

## John Ruffalo – Bonus Episode Transcript

John Ruffalo 00:00

[light, bubbly, electronic music] I'm John Ruffalo, founder and managing partner of an investment firm called Maverix Private Equity, and I have been a longtime investor in both venture capital and private equity. September of 2020, on the day of the accident, I'm actually gearing up for the first close of my new growth private equity fund, and was getting excited and thinking through, "Okay, what are all the things that I need to get aligned over the course of the next four weeks or so?"

And, on a gorgeous day, like I'd done many other days, went from my house and went for a nice solo cycling ride. I went solo because it was during COVID and it was a 100-kilometre ride from my house in Toronto to north of Toronto in kind of a loop to Stouffville. And, about 5 kilometres away from my midpoint of the destination, I heard a very loud truck—I suspected it was an 18-wheeler, and it was—right on the tail of my back tire, which is very troubling and a fear of many cyclists. And, just before I could react, the truck had hit me, and he was going about 80/90 kilometres an hour, hit my back, obliterated my vertebrae, and sent me flying for a secondary impact, quite far away from the first impact. And, frankly, the only thing that we don't understand is how I was able to wake up about two minutes later from both of those impacts.

[music continues] In the benefit of hindsight, I didn't know, but I had about an hour to get to the hospital or I would pass away. The ambulance was there very quickly and I was awake during the whole ride in an ambulance—if I were to be air transported, it couldn't be done in time—and they got me to hospital in about 25 minutes, and then I was immediately induced into a coma and spent the next six days or so in a coma.

I didn't have any surgery for the first 36 hours, as I understood. There was a big fear that the trauma of the surgery would be a third impact on my body and my body may not be able to have absorbed that impact. But, by the time it hit the 36-hour mark, then they made the decision to perform two surgeries. They did my pelvic surgery first – my pelvis was split into six pieces. I had an open-book fracture amongst a whole litany of all of my ribs were broken in multiple places on one side of my body, damaged organs, you name it, but the pelvis was the complicated surgery, so I first did that surgery and then they rotated me and then did the surgery on my back. And, the combined surgery was about 15 hours.

[music continues] I've had some serious cycling crashes before, but I'd been able to bounce right back up. On this one here, I immediately knew I was paralyzed from the waist down. And, there's this feeling of nothingness, and I could wiggle my fingers, I could move my head, but I couldn't do anything below my waist, so I already knew.

And, after I had gotten out of the coma, after about the sixth day and the intubation was removed, the first conscious episode that I had was looking around the room. [music fades out] It was a little bit funny, in fact. I was at a certain angle in the bed and I couldn't see my legs, and my first response was, "Oh, dear god. They had to amputate my legs." And, I was like, "Oh, man. I really screwed up this time," and I thought, "Okay. Well, you know, I've seen these videos of these military veterans with no legs and doing all these things. Well, I can do that too, I guess."

And then, when the nurse came in and she saw me, that I had awakened, I couldn't speak at a very high level of voice and, instead of asking her, "So, I guess you had no choice but to cut off

my legs," I couldn't say those words and I just said, "So, you had to cut off my legs," and she went to, "What?!" I go, "Pfffffft." You know, I was trying to give the motion of cutting off. She goes, "No, no, no, no." So, she gets the switch and moves my bed further upwards. She goes, "No, your legs are right over there," and I went, "Oh, my god." [chuckles] So, right from the opening bell, I thought, "Okay, this is a huge improvement of I do have some legs versus no legs," so there was a little bout of optimism there. [music fades out]

Shortly after realizing I did have legs, I did ask the nurse what was the prognosis, and I was diagnosed with the worst grading of spinal cord injury. It's called an ASIA A, which basically means you are a complete spinal cord victim and you'll never, ever have use of your legs again, which obviously is a shock to anyone to hear that.

[light electronic music] One of my cycling teammates, Peter Gilgan, who's well-known to contribute to many hospitals in the city of Toronto, immediately was searching for the top doctors in the world to help me, and one of my partners who works with me at Maverix was the former Minister of Health, Eric Hoskins, and the two of them went on a mission to identify the top doctor in the world who might help, and just like good old Canadians, we went to the US first.

And, they went to the United States, went to some of the leading hospitals in the United States, and we were tracking down the right folks, and then they would ask, "So, where is this patient located?" and they said, "Toronto." "Toronto? Why are you calling us? The best doctor that you can have is someone at Toronto Western." And, we're like, "Who's that?" And, I wasn't involved in this process. Even Eric Hoskins didn't know who he was, and he heard that two or three times and then realized, "Okay, maybe I'd better stop searching," And he contacted Dr Michael Fehlings and mentioned my situation and Michael actually heard about my accident because Michael, in addition to being a practitioner, is also heavily involved in research and commercializing the latest technology, and because I'm involved as an investor in the technology industry, he was aware of who I was. [music fades out]

[light, flowing electronic music] After a few weeks of being in hospital—so I was at hospital at Sunnybrook—and Sunnybrook frantically was trying to save my life, and they did a great job in doing so—I then had a meeting with Dr Fehlings and they had me do some initial tests, you know, MRI, etc., and Dr Fehlings had concluded that, in order to maximize my functional recovery, he thought that I should get my spinal cord decompressed. And so, he said it's a very, very complicated surgery. There is a lot of risk with that surgery. Very few people know how to do it because of the sensitivity, and I said, "What are the odds of success?" and he said, "You know, odds have been around 50/50," and I told him, "I am a venture capitalist. I'm in the 1% odds game. 50/50 is ginormous for me," and he's like, "Do you want to think about it?" and my wife and I both said, "No. Let's do it." And, three weeks later, we removed the pins and the rods in my back and another seven-hour surgery. He removed all of the fragments and rebuilt my vertebrae with the bone fragments that were remaining and then reinserted the rods and the screws. [music fades out]

And, the surgery was a success and my spine was decompressed. [uplifting electronic music] So, for the first two months, I'm really in still the acute care, so first at Sunnybrook and then at Toronto Western. And then, you go into a rehab stage and I went to Toronto Lyndhurst, and there, you're really just recuperating. My body just needed lots of time to heal and, at the same time, I really started needing to commence physio.

[music continues] My body started recalling the memory in my spinal cord of certain movements in my body and the funny thing is my body started to recall the movements of cycling before it did on walking and I had no idea that the spinal cord, just like the brain, has a memory, except it's mobile memory, not thinking memory. [music fades out] I am still officially designated as a complete ASIA A, and yet I cycle and walk daily – now, not unaided, but I'm walking and peddling—and it's all through, right now, I think it was two major contributing factors... let's call it three. [bubbly electronic music] You have Sunnybrook doctors, both the orthopedic and the spinal cord, saving my life, and then you have Dr Fehlings improving my life. If you were to ask Dr Fehlings and some of the other doctors, they are shocked at the amount of recovery that I've experienced, and one of the factors is I believe in—and so does Dr Fehlings believe—the decompression has enabled me to increase my chances for a recovery, but I also have, on top of that, undergone a massive amount of physical therapy, which is really, today, the only known treatment to at least improve your situation – not to necessarily solve it, but to give you a life that could become bearable.

[music continues] What I had been told was, "You will see your recovery in the first 6 to 12 months, but by the end of 12 months or thereabouts, your recovery period is over and you're not going to really experience any improvements in terms of your functionality." Well, I discovered that's not true, and there's a couple of reasons why it's not true. Number one, it takes a lot of time and money. It's unfortunate on the post-acute care – there's not a lot of significant resources available to you. So, one of the things that I have been fortunate is that, four months after my accident, I did go back to work and continued to run my fund, and it provides me with the financial wherewithal.

I have a team of ten doctors; that's physios, sports performance, acupuncture, physical trainers, physiatrists that are operating as one team, and I would say that my physio routine is seven days a week, about 18 to 20 hours a week, without stopping, and I am still improving. And, I am getting stronger both on my pedalling... I started off at four kilometres an hour of pedalling. I average now, over the course of an hour, about 25 kilometres an hour. But, I am hitting 26 and 27 kilometres, which puts me above average of a normal cyclist, or the average cyclist, I would say. And then, on my walking, my walking is getting stronger and more independent, but it's still not fully independent. I currently use either a walker or walking poles or on a treadmill and I hold on to the bars, but I'm not longer in a vest-supported or de-weighted, and the reason why I think people underestimate the power of physio and your neuroplasticity is that, first of all, people don't understand the neuroplasticity, really, in your body – number one. And, number two, you have to be extremely stubborn or stupid—or both—to want to continue to go through the pain and the discipline that I need to go through to continue doing this. [music fades out]

And, what does happen, and I completely understand – after 6 to 12 months of constant physio, you really want to get on with your life, and I think I made physio a part of my daily life. I thought that I could use physio to get to a point of recover, but I also believe that I would need technology. [hopeful electronic music] When the accident occurred, I was querying whether a solution would be available in my lifetime, and a year goes by and the amount of research and knowledge is growing at a logarithmic pace. And, what's interesting is part of the challenge is not necessarily the technology, per se, but it's rather the communication amongst the global community of projects that others are doing and people not being aware of the project. So, you know, one of the things with generative AI, for example, is there's going to be a lot of improvements on the communication of things that we already know.

But, only a year after, when I readjusted my expectations, saying, "Jesus. These things are moving a lot faster than I thought," and I readjusted my expectations to a 10 to 20 years. A couple of years later, and where I think we are right now, I think we're in between a 5- and 10-year time frame, possibly, to actually both partially, for sure, and perhaps wholly solving spinal cord injury, and that's where I am mostly focused in on. My message is one of hope and never to take away the hope. Help is coming and it's coming faster than you think, and I understand now—I didn't before—how easily it could get you into a dark place, the moment you lose hope, and it was my message to the hospitals, as well, and I said to them, "Hey, just a little bit of piece of advice, and I know that you have to manage expectations, but there's a fine line on managing expectations and removing hope. Do not cross the line of removing hope." [music fades out] [light, bubbly electronic music] You know, some of the things that were said could be implied as, "You're done," and then why bother trying to improve yourself? And, that wasn't, certainly, their intention, but my message to folks is I believe that something very significant will occur within the next 10 years, and I said that, "within the next 10," but every year, I've been cutting the estimate by half and I hope to be saying, a year from now, "Boy, was I wrong. It's going to be within the next five years."

The one thing that you can do is get physio right now and get your body moving and allow your body to feel the movements again, and hopefully have technology to give you that extra boost to get some more functionality. [music fades out]