Strong Medicine Interview with Rishi Rattan, 2 April 2014

Q: [00:00] All right. So this is Joan Ilacqua, and today is April 2nd, 2014. I am here with Dr. Rishi Rattan in the Finland Room at the Countway Library. We are going to record an interview as part of the Strong Medicine Oral History Project. Dr. Rattan, do I have your permission to record this interview?

A: You have my permission.

Q: Excellent. So as I mentioned, we are conducting this interview to create a permanent historical record of the Boston Marathon bombings and their aftermath, through the lens of the medical community. And to begin this interview, we're going to talk about your background. So do you want to tell me about yourself, where you're from, where you went to school, that sort of stuff?

A: Certainly. So I was born and raised in Chicago. My parents were Indian immigrants that emigrated back in the mid-'70s. My dad was a physician, psychiatrist. And I grew up in the near Chicago suburbs, went to public school, then went to Washington University in St. Louis for my undergraduate training from '01 to '05. I was a women and gender studies' major there. And then I did medical school at the University of Illinois at Chicago from '05 to '09,

where I got my MD. And then I started general surgery residency at Tufts Medical Center in Boston. And I started in ’09 and will be there until June, 2014. And then after that, I will be going to Ryder Trauma Center at Jackson Memorial Hospital in Miami, Florida, to be doing a two-year fellowship from 2014 to 2016 in surgical critical care and trauma surgery.

Q: All right. And you’re also involved with Physicians for Haiti, right?

A: That’s correct, yeah. So since -- starting probably in undergraduate, I was working on feminist activism and women’s rights and reproductive rights issues, and that segued into global health activism in medical school. I did mostly direct action and community organizing and advocacy work on a variety of topics: reproductive rights, access to essential medicines, health care worker shortages in the developing world, and funding for global AIDS issues. And as that progressed, with me coming to Boston, I had been -- started working in Haiti with an organization called Partners in Health, which is Boston-based, in 2007, doing clinical work. And when I came to Boston, after the earthquake in January, 2010 -- the earthquake in Haiti, that is -- in January, 2010, a couple of us that had been working either formally or informally with Partners in

Health formed an education group called Physicians for Haiti. And that's been in existence continuously since 2010. My work with it was supporting their educational efforts, but actually, I was also doing advocacy work on cholera advocacy. The United Nations was found to have introduced cholera into Haiti, but was denying responsibility. So I worked with Haitian civil society, the government of Haiti, foreign governments at the level of the UN and the UN Security Council, as well as their department of peacekeeping operations, to try to hold the UN accountable, both in their response in and to Haiti, as well as their -- changing their policies to be more in line with preventing a second introduction of cholera.

Q: So this is an abrupt shift, but at Tufts, what does a typically day look like for you?

A: Sure. So a typical day, that would have been last year or this year. My PGY-4 and PGY-5 year would be that I'd arrive to work anywhere between 6:00 and 6:30. My team would have arrived about 30 minutes before me to start getting basic information on the patients, including vital signs and any relevant events overnight. And then we'd round anywhere from 20 to 30 minutes, and see the patients together, and formulate a plan. From 7:00 to 7:15, I would participate in consult conference, which is run by the

chief residents, in which we go over a relevant consult overnight for educational purposes. And then from 7:15 to 7:30, I would pre-op any patients that I was going to be operating on for the day, as well as talk to the attendings about my plan for the patient and to confirm that that was OK. Throughout the day, if I wasn't operating, I'd be either in clinics seeing patients pre- or post-operatively, or seeing consults with the middle level members of my team, and helping them develop plans, or teaching medical students. And then, when I was a PGY-4, I was, at that time, chief of the trauma service, so any traumas that came in during the day, or trauma consults, I would also be participating in their care.

Q: And when did you shift from PGY-4 to PGY-5?

A: Yeah. So our -- we go on an academic year that goes from July 1st to June 30th. So from July 1st, 2012, to June 30th, 2013, I was at PGY-4. And then July 1st, 2013, to June 30th, 2014, [05:00] that I will be PGY-5.

Q: OK. So last year, on Marathon Monday -- or rather, was this your first Marathon Monday in Boston?

A: It was not.

Q: OK. So what did Marathon Monday look like before last year?

A: Before last year, it was a strange holiday that no other state celebrates as, you know, Patriots' Day. So it was a day off, which meant that people extended their weekends, so we would get the occasional increase in drunk people or assaults. But for Marathon Monday, it always meant a big influx of patients, starting midday and going into the afternoon and evening. Basically complications from the marathon: dehydration, hyperkalemia, acute kidney injury, rhabdomyolysis, and any other complications. Sometimes these were serious. The year before, we had had one or two deaths, actually, as a result of people participating in the marathon. And the majority of the people did not have surgical issues as their primary issues, so they were often in the medical intensive care unit. But being down in the ED to see our consults, we would always hear about them. They were interesting and a novel sort of admission, because we only saw it once a year. We would do a lot of teaching about it, because it would be important to recognize those issues that may be rare at other times of the year. And so we would, sort of by osmosis or in the proofread, pick up that -- those educational points. And very often, if people needed dialysis due to kidney injury or rhabdomyolysis, we would be involved in their care and

getting access. So a very peripheral part of the care beforehand.

Q: So we're going to talk about last year's Marathon Monday now. How did that day begin for you?

A: Very uneventfully. In fact, I couldn't even tell you about what was going on that day until I happened to be pulling up the emails and social media in preparation for this, and looked over the other emails of the day and Facebook posts of the day. And it was a completely uneventful day. One of my colleagues was post-call, as happens every day. And so I was covering for him, and I remember -- I remember helping his consult resident deal with consults throughout the day. And actually, it was sort of -- I guess early afternoon, we were up on the oncology floor and dealing with actually what we thought was an urgent consult with a strangulated hernia, so basically a piece of intestine that had gotten stuck in a hernia and was potentially dying, and so was an emergency. So that's how my day started, uneventfully.

Q: So you mentioned the social media posts and alerts about the event. Were you still at the hospital when you were getting these? Were you still at work when this happened?

A: Yeah, so I actually wasn't -- I'm not too up on the social media. So I was upstairs seeing this consult with a PGY-2,

Michael Blea. And his girlfriend, who seems to be very on top of social media, had texted him, saying that there was an explosion at the marathon, and then that there were reports of a second explosion. And we hadn't heard anything about it. And I'm, again, not too facile with social media, so a brief look at Twitter and Facebook didn't reveal anything. And so I said, well, if this is real, we need to go down to the emergency department right away. Incidentally, the only other mass casualty experience that we'd had was when two Green Line trains crashed into each other at Boylston Station, right next to Tufts Medical Center. And she was also, again, the first person that notified us, so I believed her when she said that there was an explosion. So we went -- we cancelled our consult, essentially, or stopped in mid-consult, and went down to the ER to check it out together.

Q: And when you got down to the ER, were they aware of it?

A: I believe so. We were the first members of the surgical team to respond. We had not received any formal notification from the paging or communication system of the hospital. And when we got down there, I would say about a minute or two later, the chief of trauma surgery and another senior trauma surgeon were walking into the ER. And I remember asking the senior trauma surgeon, "Have you

heard?" They said, "Yes; that's why we're here." And there was -- you know, within those two minutes, bustle and commotion in the ED as people started flooding into the ED in preparation. And -- but there was still no formal announcement.

Q: So as people were prepping for casualties, what was going on? Were they -- were the people out, or -- ?

A: Yeah, so, this -- you know, we were talking a bit off the record about how things could have been done better. There were a lot of cooks in the kitchen, and two people who had trained for trauma in mass casualty situations. There was a very clear hierarchy that, at the top of, was the chief of trauma. [10:00] Unfortunately, there were a lot of people that had heard about it and came to the ED wanting to help, everybody from multiple people from pastoral care and social work, and environmental services, and orthopedics, neurosurgery, anesthesia, nurses from other floors, medical people, extra nurses. And to complicate matters, this was a change of shift time, so there was double of everything in addition to all of the people responding. Part of the -- some of the people who responded were in a normal hierarchy, higher up than the chief of trauma surgery. And so, people who were not part of the mass casualty response were coming to them, asking

questions about how to triage patients, where to move non-sick patients to clear the rooms, what to do with the operating room, and that created a bit of confusion initially. But the people who were there as primary responders to the mass casualty, we were sort of off together with our fellow nurses, respiratory therapists, and the whole trauma team, organizing and planning how to triage, which would be our sort of red trauma base in which people were acutely ill, what the plan was in sort of moving people if we triaged them as not acutely ill, and we had more people coming in, what was the OR plan was, etc. So we were sort of huddled off, making a plan, while there was the other commotion going around.

Q: And in that time, how long did it take for people to start coming into the ER?

A: Actually, the numbers itself I had gone over, because we were working on a paper on it. And actually, from the explosion to the first arrivals was about 40 minutes, which was a little surprising to us. But looking back at the other literature in disaster management, particularly the Israeli literature, it's not totally altogether out of the line of normal. But I do know that -- I think sicker patients ended up going to Boston Medical Center and MGH

first. So -- but our first patients started arriving 40 minutes into it.

Q: And what did you do at that point? What else happened in the ER that day?

A: Sure. So before patients arrived, there wasn't -- you know, I didn't really have a template about how to respond or how to act. So there was a lot of nervousness, and anticipation, and anxiety about what we would be seeing. We didn't know how bad the explosions were. There had been only two -- I think by that time already, we -- there were reports that were being confirmed in media of explosions and other incendiary devices at the JFK Library, and other things going on, so we had no -- it still seemed like a very active, ongoing situation to us. It's still that first part of a mass casualty, where we're not sure what the extent was going to be. So that was very anxiety-provoking, particularly as the -- at the time, the most senior person among the resident staff there, as well as the chief of the trauma service there. So at least my residents and people below me were sort of looking to me to help among the residents, be the leader.

But as patients started arriving, it became routine. It became like another trauma. I've never seen people who had

suffered blast injury before, or extensive burns like that, or that sort of shrapnel injury. But on the other hand, if I hadn't been given a context, it could have just been a car accident victim. So we started treating it just like lots of traumas coming in. And -- yeah.

Q: So you had mentioned that social media was sending messages about that. Did that all go away once you started treating people, or were you still aware of larger things going on outside of the hospital?

A: We were vaguely aware, based on what other people were telling us. We were -- we had our hands full in treating the patients in front of us. But, you know, we had heard about the JFK bomb. You know, every TV was turned to it. Everybody was talking about it. And it vaguely affected us, in the sense that if there were still ongoing explosions, that would affect our triage plan. But it was mostly just sort of in between patients, touching base and saying, "What did you hear? What have you heard? What's going on?" So in terms of social media, I wasn't checking it too much. I know that all of our phones were -- sorry, I was going to say blowing up. But all of our phones were ringing a lot with people checking in, and making sure we were OK. You know, cell phone service was down for a while, and so we didn't get any of that for -- initially, I

think, maybe for an hour or two, and then it just all came in a flood. But you know, I also -- I had a lot of friends running the marathon, and loved ones, so a lot of us were also trying to reach them to make sure that they were OK.

Q: So you had also mentioned the "too many cooks in the kitchen" sort of situation when things were starting. Were there other aspects of your [15:00] disaster management triage plan that either went particularly well, or not so well?

A: I may get blacklisted from talking about the Tufts response. I think that -- I think that people had very good intentions, and that was good, and that, when our trauma director was present -- you know, he had a -- he was previously trained in Israel, was in the Israeli army as a tank commander, I believe, before becoming a trauma surgeon. And the senior surgeon that was down there was Argentinean special forces, and he had been on counter-terrorism task forces. So they were very well versed, based on their international experience, about how to respond. And they were a strong presence and a respected presence. So when they were around, things went well. But they couldn't be in all places at the same time.

And we have a relatively small trauma department, compared to other hospitals. So I would say that, yeah, you know, we were also -- in terms of triaging patients that were coming in, I think that went well. And coordinating with surgical support services, like orthopedic surgery in particular, for the extremity injuries, I think that went very well. I think the nursing staff in the ED, who seem to be coordinating communications, also did a very good job. In terms of the operating room, we had elective cases going on; it was the middle of a weekday. And we had stopped those, but those, if I remember correctly, got restarted by -- unilaterally by someone who was not part of the mass casualty hierarchy. And that actually ended up delaying one of the cases of the trauma patients that needed to go to the operating room, because we weren't informed that the operating room had restarted elective cases.

In addition, we were, I think, the only hospital that had a bomb threat or a bomb evacuation. And again -- this was, again, when we were hearing about other bombs at JFK Library, and they had tried to clear the ER. It turned out a patient's family member left a black backpack in a room, but that room had been quote-unquote "cleared" by staff as

clean minutes earlier, and then when they went around on a second look, there was now this bag. So that turned into a very sort of complicated situation, because you had the mass casualty hierarchy at Tufts saying one thing, the hospital administration hierarchy at Tufts saying potentially other things. We notified Boston -- the Boston Police -- our security came right away, was there already. They notified the Boston Police Department, and so their ordnance unit also was involved. But I feel like there was maybe a federal -- maybe federal thing, or there were multiple units of law enforcement there, because we initially evacuated to the ER lobby, and then were told we were too close, and so we had to evacuate to the main hospital lobby, which required us to pass through -- back through the ER, next to this unidentified device, to get to the hospital lobby. And we're told to take the elevators, which seems like not the thing to do in an emergency, to get the patients up. But once we got there, we realized all these patients in stretchers, the stretchers don't fit into the elevators. So now we're surrounded in a glass lobby by glass and metal, and you know, we're hearing different information from different people, and aren't really sure what's going on. So that was sort of a confusing scenario.

And then, finally I would say that we approached this assuming that -- incorrectly assuming that this was the only -- those were the only bombs that were going to go off. And again, in terrorist activity, we've -- as particularly in Israel, when bombs go off, there's often a secondary device that is timed to go off once personnel and first responders respond. And that certainly could have been a possibility at Tufts. We were the closest hospital to the -- to the marathon, and there was already a questionable device. And so, our planning for a secondary device in the -- in this kind of enclosed trauma bay, that would have created a lot of damage to the ER. There was zero planning for that. And I think there was zero planning for that at the other hospitals. If people came in and they needed an operation, they went straight to the operating room. Other than Boston Medical Center -- and maybe MGH, I'm not sure -- but for sure, Boston Medical Center had life-threatening injuries that needed to go to the operating room. But the vast majority of injuries that people experienced were non-life-threatening extremity injuries, that were certainly limb-threatening but not life-threatening. And they all got rushed to the OR, as everyone bragged about, within 20 to 30 minutes. But if a

secondary device had gone off, then all the ORs in all of Boston would have been full of people that don't have life-threatening injuries, and then this secondary device would have caused a lot of life-threatening injuries. And so I think that was a big thing that people are just starting to realize, that if this had gone like a coordinated terrorist attack anywhere else in the world, there would have been a secondary device, and that would have caused a lot of problems. And we were very lucky that that didn't happen.

Q: [20:00] Have you been -- or rather, has Tufts been updating their disaster management plan to account for all of that?

A: Yeah. In fact, there were debriefing meetings even that week, that residents were not a part of, but that I've heard, again, working on this paper, about a response to it. There were debriefing meetings, certainly every month, if not every week in the beginning. That updated the mass casualty policy in terms of communication, in terms of hierarchy, in terms of who can let the OR restart elective cases, in terms of how to have ambulances come in. You know, there was absolutely no security about a bunch of private, non-city ambulance companies coming in with very large vehicles that could hold a lot of explosives, that were, you know, similar in size to, say, Oklahoma City. And they were coming right up to our emergency department.

And so, working on protocols with Boston law enforcement on how to make sure there's a safe perimeter, and how those vehicles can be searched quickly and safely without risking patient lives who are in there, but also patient lives who are already in the hospital, and dealing with the overcrowding. Again, shift change was part of that, so there was double of everything. But making sure that, for example, you know, four orthopedic teams that may not be needed, or multiple anesthesia teams, don't all show up, and if there is a secondary device that gets through, then our entire trauma response has been injured in a secondary blast. So kind of hold -- putting them in a holding area, and saying, "If you want to come help, you need to be in this holding area, and you will get called up as needed, whether you're social work, or pastoral care, or whatever."

Q: So how did that day wrap up for you?

A: Well, I also happened to be on call that night. So it was about a 30 to 36 hour shift, I think closer to 30 hours. So it never quite wrapped up. We had a lot of patients that we didn't know the names of. They, to me, all sort of looked alike. They were young, mostly Caucasian people who were in running gear. And they all got moved after the evacuation, so I couldn't even remember them based on their location. And then, as we were triaging, they disappeared

to the operating room, to the floors, back to the ER. And so I had no idea who I had seen or not seen. And we did a -- we did a triage evaluation and mass casualty situation. So we triaged them for life-threatening and non-life-threatening injuries. And if they had non-life-threatening injuries, we said that we would get to them later. So the majority of the rest of the day was finishing our trauma assessment, and resuscitation, and kind of an early what we call tertiary survey, to make sure that we didn't miss any injuries. And there were a lot of perforated eardrums that -- you know, you don't look for when somebody's bleeding out, but that needs to be addressed. Or shrapnel injuries, burns, lacerations, things that weren't going to kill them, but that needed to be found. So the majority of the day -- sorry, the majority of the afternoon, evening, and early morning was spent trying to find everybody and make sure that we didn't miss anybody.

So that took a lot of work, and then it was also still a normal workday. So particularly for other services that weren't involved in the main response, they were still asking us the normal surgical consult questions, and we were still getting that normal volume, above and beyond the trauma response.

And finally, I think that every hospital experienced this. But because, again, we were very close to the marathon finish line, we got a lot of walking wounded throughout the evening that continued to add to the number of people we were seeing.

Q: So how did the rest of that week start to unfold for you?

A: It was very surreal. We were -- my colleague Eric Benoit, who was a PGY-3 at the time, and is going to be a chief starting in July -- he was my mid-level, and I remember, we just -- we didn't stop working. We just were working all night on, again, some of the most basic stuff of just trying to find a person whose name we didn't know, and we didn't know what they looked like, but we vaguely remembered an injury. And we were just -- you know, 24/7, neither or us slept. Neither of us had a break from it. We ended up staying late. And when we left it, we had been basically working on marathon stuff, or marathon response, for about, I'd say, 18 to 20 hours straight. And when I went home -- I don't live in the Back Bay; I live in the South End -- I remember getting home and sitting on my stoop, and it was a nice, sunny day. And it was completely surreal, because I had just been -- the images of the people I was seeing, with kind of blown-off extremities, or

fractures, and very gnarly -- you know, some people had still come in smoking from the burns. Seeing all that, and then coming back, and it's just another normal day at the -- [25:00] the yuppie moms are out on their jogging strollers with their kids, and it was like nothing had ever happened. I mean, I guess I saw maybe a couple more police cars than usual driving down the street. But from my vantage point on my front stoop, it seemed like it was a bad dream, that no one else realized what had happened.

Q: And I particularly want to talk about this. You had mentioned that you were friends with the older sister of someone who got blamed for being involved with the marathon bombing, and was later found innocent. But how did that affect your week?

A: It was very hard. Sangeeta Tripathi wasn't a good friend of mine, but was a decent friend of my wife's, and I knew her from activism and hanging out socially. And her brother, Sunil Tripathi, had actually gone missing, almost like a month prior. So that had been very tough, and a lot of our friends had literally dropped everything and gone to the headquarters at the family -- excuse me, gone to the headquarters that the family set up in Providence to help make food, help post flyers, and look for him. And so it had already affected our social circle and our group

immensely, before anything happened. And it was really hard on us, and sort of tearing apart the friend group, just because of the stress of the family and the sister. And then, when he was named, it just seemed so absurd. You know, I didn't know the kid at all. But based on the descriptions of him, and, sort of, the sort of person he was, and the stories that were told about him, it just seemed so absurd. I suppose that's what everybody says about everybody who's found -- you know in the surprise moment, to be involved in something heinous. But it just -- it seemed absurd and unreal, and it was incredibly, incredibly hurtful to the family, who had an already very stressful time, when they were trying really hard not to admit to themselves that, after a month missing, chances are this child who was suffering from depression, and had disappeared in the middle of the night with no belongings, most likely had committed suicide. To have to deal with that and the media scrutiny was -- you know, it sort of -- again, it tore the friend circle asunder. Over the course of the next, obviously, he was exonerated, and you know, his body was eventually found after a month of having floated in a river near Providence, and it had washed up. And it obviously still affects the family today.

And you know, there are friendships that we previously had that no longer exist, and people have grown apart, and you know, Sangeeta, who had a very successful job in international work, is basically living on the couch of one of our friends, and struggling a lot. And I don't know how much that the accusation of her brother had to do with it. I think a lot of that is to do with his death, but it certainly didn't help, and at the time, was very, very hurtful that she even had to, while looking for her brother, respond to the friend group and kind of put out these pleas that this is not like him. It seemed very unfair.

Q: Also during that week, where you dialed into the news media manhunt situation that was going in --

A: Yeah, it was interesting. I -- you know, one would think that you would -- one would have a fascination with the abomination, and want to kind of follow it in this obsessive way. And I just -- Eric and I both -- and he was -- again, he was the one who was on overnight with me, and both of us really only talked to each other, because we felt like people -- other people didn't really understand, based on the comments that they were making, and the sort of things that people try to say after a tough situation that just ring hollow. But neither of us went anywhere

near media. We didn't look at any of the pictures. We didn't want to hear any of the stories. We didn't talk to anybody. We didn't read the paper. We didn't look at the news when it was on in our study center, or center where the residents -- well, unless we turned we off. It was just -- it was very hard to look at the way -- it felt like people were exploiting the situation, whether it was our colleagues or our supervisors who weren't there, but you know, talking to the media, or other hospitals that were going for the limelight while a place, for example, like Boston Medical Center was having their students who had been injured, dying -- you know, my wife works at Boston Medical Center. I have -- my best friend works at Boston Medical Center. So I was hearing a lot about what they were doing, and how they were just sort of working in the shadows, and not standing in front of the spotlight, whereas other hospitals were. You know, there was just so much of a media circus. [30:00] It was very eye-opening, actually, because so much of what the media was saying was wrong, we knew to be wrong. But it was just being, you know, parroted in national and international media. And so that also kind of made me lose a lot of faith in what the media was reporting in other situations. But I -- to this

day, I haven't read a single article about it, or looked at pictures about it. I just can't.

Q: So at the end of that week, during the citywide shelter in place, were you at work?

A: I was. Actually, I happened to be at work when they had that -- I don't know the formal term, but the lockdown. My best friend, who worked at BMC, lived a couple of blocks -- or I'm sorry, not a couple of blocks, a couple of houses on the same block from that house the Tsarnaevs shared with some roommates, and so was woken up by kind of flash-bang grenades, or whatever the -- the SWATs or whoever -- the law enforcement was using, that initiated the chase. So they were woken up by that, and looking out to see these sort of almost armored vehicles on the road, and so felt trapped in their house. And so that's how my day started, and then I was on call that night. And when the MIT officer -- sorry, not the MIT, the MBTA officer was shot on the street -- as it turns out, by friendly fire -- he was shot in the groin, and had a vascular injury, and was bleeding out. It turns out that the nurse manager, or that the bed manager, nurse coordinator, that we were on with that night, that we know and have worked with for five years; it was her son. So she was getting a call in the middle of the night while -- you know, I wasn't there when

she got that call, but we touched base about beds, and where to move patients, and making room for patients. In the middle of the night, you know, she's getting this phone call that her son's shot. And at the time, it was a very -- it was a very life-threatening injury, and there was concern that he wasn't going to make it, to the point that he just got taken to the nearest hospital, not a trauma hospital. And so she left in the middle of the night, and that kind of created -- you know, people were aware of that; it's a small community at Tufts. So that was an interesting night as well.

Q: Do you have anything else you want to say about that week in general, before we move on to sort of the lessons learned, year in reflection?

A: I don't know. It was a very -- it was a very surreal week, with a lot of anger. We were -- I mean, we were angry, that day, too, at people calling us about non-trauma stuff. That just seemed very insignificant compared to what else was going on. We were angry at the people the next day, who weren't there -- I mean, essentially half our department was there. Everybody -- everybody who was in the hospital came and helped. But, you know, in particular, one of our colleagues who was, again, Israeli special forces, and had really seen more terrorism than we

had, kind of came in, and was dismissive of the event that had happened, and said, this is not really what true terrorism is like. And you know, he -- I think, in his own heart -- he's not very socially adept, and in his own heart, was trying to reassure us that, you know, everything would be OK, and things could be much worse. But again, it didn't pan out well. So there was just a lot of anger and resentment at, I think, other people who didn't -- who didn't have to -- I guess, who had the luxury to not have to deal with it up front for 30 hours.

Q: Do you think that changed the Tufts medical community in general, or things -- back to business.

A: We were hoping it would change. The way that people worked together, and went above and beyond, was impressive and like nothing I had seen before. And that lasted a good 24 hours, before everything sort of went back to business. And -- but you know, I didn't have high hopes that this would change the whole community. You know...

Q: So since then, you had mentioned that there's been debriefings, and monthly meetings, and changing plans. How has that panned out? Could you expand on that a little bit more?

A: Sure. Again, you know, as a caveat that most of it is secondhand, because I wasn't participating in any of it.

But, you know, the hospital administrators, particularly led by security services, and with consultation of law enforcement, have been updating the mass casualty plan. And it seems to have been mostly implemented, though it's taken a full year. There are still things that are not implemented. [35:00] And they're all good ideas, based on, again, the experience of our senior trauma surgeons who have been in both conflict settings, as well as anti-terrorism settings, in the past. And so I think that it's -- there are very robust plans. But, you know, part of it also seems like a lot of bureaucracy, of people who haven't been involved in stuff like this before trying to base decision making on some policy brief that, you know, FEMA or something has put out; or Department of Homeland Security; or Alcohol, Tobacco, Firearms, and Explosives Bureau; something like that. And so it seems well-intentioned, but I'm not convinced that in the future, things will be much different.

Q: Actually, a couple of other hospitals I've mentioned -- and you've mentioned Israeli special forces working with you. Has that sort of anti-terrorist, or reaction to terrorist attacks, affected the plans? Is that something that Tufts is taking more seriously?

A: I think so, only because the committee is stacked with people who have that experience, I guess, in higher-up places. But I think that -- my hope is that it's a much more realistic approach. I think that when you look at the way the United States has responded to terrorist attacks, it's not been very evidence-based. And while that's not necessarily helpful, I think it's actually been potentially harmful, because it hasn't been an efficient use of resources that maximizes safety and prevention. Whereas, in Israel particularly, because of the third Intifada, and just how their daily life has been for the last couple of decades, they don't have the luxury to follow politics and pork barreling. They have to be evidence-based about their response and prevention efforts. So my hope is that it kind of is ushering in a new era of more evidence-based prevention and response to terrorist mass casualty events. And it seems to be for the most part going that direction, at least on a hospital level. Whether that will translate into a city, state, or national level, you know, remains to be seen.

Q: And would you tell me a bit about the paper that you're working on?

A: Sure. It's not published yet, or not accepted anywhere. But basically, it's trying to explain and go over all of

the things that went wrong that day at Tufts Medical Center, the emergency department, specifically around the evacuation of the emergency department, and how we responded to that. And I think it's significant for a couple of reasons. The Boston medical culture is such that with such giants like MGH and Brigham, that I think there's a general sense of a chip on one's shoulder at the smaller, lesser known hospitals. Tufts is certainly the smallest hospital, and though by severity of illness, when the state looks at it, we have the sickest patients of a tertiary center, it doesn't always feel like that. And so I think that there's a fear for Tufts to talk about the things that went wrong, because it will just show or demonstrate to the other, more well-equipped and more experienced hospitals, that we weren't capable of responding appropriately. But I think that it's an important learning point to realize that, again, sheer luck allowed us to maximize patient life in this situation. If this had not happened during a shift change, we would have had half the staff. If there were a secondary device, all of our operating rooms would be filled with people who didn't have life-threatening injuries, and people would die. If a secondary device had gone off at Tufts Medical Center, due to the evacuation, basically the majority of our trauma response team would

have been injured, either 1) in the ED lobby, 2) walking past the incendiary device to get back to a safer place, and 3) that safer place, again, being not ideal, and not having a clear chain of command during that really important point. So I think those are important things to learn from. We're not Israel; we don't have that higher volume of terrorism. And so it's important to have a US-specific response, where the majority of the people that are going to be responding probably have never been involved in a mass casualty event, let alone a terrorist mass casualty event before.

Q: So I think we're going to shift -- well, I can't think of a good segue, [40:00] sorry recording. But so that's something that we've been working on in the past year. Are there other things that have come up in response to the marathon in the past year that you'd like to talk about?

A: Sure, yeah. I guess I'd like to note that I haven't chosen, really, to be working on that. I've, again, sort of avoided everything to do with the marathon, in terms of memorials and stuff like that. I just -- I'm sure if I was more introspective, I'd have a proper reason for it. But it's, I just don't feel like it, and I don't want to deal with that bullshit. That's sort of the internal response, and I haven't gone more into it. My attending approached

me two weeks ago to help him edit this paper that he had essentially already written, but again, as an Argentinean, English isn't his first language. So I offered to do it, purely from a copyediting point of view, and didn't really contribute, and even at the time, sort of wasn't happy, and did it really grudgingly, and put minimal work into it, to get that editing job and grammatical stuff correct. And then I'm not -- I haven't touched it since. And so, yeah, I've actively avoided doing stuff. And I guess part of it is because it seems fake, the whole "Boston Strong" response. In the first week, maybe it felt genuine. Everybody was really coming together and helping each other out. You know, in the intervening weeks, everybody and their mother had a Boston Strong T-shirt, whether they were telling you to GFY or not. You know, you would -- you know, you've heard about the people trying to rip off the One Campaign. Everything went back to status quo. A lot of the things that the people on the ground -- and from the resident perspective, we were the ones in the trauma bays. We were the ones tracking down the patients. We were the ones moving the patients when there was a bomb threat, and you know, our lives were at risk, too. There wasn't a lot of listening to first responders, whether it was nurses or

residents, in terms of changing things, or it took a long time to change.

And so, I think part of it is that, and feeling like it's been in -- you know, the normal response afterwards, I guess that feels like it's been an insincere response. And part of it also is that I don't feel like I have the right to participate in those things. Whatever I saw was cleaned up by the actual first responders first. I seem so far removed from everybody else that actually experienced this firsthand, that I still don't consider myself as having experienced it firsthand. So participating as a responder or caregiver just seems disingenuous, when I think about the people who were actually unseen, and had survived an explosion, and were still trying to respond to people who were helping each other out, or people who were actually injured.

And so, I just feel like I don't have a right to stand in that same place. And so, it's been, I guess, hard to process, because you feel sort of ashamed or guilty that you feel bad, and feel like you don't want to take up resources talking to people, or talk people's ear off, when there are so many other people, literally hundreds of

people, who had -- who truly experienced it firsthand and had a harder time of it. So you end up just not wanting to be a part of it through a combination of anger, and guilt, and shame. And those are probably the overwhelming emotions.

Q: So will you be avoiding doing anything marathon-focused on the 15th this month?

A: I think so. I'm not -- I'm not ready yet. I don't know if I will be ready. I don't know if I'll ever get to a point where I think that it will be a worthwhile thing. You know, we haven't done nothing. The patients that we took care of, we still are in contact with, and we see from time to time, and help out if they need help with, you know, navigating the medical system, or something like that. And they've -- again, in large part, that's been them, too, coming back to visit. You know, we haven't gone to their house or, you know, seen them socially. They've come back, and visited, and said thank you. But you know, we've kept in touch with them, and you know, asked how their new prosthesis is working, or you know, just touched base. And that's felt much more genuine and real, than being part of some -- some ceremony where a bunch of people who weren't first responders get up and talk about how good our response was, when I don't know if that's really true, and

I don't know if the support afterwards for people who were in the trenches was good, and that there wasn't necessarily recognition for people in the trenches. Not that I'm doing it for recognition, but it's nice to hear a thank you, and that's not really something that I think any of the residents have heard sincerely. You know, it's -- you know, you hear it from your [45:00] chair of the department, who wasn't there, while talking on TV, when someone forwards you the link. That feels different than getting it firsthand, or listening when you have a suggestion made.

You know, as an example, when the Green Line trains crashed, I think the year before, we have no way to notify someone of a mass casualty. I heard about it, again, from the wife -- or, sorry, girlfriend of a colleague, and went down and that's -- we weren't even called by the emergency department. So at that time, even from a year before, I was saying we need a special activation, the same way when we only have a single trauma, for mass casualty. And I went -- I even, like, attended the multidisciplinary committee of trauma meetings at the hospital to make that suggestion, and it never happened. And then, you know, again, during the bombing, there was no notification of

people until about 15 minutes from when we were notified, and that was because the trauma team was the one doing the notifying. So that was a tangent; I don't know where I was going with that.

Q: No, that's fine. Well, I think the -- well, one of my questions is, are you going to be working this year on this year's marathon. The anniversary and the day of the marathon are two separate days. I don't know if you have that -- if you're scheduled that far in advance.

A: I do. I take it a day at a time, anyway, so I have no idea. I mean, it -- the -- I'm definitely working that Monday. I don't know if I'm working on the anniversary of the bombing. I don't know.

Q: So we're just about the -- at the end of the list of questions I have prepared. Although I'm curious, so you're leaving Boston in June. Do you think you're just ready to -- to move on? Is that what's -- if you want to talk about that.

A: Sure. Yeah, no, I mean it's sort of interesting. At the time of the bombing, I didn't really have a particular interest in trauma. I mean, it interested me a little. It was fun, but I certainly didn't consider it as a discipline or career. And then, a couple of months later, I ended up totally changing my plans to do a trauma fellowship. I had

actually been pretty involved in -- almost at the end of a process of getting jobs in either Rwanda or Tanzania as part of my general plan to do global health, and changed my mind last minute. It didn't really have anything to do with the bombing, but I had seen a couple of mass casualty scenarios in Haiti, where, you know, you would have 40 or 50 people injured at a time, and you're not even, like, a fully equipped hospital, let alone a trauma hospital. And so I guess, maybe it contributed a little to wanting a career in trauma, in the sense that I felt like it was a good response. I had previous interests -- you know, I had worked in Haiti; I had previous interest in working in a conflict zone. So yeah, I don't know how much the bombings contributed to that, other than helping coalesce those already existing feelings. But Miami is one of the busiest trauma centers in the country. So I just ended up going there for training. There's not -- on a normal year, there's not a lot of trauma in Massachusetts, based on laws, and the age of the population, and safety, etc. So I'm just going where the violence is, I guess.

Q: So I guess my final question is, are there any other thoughts, or reflections, or stories that we didn't go over, that you think we should?

A: Not that I can think of right now.

Q: Not to put you on the spot.

A: Yeah. No, it's just -- you know, it's -- it's been an interesting year. I mean, I definitely have been -- I probably haven't processed it the way that I should. I know that -- you know, at the time, I was taking a lot of call, I think; you know, my wife was also working. So I didn't have an interaction with another human being, other than the resident that I worked with during the bombings, for, like, at least 48 hours. And then at that time, it was, you know, only a little bit of a time of exhausted friends, or loved ones. And so it was very, like, minimal interaction and support and sharing afterwards. And you know, you're so tired afterwards anyway, and exhausted, and hurt, whatever, that you don't -- that you don't feel like -- it's another emotional obstacle to share it all over again and rehash everything. But I don't think I've ever really gone into it with anybody, [50:00] or talked about it, again, for the things that I previously discussed about the shame, or guilt, or feeling that your story is not as bad as other people's. But yeah, I don't know. I don't know. I know that that's -- I have the insight to know that that's not the appropriate response to a traumatic event. But I don't know that I would do anything different

the next time this happens. But you know, I know that I'm not alone with that.

Q: Well, thank you for this interview. On that note, we are going to sign off and turn off the recorder.

A: Thank you.

Q: Thank you. [50:42]

END OF AUDIO FILE