Announcer: Bulletproof radio. A stage of high performance.

Dave: You're listening to Bulletproof radio with Dave Asprey. Today's cool fact of the day is that being left high and dry is actually a good thing, at least if you're a telescope. Especially if for something called ALMA, the Atacama large millimeter array. And this is a telescope you've probably never heard about. It's located on the 5,000 meter high Chajnantor plateau in the Chile and Andes in one of the driest parts of the planet. In fact, they believed there was no rainfall there at all for 400 years. And this thing that you've never heard of has 66 high precision antennas with radio dishes that weigh about 100 tons each. And since 2013, we've been using this to study light from some of the coldest objects in the universe. This is molecular gas and dust. It has a wavelength of light around a millimeter, between infrared light and radio waves. And we can look at things that we've never seen in the entire history of humanity, and see very distant light that's been shifted towards the red end of the spectrum.

Dave: In order to do something like this, it took thousands of scientists and engineers from around the world more than a decade of work, and it's a collaboration from four continents, and is the largest ground based astronomical project in existence. And the reason I'm talking with you about this is because, as you know, if you're a long time listener, I like to foreshadow what we're going to talk about in the show. But also, just think about the amount of science and technology that happened on that and the fact that, unless you're a space geek, this is totally going by without you knowing about it. You ever think about what else is going on in the world of technology and of innovation that's completely outside your knowledge, but is something that would have been impossible even if everyone in the world had put their brains together to do this, even 50 years ago?

Dave: That's an example of how fast things are changing. And it's not just in space, it's changing in everything we do as human beings. And I'm pretty darned excited about it, and so is today's guest. Today's guest is Anousheh Ansari. She grew up in Iran, and lived through the Iranian revolution in the 1970s, and the war in the '80s. And came to the US at age 16. Became a really successful serial entrepreneur and active proponent of world changing technologies. And right now she's co-founder, CEO of Prodea Systems, which is an Internet of things technology company. But you might have heard of her because on September 18th, 2006, the day her company launched. She herself literally launched into space for 11 days. And that was the accomplishment of a childhood dream. She's the first female private space explorer, the first astronaut of Iranian descent, the first Muslim woman in space, and the fourth private explorer to visit space. Anousheh, welcome to the show.

Anousheh: Thank you. Thanks Dave. It's great to be part of the show.

Dave: You have a mantra and business phrase that you've talked about, and you say, "Imagine, be the change, inspire." Where did that come from?

Anousheh: Well, actually this is what I wrote on top of the patch that I designed when I went to Space Station. And it's sort of describes the three phases of my life and how I feel like most people should live their life. The first of part of our lives is to use the most precious

gift we have, is the gift of imagination. So, we can imagine different worlds. We can imagine a different life. We can imagine how we want to live our life. And basically that's how we are set on a path that will determine which direction we take, what we get involved with, and what exercises, what do you want to learn? And it's a big part of how the rest of our world and the rest of our life starts to shape up.

Anousheh: And then after that, be the change basically describes a big part of my personality. I am one of those people who when I see a problem, I want to basically do something about it. So I don't complain about problems, I try to find a solution for them. Maybe it's my engineering background and training and problem solving. But I believe that if something is important enough to us then we cannot just leave it to others to fix it, and it's up to us to change it. So it came from a famous quote by Gandhi, "Be the change you want to see in the world."

Anousheh: And then the last part is when you are lucky enough, fortunate enough to be able to accomplish these things in your life, and be able to accomplish maybe great tasks in your life especially. And overcome challenges and you need to tell your story, you need to inspire others to help them see that there's always a light at the end of the tunnel. There's always a way to make the impossible possible. There's always someone out there that will help you hold you your hand and get you through the difficult times. And that's the part that about inspiration and something I try to do a lot of them.

Dave: When we first met it was at the 10th anniversary of the NSRA X Prize, which was hosted by Peter Diamandis. This was the prize of $10 million that was given for the first private space travel. So for a company that could send something into orbit and bring it back. That changed the face of space travel now. It's why we have companies like Space X, and Richard Branson's initiative. And we got to chat for a little while then, and I was particularly impressed because Peter came to you and said, "I sort of made this commitment that I'm going to give this $10 million, and it's not funded yet. I need help funding all of these university teams who are working on radically affordable space travel." And you said, "Sure. I'll do it."

Anousheh: Yeah.

Dave: Walk me through what made you decide to do that.

Anousheh: So, it goes back to also my passion for space and space travel. I had dreamed about going to space and being an astronaut since I was very young in Iran growing up. And as I came to US and couldn't find the Star Kid Academy to sign up for and go to space. I realized that this is a dream that I have to put on hold, which I did went to school and became an engineer became an entrepreneur. So my life took a different path, but my passion for space was there and never went away and if anything just grew. So my entrepreneurial activities was also a way for me to fund and find a way to go to space. And when we sold our company, my husband and my brother-in-law were my co-founders and basically we do all these businesses together. And when we sold the company the first thing I did is I take some time off and I said, "Okay. I want to go pursue this dream and see how I can make it happen." And I had done some interviews and Peter had read about them.

Anousheh: And in the interviews I talked about my desire to this orbital fly and then orbital flight. And so he got excited and was like, "Okay." I panicked. By that time he had knocked on 150 other doors, big companies, CEOs, philanthropist. And no one had agreed to fund it because they all thought it was a crazy idea. So he came to us and we met, and when I heard his idea I'm like, "Hmm, this makes sense." It said, "Sound investment decision," because basically you're only paying someone after they demonstrated it works, and if they fly to space. And deep down I believed that if I ever would go to space it would through a private space endeavor, and not through government. So, I immediately got, really first of all fascinated by Peter's passion, which I shared and his approach to solving this problem. And I felt that this is a partnership that can last forever and that can help me get to where I want to go. And basically after, I don't know, half a day or so of just getting all the data from him.

Anousheh: We decided that we want to be partnered of X prize and Peter in this endeavor. And we became the title sponsors, but they didn't announce it until a while after this conversation, but we became partner immediately. And I'm so happy because it's been a blessing to be part of the express salvation.

Dave: It's pretty unusual for ... I'm just going to sort of say it. This is stereotypical, but I've got two kids. My son's eight, or he just turned nine. And my daughter's 11. And I've been telling them both a space story for the past four years. This thing and it's to teach them about technology and about how society works and all, and after this my son says, "Daddy, I want to be a space engineer when I grow up." I'm like, "That's awesome." And my daughter says, "I want to be an artist when I grow up." Okay? Now these are stereotypes, but this is actually what my kids did. And it's not like they don't get a little bit of pushing for STEM and engineering. But it's much more common for men to say I want to be an astronaut than it is for women. Especially at the age when we were both younger. It's very unusual. What made you such a space aficionado as a young child? I mean, it's just unusual. What made you break the stereotype?

Anousheh: Well, I don't have any scientific reason for it. But I can tell you that as you mentioned, I was born in Iran, I grew up Iran. And summer nights ... back then we didn't have iPads and iPhones, none of these electronics. So summer nights, because we didn't have air conditioning, I would sleep outside. And as I was laying in my bed, I would look at the night skies. And then ... again because you don't have all these distractions and electronics, I guess. Your imagination is very powerful. So I would try to make up all these stories about what's out there, and I would look at those stars and try to understand how far they are, what they're made of, if there is another girl like me out there looking back at me and thinking about the same things, and if there are other worlds. And it was basically something that fascinated me, wrapped my attention. The more I looked at the night skies and the stars, the more I wanted to know about them. I wanted to go touch them. I wanted to fly up to them.

Anousheh: And that was the beginning of my interest in mad science, and astronomy and trying to learn more. As I started learning to read, and one of the first books that I read at a young age was the Little Prince. And that story fascinated me, and I identified with the little prince, and I wanted to fly to space again. And I was adamant of the aliens. I became an avid Star Trek fan, and watched Star Trek in Iran growing up. And would

always go back on that balcony and look out and pray for aliens to come and take me away so I could go explore. This curiosity I think was at the base of my desire to learn about space, and go to space to just think. To just go and explore and find out what's out there because I feel like the more I know about what's out there and how our world came to be, the more I learn about myself and my role in it and my place in it.

Anousheh: That's why I love cosmology. I love the study of how the universe started, how it will end. If there is a start or an end, and all these theories about it.

Dave: That's beautiful. So, core curiosity got you there?

Anousheh: I believe so. And sometimes I feel like as parents ... I don't have kids, so I don't want to be judgemental. But I think as parents, you somehow ... we're more protective of our girls than we are our boys. And through our protective lens, we sort of stop them from risking things. We don't want them to fall down. We don't want them to climb the tree. We don't want them to do a lot of things. And without knowing, we limit their [inaudible 00:13:50] exploration and imagination and I know sometimes that's what leads them to not pursue things that is dangerous and risky and potentially, I guess, requires that type of hesitating.

Anousheh: I did a talk for a group of kindergartners, and I arrived with my astronaut training suit on and they all gathered around me. They were excited and they're like, "But you're an astronaut?" I'm like, "Yes. I'm an astronaut." Especially the girls. But they're like, "But you're too short. And you're not big. And you're not this." And I'm like, "You don't need to be big and strong to go to space. Everything is weighed less in space."

Dave: Not only that. It takes less rocket fuel for you to go to space when you're light.

Anousheh: Somehow with the stories of right stuff and big macho men being the face of, or the space travels. This whole notion has stayed with ... especially with girls, that maybe you have to be a very strong big person to go to space. And I'm too weak, or too small to do anything like that. I know these all could play a role in people even thinking about possibility of going to space.

Dave: What did your parents do that encouraged you to take risks?

Anousheh: I think the most important thing is they left me alone. They just let me do a lot of things. Of course, nothing that would put me in danger, but I actually ... my parents were not scientists, or engineers. And my father was in sales and marketing. My mom worked at a university in the administrative office. And so for me it was just experimentation. And I love books. So the more books I read, the more I'd wanted to know and the more I'd get curious about other people's life and where they lived. So I think curiosity was a big part of again, what lead me down this path and my parents just ... I think they got tired of all the times that I asked why and why this and why that, why is this this way? And my mom would just say, "Go play." And I would go play outside. And then they'd see that I felt like the world is waiting for me to discover.

Dave: What made you start a company, and what'd you do to make it so successful that you could afford to fund your space travel?

Anousheh: Well, it all was by a chance to be honest with you. I met my brother-in-law at school. We went to university together, through him I'm introduced to his brother and later became my husband. And so we sort of are in this technology and telecommunication business back then. And the company we worked for left Virginia area where we lived. And they didn't want to move, so we left the company and started our own consulting practices. We each did consulting on our own for a while. And then we decided to join our forces and launch our first company, and it was still along the same lines because we were doing consulting we found a need for a lot of these companies to better understand new and upcoming technologies and how it could help them launch new services and generate new revenues. So we started helping them with this technology questions. And then soon enough we found that we'd give them the answer, but they're too big sometimes to execute all those plans we gave them.

Anousheh: So instead of just consulting for them and telling them what to do, we said, "Well, what if we built this for you, will you buy it from us?" And then they said, "Yeah." We said, "Okay, let's go do this." So we went and sold every stock we had, we put our credit cards together, we sold everything we had, and we started our first company and started building these stopper solutions for the telecom industry. And we grew from there. And to be honest with you, if you had asked me back then if I had any idea of how big it would it get and how successful [inaudible 00:18:41]. I wouldn't be able to tell you back then. And for us it was just a business and we were running and growing our business.

Anousheh: Eventually, I remember clearly, one day I was watching CNN and they were talking about Dennis Tito. So Dennis Tito was the first person who flew as a private astronaut to Space Station, and they were talking about the controversies between NASA and the Russian Space Agency. And I just tuned into that and I'm like, "Okay. Well, if nothing else works that's one way I could go to space. Seems like I can buy a ticket." And of course, I know I know I don't have the money to buy the ticket. And the company was quite small back then and still we were bootstrapping. So it became a motivation for me because I'm like, "Okay. All I need to do is figure out a way how we can make this company big enough so I can actually afford to buy this ticket." So it was an inspiration for me to be able to find ways to even scale up and grow the company further than we have already. And eventually paid off.

Dave: So your dream of traveling to space was part of what motivated you to grow your company?

Anousheh: Absolutely. It's been a constant theme in my life. I think it influences everything I do. Before going to space, it influenced the steps I took that would get me closer to that dream, and then after I have experienced being in space and seeing our world from up there. It has influenced me and continues to influence everything I do and the work I take on and how I prioritize my life.

Dave: How did it feel after you came back from space? I mean, you've just achieved your life's dream. And what happened to you psychologically after you landed. You're like, "I'm done."

Anousheh: Well, as you said, you said it well. It was a accomplishment of a life dream and I was about ... I was only 40 years old back then. And I basically looked to this big goal in front of me all of my life and there I was in Baikonur, Kazakhstan sitting in a chair after they took me out of the rocket and the sun was coming up. And I'm thinking to myself, "Okay. What do I do now?" And it was hard. I was depressed. It was a very difficult transition. For two reasons. One was because I feel like this biggest most important thing in my life was now done. Even though I had an amazing experience and I wanted to go back, I wasn't sure if I would be able to unwind with that happening. And then the next thing was because I had this extraordinary experience.

Anousheh: And coming back I'd felt like everyone around me sleepwalking and they don't understand me and they don't understand what I've seen and I wanted to shake them up and say, "Do you realized where you're living and how you're part of this much bigger universe," and it felt like I became an alien. So it was the process of integration into the real world.

Dave: What did you decide to do next to motivate yourself? So you've had this motivation for 40 years, or at least maybe 35 of them. And you're sitting there in the chair, how did you get reinvigorated? Did you pick another big thing, first to Mars? Or switch gears? So what's motivating you today?

Anousheh: So first of all, I knew that it's not the end of my space endeavors and I wanted to continue because I felt like the experience I just had was something that anyone who wants to should be able to experience it because this is life altering. So, I knew I would be part of that whole movement. And also I had done this blog from space, so I was the first blogger from space. And I never had written single thing that was published before that, and the blogs became very popular. I was just writing about what I did every day. To me was ordinary tasks that becomes funny and interesting when you're in space. And I would write also about my emotions and talks as I was in the Space Station. And it became very popular.

Anousheh: So, in the first two months of this blog, we have about I guess 20 million visitors. And part of that was that people from all over the world was writing back to me, and telling me how this story had inspired them and people from remote places off Iran, Afghanistan, Pakistan, people from a lot of the developing countries where women don't have big chance of advancement. So, they were all writing to me and saying that just hearing about you and your story is giving us hope that even though it may seem impossible that there is a way and that we are pursuing our dream and we're going after our dream. Not that everyone wanted to go to space, but they have other dreams of their own, but in their environment and every day life, those dreams were either shattered by the society or their belief system that it's impossible to do them, and I had given them hope to change that.

Anousheh: And to me that was beautiful and I didn't know at the beginning what to do about it, but I felt like I was very lucky and this gift was given to me. The gift of going to space and being able to experience what I did and I have to find a way to translate that and inspire others. So help tell my story in a better way. Tell it to people who need it the most and basically give people hope, and inspire them to go after their own dreams. So I do a lot of that these days through different media talks, school visits, seeking engagements. I did the memoir, I published my book, "My dream of stars," which basically tells my entire story from when I was born to my endeavor to International Space Station.

Anousheh: And I collaborate with a lot of nonprofits now to help a lot of different parts of the society that disadvantage points of the society to be able to be hopeful about the future and to go and accomplish big things. Especially focused on women and youth because I think that's where a lot hidden potential energies there that they can unleash for good.

Dave: So you switched gears from pursuing actually going to space to pursuing the idea of inspiring others. What do you believe about human potential? If people are inspired, what are we actually capable of and what happens if, say you fail at your goal of inspiring people. Why does it matter?

Anousheh: So, I think human potential is almost infinite. I don't think we know what we're capable of. I don't think there's any single person that we can say has reached 100% of their full potential out there. So, as we accomplish more, I think we just learn that we could do more if we push ourselves. But it's difficult, it's something that requires a lot of hard work, discipline, focus, concentration. And those only come with motivation. So, I think the only way we can reach those potentials is one, we're doing something that excites us because that energy comes from deep inside us. And that energy that allows us to overcome failures because when you want to do something big and important, you're bound to fail. And sometimes failing and failing again and again and again, it hurts. It shatters your confidence. It may physically harm you. It's difficult.

Anousheh: so, you have to really feel strong enough about what you're pursuing to be able to find the energy to get up again, and continue to take another step. And if you fall again to get up again and take another step. And that's why I think ... I heard someone call it grit. So, people who are able to reach far and do the difficult things have this thing in them that they sort of ... we call them thick skinned. And they can stand a lot of failures, negative talks, negative comments about them from people around or society and just focus, become single focused on their goal and on their passion and desire and only see that will get them closer to their goal.

Anousheh: And it's a rare thing to find to be honest with you, but once you're there it's a fistful life. I think it's a fulfilling life that you live because even though you may be broken and tired and full of scars when you get there, and accomplished something [inaudible 00:29:33], you can look back at your life and say, "I have no regrets." And I think to me, that's wonderful to be able to look back and say, "Hmm. I did whatever I wanted to do. I fail at some things. I succeeded at others, but I have no regret." And I think that would be a life well lived.

Dave: Does that describe you now?

Anousheh: It does. I think it's a really good description of my life so far. I failed at many things. I'm not perfect at all. But every time I've done something that was meaningful to me, that was something that I felt deeply passionate about, I don't get tired. Time stops, you know? If I'm not eating, if I'm not sleeping. As long as I'm working on that thing that excites, as long as I'm working with people around me who are excited about the same thing. I just don't even notice the passage of time. And then I would go through any fire and any mountain and any obstacle to get there.

Dave: What are you doing now to tap into your human potential? You believe it's unlimited. So you've already done quite a few things, but what else is on your plate?

Anousheh: I love actually, in ways too much. I am continuously working and very, very actively collaborating with X Prize. I am running my company and through that, I have also been exposed to, throughout my career, I've been exposed to technology and see how technologies transforming everyday lives and it's impacting us, but I also feel fortunate that I'm part of an [inaudible 00:31:33] of people who are able to know and understand and acknowledge how these exponential technologies are impacting our world. And I feel like a very large majority of the population still either don't know it, don't understand it, or just are completely oblivious about it. And I think it is important to have everyone involved in deciding how these technologies will evolve and change our lives because they're moving so fast that we can't wait and debate about it 10 years down the line because at that time we'll be too late. And this is a very exciting and also very critical time. And taking steps toward making sure these technologies that are always tools are used to bring abundance, to bring a better future for everyone and not just a small group of people.

Dave: I interviewed Peter Diamandis about exponential technologies and how the things that we saw over the past five years we're likely to see over the next six months repeated and how the speed of changes is just rapid and amazing right now. And it's one of the reasons I'm so excited to be alive at this time because the potential we have is great. But the potential to do great harm is also there. So, the more power you have the more bad things you can do or the more good things you can do. What are you doing to make sure that the exponential technologies that you're supporting are actually doing good things instead of bad things?

Anousheh: So, I think collaboration is very important. So, I am working with X Prize and a few other organization and nonprofits to create a way for collaborative effort between the teams that are the most advanced teams in some of these areas. And whether it is artificial intelligence, whether it's advancement in Whispr and DNA sequencing or editing, or in robotics. A lot of these different areas that will have a big impact on our lives and by collaborating between different countries, different governments, different agencies, sharing a finding, sharing data, creating a common sort of principles, if you would, on how we want to push these technologies, working with standard bodies. We had just X Prize co-hosted a conference on AI for good. And focusing on how these technologies can be used for good and then they would be doing great business, but also solving real problems in the world.

Anousheh: I think starting this dialogue in conversation in these fashion would be a first step toward that, and very important step.

Dave: What is the single most exponential technology that has you excited and interested and just paying attention?

Anousheh: To be honest with you, I think artificial intelligence has been very exciting to me. Scary and exciting at the same time because it touches everything. It will transform every aspect of health, work, life, governments, everything we do, research in every direction. So, I think it will become embedded in everything. So, being able to ... you've talked to Peter, so with Moreslaw and how this is advancing and how our computing power and the cost of computing is dropping. All of these deals will make this type of technologies affordable and accessible to everyone, but also in the hands of people who really don't understand the power of it, it can be destructive. It can get out of hand. It can get out of hand for humanity when the entire human races brain power can be summed up in one computer chip.

Anousheh: The next step from there is, it will go beyond what we can understand. And we already see some early experiments with AI where we've started some experiments and then after a few months we sort of, it's evolving on its own and with machine learning we don't even understand how it's evolving. Can't explain how it's evolving. We're fascinated by it, we're studying it, but we sort of don't control it anymore. And I'm not saying these things to say that we should be scared of it, but I think we should be careful with it. It's like a virus where you can study the virus and you can use it to create medicine and use it for a cure, but if it gets out of hand and it spreads without control, it may also cause a lot of damage.

Anousheh: So, we need to set some ground rules, collaborate together to make sure those ground rules are followed to allow us to at least better understand that before we decide what we need to do because we're not even at the stage we can say what we need to do or should do.

Dave: Do you think Elon Musk is right in his assessment of the dangers of AI?

Anousheh: I think any technology including, most importantly, exponential technologies can be used for good or for bad. We should be scared of every technology and we should be hopeful of every technology. Technology on its own is not good or bad. It's just a tool. How we use it is what determines whether it will do good or harm. So, I think Elon's view of a doom and gloom world are possible, it's not the only outcome, but it can be the reverse. I mean, I can sit here and recite thousands of ways AI has helped and continue to help. In the medial field, for example, it has been amazing. And it has already advanced to be able to diagnose [inaudible 00:38:42] and doctors or radiologists can. First of all, we can't put the genie back in the bottle. That's not possible. And two, when there's good possibility why not concentrate on that.

Anousheh: So, instead of being scared of it, we just need to accept it as a tool use it as such for better uses.

Dave: I studied early artificial intelligence in my undergraduate degree, and it has such great promise, but you can certainly use it for bad things and there's examples of technology being used for very bad things since the advent of technology. A lot of people don't know, one of the first uses of computers sorting algorithms was in World War II to figure out who came from which genetic heritage and things like that. That was actually powered by IBM. And that's an incredibly bad use of technology. But for all that, there's been huge good use of technology. So, I'm not sure it'll be either all good or all bad. But I know it's happening and I'm pleased that you're working on the idea of how do we use AI for good as part of what you're doing with exponential technologies and your post your space flight and all that. Here's the question for you though. Given that you're more familiar with some of these technologies like crisper than the average person, I'm going to take it down to you personally. How long do you think you're going to live?

Anousheh: So, it's an interesting question, but I need to split it is how long do I want to live or how long can I live? But it's different.

Dave: Yes.

Anousheh: So, I think with, again, in a very interesting time I think Peter calls it the escape philosophy, the healthy escape philosophy. So, there's a possibility of if we take good care of ourselves that we can live as maybe twice or three times the normal life expectancy of average people right now at my age. So, at right now we're really ... so, maybe two, three hundred years. But I don't know if I want to live that long to be honest with you. It all depends on how fulfilling life is and I believe in life of meaning. So, as long as there's meaning in life I would want to live. I think one of our biggest dilemma's in the future won't be how we overcome famine or you look at future of work for people and how AI and robotics will basically take over a lot of the jobs we have.

Anousheh: So, as human beings, I think we need to worry about if we don't have to work, if we don't have to do anything, but we just live our lives and we have all the basic needs, but we want ... how would we live our life? We would wake up in the morning and what would we do? And I can think of a lot of things I would do, but I would be graced to see billions of people who don't have to work anymore and they wake up every morning. What would they spend their days on? So, I think it's interesting and ethical questions that interesting, meaning of life questions, more philosophical questions, are what I think we need to think about when we talk about longevity. So, physically I think we can live long lives whether [inaudible 00:42:28].

Dave: So, you're worried about being bored?

Anousheh: Being bored, yeah.

Dave: Okay. So, you want to live as long as you can if you're not bored?

Anousheh: Yeah. If I can go explore other galaxies then I want to live forever because I would be seeing and exploring new places. But if I'm not able to do that for whatever reason, then I don't know. I don't know how long I would want to live.

Dave: Do you think we're going to be able to explore other galaxies or even other planets without substantially hacking our own biology?

Anousheh: No. We definitely need to do that. I mean, the closest galaxies are a couple of light years away. And I think we definitely need to either through cryogenics or other ways to be able to extend our life to be able to really go beyond our solar system. I know virtual reality and robotics can allow us to virtually visit other worlds, but I don't know. I'm still a Star Trek fan. So, I don't want to go there personally. And [inaudible 00:43:41] myself, so I think we definitely need to find different ways to improve our quality to sustain space travel and living in space. And to be honest with you, throughout history, we've evolved. Our bodies have evolved, so perhaps it really becomes space [inaudible 00:43:59] species, our bodies will evolve because more suitable for longer space expulsion and living in space.

Dave: Do you think that it's ethical or a good idea for us to cause our bodies to evolve to be useful in space?

Anousheh: Yeah. I would do it. I would do it. I mean, I think there would be implants, there may be ways of training our body. I mean, if you want to go to an extreme place if you're an athlete or explorer and you want to go to an extreme place you train your body to be able to sustain low oxygen levels or high altitudes in different ways. So, I think it's not any different than that as long as you're doing that. Not forcing others to do it, but if you're making the decision for your own body, I believe that every person is responsible and in charge of their own body.

Dave: I believe that some of the things that we're doing to allow astronauts to survive in space are going to have huge implications for people who don't go to space. So, I'm watching that very well both in terms of cognitive function, longevity, resilience and all that because we think running a marathon is an extreme human performance thing. I think staying in space for six months is far more extreme. And if you look at the health results from astronauts who do that, it's not particularly promising right now. So, there's some core human engineering required there.

Anousheh: Oh, absolutely.

Dave: And that's one of the exponential things that can happen.

Anousheh: So, Dave, I'm going to ask you a question. May not be traditional for your podcast, but what if where the point where we can of course back of our consciousness or mind, whatever you want to call it. And since our bodies are just biological carbon prints, we can print another body. And just continue hopping, body hopping. So, you're still you in a way, but your body is just another sort of piece of carbon soot, I guess that your consciousness can hop.

Dave: A sleeve as they would call it, all the carbon [crosstalk 00:46:24].

Anousheh: A sleeve. Yes is actually ... yeah, exactly. Would you do that? Would you think of that as a possibility for future for space travel, for whatever, longevity?

Dave: I'm open to the idea, but I've also spent enough time to bet in with Shawman's and all that. And all of those people are saying that's pretty much already the case.

Anousheh: That's a good way of looking at it.

Dave: Right.

Anousheh: Reincarnation. [crosstalk 00:46:51].

Dave: So, I don't know. Right. I don't really know if that's the case or not. But I sure know a lot of very smart, well studied people in thousands of years of literature that are saying, "Well, a reincarnation happens and I've seen some things I can't explain." So, if that is the case, maybe we'll figure it out using things like big data and actually finding evidence of this by combing through things we've never been able to look at before. So, if it's the fact that when you die you come back anyway, well hey, problem's already solved. We just didn't notice. But on the other hand, until I'm certain of that, yeah, you can bet your ass, I'm going to back myself up. I don't understand why anyone wouldn't want to do that.

Anousheh: Yeah.

Dave: Because even if whatever gets put into a new body isn't exactly the same as me. If what I think I'm doing and who I am is worthy then why wouldn't I do that. As a matter of fact, why wouldn't I do that right now so I could have another sort of clone of me helping out on some of the projects I'm working on, right? I could use three or four of myselves. I don't know if I'd like them, but. I mean, if we're going to think about that sort of stuff why wait until you're dead to do it?

Anousheh: No, I agree. I do believe it's a possibility and an interesting one because the difference between this and reincarnation is that when you're reincarnated, you sort of start from the beginning. So, you hit the reset button, but if you're doing it in a controlled way, this way, then you're continuing on. So, you can go further because your knowledge base doesn't get reset every time you change bodies.

Dave: In the historical or spiritual context of that, they have a name for controlled reincarnation and they call it fully enlightenment. So, I'm happy to sign up on that path, but simultaneously looking at the engineering path. I'll work on both at the same time and I think as a fully functioning scientifically based human being they have this technology idea, a redundant array of inexpensive pieces of technology. I'll try both, right? It's okay to have two paths. And fault tolerant systems, we'll put it that way.

Anousheh: I like that. Yeah.

Dave: That's my take on it.

Anousheh: In technology we always have backups and [inaudible 00:49:05].

Dave: Right.

Anousheh: Sounds good to me.

Dave: So, I'll work on the full enlightenment, while I'm working on a backup strategy along the way because I don't get that one right.

Anousheh: Cool.

Dave: Cool. That was a fascinating question. Thank you.

Anousheh: No, thank you.

Dave: I have one more question for you.

Anousheh: Sure.

Dave: If someone came to you tomorrow and they said, "I'm going to perform better at everything I do as a human being." What are your three most important pieces of advice based on your entire life's experience? So, give me the three most important things to kick ass at everything that I do.

Anousheh: That's a tough question. At first I'd want to help you do everything you do better. So, I think something at the top of everything is empathy. I think for you to be better at everything you need to better understand others around you because you measure everything comparing yourself to others. So, understanding them will help you. So, empathy I would say is important. The other thing I would say if we could find you a way to reach inside to that source of energy inside, you may want to call it hope. Whatever is inside that really drives you and understand and understand what drives you because you cannot be better at something that's not important to you. So, align yourself with what's important to you, but what's your hope for that and what makes you get up in the morning. So, that would be the second thing.

Anousheh: And the third thing is that be patient because important big things require a lot of trial and error and practice and doing it over and over again and failing and doing better next time. So, patience, lots of patience.

Dave: Beautiful. Those are fantastic things that didn't have anything to do with using artificial intelligence or having even that big dream like that. But those are things that drive human performance, and if you don't have those things, I don't think you can achieve the other things that are important in your life. So, thank you for sharing that and you've definitely learned a few things along your path, which ... very successful entrepreneur, space flight, and now being an inspiration to millions of people. I like to think you learned some things along the way that are worth sharing. So, thank you for sharing that.

Anousheh: Thank you. It was my pleasure. And I think those things will help you figure out how to use the technology because the technology is a given. Like how you use those things [inaudible 00:51:57] to use them in the right way to help you.

Dave: I fully agree. If people would like to find out more about your work, you have all sorts of different projects you're working on. Is the best website anoushehansari.com? I'll spell that for people if that's the right website? Is that sort of the ...

Anousheh: Sure. Yeah. You can find a lot of information in the links on that website or X Prize, or simply google my name and I think a whole bunch of things about my talks and my defend work on some, but yeah.

Dave: That might be the best way to do it, so.

Anousheh: Sure. I have a Twitter account that I talk about some of my work.

Dave: Okay. So, if people google Ansari, they'll find you? A-N-S-A-R-I?

Anousheh: Yeah. Anousheh Ansari because there are lots of Ansari's. So, [crosstalk 00:52:43].

Dave: Oh, there are lots of Ansari's? Okay. Cool. And your first name for people who are driving or who don't look at the show notes, it's A-N-O-U-S-H-E-H.

Anousheh: Yes.

Dave: Beautiful. Thank you so much for being on Bulletproof radio. And have an awesome day.

Anousheh: Thank you so much for having me and I had lots of fun.

Dave: If you liked today's episode, you know what to do. Head on over to Google and check out some of the things we've talked about today. There's so much inspiration that you can find when you look at someone who's actually gone to space, who set a goal as a child, achieved it by the time she was 40, and took that and now is working to inspire millions of people and to make sure we do the right things with technology. It's a fascinating story and there's a lot of things that will make you wake up in the morning and say, "You know, I thought I was doing something really big, but I was thinking really small." And if that's one thing you get from listening to Bulletproof radio, that there's probably a lot more potential inside of you then you thought there was and when you find it, you can probably do more things to change the world. And that's what this is all about. Thanks for listening.