



**GEORGE F. SHELDON, MD**  
**PRESIDENT 1983–1984**

DR. DAVID H. LIVINGSTON

Dr. Sheldon, thank you very much for taking the time to do this interview. The past presidents are really giants in American surgery and in trauma care and often viewed by junior faculty and residents mythical iconic creatures. These informal interviews are about how you got into trauma, some of the things about your career and history of AAST.

DR. GEORGE F. SHELDON

I was a really transitional figure in the AAST in about 1973 or '74. The organization was almost ready to collapse. The original bylaws, if you ever had a chance to look at them, were modeled after the American Surgical Association. What that really meant was that it restricted the membership to 250 members a year and these were mainly senior academicians. At the first meetings I went to, most of the discussions on the papers were about World War II with a few about Korea.

The other thing happening at the time was there was little bit of tension with the American College of Surgeons Committee on Trauma (ACS - COT) because the AAST was “supposedly more academic.” Well, it was.

The real issue during that time-period was that trauma and trauma care was literally exploding. The Vietnam War was in still in full swing. The cities were on fire. I did 40 penetrating injuries to the abdomen in one weekend in San Francisco in that time.

At that time we explored all of it until after a while we got to where we would observe

some. The point being the organization (AAST) had been under John Boswick who was secretary for 12 or 13 years. It was run out of his office and there was a lot of discontent. A group of us met at the Homestead that year, many in fact who would later rise to presidency in the organization. There was Frank Lewis, Don Trunkey, Don Gann, and a couple of other people whose names would also be well known. We talked about starting another organization, feeling that the AAST was not one that we could mature into a specialty.

The longer we talked and discussed things, we decided that since the AAST had a journal, a better and more constructive path was to access membership and try to change it from within. That started to happen and a couple of years later—the exact year I don't remember—the bylaws were completely re-written by John Davis, Bill Blaisdell and a couple of other people at a meeting in Washington. That created a huge change in the organization. A big one was the limitation on the number of years you could be in offices. I was elected the first secretary under this arrangement. The length of time for a secretary was three years. When I finished my three years they asked me if I would stay on for another two and I said no. I was very immunized to that. They really, really tried very hard to try to get me to do a full five years but that wasn't the way the new bylaws were written. Again, I said, "No, I can't do it." So instead they made me president!

That they did but we all believe the organization was basically saved. During my time as secretary, Dr. Leonard Peltier—and this is getting down to your mentor question—was president. He had actually been my thesis advisor in medical school at Kansas and was now head of orthopedics at Arizona. He was a very creative thinking person, and between us we expanded the membership. Tommy Thompson had breakfast at my house in California. We kind of mended the fences with the COT because many of us wound up serving with that anyway and opened the membership up.

We also did something that I think is very important. We changed the definition of "corresponding fellow" so that we could open the membership up internationally, which has really had a lot to do with I think how successful and how global the organization has become in the last 15 years. It was fun to be part of it because it was such an obvious thing to do.

The funny thing about this was I was the first member of our county group (San Francisco General) to be a member of the AAST. The organization wasn't even regarded well enough or active in trauma at the time; not like our front-line, hands-on, center in San Francisco. There also was an older rule that a member could only nominate one person a year. So the first person I nominated was Bill [Blaisdell] and pretty soon everybody was involved in it. Out of our group at the time in San Francisco, Bill and I and Don Trunkey and Frank Lewis have all been presidents.

LIVINGSTON

How did you decide to get into trauma surgery?

SHELDON

Well, I grew up in a small Kansas town. My father was a surgeon. When World War II began, I

was seven years old and in fact we were going to the hospital the morning we heard the bombing of Pearl Harbor announced over the radio. I used to hold people for my father. Sometimes I even gave a little bit of drip anesthesia in the emergency room for fractures or something.

I went to medical school at Kansas [University of Kansas, KU] and I always wanted to do surgery but I had kind of a circuitous route. Medicine was very powerful at Kansas.

But Dr. Mahlon Delp was a great mentor of mine. He had actually driven out to the middle of Kansas to see my father. He was the chairman of medicine at KU at the time. He was a real hands-on doctor who was a great role model.

Another great role model was Dr. Paul Schloerb who still is a member and still comes to the AAST meetings. And Paul was a Frannie Moore trainee in 1947 who did a lot of the original heavy water type of isotope metabolic compartments with Frannie. I already mentioned Leonard Peltier who was head of orthopedics at Kansas. I was going to go into medicine at KU and had actually been accepted into a residency there.

Then all of a sudden an event happened which was the Berlin Wall went up. I've actually got a little piece of the Berlin Wall in my office. While that might not raise any hackles now, when it went up we all got drafted. National emergency call, people called back from leaves. World War III was expected, etc. What happened was everybody tried to see if you were set up to go into the service. I was in intern at the time and interns didn't fare very well in the assignments so I went to our head of public health. The long and short of it is I applied for and got an appointment in the Commission Corps of the Public Health Service, which at that time had 16 hospitals.

I was in Galveston, Texas. The Commissioned Corps of the Public Health Service is the medical corps of the Coast Guard. So I was in the Coast Guard for two years. When I got out I had decided I wanted to do surgery because at the little hospital where I was in Galveston—it's closed now along with all the rest of the marine hospitals—the head of surgery was such a butthead that nobody wanted to be on the service. So being low man, it fell to me and I had two years of surgery in the service. I was accepted in a couple of residencies, including Mike DeBakey's, but I wanted to go work with Burt Dunphy. Well, Burt Dunphy turned me down, he was at Oregon at the time.

The reason he turned down—at least what he always told me—was because he was moving to California that year as chairman. So I was just getting out of the service and without a residency, so I went to Mayo and took another year of internal medicine making me board eligible in internal medicine. I've had four years because my service time counted. I never realized it, since in the interim Burt Dunphy's office called and offered me a job. I never even had an interview and I thought he must realize that I'm going to be pretty good. He had a 32 to 6 pyramid and wasn't taking any chances on anybody. Burt was very good to me. They let me have off a year of training and I finished in four years.

Of course that's where I met Bill Blaisdell, another one of my great mentors and trauma was just revving up like crazy out there. I did five emergency room thoracotomies when everybody was doing closed chest massage, all with survival.

Brent Eastman, the current president of the American College of Surgeons, was one of

my chief residents. Brent and I had a horrendous case we did that we actually published in the *Reader's Digest*, which is not your usual venue.

Dunphy was furious. You know that was at the time when doctors weren't supposed to let their names be out in public. Blaisdell pushed us to do that because we were trying to establish trauma and specifically San Francisco General as a city hospital as a viable entity. Medicare had come in and it wasn't clear if those hospitals were going to close. In fact, a lot of them did in California and other places.

LIVINGSTON

At the time you decided to go into trauma, were there any negative comments such as, "You're going into what?"

SHELDON

There was some of that. Trauma was still usually associated with a dirty county hospital, you know. But it was changing very quickly. Tom Shires was out all the time. Afterwards I went back and studied with Frannie Moore for two years and it was kind of a new field.

I came back to San Francisco after that and we had one of the first program project grants which Bill was the PI and I was a co-PI. Then we got one of the first NRSA [National Research Service Award] fellowships, one of the first 18 out there, just in trauma. We had a great, great bunch of colleagues out there that we all, we competed but we got along real well. If you had to be away, you could sign out to a colleague and knew they were going to get the same type of care you would have given.

LIVINGSTON

What do think was the best career or life advice you received?

SHELDON

I think one of them was not to be a dean.

I had a couple of chances to do that and I just finally accepted the advice of one of my heroes, Chancellor Murphy. Dr. Murphy was chancellor at Kansas and he turned down being HHS secretary with the answer, "I don't think I'd be very good at it." I had very good advice over my career.

I credit all the people, and the catalogue of mentors is much longer than the ones I have already mentioned. I think anybody that has an opportunity to participate and be successful in organizations receives a lot of help and I certainly had a lot. People like Basil Pruitt, John Davis—the list goes on. Basil appointed me to the first national committee that I was ever on.

LIVINGSTON

What is some of the worst advice that you ever got?

SHELDON

To go into pediatrics. I keep giving you stories, but the dean at KU Medical School was a pediatrician and he also was our family's pediatrician. He wanted me to be a pediatrician. He thought surgery was a horrible thing to do. Fast forward, when I came to North Carolina he was actually head of child programs for the school of public health here. We reunited.

He also always wanted me to be a medical historian so when I wrote my most recent book in medical history I sent him a copy of it. I told him, "I finally got there."

Seriously, I don't think I ever had real bad advice. I had people that offered opinions. When people ask for advice my answer is always, "It's worth what you pay for it. You need to factor it in to your overall decision making."

LIVINGSTON

With respect to your myriad of scientific contributions, what are you most proud of and how do you think it influenced trauma care?

SHELDON

I think we were the first group in Boston who described the low phosphate syndrome with hyperalimentation and its effect on the Embden-Meyerhof pathway. Because of that people thought I knew something about nutrition, and when I got to California I got referrals of every fistula on the West Coast.

In the lab we started working with people in Berkley and we developed this model of enteral versus parenteral feeding's effect on the immune function and we showed that the gut is an immune organ. Ken Kudsk, who is vice chairman at Wisconsin now, was a second-year research fellow from Bobby Zollinger's place who worked with me and we published about 30 papers together.

What was just remarkable was that rats will drink hyperalimentation solution almost exactly to the amount that you would give them by calculating body needs. It turned out if you hyperalimintated a rat they lost their immune function. If you let them drink the stuff by mouth, they retained it. It took a bit longer to prove that in humans but the same things seems to be coming out from some of Ken's clinical trials.

The other thing, while not as thoughtful, was to define the level category for retro-peritoneal hematoma, I, II and III, which was published in one of the first textbooks of trauma.

LIVINGSTON

During your career there have been many changes in trauma care, some you already mentioned. What do you think the top two or three changes are?

SHELDON

One of the two top hardest things that I was involved in, I didn't lead but I was just involved, was the trauma verification program of the College. While it seems obvious now, that had a

tough time getting through the board of regents. I was the secretary of the board of governors at the time and also on the ACS - COT so had a “foot in both camps,” if you will.

The other was ATLS, which was thought to be too simplistic. My presidential address to the AAST was on the need for education. Previously Red Cross-type basic care wasn't even taught in medical schools. It really wasn't. That was changing at the time that I did my paper. It all just seems so ludicrous now but do you know Deke Farrington?

Deke Farrington was a president of the AAST. He's been dead a long time now. Deke was one of the real pioneers who came back from I guess the Korean War, maybe it was World War II, and started working in Wisconsin. He looked like Colonel Sanders—white haired, goatee, beard. Deke was the one that did a study showing that mortuary ambulances were conveying trauma patients at the time and so the title “Death in a Ditch” was one of his articles. The Institute of Medicine picked up on that and had the first of the series of updates on EMS in 1966, and “Death in a Ditch” was the subtitle of the first one.

LIVINGSTON

What aspect of your very varied career have you found most rewarding? What gives you the most joy in your career?

SHELDON

Well, I've enjoyed working with organizations and trying to make them more useful. I had a lot of opportunities to do that. And I've enjoyed all the people I've had a chance to work with as much as anything.

I've actually enjoyed being a department chairman. People complain, “Gee, all the administration”—yes, but that means you get to set things up the way you think they ought to be.

I think I've enjoyed just about all of it. I don't have many downsides that I think of. The patient care, the research, working with young people, all this has been a lot of fun all the way through.

LIVINGSTON

Well, what's been the greatest challenge?

SHELDON

I think one of the greatest challenges has been beating my head against the federal government over the years. I may have chipped it some. I first testified before Congress on graduate education funding in 1985 and it still hasn't gotten fixed.

I was a charter member of the Council of Graduate Medical Education when it was started with 17 members. It's turned into just a white paper for primary care. That's really been disappointing. While we need primary care doctors, this idea that this somehow will solve our health system's problem is so naïve.

LIVINGSTON

Any advice you would give to young surgeons on how to balance their life?

SHELDON

Yes, I think spend more time with your family. I think we ought to try to get all of the younger surgeons to do something I started doing many years ago. I would take one of my kids to meetings with me. Especially if we were going to a good place. I took my oldest daughter who is now 53 to a meeting in Montreal when she was a junior in high school. My youngest daughter has been to Japan, Thailand, Korea, and Hong Kong. If you're going to be active in your profession, you will be traveling—by all means take your family if you can. They will never forget it.

LIVINGSTON

What are the current challenges and opportunities for trauma and acute care surgery?

SHELDON

I think it's system-wise. I think the model, which was discussed in my address to the Excelsior Surgical Society two years ago, of trauma center verification can be built upon to regionalize a lot of high end and complex surgery. I think that that's going to be happening more and more. The lesson that was learned pretty early with the trauma verification program was that everybody with a broken finger doesn't need to come to the tertiary trauma center. In fact, if you don't allow the local hospitals and their practitioners to be involved, it creates an exclusive system and will defeat the real purpose of it. I've been to Washington about this and met with Secretary Sebelius once.

I've also tried to get the Commission Corps of the Public Health Service, the old group I was in, to expand its mission and develop a team based on the DMAT programs to where you could have loan forgiveness for your time in medical school and residency. Put two years in the public health service, then be deployed along with the Coast Guard to places like Haiti. During Katrina you could be deployed into New Orleans for a time until the local resources pick up. I hope we can get some traction on that. The number of positions they've funded is about 3,000 but all they talk about is primary care. The idea that you can send a primary care doctor in and that will fix everything is just so incredibly wrong that it doesn't even warrant discussion.

Lastly the split between rural and the under-served parts of the health system is what we've spent some time on in some of our publications. I am going to keep working on this and hope the ACS—Brent Eastman mentioned it in his presidential address—inserts it into the Washington dialogue in 2013, as soon as things settle down after the election.

LIVINGSTON

Predictions are always funny, but what do you think the next decade will bring in trauma care? What big things are on the horizon?

SHELDON

Well, as Yogi Berra and others say, "It's hard to predict, especially the future." But I think that there are a couple of things are on the horizon.

I think there will be more telemedicine. I think there will be a much more blending of the global spread of surgery and of people. We've seen that through the programs the College and the AAST have had with Landstuhl and some in the Afghan War. Something we're doing right now is we actually have a resident rotation to Malawi and we've had one resident spend a whole year there.

I have two things that I'm working on. First, I think the American College of Surgeons needs to have an associate membership, if you would like, that is available to underdeveloped countries.

As editor of *The Portal*, I've given the software, the teaching CDs, to people whenever they go into underdeveloped areas because there is more global access to the internet than they may have locally with a library.

I think globalizing all this and residents getting credit for the time spent is something that's not very far into the future or shouldn't be.

As far as the AAST, while I didn't get to the meetings very often, mainly because I was chairman of the AAMC [Association of American Medical Colleges]. I'm the first surgeon since Samuel Gross in 1879. But the AAST is still my favorite organization. I think that its global role is really something quite unique. It's the only place you can go where you can talk about trauma for 2.5 days.

LIVINGSTON

Would you have made any changes in your professional life?

SHELDON

I'm still a full-time professor. I'm 79 years old now. I still beat most people to work in the mornings but I'm doing a book right now, another biography. I teach a class in medical history that's been quite popular here. I still teach the residents. Actually my office is in the trauma and acute care group so they stick their heads in and ask for advice from time to time.

LIVINGSTON

Anything else that we haven't covered, sir, that you would like to mention?

SHELDON

I think that you've given me an opportunity to talk quite a bit here. When you do get to interview Dr. Blaisdell, ask him a little more about the politics of redoing the constitution of the AAST. Especially in light to the 75<sup>th</sup> anniversary, I think that's a terribly important story.



***Editor's note:** George Sheldon died on June 14, 2013, having recorded this interview several months earlier. It is the last formal interview of his of which we are aware. Dr. Sheldon was a friend and a mentor to many and made enormous contributions to the field of surgery. He will be greatly missed. We feel fortunate to have captured his reflections on trauma, surgery, and the AAST in these pages.*

ROBERT C. MACKERSIE, MD