# 13

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## President 1982–1983

Dr. Frederick A. Luchette

When was it that you decided you wanted to pursue a career in surgery and specifically, in trauma and burns?

Dr. Basil A. Pruitt, Jr.

As a medical student I thought I wanted to be whatever rotation I was on. There was a professor of radiology, Dr. Alice Ettinger, who had introduced spot film technology to the United States when she moved to the U.S. from Germany. She had become one of the leaders in American radiology and impressed me as a radiologist who could relate X-ray images to clinical findings. Consequently, on that elective rotation I thought I would be a radiologist. Before that I had a summer job and a weekend job throughout the third and fourth years as a diener with Dr. H. Edward MacMahon, the chairman of pathology who was a superb teacher. The first medical paper I ever wrote was on basal cell carcinoma. I had participated in the processing and histologic examination of a basal cell carcinoma in a surgical specimen sent from a local hospital in Boston to the medical school for Dr. MacMahon to examine and diagnose. Dr. MacMahon's comments about the causative factors and characteristics of basal cell carcinoma captured my interest and prompted me to undertake a review of basal cell carcinoma. That review was published in the *Bulletin of Tufts-New England Medical Center*. At that point I was fully convinced of the historical importance of Virchow and was going to be a pathologist.

After that I took an elective rotation with Dr. William Schwartz, a pioneer in the field

of nephrology whose ability to explain acid-based physiology to a medical student (me) and global knowledge of renal function and dysfunction convinced me that nephrology was my specialty destination.

Finally I had my surgery rotation where I met Dr. Charles Gardner Child, III, the chairman of surgery and a very impressive figure in his double-breasted, below-knee-length white coat. I had never seen one of those before and haven't seen anyone else wearing one since. Apparently that was the style of coat worn by attending surgeons at the New York Hospital where Dr. Child had been before coming to Boston. Dr. Child gave the opening welcoming talk on the first day of the surgery rotation and made it sound really exciting until he closed the talk by enthusiastically saying "…and you will be able to participate in the laboratory evaluation of the patient." In those days that meant that the medical student did a stool guaiac, urinalysis, hematocrit and a white blood cell count on every admission to the Tufts Surgical Service at the Boston City Hospital. I thought that anyone who could make that sound exciting must have something to offer. That and my experience while on the surgical rotation, where I saw how knowledge of pathophysiology could be applied to address clinical problems and restore the patient's health, persuaded me to become a surgeon.

That decision was reinforced early in my residency when I had a rotation on Dr. Dwight Harken's (Alden's father) cardiothoracic service, at the Mount Auburn Hospital. What an exciting month that was! Dr. Harken, a master surgeon and surgical showman, made every operation and even post-op visits with his patients a dramatic occasion. Dr. Harry Soroff, Dr. Harken's senior fellow, had been assigned to the Army Burn Center when he was drafted and had been able to do some of the earliest research characterizing the hypermetabolic response to burn injury. When Dr. Soroff learned that I was about to be drafted into the Army, he recounted his experience at the Burn Center and encouraged me to request assignment to that unit, which I promptly did.

When I reported to Fort Sam Houston in San Antonio, two representatives from the Burn Center came to interview me and, after a brief discussion, they informed me that I would be assigned to the Burn Center as a staff surgeon. That assignment, which allowed me to carry out both clinical and laboratory research, actually set the compass of my surgical career on burn and trauma care.

After I spent my two years as a drafted doctor at the Burn Center, I returned to Boston to complete my surgical residency with the intention of becoming a burn and trauma surgeon. My experience as a burn surgeon had convinced me that the burn patient was a good model for severe injury in general with such florid departures from the normal in terms of organ function that those changes were easily studied and were often of such duration that they could be definitively characterized and one could readily validate therapeutic interventions.

While in the Army I had written Dr. Child, who had moved to take the chair of surgery at the University of Michigan, seeking to complete my residency under his direction. Dr. Child informed me that since his predecessor, Dr. Fred Coller, had taken on many more residents than allowed by the Board of Surgery, I would have to restart residency as an intern if I wished to complete my residency at Michigan. Even though I considered Dr. Child to be a great

surgeon and superb role model, the prospect of being an intern and then a first-year resident again was too daunting and I returned to the Boston City Hospital.

Unfortunately Dr. Childs' replacement was but a pale shadow of his predecessor. In light of that and because I had such a good experience at the Army Burn Center, which I considered to have been intellectually stimulating, I called the Army and asked them if I came back and finished my residency at the Brooke Army Medical Center in San Antonio, could I be reassigned to the Burn Center for a duty assignment when I completed my residency. The Army agreed to that plan, which charted my professional life for the next 33 years.

Luchette

You mentioned a couple of names in there that were mentors, but were there any other mentors that helped you throughout your career as you look back?

Pruitt

There were several beginning with Gardner Child, the chairman of surgery at Tufts University School of Medicine and surgeon-in-chief of the Tufts Surgical Service at the Boston City Hospital where I began my residency. During my residency, Dr. Arthur Donovan, who was an assistant professor of surgery and Dr. Child's right hand man at the Boston City Hospital (ultimately chairman of surgery at the University of Southern California), introduced me to the delights of laboratory research, served as an academic surgeon role model, and has since then provided me with wise counsel and sage advice. As you know I completed my residency at Brooke Army Medical Center where Colonel Edward Vogel, who was the chief of surgery, tutored me on the unique aspects of military surgery and gave me an abundance of good advice about a career as a military surgeon. After completing my residency, I was reassigned to the Institute of Surgical Research where Colonel Jack Moncrief and Dr. Curtis Artz became my burn surgeon mentors. Colonel Moncrief furthered my academic progress by volunteering me to author a two-issue review of burn care for *Current Problems in Surgery* which was well received by the surgical community.

Others who in various ways have provided support and furthered my surgical career have included Francis D. Moore, Ben Eiseman, Sam Wells and George Sheldon. In the military surgical community, supporters have included General Leonard Heaton, General Thomas Whelan, General Richard Taylor, General Hal Jennings, General Kenneth Orr and the commanding generals of the Army Medical Research and Development Command.

Particularly important to my career was Frannie Moore's advice to take a one-year assignment as chief of surgery at an evacuation hospital in Vietnam rather than take a three-year assignment as the chief of a burn holding unit in Japan, which he felt would be "the death of my academic career." Prompted by that advice I took an assignment as chief of surgery at the 12th Evacuation Hospital in Cu Chi, Vietnam. That assignment at the busiest evacuation hospital in Vietnam firmly established my credentials as a military trauma surgeon and secured my assignment as commander and director of the U.S. Army Institute of Surgical Research upon my return to the U.S., a position which I held for the subsequent 27 years. Lastly

throughout my career Dr. Harry Soroff, who as noted above first recommended that I seek assignment at the Army Burn Center when I was about to be drafted, and Dr. Arthur D. Mason (senior scientist at the Burn Center) provided strong support and sound advice that enhanced my research efficiency and productivity.

Luchette

How did your peers and your colleagues view your decision to go into burns and trauma back then, at a time when there were a lot of specialties beginning to be established?

Pruitt

In the mid-sixties, aside from the Maryland Institute of Emergency Medical Services, there were few trauma centers as such, but there were established burn centers at the Brooke Army Hospital in San Antonio, Cook County Hospital in Chicago, and the Medical College of Virginia in Richmond. The first Shriners of North America Burn Center opened in Galveston in the early 1960s, and since then three others have been established in Boston, Cincinnati, and Sacramento. In addition to those few centers, there were burn or trauma services at the Massachusetts General Hospital, Grady Hospital, Charity Hospital, and Parkland Hospital among others.

There wasn't a trauma or burn or even surgical oncology specialty as such at that time. A general surgeon could establish a presence in an area of special interest and by experience become expert in that field. He was then considered to be a "specialist" in that area of general surgery and recognized as having special capability as a trauma surgeon, burn surgeon or a cancer surgeon. Consequently, it was accepted without raised eyebrows that I was intending to be a general surgeon with a special interest in burn and trauma care and that career path was fully compatible with being a military surgeon. Even so it was unusual, actually unprecedented, to return to active duty in the Army Medical Corps to be a full-time burn surgeon. Any dismay about a career in burn surgery was perhaps, in part, due to the fact that in those days when you walked into the hospital you could locate the burn service by the odors emanating from the infected burn wounds. Of course modern burn care has eliminated that "aroma" and the burn center smells just like any other ward or floor in the hospital.

Luchette

As you started early in your career, and the specialties like vascular surgery, pediatric surgery and cardiothoracic surgery were viewed as the place to be, how did your colleagues view your decision to commit your career to burns and trauma?

Pruitt

At that time there were relatively few of those "super specialists" and they were fully occupied with what were termed "index cases," with general surgeons doing less complex thoracic and pediatric cases, which maintained a broad scope of practice for the general surgeon with a special interest in trauma. As specialization intensified and proliferated, the general surgeon's

scope of practice narrowed, but the development of burn and trauma centers enabled the burn and trauma surgeons to maintain adequate operative practice. In fact the surgeons at burn and trauma centers were well respected because of the volume of their operative experience and their research activities, which were recognized as the means by which care was improved.

The operative experience of trauma surgeons was subsequently diminished by the progressive increase in non-operative management of a variety of injuries in trauma patients. The development of closed intensive care units, directed by internists and anesthesiologists, led directly to the development of the certificate of added qualifications in surgical critical care. Historically, new specialties were defined by technological advances, e.g. cardiothoracic surgery, or development of a special body of knowledge, e.g. transplantation. But now we have specialties defined by the location of the patient, i.e. emergency medicine and critical care. There is not a unique body of knowledge associated with either of those specialties in the traditional sense. In the case of added qualifications in surgical critical care, as noted previously, this certification was developed to maintain the general surgeons' access to the ICU where they could deliver non-operative care to their patients.

Luchette

What are the two or three contributions you are most proud of and actually influenced the field of burn surgery and trauma?

Pruitt

Well, development of topical antimicrobial chemotherapy to prevent invasive burn wound infection was a major step forward in burn care. I was a participant in the development of Sulfamylon® burn cream at the Army Burn Center, a project directed by Dr. John Moncrief. As a staff surgeon at that time, I was involved in the clinical introduction of Sulfamylon® burn cream. Not only did that topical agent reduce the incidence of invasive burn wound sepsis as an autopsy cause of death, but by controlling the microbial density in the burn wound, it permitted burn wound excision to be carried out with less risk of inducing intraoperative endotoxemia.

When Dr. Bruce McMillan, who became the first surgeon-in-chief of the Cincinnati Shriners Burn Center, was at the Army Burn Center with Dr. Artz, he evaluated burn wound excision in a small group of patients. The survival of those patients—as I recall there were less than 20—was just what one would anticipate based on age and burn size without excision, i.e. excision conferred no benefit. The troublesome fact was that sometimes when a burn patient had invasive infection, excision was performed in desperation to remove the infected tissue, and some of those patients would develop systemic endotoxemia, have difficulty recovering from the anesthesia, and very shortly afterwards die. With control of the microbial density in the burn wound, by use of antimicrobial chemotherapy, one could excise the eschars in a scheduled manner and not induce endotoxemia. In fact the combination of topical chemotherapy and early excision reduced the incidence of invasive burn wound infection as the cause of death from 60% to 6% in burn patients who expired.

Before touching on the other contributions that deserve mention, I want to emphasize that these aren't personal accomplishments of any one person but the result of teamwork involving a succession of bright young surgeons, physicians and other scientists. In those days many of the leaders of American surgery would call seeking an assignment at the Burn Center for a bright, young resident interested in an academic career. Doug Wilmore, Bill Curreri, James Long, and Cleon Goodwin were referred by Jonathan Rhoads; Jerry Shuck, Wes Alexander, and John Hunt by Bill Altemeier; Andrew Munster and Gary Welch by Frannie Moore; Bob Flemma and David Herndon by David Sabiston; Joe Moylan by John Schilling; Bill McManus by Merle Musselman; and Bill Cioffi by John Davis. There were also a few U.S. Army surgeons and military surgeons from other countries such as Carl Tidemann, who later became the surgeon general of the Norwegian Armed Forces, who sought an assignment at the Burn Center and participated in the research program. Lastly there were numerous civilian surgeons from other countries such as the many who came from the University of Osaka's Department of Acute Care Medicine. All of those physicians and our laboratory scientists comprised a multidisciplinary critical intellectual mass that conducted a program of integrated clinical and laboratory research to address clinically important problems in burn patients and develop solutions to those problems.

Fluid resuscitation was improved after it was recognized that success in preventing early post-burn renal failure had led to excessive fluid resuscitation and its associated complications. The goal of resuscitation became "infusion of the least volume of crystalloid fluid" (colloid-containing fluids were reserved until there was some evidence of restoration of capillary integrity) needed to maintain vital organ function. Resuscitation guided by that goal decreased the incidence of compartment syndromes and pulmonary compromise.

With the control of invasive burn wound infection it became apparent that inhalation injury was the most important comorbid factor in burn patients. Evaluations of diagnostic modalities identified fiberoptic bronchoscopy as the most useful means of identifying the presence of inhalation injury. Other studies revealed that inhalation injury resulted in intrapulmonary mismatching of airflow and blood flow and paved the way to the use of high frequency interrupted flow positive pressure ventilation to decrease the occurrence of pneumonia and reduce the comorbid effects of inhalation injury.

The fourth major contribution resulted from the program of metabolic studies conducted by Curreri, Wilmore, Mason, Long, Aulick, Herndon, Becker, Vaughan, McDougal, Cioffi and others. Those investigations revealed that the burn patient was internally warm, not externally cold as previously believed, and identified the neuro-hormonal changes that orchestrated post-burn hyper-metabolism revolutionized metabolic support regimens. The information generated led to the development of multifaceted nutritional and metabolic support regimens that minimize erosion of lean body mass and accelerate convalescence.

In addition to those four major advances, other studies documented the effectiveness of biologic dressings for temporary coverage of excised burn wounds, the effects of burn injury on the coagulation system, and changes in the cellular and humoral components of the immune system induced by burn injury. The pathogenesis of stress ulcers in burn patients was

described and effective prophylaxis identified. Still other studies revealed that a bilaminate construction with both dermal and epidermal analogues was necessary for optimum function of a skin substitute. Improvement in burn patient outcomes resulting from all of these advances has been documented by changes in burn center- specific predicting equations.

As an aside, many if not most of the pathophysiologic changes that occur in burn patients also occur in mechanical trauma patients. To my mind that makes the burn patient the universal trauma model and, indeed, many of the improvements in burn patient management have benefitted other trauma patients.

It was a great experience to be the commander and director of the Army Burn Center during that time of investigative ferment that expanded our knowledge of the pathophysiology of severe injury and improved the outcomes of the critically injured burn patient. In the mid-1950s, a young adult, age 16 to 40, with a 43% total body surface area burn, had a 50/50 chance of living or dying. Right now a patient in that same age group with a 75% burn has a 50/50 chance of living or dying-that is a statistically significant improvement.

The other thing that I am particularly pleased with is the success of the surgeons with whom I had the privilege to work at the Burn Center. An impressive number have become chairs of departments of surgery, pediatric surgery, urology, plastic surgery or anesthesia. Others have become directors of other burn centers. Alumni who have become chairs of surgery departments include Jerry Shuck, Bill Curreri, Joe Moylan, Doug Wilmore, Jim O'Neill and Bill Cioffi. Another example of alumnus success is David Herndon, who came to the Burn Center from the Duke surgical residency, finished his residency at New York Hospital and directed that hospital's burn center until he became surgeon-in-chief of the Shriners Burn Center in Galveston, where he has been an impressively productive surgical clinician and investigator. Those individuals have all amplified the success of the U.S. Army Institute of Surgical Research as an incubator of academic surgeons.

Luchette

As you look back on your career, are there any one or two things that at one time you were passionate about and now you have the advantage of the retrospectoscope and say, "Boy, that was really not the right thing for improving patient care?"

Pruitt

Well, I can't recall anything that we passionately championed that has been or should be withdrawn. We looked at aerosolizing antibiotics in patients with inhalation injury, which seemed to be a possible way to reduce the occurrence of pneumonia, but that came to nothing. That sort of study could be viewed as a false start, but it actually prevented such treatment from being adopted as a standard of care. In similar fashion, our studies of cultured keratinocytes identified their limitations and tempered clinical enthusiasm for their use.

Early on we evaluated freezing of the stomach for massive and/or persistent stress ulcer bleeding as advocated by University of Minnesota investigators. It was not effective in our hands so we continued to advocate early operative intervention instead. In the past, I treated

a few patients who had profound alkalosis with intravenous hydrochloric acid. That treatment was tough on the veins that were used but it did correct the alkalosis. Even so it was never advocated as a standard treatment.

Contrary to advocating a treatment or technique that had to be withdrawn or abandoned, my clinical experience with synthetic monolayer skin substitutes was so unsatisfactory that we took the problem to the laboratory. In the lab we demonstrated that for effective function the membrane had to be bi-laminate in structure to actually simulate skin with a dermal analog and an epidermal analog. The results of those studies defined many of the criteria that guided the subsequent construction and development by others of membranes such as Biobrane® and Integra®.

Luchette

What you feel are the top two or three advances in burn care throughout your career?

Pruitt

Well, we've already mentioned the revolutionary change in terms of effective topical antimicrobial chemotherapy combined with burn wound excision.

The second one would be the capability of diagnosing inhalation injury and treating the patient with high-frequency positive pressure ventilation to reduce the occurrence of pneumonia and increase survival.

The third, in terms of not just burns but all surgical patients, would be the identification and characterization of post-injury hyper-metabolism and the development of programs of metabolic support. We were early investigators in the field of parenteral nutrition and of feeding through surgery using the GI tract.

Those would be the three most important burn specific advances: topical therapy and excision, inhalation injury, and the characterization of hyper-metabolism with development of means to preserve lean body mass and accelerate convalescence.

Luchette

What were the major changes during your career in practice patterns?

Pruitt

Well, I think recognition of the complexity and intensity of the pathophysiologic changes that occur in patients with burns of more than 25% or 30% of the total body surface and the regionalization of burn care in a hierarchical system. Today it's common for a local hospital to refer burn patients to a regional facility capable of doing a little bit more and then ultimately directing the larger burns, defined by the American Burn Association as those patients benefiting from center care, to a burn center. I think that burn care in the United States was the first example of regionalized hierarchical organization of surgical care, which is now being emulated by the trauma care system.

Luchette

At the end of the day, what brings you the greatest joy as you look back over your half century career as both a military and academic surgeon?

Pruitt

My greatest satisfaction is the fact that one can document that what we've done in the field of burn care has benefited innumerable patients. First of all, many more severely burned patients survive, as documented by a significant increase in the $LA_{50}$ for burn patients and well-illustrated by the use of three-dimensional graphics. Additionally many more of the survivors resume their lives as functioning members of society.

Another great joy is the success of those with whom I have worked. I have always viewed such departures as recognition of the individual's accomplishments and also recognition of the leadership and environment of the Institute of Surgical Research which made that individual a productive investigator. In short their career advancement actually magnifies and does not diminish the reputation of the Institute, which may also receive some credit for future productivity of that individual. Consequently, I relish the success of everyone with whom I have worked to advance the field of burn and trauma care.

Luchette

As you look back over the 50 years of your career, and you've watched health care and burn care evolve, what keeps you up at night? What makes you worried about the future of American medicine?

Pruitt

Well, the fact that everything is so compartmentalized now is very troublesome. There are so many specialists who don't want to take night call that there are now surgical hospitalists who may have a shiftwork approach and little sense of patient "ownership." I am also troubled by what I perceive as a marginalization of physicians.

Others have written about this, and several years ago there was a graph in a letter to the editor of the *New England Journal of Medicine* predicating that, in this decade, administrators would outnumber patients in U.S. hospitals. That hasn't happened yet but it may be only a matter of time. The way in which administrators amplify their position is to have more clerical people to supervise. They do that by designing forms for doctors to fill out so they need more clerks to analyze these forms. The doctors are kept from patient care, i.e., marginalized by having to fill out the forms. The administrators then hire less expensive caregivers to fill in for the doctors who are busy filling out the forms. The administrators are further aggrandized with salary increases based on their activities to evaluate and analyze the data generated by the forms they designed and savings generated by hiring the non-physician caregivers rather than physicians. That may sound fanciful and simplistic but I really think it's not too far from the truth.

It is also a concern that health care was supposed to get cheaper with all the HMOs,

PPOs and preapproval for operations and diagnostic procedures, but I fear that not a penny has been saved. Those changes have just allowed the group of people to whom the profits flow to change from the physicians to the MBAs in hospitals, hospital corporations and health insurance companies. We have let MBAs take over what used to be a cottage industry and turn it into a cash cow for the administrators.

Luchette

What are your words of wisdom for young surgeons entering a career in trauma, acute care surgery and burn surgery? What would you tell them to do in their lives outside the hospital?

Pruitt

I think each young surgeon should find something that is not directly related to medicine and develop a special interest in that topic. My wife, Molly, and I collect modern Japanese art. The walls of our home are filled with artwork we have acquired on many visits to Japan. We were just in Japan a few weeks ago and acquired additional works so we are going to have to take some of those on the wall down to find room for the new. That may make us like a museum in which works are displayed on a rotational basis. In essence, it is good to have an interest outside of medicine which one enjoys and in which one can develop some expertise. An athletic interest can also be enjoyable. There was a time before my recent back surgery when I enjoyed skiing. Our entire family likes to ski, so ski trips at Christmas and Spring Break provided an eagerly anticipated change of pace.

In terms of advice for someone entering a career in trauma surgery, acute care surgery, and burn surgery, I think that if they're going to narrow their general surgery to those areas and not have a practice including hepato-biliary, surgical oncology, or endocrine surgery, it pretty much defines a hospital-based if not an academic practice. Within that scope of practice, I think you need to pick some subtopic, like resuscitation, coagulopathy, or pulmonary dysfunction, focus on that as a topic about which you develop expertise, and carry out either clinical, or laboratory, or an integrated program of laboratory and clinical research. You will thereby develop expertise in that area which will give you stature as an authority on that topic and support your academic advancement.

That expertise will open up opportunities to lecture at national meetings and to be a visiting professor, which will lead to regional and even national and international recognition. I think that's a pathway to a satisfying, effective academic career in any aspect of surgery.

If you're contemplating an academic career, it is important when picking something that interests you that it also be of clinical importance. You should then concentrate your investigative activities, and as much as possible your clinical activities, on that topic to develop expertise and recognition as an authoritative voice in that particular aspect of surgery.

Luchette

What do you perceive are the challenges and opportunities for the future of the acute care surgery model?

Pruitt

Well, I think that it has a bright future. One could be a little cynical and ask how does acute care surgery differ from what we used to call general surgery? But today, there is a lot of emphasis on disease-specific or organ-specific centers of excellence. For example a center of excellence for gastrointestinal disease will have GI surgeons working with gastroenterologists as well as interventional radiologists.

The Acute Care Surgery Center of Excellence will house the trauma and burn centers and have the necessary facilities to provide care for a wide variety of acute care surgery problems. That will include patients with acute GI and other problems which because of their acute nature would disrupt the elective schedule of the specialists who would ordinarily care for patients with such problems.

In a sense, acute care surgery is a hospital-based practice that deals with acute surgical problems on a 24/7 basis. Since the disinterest of the elective specialist surgeons seems to increase after 5:00 p.m., the acute care surgeons have been called the "master surgeon of the night" and the label "nocturnist" has been applied by some. I will predict that acute care surgery is going to become even more prominent as more surgeons complete the acute care surgery fellowships that are being developed and verified by the AAST.

As elective surgery is increasingly concentrated at disease-specific centers of excellence, there will be more patients who will initially present to the critical care surgery center just as burn and trauma patients now present at burn and trauma centers, respectively. Other acute care surgeons with expertise in trauma may fill the void in rural surgical care. The acute care surgeon who has completed a fellowship which included experience with external fixation of fractures, placement of burr holes, and even craniectomies, would answer a need in the rural areas of the United States.

On the other hand, there may be challenges if it is perceived that the title of "acute care surgeon" defines a surgeon who is deemed to be lesser than a surgeon at other disease-specific centers. Also, it may be a hard sell to get the acute care surgeon who is "allowed" to do GI surgery at night to accept daytime restrictions on his/her practice.

Luchette

What changes, if you could sit in front of a crystal ball and look 20 years into the future, what do you think practices in trauma, burn surgery, and acute care surgery will look like?

Pruitt

Oh, I think that it will be more and more regionalized, but at the same time the Level II centers will increase in capability as people are trained to a higher degree and as the tertiary centers focus on that smaller subset of patients who have pervasive, extensive, and intense pathophysiologic changes that are best addressed at the tertiary center, where all the resources and all the investigative activity that will lead to improved care can be carried out.

Luchette

As you look back over your career is there anything that you would change regarding your professional career?

Pruitt

Well, you know, you always wonder, could you have done more doing something else? I was tempted two or three times to accept appointment as a chair of surgery, but ultimately resisted those opportunities. We had such an effective program of integrated clinical and laboratory research going on at the Institute of Surgical Research with adequate, dependable funding and a steady supply of patients with large burns causing pansystemic effects which generated problems of clinical importance that I made the choice to remain here in San Antonio each time.

It's been very satisfying to have done what we accomplished at the Institute of Surgical Research, but, there is always the question, "Could you have done more, had a bigger influence on more young surgeons as a chair?" And of course I will never know that.

Luchette

It's hard to imagine that you could have made more contributions as a chair than you have. You have touched on just about everybody's career that's related to trauma and burns.

Pruitt

Well, that's, of course, a great satisfaction and it's very kind of you to say that. What we did at the Institute of Surgical Research here in San Antonio has materially benefited literally thousands of patients and advanced our understanding of the pathophysiologic response to severe injury.

Luchette

Is there anything you would change in your personal life outside the hospital?

Pruitt

I might have skied more and spent more time with the family, but I can't think of anything else. My wife, Molly, has had a very active career in educational administration. She was an elected member of our school board for 24 years, and when she retired they named a combined City of San Antonio/Public School Library for her. As you know, our older son, Scott, is a surgeon on the faculty at Duke; and Jeff, our younger son, is a radiologist at Parkland Hospital in Dallas. I tease our daughter, Laura, who is a lawyer, by accusing her of "having gone over to the dark side." She doesn't sue doctors and is a securities lawyer in Washington, D.C. She has been quoted by the *Wall Street Journal*, so she must be doing well in her field.

Luchette

Your career spans 50 years and you don't seem to be slowing down. What are you going to do for the next 5–10 years, both personally as well as academically?

Pruitt

Well, my almost 18-year tenure as the editor of the *Journal of Trauma*, which certainly kept me on my toes, has now ended. I hasten to assure you that as editor emeritus, I still read the *Journal*. I am still presenting invited lectures and still writing papers and chapters. Richard Gamelli and I did a chapter for L.D. Britt's new book on acute care surgery just this last year. I remain half-time at the medical school and I go back to the burn center one day a week, for which they pay the medical school. That arrangement makes me really "cheap help" which the Department of Surgery at the medical school greatly appreciates. I plan to slowly decrease the intensity of certain of these activities but will try to keep informed and keep out of the younger guys' way.

I do believe that if you try to orchestrate things for which others have responsibility or if you resist change, you may be quickly viewed as an obstacle rather than a helpful source of informed counsel. So I am very careful not to infringe on anyone else's prerogatives. I think that it serves the occupant of an emeritus position best not to become a roadblock but to give reasoned advice when consulted.

Luchette

Are there any other comments you want to make for the readership that we haven't touched on in our discussion?

Pruitt

I think that the AAST has been a very vital organization. By vital, I mean it has adapted to changes in the organization of trauma care and has accepted evidence-based changes of medical practice. Moreover, its members have provided evidence that has improved medical and surgical care.

In 1991, the AAST established a Critical Care Committee to give a greater voice to those trauma surgeons with a primary focus on the ICU, and in 1995 "critical care" appeared in the title of the new front cover of the *Journal of Trauma*. Recently the AAST has assumed the leadership role in defining acute care surgery, developing the fellowship curriculum, and verifying fellowship programs. So I think that acute care surgery is going to be a successful means of addressing existing needs in the health care system that will further amplify the American Association for the Surgery of Trauma.

The first AAST meeting I attended was in 1963 and a story about that meeting will illustrate how clinical research has changed over the past half century. At that time, Dr. Moncrief said we're going to have lunch with Carl Moyer, chief of surgery at Washington University. We went to lunch at the Jack Tar Hotel in San Francisco.

The first thing Dr. Moyer said was, "Well, we're going to start this lunch with a double martini." I almost fell out of my chair. I didn't particularly care for martinis. Dr. Moyer then outlined the first fluid resuscitation study that I was going to do with volunteers by bleeding them either 10% or 20% of their blood volume and either let them spontaneously refill or give them Lactated Ringer's according to a formula Dr. Moyer had developed. I obtained all

the necessary approvals and recruited the requisite number of volunteers. I bled those young volunteers and followed the blood volumes in those who received no intravenous resuscitation fluid and those who received Lactated Ringer's given according to Dr. Moyer's formula. The results of that study were the basis of a paper that I presented before the National Research Council and published in 1967 and literally launched my academic career. The way in which trauma research is organized, conducted, and presented has become much more formal and regimented since those days, but perhaps is less innovative and spontaneous.

After that introduction to the AAST, I became a member in 1966 at which time the membership was limited to 250 individuals. I was really proud to be one of the 250 trauma surgeons recognized by their peers.

Thereafter I became the recorder and in due time, John Davis designated me an associate editor of the *Journal of Trauma.* After serving as the recorder, I was elected president of the AAST in 1989. In 1994 I was chosen to be John's successor when he retired. I assumed the editor's responsibility in May 1994 and became editor of the *Journal of Trauma* in January 1995. What I was able to do during my almost 18-year tenure as the editor of the *Journal of Trauma* has been another major satisfaction of my professional life. The *Journal of Trauma*'s publication reach, both electronic and hard copy, the royalty that provides important support for AAST fellowships, the editorial page allowance, and the impact factor have all increased.

Clearly, much of my professional and academic success has been intimately related to the AAST. I would encourage all young trauma surgeons to be active participants in AAST activities by presenting papers at the annual meeting and most importantly, by serving on one or more of the association's committees.