

PAST PRESIDENT RAUL COIMBRA, M.D., Ph.D.

DAVID LIVINGSTON, M.D.: I am not sure if you know that these interviews began as part of the 75th Anniversary AAST meeting with the goal to interview all the previous past presidents. The idea was to allow people, but especially junior faculty, students, residents, fellows, to get a sense of the person behind the president of the AAST. While I know sometimes we don't believe, you are currently and deservedly viewed as larger-than-life to many. After the 75th Anniversary the AAST decided that we should keep doing them so here we are.

RAUL COIMBRA, M.D., Ph.D.: Great.

DR. LIVINGSTON: The first series of questions are seemingly obvious, but I've got some really interesting answers over the years. How did you find yourself in surgery and how did you end up in trauma/surgical critical care/acute care surgery? When did you decide on all this?

DR. COIMBRA: I have been influenced in every step of my career by surgeons. The first persons that influenced me were two professors of anatomy in

medical school who were surgeons. In anatomy class at the end of my first year in medical school, I was talking to those surgeons and they were telling me how exciting their careers were. During regular hours they were professors of anatomy. At the end of the day, in the early evening, they would go to their offices and see surgical patients or go to the hospital and do bread-and-butter general surgery.

I developed an interest in what they were doing and they said, "Hey. If you want to come and tag along one day I'll show you the operating room and how to scrub in a case and how to pass instruments". I thought that was a terrific opportunity for me as a first-year medical student. To walk in the operating room for the first time. I joined these two old professors and worked with them until I was a third-year medical student. I was scrubbing every day after school. Although I probably should not say this, after I learned how to behave in the operating room, I would rather miss some of my initial basic science classes to go scrub with anybody that I could.

They were a terrific influence for me at the beginning of my medical school career. So right there in the first year of medical school I said "This is what I'm going to do; this is what I love". I developed a passion for it. They really influenced my future.

When I was a third-year medical student I got to know the vascular surgery group. They, too, offered me to scrub with them. They would spend their Saturday mornings doing AV fistulas and bypasses. They also said, "If you want to come on Saturday, you can and join us". I got very close to them.

Then, two important things happened. One of the vascular surgery professors used to take call in a public hospital once a week for emergency surgery and trauma. He invited me to join him since he had a spot for a medical student and I got that position. So I was the guy suturing lacerations in drunk patients in the ER while he was evaluating more complex surgical patients. Then we would go to the operating room together. This man allowed me to do, as a fifth-year and sixth year medical student, procedures that I would only do as a

third- or fourth-year resident in surgery. That was a terrific experience for me. He really influenced my decision to do vascular surgery.

However, at that time, I also developed a passion for emergency general surgery and trauma. I understood then that trauma patients die more often of bleeding and thought if I had vascular surgery skills that would help my trauma surgery career. By the end of medical school I thought I had it already figured out. I said, "I'm going to go into surgery then I'm going into vascular surgery training. Then I'm going to be a more skilled trauma surgeon because of my vascular surgery skills". So in a nutshell, that's the story.

DR. LIVINGSTON: Because you went to school in Brazil, I want to clarify some differences in education. When you say you were a first-year medical student, you were really right out of high school, correct? A fifth/sixth year student would be like our third/fourth year students. That's because it's a 6 year combined college/medical experience?

DR. COIMBRA: Correct.

DR. LIVINGSTON: So as a first year student, you are just 18 years old. That's a pretty amazing opportunity when most of our students are still in college.

DR. COIMBRA: That's correct.

DR. LIVINGSTON: It is also incredible that you recognized what an opportunity you were given and you made the most of it. That is a tremendously mature for an 18 year old.

I also think it's pretty interesting that these guys were anatomists by day and surgeons by night. If you contrast it to who teaches most anatomy in this country that's pretty uncommon. It may have been the way it was 40-50 years ago in the United States; I don't know, but clearly not the way it is now.

DR. COIMBRA: Well, these guys were very old guys, at least to a first year student. I think they had long careers as surgeons. When the medical school opportunity appeared to them, it allowed them to transition into the anatomy because it made sense. But, they still want to keep their surgical practice so they limited that to the end of the day. I caught them at

the end of their careers. They were terrific mentors and really big influencers for me.

DR. LIVINGSTON: They were old school general surgeons doing regular bread-and-butter general surgery - hernias, gallbladders, abdominal cases?

DR. COIMBRA: Oh, yes. I have done more Cholecystectomies and gastrectomies with these guys than I have done for the rest of my career.

DR. LIVINGSTON: That's what happens when you train after H2 blockers, PPIs and H. pylorii.

DR. COIMBRA: Exactly.

DR. LIVINGSTON: Finishing this line of questioning where did you do your surgical training?

DR. COIMBRA: I did my initial general surgical training and vascular surgery in Brazil.

DR. LIVINGSTON: You were really committed and differentiated early in your thinking with respect to surgery. Did you ever think about anything else or that was it?

DR. COIMBRA: Yes I did. I'm the only physician in my family. I actually had this idea before going to medical school. When you are a teenager

trying to figure out what you're going to do with your life is when I decided I was going to go to medical school. I had this idea that doing public health and helping people with common diseases and helping humanity was what I was going to do.

But after I met those guys, six months after I started medical school, my whole life changed. So that dream lasted six months and, to be honest with you, from then on I never thought about anything else.

You know my story better than many but the importance of mentors for me cannot be overstressed. I said that during my presidential address in the AAST.

I found those people during medical school and I have been fortunate to just stumble on others during my career. When I look back I think, "Gee, why me?". There were 100 of us in our medical school class. Why me? It continued to happen.

My first basic science research paper was in my last year of medical school. I was investigating intestinal ischemia. Using ultrasound to evaluate bowel viability in an experimental dog model. How did I get

there? By the influence of some of my mentors and my professors telling me, "If you really want to be an academic surgeon these are the things you've got to do. You've got to develop an interest in research and basic science. You've got to learn how to write." That mentorship really pushed me to do it and accomplish the things I've done in my career. The role of a mentor for me is tremendously important.

DR. LIVINGSTON: Well, that dovetails into the next question. You talked about the two anatomy professors and the important role of mentorship in your career. There is no doubt that good mentorship is invaluable at various times in one's career. For those who didn't hear your presidential address who were your mentors besides the anatomy professors?

DR. COIMBRA: In Brazil, the person that really held my hand and guided me through the academic surgery pathway, is an honorary member of the AAST and of the American College of Surgeons.

His name is Samir Rasslan. He is a famous surgeon in Brazil. He was a classic triple-threat which was uncommon at the time, particularly in

South America. He was a basic scientist. He was an excellent surgeon. He was an excellent educator. He developed an interest in me and taught me the principles of basic science research. As you may know, in Brazil to advance in academic medicine you need to write several theses. You go through a master's program and then a Ph.D. program after you finish your training. He was my advisor and really guided me through those very difficult times. You work during the day and go to school and you do your credits for your masters or your Ph.D. and you do your research. But you still need to feed your family. Those years were very, very difficult and this man really got me through it and pointed me to the right direction.

Obviously, the second and perhaps most important mentor for me is Dr. David Hoyt who, again, I just stumbled upon. The story goes that I was a very young surgery faculty in Brazil presenting a paper at the Panamerican meeting in Guadalajara in, I think, 1991 or 1992 on splenic injuries. The professor discussing my paper was Dave Hoyt.

After the session he came to me and said, "Tell me a little more about yourself. Who are you? What do you do, where you come from?". We sat at a bar and had a beer and we had a very long conversation. After several hours, the conversation veered towards research. He said, "Do you do research?" I said, "Yes, I am actually setting up a lab with the person that described the initial effects of hypertonic saline on hemorrhagic shock. A gentleman named Mauricio Rocha e Silva, a very famous researcher in Brazil.

Hoyt says, "I can't believe you are saying that. Our lab just discovered that hypertonicity changes the function of T-cells." You can imagine what happened with the conversation. He said, "Why don't you come to San Diego and visit me and visit our lab?"

I went back to Brazil from that trip thinking that was a great opportunity to expand my horizons and see what other people were doing and connect internationally. Dr. Brent Eastman helped me connect with Dr. Hoyt more formally, as he was a good friend of Dr. Rasslan in Brazil. I arranged to visit San Diego and saw that there was an opportunity for me to go

there. I applied for a scholarship from the Brazilian government to allow me to take a two-year sabbatical. I got it and that's how I started my relationship with Dr. Hoyt. Everything else happened after that. The influence of this man completely changed my life.

DR. LIVINGSTON: I think that's really a great story, Raul. I also think that this is a classic trauma story because: one, it includes beer and a bar and, probably more importantly, two, it exemplifies the incredible willingness and giving nature of our profession and specialty to help other people. While I've only been doing these interviews with trauma surgeons - I think this amazing willingness to give to others and help people in their careers is a defining feature of our specialty. Your story is not that unique and that concept permeates through many of the past president interviews.

You finished your time with Dr. Hoyt and then you went back to Brazil for a while before you came back? How long?

DR. COIMBRA: The scholarship was for two years and at the end of two years you have to return to

your country of origin or you have to pay back the money that the government gave you.

DR. LIVINGSTON: Easy choice there when you're a poor trainee.

DR. COIMBRA: Exactly. I was a lot younger. I had a young daughter and a young wife at the time. I couldn't afford paying it back so I went home to Brazil.

I was in San Diego for two years and then returned to Brazil. That turned out to be a great decision. I became the chief of trauma at my medical school which is a very large hospital in Sao Paulo. It has 8,000 trauma admissions a year and we were very, very busy. I was able to organize the trauma service and working with my mentor I was able to create the emergency general surgery service as well.

We did a lot of good things and I progressed through the ranks of the university to the level of associate professor. My two years in the U.S. prepared me to take on the challenges back home.

Another story of serendipity. One day I am sitting in my office waiting for a trauma conference

to start - this is in Sao Paulo - and my phone rings. It's Dr. Hoyt and Dr. Moussa who was the chair of the Department of Surgery at UCSD. Dr. Hoyt said, "Listen, I'm here with Dr. Moussa. One of our faculty in trauma and critical care is leaving and we would like you to consider coming back."

Thank god I was sitting in a chair because, if not, I would have fallen down. Again, opportunities just presented themselves to me over and over again and again by people that developed an interest in me. Obviously after a brief period of negotiation I said, "Of course I'm coming back".

I knew that my career would be a lot more productive and I could do many more things in a place that had resources like UCSD. But I always kept that interest in doing international work in global health in an attempt to give back a little bit of the gigantic amounts that my mentors offered to me.

DR. LIVINGSTON: I think that interest in public health you had back when you were a teenager found a way to blossom big time. Your efforts around in global surgery, trauma and emergency general surgery are

well known and regarded. It is a real reminder that it's not all about sanitation and infectious disease.

DR. COIMBRA: That's right.

DR. LIVINGSTON: Compared to some previous past presidents, by the time you became a trauma surgeon it was a pretty established as a career path.

You had David Hoyt as a mentor and all of what you accomplished in Brazil. It was a lot different, compared to maybe 20 years before when people decided on a career in trauma and others asked "Why?". In your case, trauma was pretty set as a career path?

DR. COIMBRA: Yes, that's correct. It was a lot more developed as a career or at least it was the beginning of the real development of trauma as a career in the U.S. by time that I was starting my training.

I finished my surgical training in 1989. About that time things were taking shape in the U.S. when I came in 1994. I probably got into the trauma business in the U.S. about ten or fifteen years after

that big wave of trauma center development and trauma systems development started in the U.S.

DR. LIVINGSTON: Right. You came to the U.S. even after the introduction of the surgical critical care exam.

DR. COIMBRA: Correct.

DR. LIVINGSTON: What's been the best career advice you ever received?

DR. COIMBRA: I think the best career advice relates to how to succeed in academic surgery. I have got to tell you this story. It is a very early mentorship conversation. Hoyt and I developed such an intense, close relationship and he really developed an interest in my life and my career. We had the habit, at the end of the day when everybody had gone home, of walking out of our offices and meeting up.

We had our offices in a little apartment building across the street from the hospital. A very ugly but very cozy building. We would walk out of our offices and stand there chatting for about an hour. If not every day at least three times a week when we were

in town. Those mentorship sessions were invaluable to me.

In one of those, Dave just said, "You know, you're doing great but you need to add structure to your career because to succeed these are the things that you need to do.

Number 1, you need to be a real scientist and so continue doing what you do in the lab.

Number 2, always put patients first and advocate for your patients and be an excellent clinician.

Number 3, don't sweat the small stuff. Impediments and roadblocks and issues will come up but never lose focus of where you want to get."

He told me to plan in five-year blocks and halfway through that block to start planning for the next five years. Always have a plan and always have a goal. Keep your eye on the goal and keep moving straight toward it.

That was very, very important for me and I have tried to do that in my career. I still do that to this day.

DR. LIVINGSTON: That's really sound and very sage advice. On the opposite side of the coin, did you get any bad advice and did you listen?

DR. COIMBRA: You know I tend to forget the stuff that doesn't help me. So if I got some bad advice from someone I probably ignored it. My relationship with the people that mentored me was so strong that I really didn't listen to those few that really did not help me.

DR. LIVINGSTON: Raul, your contributions to trauma/critical care/emergency general surgery, basic science, they're really just vast.

Trying to narrow that down may be tough but what scientific contribution are you most proud? How, if it did, influence trauma care?

DR. COIMBRA: My career has been heavily influenced by my interest in basic science. I usually say that I am a great example of gigantic failures of basic science projects translating into clinical care.

Everything I tried in the lab seemed to be a great idea and worked phenomenally well in mice and

rats. Unfortunately, the few that went on to clinical trials didn't pan out.

Still, and to be honest with you, I'm very proud of the hypertonic saline story. Starting in Brazil, it was an honor working side-by-side with the Dr. Silva, the man that really described hypertonic saline for the treatment of hemorrhagic shock in the early '80s in the *American Journal of Physiology*.

Then coming to San Diego and continuing my research on hypertonic saline and its role in immune function, which was really discovered by our lab in San Diego, was very important. Even if you can't translate those important findings to clinical practice, you advance knowledge. I think the advancement of knowledge that occurred with those projects led to many, many other lines of investigation that are out there, some very promising.

I think most people would know me for two things: one, that I have a vested interest in vascular trauma; and, two, I did a lot of basic science in shock resuscitation. Starting with hypertonic saline and more recently with the vagal nerve stimulation. We, with

others in San Diego discovered a few things that are really important to understand in the pathophysiology of ischemia and reperfusion in the gut.

So I am proud of those things although I may not see them in clinical practice to improve patient care in my lifetime.

DR. LIVINGSTON: I think that your basic science work has been just outstanding over the years, Raul. It really is. I look at your success and I can't help asking, where you do think trauma/basic science is going?

You're one of the few people I can talk to about basic science because we have both done it. There just seems to be a huge drop off in interest in having a lab is a viable career path for academic surgeons. What is your thought on that?

DR. COIMBRA: Yes, that's a very good question, David. I think a number of things have happened recently that it's like the perfect storm.

The decreasing federal funding for basic sciences is huge. The fact that for the last 30 years we have tried very hard to have better representation of

trauma research in the NIH and have not been able to accomplish that. So we don't have a trauma institute in the NIH. The fact that there is still an unhealthy competition between translational researchers and basic scientists and the funding goes preferentially to basic scientists. All of those things in addition to the pressures in medicine and health care in general. In academic departments and hospitals there is enormous pressure for generating billing, for clinical productivity, for paying for your own salary. All those things have pushed people away from basic science.

I am very concerned about it. I think if we are to succeed in the future we have to develop strong collaborations with basic scientists towards developing projects that have a tremendous translational potential. We can't be doing research like we did in the past. Trying to understand specific cellular or sub-cellular mechanisms of things or how things work but we need to think about clinical applications.

From animal models to translational opportunities to drug or device development. Whatever

it is, it has to have clinical applicability. I think that is our future in research if we are to succeed.

Otherwise, we are going to fall back to doing clinical research and analyzing data and mine large data bases. Those lines of investigation are also very valuable but in terms of advancing knowledge is more limited.

So I see value in both, but I think that the surgeon scientist still has a major role to play if we can develop those relationships with basic scientists and develop those program grants that will allow us to do the fundamental research but also look at clinical applications.

DR. LIVINGSTON: I totally agree with you on that one and I remain very concerned. I still consider my lab on hiatus, although I wonder with all of the other things going on in my career, if I will ever get back to it. That disturbs me greatly. I still think I have some good and possibly exciting ideas but wonder if they will ever be studied. I do collaborate with some really good basic science people but sometimes that is

not the same. I think we as surgical scientist have a unique role in forming the right questions.

Is there anything you thought would be the next great thing, and maybe hypertonic saline was that one thing, that didn't really pan out.

DR. COIMBRA: I really thought that hypertonic saline would do it. We had all the basic data. We had the preclinical data. We had several Phase I and II clinical trials.

That data existed. But when we took it to a large, multi-institutional prospective, randomized study, the ROC network funded by the NHLBI it didn't pan out.

Whether there were issues related to the design of the study or to the patient selection or whatever - it doesn't matter. What does matter is that after \$50 million and several thousand patients we didn't see the effects that we saw in smaller studies.

That happens all the time with drugs and in other fields but I was absolutely convinced that we could improve outcomes with hypertonic saline for

hemorrhagic shock, and we didn't. So I think that's the biggest one for me.

DR. LIVINGSTON: I think you were not alone in thinking it would work. There is probably nuances somewhere in there that were hard to tease out in the entire database. It did look better than most things that were out there.

DR. COIMBRA: Yes.

DR. LIVINGSTON: Those pesky data points proving you wrong are just so irritating.

DR. COIMBRA: That's right.

DR. LIVINGSTON: So what do you think during your career are the two or three biggest advances in trauma care that you've seen?

DR. COIMBRA: I think a couple things have been remarkable to me. I have had nothing to do with them but I watched this happening and I think they are pretty remarkable.

One is this complete new understanding of resuscitation which today seems pretty obvious. For 20 years you and I practiced in a way that was not obvious at all but we didn't see the truth in front of our eyes:

if you lose blood, give blood. I think that's pretty remarkable.

DR. LIVINGSTON: That was a real "duh moment", when you think about it. Like how did we not get that? How did we miss this?

DR. COIMBRA: Exactly right. I think the other thing that's quite remarkable to me is the significant incorporation of new technology in clinical care.

We need to have a very open mind about this - it's not just diagnostics but also interventions, minimally-invasive operations, endovascular procedures. All those things and adjuncts have a tremendous impact in the outcomes of injured patients. I think we need to embrace new technology.

We need to encourage our young partners and trainees to embrace new technology and to bring it to the forefront of their practices because I believe those things are here to stay.

The third thing that still amazes me, David, and it's not exactly related directly to patient care but it's what is happening in trauma globally.

Initially, organized trauma care was mostly an American thing with some little areas going on in Europe. There was very little going on in Asian and South America. Today this became a real global initiative and I am very proud of having had the opportunity to participate in the process of disseminating and carrying that banner showing that trauma is an important public health issue around the globe.

It has been amazing to see it happen. Everywhere I go in the world today people talk very seriously about trauma care and they are discussing the same things in India or in Brazil or in Southeast Asia that we are discussing in our professional society scientific meetings in the U.S. That common language has spread all over the world and it's been a tremendous opportunity to be part of it and see that happen and come together. Our family is getting bigger and bigger but we are closer and closer together. So those are the three things.

DR. LIVINGSTON: That covers some really great issues. Raul, I think you had a lot to do with the global push for trauma care and something that we should

be all grateful for. Don't sell yourself short on that one.

What aspects of your career have you found to be most rewarding? What gives you the most joy?

DR. COIMBRA: There is no question to me that despite all my interest in global health research and education the thing that gives me the most joy is when I help fix somebody in the operating room. Delivering excellent surgical and trauma care to patients in need, is to me, what really matters at the end of the day. That's why we are here. That's why we do what we do. Some are more academic than others. Some like to write more than others. But at the end of the day, when you finish up that case and you know that patient is going to walk out of the hospital there is no better feeling than that.

DR. LIVINGSTON: Amen. What part of your career, what aspects have been the most challenging, the most difficult? What has distressed you most over the years?

DR. COIMBRA: Well, at different stages there were different stressors, right? So at the earlier stage of my career funding for my academic endeavors was always an obvious concern. The idea that eventually you may need to drop your basic science research and close your lab because you are not funded is a nightmare to every serious investigator. That happened at some point.

When I became division chief after Dr. Hoyt left U.C. San Diego, just having that tremendous responsibility - and those were big shoes to fill - was a major stressor. I had to change the way I think. I had to develop management and leadership skills that I didn't have or I didn't have the opportunity to develop up to that point. I felt very strongly that I was responsible, totally responsible, for the team that I was going to form moving forward. I should and need to treat them with respect and I should fight for their resources and I should be responsible for their careers, I should be their mentor, just like others were for me. That was a period of significant stress for me because either I didn't have that skill set or didn't think I

had that administrative skill set that was required to survive in a very competitive environment in a big university.

Suddenly being responsible for a group of five, then seven, and eventually eleven faculty when I left UCSD, and feeling responsible for their careers and their future was a huge responsibility. Trying to create opportunities for each one of them to be successful in academic surgery was very stressful but ultimately very rewarding because all of them did very remarkable things in their careers.

I think at the tail-end of my career now I feel that this is it for me. You know a few more years and we're going to pass the baton to those that are coming after us. For me the stressful thing now is dealing with the proximity of the end. It's quite amazing how often I think about this and how I try to reinvent myself to stay engaged and stay relevant.

But it is important for us to understand that the golden days are over and now we should use our experience and the things that we have learned over the years, pass that along to the people coming after us who

will be the future leaders and gracefully let go. I have been thinking a lot about this and trying to figure out what other things that will give me joy in life. To fill the void of not being the guy that is taking call and being in the operating room all the time and doing great research and presenting in national meetings. Finding that role as a mentor that's fading away gracefully and slowly but surely.

DR. LIVINGSTON: I think you really hit a lot of the challenges chronologically as one's career matures. Especially describing the stress as a Division Chief. There has been little discussed about that particular role. It's pretty daunting as you are still very close to your faculty and not as removed as a chair. If you do your division chief job right, you really do feel this overwhelming responsibility for all the people in your "family". As the saying goes, "you're only as happy as your most miserable child" works in a trauma division as well.

What is your career advice now for your trainees, your medical students, your residents

interested in an academic career in trauma/acute care surgery. From the academic career side?

DR. COIMBRA: I basically tell them a few things. Number 1: Find a mentor. It is really important. No one can make it without a mentor. Find a mentor.

Number 2: Find a group where you feel comfortable. Where people respect each other. Where people support each other because we all need support and help most of the time. And we need to be there for others, as well. So I think a mentor and a good group are critically important.

From an career advancement point of view, I tell young people just get up every day and do the right thing. Put your patients first and do the right thing. At the end of the day if you go home and say I helped people today, I did the right thing, you're going to be happy about it and your career will be a lot more rewarding.

From an academic point of view, find your niche. This is what I tell the fellows. Develop an interest in something in addition to your training

program. Residents come to interview for fellowships and they believe that the fellowships are there to fill the gaps of their surgical training or their critical care education. They are going to be much better doctors after their fellowship and they may be, in part, correct.

However, I tell them to use this tremendous opportunity that they are going to have during their fellowship to develop additional skill sets. They will be going to spend a year or two interacting with great and incredibly talented people across this country. They should "use" them as mentors and find their niche. Develop a skillset that's different than the one you came in with. Whether it's injury prevention, basic sciences, trauma systems development, education, outcomes, resuscitation, whatever it is. Find your niche and develop that skillset so that at the end of your fellowship you have the clinical training that you are looking for and an additional skillset that will make you different than the next fellow. That's how you're going to get the best job possible. When I recruit faculty I am always

looking at additional skillsets of the candidates to determine if there is a match between what the program needs and the candidate's desires. You have got to bring to the table something in addition to your general surgery and critical care boards. When you bring that additional skillset, that puts you in a higher level of differentiation. So those are the things that I tell people to do.

DR. LIVINGSTON: That's really great advice which is so important. It's amazing how many trainees I have that same talk with don't really get it. Although there is that small percentage that once you explain it to them they light up and really understand what it will take to be successful. What about what life coach advice do you give them for the life out of the hospital?

DR. COIMBRA: People ask me, "Do you have a balanced life?" What is it? How do you define it?

I tell people that having a supportive family, having a good group of friends outside of work, and developing an interest in something outside of

medicine will help you fill your time outside of the hospital and it will give you pleasure.

I don't know if you know this, but for many, many years I developed an interest in collecting old fountain pens. That became a hobby. More recently, I collect Italian wine.

Just finding those things that give you pleasure, that you can read about, that you can talk to friends about outside of medicine makes life a lot easier to live.

Obviously, I would not have done anything without Sandra and my kids supporting me. Although they tell me it doesn't matter how big my CV gets they will never read it. They've been very, very supportive of my career. Family is really important as are good friends. I think with those three elements I find balance outside of medicine.

DR. LIVINGSTON: I knew about the wine but didn't know about the fountain pens. Obviously, your family is just super. Sandra and the kids are just great.

What do you perceive the biggest opportunities and challenges are for our specialty, trauma and acute care surgery?

DR. COIMBRA: David, I think we are at a great moment in the history of our specialties. I am very excited about the future. I think we, at the AAST, have done great work setting up the stage for the future. I think we finally are getting our arms completely around this issue of emergency general surgery and acute care surgery.

I'm excited about the combined AAST/American College of Surgeon's program in emergency general surgery which was the piece that we were missing. Developing perhaps a verification program and establishing standards for EGS practice in the country. Eventually evolving to the development of centers of excellence, et cetera.

I think the specialty is going to be a lot stronger and have a lot more structure. There is a lot of research being done in emergency general surgery. And I think we are really closing the loop on all three components of emergency general surgery.

I am very proud of - and you participated on this as a board member of the AAST - of the goals of our strategic retreat several years ago for each one of the components of acute care surgery. We accomplished all of those in record time and I think that provided more structure to the specialty.

I am very, very excited. I think the future is going to be a lot brighter and I think the market is favorable to us. I think people now understand what it is when we say "acute care surgery". Hopefully with this new program between the AAST and the College we will immortalize that concept and the hospitals will understand that they should be recruiting people that have the specialized training to staff acute care surgery services. In the end, the specialty can only grow and become stronger. We've got to just keep pushing, pushing, and turning the flywheel so we achieve greatness.

DR. LIVINGSTON: Well Raul, I think I speak for more than myself to say that that you have a lot to be proud of in pushing that agenda. The retreat during your AAST presidency and your vision of figuring

out where the ship should end up has really just been phenomenal and really very prescient in so many ways. Not only to survive but to thrive in whatever our health care future turns out to be.

Anything you would change in your career personally, professionally?

DR. COIMBRA: If I had another crack at everything I've done, the one thing that I would do differently is to embrace technology a little sooner. Particularly laparoscopy and minimally-invasive techniques. Obviously, for those of us that trained 30 years ago with open surgery and then re-learning how to do the same operation using a different approach is a lot harder than a trainee that is brought up in that environment. I should have resisted less and embraced it sooner.

DR. LIVINGSTON: I get that. Time for a bit more reflection. How do you view your time as AAST president? Especially since getting this interview done took almost two years.

DR. COIMBRA: Needless to say, becoming the president of the AAST was the highest honor of my

professional career. No question about that. As many of my mentors and old friends said, "after that, things only go downhill." Right? But that was the top.

That time was incredible to me. It was very intense. Because of the retreat and all of the responsibilities and the things that we all took upon ourselves to deliver for our members and for our specialty; but I had a great time.

I enjoyed every single day of my president-elect year and every single day of my president year. The thing, though, is it goes too fast. By the time I turned around, and thought I was going to look back and appreciate all the accomplishments, it was over. It was a great honor.

I would do it again in a heartbeat if I could. I think the incredible energy and talent in the AAST, we will always be the premier trauma organization in the world. The whole world does look at us for guidance, for direction, and we need to continue that strong work to remain where we are. So I had more fun than one can imagine being president.

Obviously, it's not a one-man show and having the opportunity to work with the board and the executive committee and a lot of smart people around the table that supported me was incredible. There were a few times when I stumbled and was falling off track, they brought me up and said, "No, keep going" and gave me advice. It's getting that direction, that camaraderie that exists in the organization that made the president year very, very joyful and happy for me.

DR. LIVINGSTON: Well, that's great and I think I think it is a perfect way to close. I think you have served as a tremendous mentor and role model for a lot of people; both younger and older and I count myself in that group!. Your vision of where the trauma and acute care surgery will be in the next decade or two is really going to help the AAST continue to thrive going forward. We thank you greatly for your wisdom and guidance as president and beyond. Any last words?

DR. COIMBRA: I think the only thing I would say is that we have a terrific profession. It is a privilege for me every day to be able to touch people

and try to heal them and to fix them from their injuries.

It has been a privilege for me to serve the AAST and to have an interest in advancing knowledge in clinical care, education, and research.

I hope the young folks that will eventually read this interview feel stimulated to pursue similar goals because it is very rewarding to do what we do every day.

Again, it is a privilege and I am very honored to be part of the AAST.