

Alex's notebook: The Eastern Association for the Surgery of Trauma 2023 Presidential Address

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First, let me thank you all for taking time away from your family and busy lives to be here in Orlando and here in this room today. Let me start off this incredibly nerve-racking activity with many thank yous and recognitions. Grateful and proud. That was how I started my EAST president year with the first tweet I ever sent (of two, by the way). So grateful for the opportunities that this organization has afforded me. So grateful to be a part of an organization that is so welcoming and warm. Grateful to be among this group of individuals who are so dedicated and generous of spirit. And so proud of the organization and what it stands for. And so proud to be a member and to be able to serve the organization.

I am so grateful for this group of individuals and so proud to serve with them, your Board of Directors. A group of some of the most talented and dedicated individuals you will ever meet. They, along with your committee chairs, are a group of just the hardest working people. They are the ones that make this organization what it is. I know you don't always feel their efforts, but the amount of time and energy they put into the organization is completely inspiring. And to all the committee members volunteering their precious time to create programming, read papers and abstracts, read and score scholarship proposals, create mentoring families, comb through membership applications, etc...I thank you from the bottom of my heart for your service to the organization. And to this group of amazing people; Rachel, Nakia, Kinga, and Julianna without whom we would accomplish nothing and with whom we are better than we ever dreamed we could be. Thank you! And to my dear friend, Christine, who is the only person who hates being the center of attention more than I do. Christine, there are no words for what you mean to this organization. Your creativity, passion, professionalism, and dedication are the driving force that keeps EAST always moving forward. Thank you.

I am keenly aware that I am not here by accident. I am well aware that if it not for Scott Sagraves and Kim Davis, I would not be here at all. They were the ones who gave me an opportunity for leadership in the organization and for that I am so very

grateful. The opportunity to serve with and for these 7 subsequent presidents, dear friends and amazing people has been an honor and a privilege and a whole lot of fun. And to this group of individuals, those who have serve as mentors, guides, sage voices, thank you. My clinical, academic, personal, professional mentors, some of whom might not even realize it, but each and every one of you have had a significant influence on who and what I am today. These individuals who are generous with their time and energy, who have believed in me when I didn't believe in myself; people like Eileen Bulger and Rosemary Kozar who have given me opportunities I don't know that I deserved; people like Len Jacobs, who inspired me to want to at least try to improve the world; and others who have given advice and others who sometimes just gave me a piece of chalk, thank you all. And this amazing group, the OG "Women in Trauma Surgery" (WITS). Certainly, what a surgeon should look like in my opinion. Thank you for all your friendship and support. I am so grateful to you all. And for those of you who are new to this community, this is what you have to look forward to. Lifelong friendships with those in the trauma community. Many of these relationships started here at EAST and have continued through the activities of this organization. So grateful for you all.

When you work at a place with 16 fellows a year and 300 rotating residents, you get a lot of opportunity to help training and hopefully provide some mentorship. Here is a sample of the now hundreds of fellows I have had the privilege to train, in addition to other mentees with whom I have worked throughout the years. Your successes are so gratifying to see and it has been such a pleasure to evolve from being Dr. Stein to your friend, Deb. Your successes are our legacies. And to this fantastic group of former fellows and mentees who are now my partners in practice.

They, along with this group of partners, are the foundation of the Shock Trauma Center. It would be difficult to find a group of more talented, dedicated, compassionate and skilled group of trauma care providers. It is an honor and privilege to come and work with you each and every day. Thank you all for our dedication and commitment and for supporting me so wholeheartedly. And, of course, a huge thank you to the Shock Trauma family, our amazing nursing staff and APPs who are the foundation of the Trauma Center. A huge thanks to Stevie who runs all of our lives and, of course, Betsy, who runs my life and tries to make me look good. I am sorry I make it so difficult. And to Tom. What can I possibly say? This is the Tom Scalea that many of you know—the public face of the Shock Trauma Center, the icon of trauma care. This is the Tom Scalea that I wish more of you had the opportunity to know—the incredibly compassionate and skilled clinician, surgeon and physician. Who is also

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a scholar, philosopher, teacher and friend. Words cannot express how grateful I am to you and for you, Tom. I hope that I have lived up, at least in part, to your expectations.

And to my support system—the people who know me best and love and support me anyway, the people that keep me sane. Thank you, guys, and thank you for being here. And the ones that drive me insane. I am mostly kidding, of course. My family, in the upper left and my parents in the lower left. And of course, my sister Sharon, my brother-in-law, Siva, and my niece, Mimi who are here today. Thank you for being here.

And the loves of my life. For those of you who know me, I don't have a maternal bone in my body with the huge exception of our Berners. My favorite creatures in the world. I color coded them all for you in case you had difficulty telling them apart for some strange reason. Daisy, Violet, Poppy and our new baby Dahlia. And, with all due respect to Drs. Spain, Bruns, Duncan and Yeh, to the best dressed man in any room, my husband Kelly. My greatest wish for you all is that you get to fall in love with your best friend and have someone in your life who supports you and loves you so unconditionally. I love you so much, Baby.

Well, let's get to the substance of what I am here to speak with you all about. For those of you who also have a soul crushing imposter complex, I hope you will understand and forgive my nervousness and anxiety giving this talk. I titled this talk "Alex's Notebook" for reasons that won't be obvious until the end. I hope you will forgive me the indulgence.

For those of you who have had the opportunity to do this type of talk, there is definitely a process that occurs when you try to figure out how to craft a presidential address. You have this amazing opportunity to speak about any topic you want and try to impart just a little bit of knowledge and maybe wisdom. You want so badly what you say to be meaningful and impactful. I wanted so badly for what I said to be meaningful and have an impact. For people to be able to carry it forward. But I wasn't sure how. So, I did what I am sure many others have done. I asked a lot of really smart people, many of whom have done this before, their opinion about how you do this well. The consistent advice I got was to take the opportunity to speak about something I really care about. To take advantage of the chance to speak to a room full of trauma providers to impart even just a little bit of inspiration. I really wanted to find a topic that was not only meaningful to me and would hopefully be impactful and helpful to you all as well. So, what do I really care about?

I realized it actually doesn't matter what I care about. I have lots of opinions and anyone who knows me knows that I am not shy about sharing them. But you all don't need to hear that. I realized what I really wanted to do was talk to you all about is what our patients care about. To try and help all of us understand the patient's experience. Because at the end of the day, that is what matters most, right? The problem was how do I really know what is important to our patients?

I remember my father telling me a story, I guess when I was in medical school. He was a general surgeon and he told me a story about seeing patients in clinic one day. He sees on the clipboard that his next patient is there to be seen for a neck mass. My father walks into the exam room and the patient is sitting there with his head tilted to one side because of this very obvious huge soft tissue mass on his neck. My father tries to act very professional and says, "so what brings you in today?"

The patient responds, "well, I have this growth on my neck". So, my father walks over to begin examining the patient's mass and the patient says, "oh no, not that. That is a lipoma. I have had it for years. I have this new little thing on the other side I am kinda worried about." You never know what your patient is thinking or feeling, until you ask them.

So, I decided to ask them. I am hoping by hearing their words and thoughts, we will all be able to appreciate their perspectives better and hopefully take back home a list of seemingly small things we can do for our patients to make their experience even a tiny bit incrementally better. In a completely nonscientific way, we conducted 10 interviews with a few patients who were a few years out from injury and several who were still in the hospital but approaching discharge. We had some questions in mind, but mostly these were unstructured interview conducted by 2 wonderful 3rd year medical students, Annie and Brandon, and one of our amazing nurse practitioners, Michelle. We got consent and participation was, of course, voluntary. The patients were not compensated in any way for participation. The idea of the interviews was for them to impart whatever information they would want us, as a group of trauma providers, to know.

These are the 10 patients we interviewed: Lexi, D, Scott, Alex, Chris, Ted, Ellen, Mr. Ross, Darren, and Scott S. and his wife, Laura. Darren, the chef, declined video. I will apologize in advance for the crappy video editing. No academy awards coming my way for film editing that is for sure. It was a labor of love and one that I realized I am pretty bad at.

I now would like them to have an opportunity to introduce themselves.

Chris—I'm a certified arborist. My fun activities are...I just like ride ATVs and do saltwater fishing.

Alex—I just started with trauma three months before...I had been with medicine for almost 8 years.

Ted—I'm a 53-year-old auto body technician from Mount Airy, Maryland. I ride motorcycles, which is why I'm here.

Ellen—I used to jog 4, 6, 8, 10 miles.

Lexi—I'm a daycare teacher. I work with one-year-olds. I am currently in school at the University of Baltimore for my psychology degree. I want to be a clinical psychologist and I'm engaged. I have 4 cats.

Scott S.—I went into the military for 22 years where I spent the majority of it in Europe. I am now the senior technical advisor in the cyber security division at the Department of Homeland Security.

Mr. Ross—Housekeeping. And I was taking care of 300 gravestones.

Scott—Dairy farmer on the Eastern shore. Originally from Maryland from Caroline County.

Darren—I'm an executive chef for a local beer pub. I was a Pro baseball player with the Giants organization years ago.

D—I was trying to get back to work 'cause I got laid off and I was actually on my way until this situation right here.

And what happened to them

Mr. Ross—I was rear-ended by another car. Had to cut me out.

Scott S.—I left the house on my Harley Davidson. It was a beautiful day and I was going to run to the local grocery store and get something for the grill. I was hit head-on by a distracted driver on my motorcycle at 55 miles an hour.

Lexi—So I was walking across the street on my way to work and a car just struck me. It's like my normal routine. I go to work, and I cross that same street every single day.

Ellen—My husband and I were walking across the street, and I got hit by a car.

Scott—I was working on a water trough for a bull and I was on one side of the trough, and I couldn't reach something and I didn't think nothing of it. Climbed up one side of the gate and down the other. Well, I don't think my feet hit the ground and the bull was on me.

Alex—We were driving back on the freeway 101 and we were in the fast lane. My husband was driving. This other driver lost control and fishtailed over to us and slammed us into the wall and into the median. I'm sitting right on the gas tank, and it just "boom." We somehow ended up on the median itself and hit a commuter sign that went into my door pushed me over about 2 feet. I didn't know it at the time but crushed my pelvis...broke my back in a couple of places.

D—Young lady I was messing with had a drinking problem. She was drinking and we had an argument, and she pulled a knife on me. And I thought "where did you get that from?" Cause I thought I hid them all but apparently I didn't. She swung it at me and I grabbed it and then my hand slipped off of it and then when I swung around she caught me right here.

Darren—I'd been drinking too much at night and when I started drinking I also took too many pills. It just knocked me out going downstairs and my wife said the handrail gave way and I just stumbled and stumbled all the way.

Ted—Motorcycle accident. I'd only been out for a couple of hours.

Chris—On the way to the job, me and my best friend, Josh, something broke on the truck. The truck dropped on the driver side and just went straight off. Ran into a tree. I was like "get him out...get this other guy out. Truck ready to catch on fire." So, they pulled me out but they couldn't get Josh out. He was just wedged in too tight. And he ended up passing away and burning up in the accident.

I was also very curious about what people remember in the field and when they first get to the hospital. How much of that early trauma bay chaos are they actually experiencing?

Scott—I don't remember a whole lot, being in the ambulance and then getting loaded. I mean, I remember a little bit hurting. And I remember the guy telling me we're going to land in four minutes. Well, that was the worst four minutes of the whole experience. I don't know whether some of the medicine wore off, but the plane was just vibrating and I could feel it, just all up and down my back and spine. But actually, I remember coming in the elevator and coming down and moving me over to the other table. And I guess they cut off all the clothes off me, which is fine.

Lexi—All I remember was when I crossed the street, and there was a bright light and then I passed out and then I woke up here. There were tubes down my throat which was scary. And I just thought maybe I was dead.

Ted—Complete confusion the whole time because I don't remember any of it.

Ellen—The last thing I remember that afternoon is my husband glancing over his shoulder and saying "jump". I don't remember how many days or weeks transpired until I came to it all. The best part was that I don't remember

Darren—I don't remember anything when I first came in. I mean until I woke up and until, you know, after my surgery. Which I guess was a godsend that I was out.

D—I remember when I woke up, my best friend was standing beside me on his phone. I'm looking like "where am I at?" Last thing I remember I was on the phone talking to the operator and that was it. That's all I remember. I remember nothing else.

Alex—This one very funny interaction I'm having with the flight nurse, and I'm saying to him, "I think I got a liver lac" and he said, "well, why do you say that?" And I said, "because it hurts... Right here". And he goes, "well your liver is on your other side". Pretty much remember the whole thing. I remember going into the ED.

Chris—The helicopter ride. That's what I remember. And then after that, I just kept waking up. Waking up and different things and events was going on. I woke up and cut all my clothes off. I got out the helicopter, I woke up again. There was a bunch of nurses around me asking me what happened, do I know who I am, what month it was. Woke up again and they were telling me about some of the injuries I had that I didn't even know I had sustained. I woke up again and they just took a breathing tube out.

Mr. Ross—I woke up. All these people walking back-and-forth and stuff. I say, "what's the matter?" I say, "why are all these people?" Do you know if this is another world or something, but I guess that's how organized the place is.

Scott S.—The last thing that I remember at that point was handing my phone to a stranger and telling him call my wife and my son and tell them that I'm going to be late for supper.

Laura—I got a call from a stranger saying, "are you Laura?" And I said, "yes". And he said, "well your husband's been in a real serious car accident, and I'm here with him and I'm going to stay here with him."

When then asked, again in a relatively unstructured format,

- What has been the hardest part about being injured?
- What has helped you feel better?
- For those still in the hospital, how do you feel about going home? And what are you looking forward to?
- How was coming home after your hospitalization?
- We also asked the ridiculously stupid question of "if there is one word you could use to describe your experience, what would it be?"
- And then, what else do you want us to know?

All in all, we had about 5 ½ hours of video that I went through and, with all apologies to the qualitative researchers in the room, I tried to pull out themes that might be instructive and helpful. I tried to keep the flavor and texture of the comments as best I could.

There were 2 themes that were pretty universal with respect to what has been difficult. I will allow our patients to describe for you

Ted—Woosh. The pain probably.

Alex—And then the pain set in. You will grab on to anything, anyone just to get you out of this pain.

Scott—When you're hurting like that, all you want to do is get taken care of.

Chris—I was just in so much pain. I was just trying to figure out why.

Ellen—*That night in terms of what I remember, that was the most painful night of my hospitalization. Again, I don't know if that was that the sedation wasn't monitored correctly or what, but on the chart, I remember holding the chart, and writing 12 1/2 as to my pain level.*

Clearly the experience of pain was one that was incredibly difficult for our patients. I don't think anyone is particularly surprised by that, but it clearly came through as a very predominant feature of their experiences. While we all struggle with this balance of adequate analgesia with a world of opioid addiction, perhaps, at least early on, a bit of heavy handedness may be appropriate.

There was another very pervasive theme

Ellen—*Things did not just change for me, but for my husband as well. He witnessed the accident, and frankly I felt sorrier for him than for me.*

Lexi—*Well what I found out is she was the first one that found me. So she was very shocked and, you know devastated. And as soon as she found out, she called my family and she was right by my side and she said it was hard, she knows that we will get through this.*

Alex—*My husband was in a terrible place. He was driving. His wife was almost killed. he had a real hard time driving up to see me.*

Laura—*They are trying really hard to save his right leg below the knee, but that if it had been severely damaged and shattered and open. I remember him saying, "we need to have your consent to amputate his leg". It was just so devastating. And it was so hard to make, as close as Scott and I are and feeling like we know each other so well, and he's my best friend, and I feel like I know he thinks about things, but it was really difficult to make with that decision alone for someone else's body. "Did you tell him? Do I tell him? Do we just let him find out when he wakes up and realizes?"*

Scott S.—*She had to make a decision. And near the impact because we are so close, and she's my best friend. I know the decision that she was faced with was probably the hardest thing that she had to do in her life.*

Again, I don't think we should be surprised that our patients felt deeply concerned about how their injuries and their experiences had affected their families. But both the appreciation of concern for family members and how this may be affecting them may provide some actionable targets for us in being more holistic to the care we provide.

We then had discussions about "what helped" and made you feel better.

Lexi—*I grew up as a Christian but I moved from Christianity to Buddhism. But I'm more spiritual now because I believe in everything happens for a reason. I believe in the connection with the universe, and I believe there is a higher being up there. That helps us get through life itself. Today I spoke with one of the chaplains and she was amazing and inspiring. We prayed. She gave me a new insight on my recovery, and she was very supportive.*

Mr. Ross—*God is good. Because he blesses people. He blesses their minds, he blesses their hands, he just works through people. A lot of people think they making it on their own, but they're not. Always try to say my prayers every day. God works through people whether they realize it or not.*

Ellen—*My daughter somehow during my hospitalization informed me that there was a chat for my benefit. At one point, there were about 1000 people participating in this chat around the world. Needless to say, most of these people I do not know. But just knowing that it existed gave me strength and support and the prayers of people of around the world storming heaven.*

Chris—*I'm a blessed and highly favored dude. I love Jesus and I know when I get out of here, I'm going to be OK.*

As someone who is not a person of faith, I was completely struck by the degree of comfort and well-being that our patients experienced as a result of their deep faith and beliefs. This may be completely obvious to many of you but was not to me and I found it frankly kind of inspiring.

Many of our patients had messages they wanted to share about how they communicated with us or how we communicated with them, the difficulties and successes. And perhaps give us some advice.

Darren—*They did a good job answering all my questions. You know, "how did I get here?"*

Alex—*They can be looking at you and saying, "OK, OK, I understand" and even maybe repeat back to you what you're saying. They're not getting it.*

Chris—*Just listen. I mean, everything that I told them, they listened and they went back and they did their homework or their research and do what they had to do and they came in and corrected it.*

Ellen—*When I wanted to communicate, Dr. Scalea handed me just a simple plastic chart with the ABCs and I could point to the words that I wanted to say.*

Alex—*It takes time, but it's the act of listening that is so helpful.*

Laura—*Trying to be honest and direct, but I know compassionate, at the same time. To pull up a chair and sit down next to the bed and talk to him and explain it and then to me and would stay as long as I had questions. It makes a lifelong impact. The information needs to be accurate and realistic but positive, as best they can.*

D—*Any questions that I asked, because I asked a lot of questions, because if I don't know something, I ask. So, they were pretty much just telling me everything. Because if there's still something that I wanted to know, I asked them. They just tell me with no problem. They didn't act like, "this guy is getting on my nerves. He asked me questions." No, they would tell me what's going on. And then one time, one of them didn't know what was going on, so they said, "well, hold on one second." They went and got somebody to help me*

I call this "the good news video". I don't know if we managed to find the happiest 10 patients on the planet, but please listen for a few minutes about how our patients feel about the people who provided care to them

Mr. Ross—*Thanks to y'all. I feel a whole lot better than what I was.*

Ellen—*How much I appreciate every single one of the people who attended to me.*

Alex—*The nurses were incredible. I was in the ICU for about a week and sitting and laying at the roadside, I didn't realize it, but my hair had blood and soot and oil in it. There was this lovely ICU nurse who I think the second or third day said, "let's wash your hair." I don't know how she did it. It took two*

or three tries. And just that gesture trying to get back to some semblance of normalcy.

Chris—This team does an excellent job. I can't even lie about that. Amazing team. Done everything for me they could do for me. Amanda is, she's great. She comes in, she talks, she laughs, she jokes. She makes me feel comfortable. It's not like one of those uncomfortable situations where there is this, this, this, and this. But she comes in, she gets to know who you are and she actually literally cares and works with you. Doctors here, they're coming in all the time checking on me. It's like this one who came in, the one that actually did the surgery on me. Looked at the hip, took the bandages off. Normally they get nurses to come back but he did it himself.

Ellen—I remember her smiling eyes over the mask and her good wishes.

Mr. Ross—You took care of me. I have to say thank you.

Scott—Everybody's been super great. I mean the therapy people that have come in since Monday. Jeff was great working with me.

Alex—The care that I got was one of the most cohesive integrations of any hospital.

D—Pretty much the nurses that's come in, they've been talking to me. They were really really nice to me.

Darren—"You're going to be OK, Darren. You're going to get out of this. You came out of the surgery good." That kind of thing has been really good. Like I said, the ICU nurses were unbelievable.

Ted—All of them been great. Very cool people. The nursing staff has been phenomenal.

Lexi—I love meeting all the new nurses and I feel welcomed and cared for. They are always reassuring me that "you're OK, nothing bad will happen to you."

We should feel good about that. We are appreciated. What we do and how we act matters. It is not just the physical care we provide, but the emotional support and care that our patients appreciate, particularly our nurses and therapists. I hope you can all acknowledge that and own it. We so often get the bad news and complaints and so rarely get to hear the good, so I wanted you all to hear that what you do matters and is appreciated.

We spent a lot of time with our patients talking about going home. How they felt about it? Were they prepared? What were their emotions and fears?

Lexi—Excited, because it helps me know I'm on the right path to recovery. But it also makes me sad, because I'm gonna miss everyone here. Everyone's been so nice and welcoming.

Scott—I'm not sure what my limitations in the long-term will be. Hopefully, I'll be all back. I don't know what the wrist will do with issues with that. I'm a little worried about getting pushed and I don't know how stable I'll be. I'm a little hardheaded and want to go in there and get right back into it. But in reality, I got to be careful. My body can't handle another cow just pushing me or just moving me over.

Ted—It's hard to work on a car with one leg. Not to mention I was struggling anyway because my back is all messed up from before the accident. That's a worry. Big worry. But we will survive one way or the other.

Darren—I got to make a paycheck. When the pandemic hit, I lost my job and my insurance, so I got to get right back to work as soon as I can. And that's motivation for me. I'm kind of scared in the fact that I think I need some more rehab, but I

can't afford to go to that place. There's no way...\$2000 a day or whatever it is.

D—I know it's going to be like a couple of weeks before the stuff happens with my stomach. Got to get back together and then I can just keep on completing my mission. What I was going to do and just look forward and do whatever purpose that I'm here for. That's all I can say on that note.

I can only imagine the added anxiety of not being able to support your family, in addition to dealing with the physical recovery and rehabilitation.

But we also wanted to know what they were looking forward to...

Scott—Yeah, relax, have a beer or a Crown and Coke. Just have time to sit at the counter, read the newspaper or something.

Darren—Seeing my dog and just getting back to work... and quit drinking!

Ted—Sitting in my house with my dog. Seeing my house and my dog!

Lexi—Being with my fiancé and my cats. We just got approved for our new home so being able to walk into a new home with her and being able to walk well. I can move my legs some but being able to fully walk again. Being able to see my students again, being able to get back to school.

Mr. Ross—To be able to walk my dog, take care of her, you know. Get back on my feet. Do the things I like to do.

For the non-animal lovers out there, there is definitely something about our pets (Fig. 1).

And for those who were a bit remote from injury, how did going home feel?

Scott S.—I went from being a very active outdoorsman, avid hunter, avid fisherman, to being in a wheelchair and not sure that I would ever be able to do anything like that again.

Alex—Getting back home was so wonderful. But it was also when, you know, when life really started again and the PTSD was really bad.

Scott S.—A lot of exercise, I think, was the key for me to kind of pick up the pieces, because I know now that the stronger that you are, your ability to be, your mobility. You're relying on your upper body to where you used to be able to walk out the front door and now you have to use a transfer board and your arms are key. Your upper body strength is key for you to be able to move around.

Ellen—Well, I don't ever expect to pick up where I left off.

Laura—We know that there is so much that he is going to be able to continue to do. We surprised him and bought him a zero-turn lawn mower because he loves to mow our lawn.

Alex—When we finally did get home, I'm a quilter and my husband had set up our dining room with my sewing machine



Figure 1. Poppy and Dahlia.

and tables and a big welcome home sign that I think was in the dining room for about a year. It was pretty cool the fact that I could be with Michael and John and the cats.

See? Those pets again. I think it is so amazing how those simple things that we all take for granted every day become so monumental. I am inspired to try to figure out how to harness that into something positive for the patients in that moment. Certainly, the appreciation of that objective to get home again can help give our patients, in the moment, something to look forward to.

And then we asked the truly stupid question, if there was one word to describe your experience, what would it be? Not sure why I thought anyone would be able to sum up a life altering experience in one word, but they tolerated the question.

Ted—*Rough.*

Scott—I don't know if you can do it in one word. I mean, it's very stressful.

Lexi—*Brave.*

Mr. Ross—*Amazing...at how people can get together.*

Ellen—*Gratitude*

Scott S.—*In one word, the best way that I would explain that is...grateful.*

Alex—I don't know if I would say blessed exactly, but I think there was a reason that this happened to me.

Chris—*Blessed.*

Pretty amazing, huh?

Lastly, we asked, what else? We asked them, if they were in a room with a group of trauma providers, what would they want us to know about their experiences. These are just a few selected responses among dozens.

Chris—*Life itself. Life in general. Just the little things in life. Just to be able to get up on your own and walk outside and stand out on a balcony and just look...just little things.*

Scott S.—*I don't know if this is just over time or at the exact moment, I was grateful to be alive.*

Ellen—*Life has changed, but I'm alive and here to tell the tale.*

Mr. Ross—*Maybe it could have been worse. I'm thinking about everything I went through, but I'm talking right now. Everything I went through in a week but I'm talking right now.*

D—*Trying to build a stronger relationship with my older children because they got their own lives, but I want to come together even more and then just be there even more for my younger kids too.*

Scott S.—*Anything that they had encountered in my accident that they learned from that they would continue to be valuable if they were faced with another surgery similar to mine or a fraction of what had happened. That I was valuable to the trauma team to learn from and take forward to new patients.*

Lexi—*Yes, life is short. It's very short. If I didn't have God or if anyone believes in the universe by my side, I don't think I'd be sitting here right now.*

Alex—I hurt every minute of every single day, but it's OK. It's not ruining my life. I'm on this side of the dirt.

Isn't it remarkable that these are the sentiments they wanted to convey to us. There is so much generosity of spirit there and so much gratitude. I know I certainly lose sight of that in my day-to-day practice. Maybe this will help some of you hold on to those sentiments and that gratitude.

Well, I hope some of this perspective has been helpful to you. So far, I have spent my time talking about clinical care of

patients and hopefully imparted a tiny bit of additional insight that we didn't have before. But as trauma care providers and academicians, we know that the clinical care of an individual patient is only part of what we are committed to doing. It is in the EAST tag line, "advancing science." Can we figure out how to intentionally incorporate the patient and the patient's perspective in those scientific pursuits? I would very much argue, yes.

This is a great quote from a paper that was first authored by Laura Haines on patient-centered outcomes research (PCOR) where she asked this question, "Why are we doing research and what are we hoping to accomplish?"¹ She went on to state that many researchers would answer this question with a response related to impact. We know that impact can be measured in multiple ways. One of the ways to measure impact is by measuring through the eyes of patients and community stakeholders the outcomes that they perceive to be most relevant. That is the central component of doing research that is patient centered. PCOR focuses the attention on patient's beliefs, preferences, and needs, in contrast to physician-centered care. Thus, active participation of the patient as a stakeholder is an essential element of PCOR.^{2,3}

So, when we talk about patient centered research principles, we can look at the foundational elements that can be internal, such as awareness or interest in PCOR or external such as resources and infrastructure that allow for PCOR. We can look at actions such as initiating partnerships between researchers and stakeholders or outcomes that can be near-term, such as culture change, intermediate term, which are the traditional outcomes we think of such as patient satisfaction or long term, such as better overall health for the community.⁴

So how can we, collectively, as a trauma community become more patient centered in our research efforts. Through Coalition for National Trauma Research (CNTR), in 2019 we embarked on the Injury Research Engagement Project (I-REP) which was funded by the Patient-Centered Outcomes Research Institute (PCORI) in 2020. Our first step towards true PCOR was to propose

1. an integrated partnership with the most vulnerable populations will inform the project team's understanding of participants' attitudes regarding participation in trauma research.
2. to collect input from patients who may benefit from trauma CER, ensuring outcome measures and research questions are meaningful, respectful, and relevant to the injured patient.

These are our partners and stakeholders in this project (Table 1). An amazing team that we were able to assemble under the leadership of Anna Newcomb and Michelle Price. These are the project's objectives:

- Conduct reciprocal education between patients and researchers
- Develop emergency-setting-informed consent strategies and methods for increasing follow-up engagement
- Establish stakeholder Injury Research Engagement Panel (I-REP) to partner in PCOR/comparative effectiveness research (CER) from conception through dissemination

We have conducted multiple focus groups over the past year with patients, caregivers and researchers, some of you may have participated and we thank you for that. We are now in the final stages of a survey that will be administered to

TABLE 1. I-REP Partners and Stakeholders

American Association for the Surgery of Trauma (AAST)
American Burn Association (ABA)
American College of Surgeons' Committee on Trauma (COT)
American Trauma Society (ATS)
Coalition for National Trauma Research (CNTR)
Eastern Association for the Surgery of Trauma (EAST)
The Health Alliance for Violence Intervention (HAVI)
Inova Fairfax Hospital
The Johns Hopkins University
Society of Trauma Nurses (STN)
Trauma Survivor's Network (TSN)
University of California, Los Angeles (UCLA)
University of California, San Francisco (UCSF)
University of Maryland School of Medicine (UMSOM)
Western Trauma Association (WTA)

patients, caregivers and researchers to generate that reciprocal education I mentioned. Forgive the moment of promotion here, but please grab this QR code (Fig. 2) and help us out by participating in the survey. We would greatly appreciate it. At the end of this project, we will have a panel of patients and caregivers that will work with CNTR and be available to CNTR researchers to assure that we are asking and answering questions that are the most meaningful and relevant to those that matter most.

I would now like to take the opportunity to introduce you to one of our collaborators and co-investigators in I-REP. You have met my friend Alex through the videos I have shown. Alex and I met at a strange time in both of our lives. We were both going through a really hard time; hers entirely the fault of an intoxicated driver that completely devastated her body and life and me, for what was largely a self-imposed and in comparison, completely trivial, set of circumstances. As you heard, Alex is

**Figure 2.** QR code for link to I-REP researcher survey.

a Trauma Navigator for the trauma service at San Francisco General Hospital. While I was there, she was coming back to work more than six months after she was injured. I watched her struggle every single day to try to get back her life. She absolutely inspired me and as she and I became friends, she would talk about how much she wished that she could help us all understand a little bit better what our patients were going through. That was the inspiration for this talk—for me to try to help Alex help us all understand better what our patients are experiencing and how they may be feeling.

Alex—*One of the things that my sister did for me was she brought me a little notebook. My phone was gone and even though my family was able to get me new one, and I was in a position where my family could do that for me. I had no memory of any passwords...nothing. So my sister gave me this notebook and I started to write questions down that I wanted to ask the doctors. And this little pink notebook became everything to me.*

I was telling him about this notebook and how I had started giving them to patients who had gone through serious accidents. Just sitting down, you know, "Can I talk to you for a minute?" and telling them my story.

My story is no worse or better than yours. What I learned is; trauma is trauma is trauma, pain is pain is pain. My experience is no more than yours or no less than yours.

I think what we have been talking about is trauma informed care. It is at least an element of it or a foundational principle. There is amazing work going on led by the efforts of Eileen Bulger, Jeff Kirby, Rochelle Dicker and others and I encourage you all to get involved. We can't ever know someone else's perspective. Perspective is unique to each of us, but we certainly can appreciate our patients' perspectives, consider them, ask them and address them. The concept of the "beloved Community," that it is us not them is so important and I think we can all spend some more time thinking about our patient's perspective. I think you will hear about more about that this week.

I am not asking you all to run around the hospital and give out little pink notebooks, but perhaps find one or two things that you heard today that you will take back home and try out. Like take the time to pull up a chair, or better address acute pain early on, or assure patients that their loved ones are being care for and communicated with, or just offer the encouraging words "look at you, you're doing great."

I so hope this last 50 minutes or so has been helpful. I am so grateful for the opportunity to speak with you all. Thank you so much for the opportunity to serve as your president. It's been an amazing ride. I am incredibly grateful and proud.

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