospitals with myriad jump injuries.” In addition, my unit did not make the “combat jump” in February 1967.

My son was born in December 1966, and I was able to meet my wife in Hong Kong for an R&R (rest and recuperation) in March 1967. She arrived in Hong Kong a day before I did, and I almost did not make it. The morning of the flight I arrived in the departure area, and the sergeant informed me “Sir, we have no more room on the flight today. What about Bangkok?” I told him that I was meeting my wife in Hong Kong. He went on the loud speaker and said “Attention, we need some help here, the Capitan needs to go to Hong Kong to meet his wife. For those who have not been in Bangkok, I can say that everything is cheaper there.” About five soldiers volunteered to change destination, and I made my flight to Hong Kong. It was a surreal trip, but we truly enjoyed it.

I became the clearing platoon commander and later the commanding officer of the Medical Company. The brigade continued to move around Vietnam and in April 1967, we boarded ships and sailed up the coast while the Marines moved northward when we landed. Nothing much changed. Our perimeter was probed one day, and the Viet Cong blew up our ammunition dump.

Another chore we carried out was signing the death certificates of the soldiers killed. There was a “morgue” which was the back of a refrigerated truck where dead were kept for a day or so until they could be flown to the mortuary in Saigon. These were emotional times, and occasionally, the cause of death was unknown.

At the end of my Vietnam tour I flew back to the States and on to Fayetteville, NC where I surprised my mother. My wife, with the two children, was visiting her parents in Charlotte, NC. After spending the day with my mother, I drove to Charlotte, surprised my wife and daughter, and met my son for the first time! This was a great homecoming, and two days later we were back in Fayetteville where we subsequently settled into a rental home for the year of general surgery. This year went very well. There were a plethora of cases generated by accidents and altercations with the civilian and military police in, and around, Fayetteville which added to the usual flow of patients. Of course, general surgery was busy with cases some of whom were from Vietnam. On weekends when I was not on call I did some emergency room duty work (“moonlighting”). In those days, it was a lot easier than today with the present administrative and legal restrictions.

In April, 1968, my wife went to Maryland to select a home for us. She was given a scare, because Martin Luther King Jr. was killed on April 4, 1968, and rioting had just started in Washington DC. She, not knowing the area well, was driving through the District. She was not injured, and a patrol car escorted her to Silver Spring, MD where she closed a deal on a house.

Lastly, I made friends with a Major “Charlie” Davis Jr., a staff pathologist who was being assigned to the Armed Forces Institute of Pathology where Dr. Kash Mostofi had been able to get him a position. Little did I know at the time how he, Isabell Sesterhenn, and Kash Mostofi, would become a driving force in my academic life.

The residency was a great learning experience. During the Vietnam War, the military had increased in size from its post-World War II draw-down of troops. At the end of WW II the United States had > 12 million active duty military personnel. The number of troops decreased after World War II and then peaked again in 1968-1969. I mention this fact, because the smaller military hospitals; like Fort Bragg and Fort Belvoir were very busy, especially when one factors in dependent care. With the large numbers of young men with testicular cancer, WRAMC was at the forefront in treatment of this disease.

As the end of the residency approached, I still had not decided on sub-specialization. I was interested in research and learned of a year-long research course at the Walter Reed Army Institute of Research focusing on how to carry out all aspects of clinical and basic science research. I asked the director of the research program how best to get into the course. He went over details with me and gave me a place - contingent on the urology program director's permission. The next day I went in and asked the program director if I could take this year-long course before going to my assignment to the hospital at Fort Belvoir. He said “I will check with the director and get back with you.” I stated that I had his acceptance already. He was surprised, but he respected my aggressiveness, and I spent the next year in research. This experience was new and enlightening. Once the year was over, I went to the hospital at Fort Belvoir, VA as the assistant chief of urology in 1972.

At this assignment, I became involved in all aspects of urology. For a period, I entertained pediatric urology as a subspecialty. In 1973, I flew to Toronto where I met with the world-renown pediatric urology surgeon D. Innis Williams from Great Ormond Street, UK. He invited me to London to learn about pediatric urology and to observe him in the operating room. I asked for Permissive Temporary Duty, and the request was granted. I had to buy the airline tickets and pay for lodging and food, and I was on active duty still. When I arrived, the Air Force person in charge of a military hotel near Hyde Park asked if I would be amenable to seeing any person staying at the hotel who had a medical question. I said yes, and he gave me a room overlooking Hyde Park. Luckily there were no emergencies or any medical interaction with military or retired military persons staying at the hotel.

I went for a short while to the “Hospital for Sick Children;” however, Dr. Williams also operated at Saint Peters Hospital, and I interfaced with him there. I was asked to be a temporary house officer at Saint Peters Hospital and worked for Professors Turner-Warwick and John Blandy. One of my fellow house officers was Dr. George Webster from what was then Rhodesia and is now Zimbabwe. George went on to become a professor in reconstructive urology at Duke.

I gradually became enamored with the idea of urologic oncology. Everyone with whom I worked were outstanding surgeons, registrars and students. One experience which I shall always remember was with Professor Blandy where he and I had met a patient who was having a transurethral resection of his prostate. Professor Blandy told the patient that I would also be on the case and after spinal anesthesia we both took a look and he asked me to start while he saw another patient. So I performed a TUR-P, and when he looked into the cystoscope to finish, he said something like “My God, you have done a complete resection. We are still just doing “English Channels” in this country. There is nothing left for me to resect.”

Working with professors D. Innis Williams, John Blandy and Richard Turner-Warwick was a valuable experience. In addition, I met Professors John Fitzpatrick from Ireland and Roger Kirby from London. The comradery and the scope of patients seen during my short stay made for a tremendous experience in my life.

I returned to the United States, passed the Urology Board Examination and settled back into practice at Fort Belvoir, Virginia. At about this time proponents of a Uniformed Services University of the Health Sciences (USUHS) medical school were seeing their dreams become reality. With the end of the draft in 1970s, the country could no longer rely on draftees to provide the bulk of medical care to the military, retirees and their families. Congressman F. Edward Herbert from the state of Louisiana identified the need to have a military medical school to train physicians. The university was chartered by an act of Congress in September 1972, and signed into law in the same year. The eventual site was on the grounds of the National Naval Medical Center where the university now spans 100 acres across the street from the National Institutes of Health. The first class graduated medical students in 1980. At the time I did not know how my future would be shaped by that institution.

In March 1976, I was brought back as the Assistance Chief of Urology at WRAMC. We did some research, albeit not to the extent that we wanted. All this changed when we hosted Dr. Gerry Murphy as a visiting professor one weekend in early 1980. After he learned about our capabilities he implored us to join the National Prostate Cancer Project (NPCP). He was a close friend of Drs. Mostofi and Sesterhenn since he had served in the Army. We became very active in the NPCP, and working with many of the leading urologic cancer experts was one of our good fortunes.

WRAMC became a top recruiter for most of the prostate trials. Gerry left Roswell Park to become chief medical officer of the American Cancer Society in 1988. In 1993, he left the Society and was named Director of the Pacific Northwest Research Foundation in Seattle. Gerry continued to organize numerous seminars in the United States and Europe. He was Editor-in-Chief of *CA—A Cancer Journal for Clinicians*. He remained very active; however, on one of his almost continuous trips he died of a heart attack at age 65, on Friday, January 21, 2000. Gerry was a superb organizer and friend, and the urology research program at the now Walter Reed National Military Medical Center (WRNMC) owes much to him for helping us to become a world-class center.

After the NPCP was folded, in order to get away from specific organ site programs, we joined the Eastern Cooperative Oncology Group (ECOG). Both Dr. Judd Moul, who had graduated from the Walter Reed Program, and I were active in that group. Although we were not in the Southwest Oncology Group (SWOG) we remained close friends with Drs. David Crawford and Ian Thompson, both leaders in SWOG. What we were experiencing at the time was the genesis of a world class center in prostate cancer research and treatment. At the same time, USUHS was reaching its full potential of training military physicians and nurses. In addition, the quality of care provided brought many members of the Senate, The House, and the military for urologic treatment.

One day between cases several people came by my office to see if I had any desire to go to a weekend law school. I thought it was a crazy idea. This school in 1981, did not, at that time, have the authority to grant a law degree, but was close. I started going on Friday nights and on Saturday mornings, and shortly thereafter the school did get the authority to give the JD degree, but here is the caveat. To sit for the DC bar exam, one has to: "Obtain a JD from an ABA accredited law school; or obtain a JD from a non-ABA approved law school while successfully completing at least 26 semester hours of study in the subjects tested on the DC bar exam in a law school that, at the time of such study, was "ABA-approved." The Judge Advocate General of the Army helped me to gain acceptance at Georgetown and Antioch in night school programs. The latter became the University of the District of Columbia-David A. Clarke School of Law. I must add that this adventure did not distract from my efforts in urology to help build what became the Center for Prostate Disease Research. As an aside, I passed the bar exam.

I became busier with administrative responsibilities and became the Chief of Urology in 1984. Also, I became a member of numerous professional societies, including the American Society of Clinical Urology, the Society of Urologic Oncology, the American Association of Clinical Urologists, and the Society of Surgical Oncology. In addition, I am a past President of the American Foundation of Urologic Disease (now known as the American Urological Association Foundation) and Past President of the Mid-Atlantic Section of the American Urological Association. I also served on the Residency Review Committee in Urology for a six-year term.

In 1991, amid increasing focus on prostate cancer and controversy over its optimal treatment, Congress enacted Public Law 102-172 which provided funding to establish the Center for Prostate Disease Research (CPDR) at the

Walter Reed Army Institute of Research (WRAIR). In March 1992, a memorandum of understanding authorized the Uniform Services University of the Health Sciences (USUHS) the authority and responsibility to provide the facilities and administer the CPDR program. The question was where the funds would be dispersed. The chief of surgery at USUHS, COL Norman Rich was able to have the medical school receive the funding. Every Department of Surgery Chair from the aforementioned COL Norman Rich to the present Chairman, CAPT Eric Elster, has been tremendously supportive. Without their leadership and guidance we would never have reached and maintained our successful endeavors. Our program grew so rapidly that we realized we needed additional administrative support.

This support came through thanks to The Henry M. Jackson Foundation for the Advancement of Military Medicine. For those not familiar with the Foundation, a brief history is in order. In May 1983, President Ronald Regan signed into law a bill from Congress. This bill authorized the establishment of the foundation which was named after Henry Martin “Scoop” Jackson, Congressman and later Senator from Washington State. In 1985, Congress directed the Department of Defense to study HIV/AIDS and its impact on medical readiness. The Jackson Foundation was, and is still, involved in supporting numerous military medical programs. With the support of the medical school and the Jackson Foundation we could now have a long-term infrastructure to support our multi-disciplinary state-of-the-art program. It was relatively easy with the support of staff urologists, and with the aid of our basic science researchers, to augment the residents’ teaching curriculum.

I met David the very first time in 1995 when I started my fellowship as the first international fellow of the brand new Center for Prostate Disease Research. I was impressed by his passion and dedication to initiate a new era in prostate cancer research: the combination of molecular biology and clinical research. I got to know him as an excellent clinician focusing on the unmet needs of prostate cancer research and dedicated to exploring new options in diagnosis and treatment for the patient. David is a great and enthusiastic teacher for a young urologists and scientists at the beginning of their academic career. Being back in Germany he followed and supported my career continuously and we stayed in close collaboration. What he accomplished in his career is truly remarkable.

Univ. Prof. Dr. Med Axel Heidenreich
Direktor der Klinik für Urologie, Uro - Onkologie,
Roboter-assistierte und Spezielle Urologische Chirurgie Uniiversitätsklinikum Köln

The CPDR basic science program was initially based on campus in the Department of Surgery at USUHS. In 1992, MAJ Judd W. Moul, MC, USA, was designated to lead CPDR as its director. He was already an Assistant Professor in the Division of Urology, Department of Surgery, USUHS. He rose to the rank to become Professor and remained as CPDR director until he retired from military service in 2004. Through collaborative interactions in the joint tumor biology program of Department of Surgery and Pathology we were fortunate to recruit Shiv Srivastava, PhD to establish and lead the Basic Scientist Research Program. Doctor Srivastava, an accomplished cancer biologist with numerous ground breaking discoveries including the p53 mutation in Li-Fraumeni syndrome in cancer prone families, continues to lead the basic science research program. These events transformed the CPDR multi-disciplinary research capabilities, and Drs. Mostofi and Sesterhenn became fundamental collaborators and the driving engine of translational research.

“The Chief” was my boss, mentor and friend during my entire Army career from when I was a second lieutenant med student in 1980 to when I was retiring as a full colonel in 2004. He was amazing-his energy, enthusiasm, keen wit and uniqueness-I credit my academic career to him-our years together building and running CPDR from 1991 to 2004 was truly the high point of my career. I cannot thank him enough for what he has meant to me! I do not say this lightly, but I love this man!

Judd W. Moul, M.D., F.A.C.S.
Director, Duke Prostate Center
Division of Urologic Surgery
Duke University Medical Center
Durham, NC

In CPDR endeavors, we are extremely fortunate to have Jennifer Cullen, PhD who directs the epidemiological program of CPDR. This is a well-functioning group that is an indispensable team. With her leadership we, have combined our data base with ones from Madigan Army Medical Center, Tacoma, WA; Virginia Mason Medical Center, Tacoma, WA; San Diego Naval Medical Center, San Diego, CA; Tripler Army Medical Center, Honolulu, HI; and Fort Sam Houston, San Antonio, TX.

As the scope of CPDR's research activities grew rapidly, we outgrew our facilities. In 1999, we were able to obtain an off-campus facility in Rockville, Maryland. Additional space was approved to expand the clinical research program at WRAMC. Also, in January 2000, the Department of Surgery CPDR laboratory upgrade provided additional science laboratory space. In August 2000, the renovations at WRAMC provided space for clinical research. This rapid sequence of events honed my leadership skills, because nothing of this magnitude is simple... I think that the legal phrase "res ipsa loquitur," or 'the fact speaks for itself', epitomizes my career, as I was very fortunate to be surrounded by people who make things happen spontaneously or with some degree of "guidance." I believe that we have made, and are making, a difference in the ongoing quest of understanding prostate cancer.

I am also proud that I was of some help to my colleagues by supporting programs focusing on the care of cancer patients within the Department of Defense (DoD). The Clinical Breast Care Project (CBCP) along with the Gynecologic Cancer Center emerged as robust autonomous initiatives. In the aggregate these three centers have become Department of Defense Centers of Excellence in their respective fields.

When the Base Realignment and Closure (BRAC) was announced in 2005, the leaders of the CPDR, CBCP, and GYN (all historic Congressionally funded programs) pulled their resources together, and aligned with my vision to create a military cancer center at the new Walter Reed National Military Medical Center (WRNMMC)-Bethesda facility. For the next six years we worked with Navy Facilities leaders to ensure that our centers were all co-located in the new outpatient building being built on the Bethesda campus. The USUHS leadership was critical in supporting our efforts. When the new WRNMMC opened in September 2011, our three organizations and the core clinical elements of a future cancer center were now in close physical proximity in the new America Building.

In January 2010, COL Craig Shriver was named to lead the integration team to charter a cancer center at the new WRNMMC. As his first order of business he and COL Larry Maxwell met with me for leadership advice, and support and to enlist my suggestions in the formation of the integration team. In 2011 our Cancer Center officially begun!

"Dr. McLeod is not only my doctor – he is my friend. We have known each other for decades, and he deserves any award that comes his way. He is a pioneer in his field, having performed countless surgeries. Any patient of his is certainly a lucky one."

Senator Bob Dole
United States Senate 1969-1995

At the time we moved into the new outpatient "America Building" in September 2011, the DoD announced official criteria that would be required to approve and designate a center of any type within the DoD, as an "official DoD designated Center of Excellence." No longer could any organization or center in the DoD use the term "Center of Excellence" without successfully going through the rigor of this approval process.

COL Shriver and COL Maxwell met with me again, and we decided that we would all go in together as a group (Cancer Center) for the official designation, rather than seeking it separately for each of our individual centers. This was a critical decision that bonded these individual and highly successful programs together in a cohesive vision for our cancer center. Working together, we placed the application in February 2012 and defended our application in front of the DOD Center of Excellence Board in May 2012. We were then awarded this unique official designation as the DoD Cancer Center of Excellence (COE). The center was named after the Honorable John P. Murtha, Congressman from Pennsylvania's 12th congressional district, a visionary Congressman, a decorated veteran of the United States Marine Corps. Incidentally, I discovered that we have served in Vietnam during the same time in 1966-1967.

To this day, John P. Murtha Cancer Center (MCC) is the only official Center of Excellence for Cancer in the entire DoD health care system. COL Craig Shriver, my esteemed colleague has said the following “COL (Ret) David McLeod, from the beginning of the possible genesis of a cancer center which clearly occurred only because of his trailblazing development of the CPDR and showing the rest of us the way forward, has been nothing but completely supportive, visionary, and seminal in making our Murtha Cancer Center of Excellence at USU/WRNMMC, a reality. It would not exist without his historic and unprecedented leadership, vision, mentorship, and support.”

When one serves in the military as long as I served, one will acquire military awards and decorations. Mine include the Army Distinguished Service Medal, Legion of Merit with two oak leaf clusters. Oak leaf clusters are given for subsequent awards of a medal. My other awards include the Bronze Star, Meritorious Service Medal with four oak leaf clusters, Air Medal, Army Commendation Medal with two oak leaf clusters, Army Achievement Medal, Marine Corps Good Conduct Medal, National Defense Service Medal with three stars denoting military service in uniform during the Korean War (June 27, 1950 till July 27, 1954), Vietnam (from January 1, 1961 till August 14, 1974), Persian Gulf War (August 2, 1990 till November 30, 1995), and the Global War on Terrorism (September 11, 2001 to the present date). Also, I have the Vietnam Service Medal (two campaigns), Army Superior Unit Award, Global War on Terrorism Service Medal, Army Service Ribbon, and the Republic of Vietnam Service Campaign Medal. In addition, I have the Combat Medical Badge, and Parachutist Badges (US and Vietnam).

The CPDR continues to be in “good hands” with its new Director, COL Inger L. Rosner who was our former resident. She is an esteemed colleague and distinguished surgeon.

Lastly, special commendation goes to my colleague Albert Dobi, PhD. He has been unrelenting in his efforts to corral me for numerous sessions as we refined this manuscript.

I enjoyed making a difference in patients’ lives as they battle prostate cancer. I am proud of what we accomplished in military medicine, and I am forever grateful for the support of colleagues, friends, and most importantly, my family for the unrelenting support that they all provided.

*Colonel David G. McLeod, MD, JD, MC, USA
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