



**L.D. BRITT, MD, MPH**  
**PRESIDENT 2010–2011**

DR. FREDERICK A. LUCHETTE

How it was that you decided to pursue a career in surgery, and, then what was the impetus for your interest in trauma surgery?

DR. L.D. BRITT

Well, I became interested in surgery as a high school football star. I got an injury and I went to my family medicine doctor. He said, you know, “I want my son to see you.” His son was Dr. O.W. Hoffler, one of the last residents of Charles Drew, and he was impressive. He was definitive. He certainly took care of my extremity injury. I knew then that I wanted to be a surgeon. I knew I was going to medical school and I knew then I wanted to be a surgeon.

As far as trauma, when I got into medical school, I thought I was going to do pancreatic transplantation. Then I realized that we would never be able to circumvent the need for immunosuppression for islet cell transplantation. If you’ve seen my CV, you’ve seen some of my earlier work was on neonatal islet cell formation. In fact, we did some of the leading work down at Wash U with Paul Lacy and David Scharpe. But I knew that we would not be able to circumvent that because no one who is diabetic is going to say, “Give me islet cells and also I will take immunosuppression the rest of my life.” No one is going to do that. However, if they have a kidney transplant, that’s different.

Then I became fascinated with trauma. I was fortunate to get in with what I felt was nation’s premier trauma program at Cook County Hospital. Cook County was the first trauma

center and that was a rich environment. I was totally hooked because it's benefit management. It's high stakes. It requires a high performance team so you have to work as a team. I never looked back.

LUCHETTE

Was that in the middle of your residency that you made that decision?

BRITT

Yes. I did two years of research and was very well published at Wash U, which had the premier islet cell/transplant program. Because of the likely need for immunosuppression, I had concerns about the future of islet cell transplantation. Then I fell in love with trauma, and the rest is history. There was not a better place than Chicago.

LUCHETTE

So who are some of your early mentors? And how did they influence you to do trauma and maybe try to sway you away from doing trauma?

BRITT

Well, they were the godfathers. You had Bob Baker who worked with Bob Freeark. At that time, Bob Freeark had already gone to Loyola. In addition, Sam Apparau who was a trauma/ICU guru. He is probably the most well, the most knowledgeable ICU person even today. And then I had obviously John Barrett who was the chief of trauma back then. The Chicago guys got me hooked on trauma. Then I had other mentors: Lloyd Nyhus who was the chairman of the department of surgery at the University of Chicago at Illinois [UIC].

Back at that time that was one of the largest programs in the country, the UIC/Cook County program, because it was combined. I kept finding mentors. I give Kimball Maull a lot of credit for developing the early part of my career, followed by Lew Flint. I have had mentors throughout, so I've been very blessed. Maybe you remember my presidential address. I really thanked a lot of folks, and I meant it. I mean some people couldn't even spell "L.D." And those folks supported me. They saw something in me and they gave me encouragement and confidence and the rest is history. I try to do the same thing.

LUCHETTE

How did your peers and your colleagues in during residency view your decision to go down the road of trauma versus something else?

BRITT

It's amazing. I think people liked trauma but they thought it was too demanding, as they looked down the road as far as a career choice. They never said it but I could tell that that special compilation was not something they wanted to deal with when they were 30, 40 and 50 and my age now of 60. They never said it but it was well understood. I picked up on that very

quickly. In all fairness, they didn't feel that it was as "prestigious" back then as being a cardiac surgeon.

It is amazing how the tables are turned. Right now, for a quarter and a cup of coffee you can probably get a cardiac fellowship. But they didn't think trauma was prestigious enough. So those are the things that for my colleagues. They didn't want to go through the hard work and know that this is it because trauma knows no holiday. It knows no weekend or nighttime.

You know vascular is certainly great to do. It's a great population of patients. But at the end of the day you have that patient that comes in and you have to obviously do a major, a definitive reconstruction of their circulation. Then it clots off and then you have to debride and then you have to get into an amputation, so I did not find that to be satisfying for me. Even today, I don't think I would find it satisfying. Today, ninety percent of vascular is catheterization. Well, hell, if I wanted to do catheterization management I would go into cardiology and interventional radiology. But I want to be a surgeon. I want to be able to open—you know the good thing about acute care surgery is it is time sensitive and sometimes we have to operate. Patients necessitating emergency surgery have diffuse peritonitis obviously or they're hemodynamically labile. Such a presentation is an absolute contraindication to minimally-invasive. So the open approach is going to always be there. So that's one thing. I didn't predict the future of vascular back then, but I was not that interested in recidivism, and those patients coming back and grafts clotting off and all that, having to do amputations. It was not fascinating to me.

#### LUCHETTE

When you look at your scientific contributions, which are you most proud of and how do you feel it influenced the field of trauma care?

#### BRITT

Well, first of all, shock. The whole emphasis of my research, particularly my basic science research, has been on shock, whether it's ischemia reperfusion. We had a definitive collective review in *Annals* a few years ago (*Ann Surg.* 2008 Jun;247(6):929-37). I felt that we had not made much progress in shock, particularly ischemia reperfusion. I still think we have made some progress but back then not much at all. I had a chance to look at how everything happened at the cellular level. Before I got interested in basic science, I felt most things could be handled clinically. Then I realized we're going to have to go to the ditch for a lot of these answers. As you know, most things happen at the endothelial level. Seeing a reperfusion injury, you're not going to have that if you don't have a problem with leukocytes, and we have a problem with leukocytes. Leukocytes become adherent to the endothelial cell, and then the next thing you know, you have this cascade of mediators and adverse cytokine occurring. So what we did in our lab, we were able to block such an adherence. There was only a partial response which suggested that just blocking at the CD-18 component endothelial level was not enough and, perhaps, that there were other mediators contributing to this cascade.

That's the problem: there are a lot of reasons for somebody to be in shock, whether it

is septic shock or ischemia reperfusion. There are a lot of reasons for people to get in trouble. Although you might block one pathway, there are other pathways you're going to have to deal with, too. Sometimes you can block things so much that there is a toll effect, there is an advantage sometimes with these pathways and then you end up, obviously, hurting the patient more.

I'm still fascinated. Look at my lab now. It's concentrating on the membrane vesicles, the little out pouches that inform intracellular messengers. Well, we're looking at that now. We feel that that might be the scud missile for septic shock. So we're trying to characterize it. I actually spent in our lab \$375,000 for an atomic force microscope just to look at it and try to define the carrot and see if we can find some sort of cognitive therapy, if indeed the membrane does function as the true scud missile of this true virulent component in septic shock. If I have to admit, I wish I had a good ending to say I'm on my way to Stockholm for a Nobel Prize, but I just think that we have to just keep chipping away at it. Ischemia reperfusion is still a major problem. I don't think we've made a major impact on septic shock for those who are in true septic shock. I think the mortality is still very high.

The only reason I am bringing it up is because you look at the recently implemented duty-hour limitations in graduate medical education. The major casualty has been research. The bragging rights for this country has been research. This is how we have advanced medicine. If you take that away, I'm not sure we are going to remain the leader in medicine. But that's a discussion for another time.

LUCHETTE

If you had one thing that you championed and campaigned for in your career that you wish you hadn't, what would it be?

BRITT

I got to tell you, Dr. Luchette, I drank the Shoemaker Kool-aid on supernormal oxygenation. I thought that if you could maximize oxygenation patients would have a better outcome. That was absolutely, categorically wrong, that our aggressive resuscitation, particularly with oxygenation, was not the right course. I think a lot of people went down that road.

Another mistake was not recognizing the importance of when not to close an abdomen. I was one who was saying that I'm not going to leave this table without closing the abdomen. I felt that I could close any abdomen. I think we all should be embarrassed that we were not aware of the deleterious effects of intraabdominal hypertension and abdominal compartment syndrome sooner.

LUCHETTE

What do you consider the greatest two to three advances in trauma care and science during your career?

BRITT

Well, during my career—now I'm not 90 years old, like Dr. DeBakey, I'm just 60—But in my career it has to be non-operative management, with the beneficiary being the patient. Right now that is a gold standard. I am not drinking the Kool-aid for non-operative management aggressively with gunshot wounds. But certainly for solid organ injury, that was a major advance for the patient.

And, also, resuscitation. I think we've gotten it right. Supporting a blood pressure of 40 and you're not resuscitating the patient, not giving them adequate fluids is not ideal. But I do think that we are at the point now of being a little more conservative. In my career, I think those were the two major things that had a positive impact on the patient. But as far as advancing our cause in helping patients, I think those were the two major things. Being aware of the need for, obviously, more than just blood, the coag products and platelets and all of that.

LUCHETTE

What do you feel are the major changes in practice patterns that occurred during your career?

BRITT

I'll give you the positive side of the issue and the negative side of the issue.

What was good I think was system development. You know, when we first started off, when trauma developed as a young specialty, we didn't have systems. Here we have the greatest country of all time. And even if you compare us to the Roman Empire—the United States—we're certainly the wealthiest and greatest country. Brent Eastman said it best in his Scudder Oration, we have areas still in this country where if you get injured, there is a good chance you're not going to get state-of-the-art management. So I have to say development of systems and regionalization would be the positive in my career. That helps the population base, more than just one patient. It helps a multitude of people.

On the downside, from the changes I see, surgeons feeling that they have to be hospital-employed. I don't think that's necessarily a good thing across the board, because some hospitals define quality differently. Some hospitals, once you sign that contract and then when you have to renegotiate, then they start ratcheting down your compensation and telling you how many patients you have to see and all that. I don't see that as good for patient care nor do I see that as good for American surgery. So I see this trend as the downside as far as the change in practice. What has been pivotal is the system development, regionalization, particularly with the acute care surgery of trauma.

LUCHETTE

I'm sure you have many things that at the end of the day you feel proud about that you have achieved in your career. But what brings you the most reward? What gives you the most joy?

BRITT

Well, you and I both have had good careers. I would still have to say patient management. I

still enjoy seeing patients. I see patients every Thursday all day. I operate on Wednesday. I like patient management and patient care. That's the most satisfying thing for me, followed by teaching. You know I've been influenced as far as education because my mother was a school teacher in the public school system, and that was a segregated public school system back then, for 53 years. I got the bug of being a teacher a long time ago. So I enjoy teaching and I enjoy patient care. Those are the two things. If you take those two things from me, I would be a miserable person as far as the profession.

LUCHETTE

What do you find are the most challenging and difficult things in your career? What keeps you up at night?

BRITT

I can tell you what I found difficult. I'm not blaming anyone, but I think we let a lot of our specialty go. We weren't as bad as cardiac surgery. I think cardiac surgeons opened up the garage and said take everything. They gave away everything. But I think we are giving away critical care. I think we made a mistake in having silos in our specialty. Remember, our specialty was acute care surgery before. Our specialty took care of critical care, trauma, and emergency general surgery, but for some reason they became separate silos. Somebody decided that we should have a dichotomy, we should have critical care separate—that was a mistake in our specialty, in my opinion. If I could press the rewind button and change the course of our discipline I would have made sure those silos would never have been established because they were all under our umbrella.

The first ICU was a surgical ICU. And our greatest shortage now is in critical care. There are a lot of founding fathers and mothers of acute care surgery, but when I came up with the brand and name "acute care surgery," I wanted that name because it clearly incorporates critical care. People say, well, you can go to Europe, or Asia and the surgeons are not doing critical care. That's a mistake because I think the next generation operating room is going to be an ICU room. If patients are going to be in the ICU setting and people walk away from critical care, I think it is going to hurt us.

But I think the acute care surgery model will address that. I think it's fixable but I think we will never be able to command it. Maybe we shouldn't, but we were the founders of critical care. I've seen a sick surgical patient, cared for by a person who was a very advanced pulmonologist caring for a critically ill surgical patient and he was lost. He really didn't know the nuances of how to take care of a sick surgical patient. We need to still have surgeons at the critical care table. What I'm the most concerned about and it keeps me up at night, is that we might lose critical care. We've been so charitable, American surgery, in fact they should call us the Salvation Army. We gave away GI. We didn't embrace emergency medicine. They knocked on our door and they wanted to be with the American College of Surgeons and we weren't interested so they established the American College of Emergency Physicians.

But let me just say this now: we can ill afford to give away critical care. We need to

have a presence in critical care.

LUCHETTE

So my next question is about what advice would you give to young surgeons interested in an academic trauma/acute care surgery career, if you were to be their life coach.

BRITT

They need to do two things. I call it S&D. They need to make the sacrifices and they need to be disciplined. You've got bright students. Some of them are brighter than any of us. But for some reason they don't want to make the sacrifices. Now, don't get me wrong. I know everyone likes to be home at five o'clock. Everyone likes to look at the NBC news and all of that. But you've got to make sacrifices. You cannot do everything, get the top dollar, go to all the shows, have vacation and all that and still be a great surgeon or a great acute care surgeon. So I've told the young people, enjoy your family. But you still have to make sacrifices. You have to be disciplined because there are so many distractions along the way. There are so many other inviting avenues you can take, and then you find out that while you enjoyed it, it is not amounting to anything. So being disciplined and making the sacrifices, if I had to give them some advice, that's what I would tell them.

LUCHETTE

What do you perceive are the greatest challenges and opportunities—two questions there, challenges and opportunities—for the future of trauma and acute care surgery?

BRITT

Well, I think acute care surgery will do what I said we needed to not do in the past. In other words, it will keep us from having silos. In acute care surgery, you have the critical care component, you have the trauma component, and you have the emergency general surgery component. That is an advantage.

The major challenge is that there is a tendency for us to embrace silos. I don't know of any silo strategy that works in anything. I don't think it works in the military. I don't think it works in business. You have to have a collaborative sort of network, team-type approach if you're going to be successful. But for some reason, we have a tendency to have specialty interests that are embraced as mutually exclusive. You can have your specialty interests but you have to also be able to have some sort of cohesive network. I think acute care surgery does that. So I think acute care surgery as a model addresses a major challenge to our discipline.

LUCHETTE

What you feel are the major set backs that have happened in the past 10 to 20 years for surgical critical care as you look back?

BRITT

I think the worst things that have happened is that we have fallen behind in the workforce. I mean we have a major shortage now, as you know, just in surgery. I think the worst thing that has happened to us are similar to most of the acute care surgery problems. If you look at the cornerstone of management, it is not being done by, you know, the Luchettes and the Britts, it's being done by general surgeons that are not necessarily trauma-trained.

Most of the general surgeons completing training want to subspecialize or have a niche and not many of them are embracing, obviously, the full spectrum of general surgery which includes the acute care surgery component. To me, that is a major problem. We have a shortage in the workforce that will take care of patients who are critically ill and injured.

So at the end of the day, we have a shortage of personnel. I'm talking about the high performance personnel which are us, who are taking care of the critically ill and acutely injured patients. And for some reason, we have to build up that pipeline again. We're not going to build it with acute care surgery. Remember right now we have, approximately 15 ACS fellowships. We will probably have 40 fellowships, which I will be proud of. That's how many surgical oncology fellowships they have. They don't have but 40 fellowships in pediatric surgery.

But that's not going to be enough to provide the workforce needed throughout the country. I know most acute care surgeons are going to be in tertiary centers. What is going to help is that we end up trying to reshape or to unveil the general surgeons that we used to have years ago. So what I am trying to do now is make general surgery a more attractive specialty.

LUCHETTE

What do you think trauma and acute care surgery and critical care are going to look like in 20 years, L.D.?

BRITT

I am going to say acute care surgery because that includes all of that. I think it is going to look like a general surgeon, a little bit more, a more advanced general surgeon, as was the case 50, 60, 70 years ago. It is going to be a person who can do the full spectrum of general surgery and the full spectrum of trauma. So I am encouraged that this is going to be our high performance profession. And that, to me, it is going to be the next generation general surgeon. But I'm not calling a general surgeon somebody who does breast. Nothing against them. And I'm not calling general surgery someone who only does endocrine. The next generation general surgeon is going to be an acute care surgeon. So that's how I would summarize that and answer that question.

LUCHETTE

What things, if any, would you change related to your professional career as you look back?



BRITT

I probably would have had a family sooner. My daughter is eight years old. I sometimes have to take Advil just to keep up with her. So I probably would have had a family sooner. It's tough running and all that when you're 60 and you've got joint aches and all of that. So if I had to do it again, I would have probably started a family sooner.

LUCHETTE

How about your professional career? Would you do anything different?

BRITT

I think I would prepare myself better. And, again, when people say, "I would do the same," I think they need to be a little more critical. I think we can all prepare ourselves better. Remember, there is so much knowledge, there are so many things that you have to know. As they said last century, they said knowledge doubles every decade. In the twenty-first century, they say it will triple every decade. You obviously have to have IT to help you, but you have to be able to prepare yourself. I would have prepared myself better than I did if I had to do it over again, professionally. Personally, I would have started a family sooner.

LUCHETTE

What are your plans for the future, both clinically, academically and personally?

BRITT

I would like to just continue to mentor people, mentor colleagues, and mentor residents. I enjoy that because that's the teacher in me. So mentoring is what I see myself doing. I don't see myself walking away from the specialty. I probably will slow up a little bit but I still want to play a role as far as teaching and mentoring and guiding.

On the social side, I'm spending more time helping my daughter develop along with my wife. My wife and I are enjoying each other more and just helping Avery Marie. I don't care whether she goes into surgery or not. But I just want her to be the best and happy in what she is doing. My daughter, I think, has inherited my wife's genius because on her side her baby sister was a top PhD student at Berkley in chemistry and her big sister got a PhD from the Kennedy School at Harvard. All her sisters and mother are PhDs. Her father was a principal. So I'm hoping that my daughter has all those genes and didn't get any of mine.

LUCHETTE

Is there anything that we haven't covered that you would like comment on for the readership of the 75<sup>th</sup> anniversary of the AAST?

BRITT

Well, I want the readership to know that we have a vibrant organization. The administration, under the direction of Ms. Sharon Gautschy, has been superb. In addition, we have good lead-

ership. And I look at you. I think we have good future! I think the organization is moving in the right direction. I just hope that we don't get to the point where we give away things. We have a discipline and we need to be good stewards of this discipline.