Bulletproof Radio, a state of high performance. Announcer:

Dave: You're listening to Bulletproof Radio with Dave Asprey. Today's cool fact of the day is

> that two US economists who received the 2018 Nobel Prize in economic sciences were awarded that for their efforts this month to untangle the economics of climate change and technological innovations. These guys are William Nordhaus and Paul Romer. They "Significantly broaden the scope of economic analysis by constructing models to explain how the market economy interacts with nature and knowledge." According to the Royal Swedish Academy of Sciences. Their work was based on two computer simulations that weigh the costs and benefits of taking various steps to slow global warming. The EPA has used their work among others to estimate the economic impacts of climate change. The reason this is really important is that I don't fundamentally believe that people are evil or bad. I think what happens is we set up systems and we make trillions of microdecisions, we do this inside companies, even companies who spray poison all over our

soil and things like that.

No one has stood up and said, "I am the dark emperor, and I will destroy the world." What happened is hundreds of thousands of people made tiny decisions that resulted in an unexpected outcome. These guys are untangling the math behind that. I think that's really important because this happens in healthcare, this happens in what the

> government tells us we're supposed to eat versus what we should actually eat. This whole school of research about how regulatory and policy-based things lead or inhibit new ideas in economic growth is something that we must understand to continue our

evolution as a species.

Dave: This is a special episode of Bulletproof Radio recorded live at the XPRIZE Visioneering

Event with my dear friend and advisor Naveen Jain, who's been on the show before. Naveen is a amazing guy who has this long string of companies that have solved substantial problems in the world, the newest one of which is a company called Viome, which I'm an advisor too. Viome as you know if you're a long-time listener has cracked the code on understanding exactly what's happening inside your gut. I've actually learned things about what's going on in my gut and if you've read my books you know I spend a lot of time looking at the micro-biome. I have a lot less guesswork in my life than I used to because I know what's growing, and I know what I eat, what supplements I take can make changes to what's going on in my gut. The changes happen very quickly

over the course of a couple days.

Dave: Naveen is on the show today because he has a new book out called Moonshots,

Creating a World of Abundance. He and I have spent a lot of time with Peter Diamandis, the guy behind the XPRIZE. This idea of solving global problems is really important. Naveen wrote a book about the mindset it takes to think bigger, my problems in business have always been from thinking too small. I'd like to think I'm a big thinker and Naveen is always pushing me to do more. Here's the gist, before we even get into the show, because Naveen is a fantastic guy he set it up so if you enjoy this episode you'll be able to go to Bulletproof.com/Moonshots and get as a gift a copy of the ebook or the audio book without entering your email, without anything, just as a gift because both of us believe that what he's written in this book is so important, it's worth your time to

Dave:

read the book. Now there's no friction at all. It doesn't cost you anything, it's just a gift. Naveen, welcome back to Bulletproof Radio.

Naveen:

First of all Dave, it's just an honor and a pleasure to be here. It's so hard to record a podcast because we just end up talking about so many different things to keep the podcast to a certain time is always so difficult.

Dave:

It's funny because we want to only go for an hour. You've been on a couple of different times, but we always talk about incredibly different things. This time, this is about mindset, not necessarily the human gut, which we've gone into great detail on. I think I describe you onstage at the Bulletproof Conference as at least part alien.

Naveen:

I'm not quite sure what that means. If you simply meant because I look brown and you've never seen a brown guy. I get you.

Dave:

I grew up in New Mexico, that's not a problem. But your way of thinking is eight standard deviations away from normal. I've seen you walk into rooms and just light up the crowd, but also over dinner, someone puts a problem in front of you and the experts will say, "Well let me tell you all the reasons that can't happen." You just laugh in their face, not in a degrading root way, but just say, "Are you kidding?" You just come up with all these crazy ideas. Why does your brain do that?

Naveen:

I think first of all every one of us can do that. There is nothing unique about what I do. The trick really is never to look at the world as is, but really what the world can be. Anytime you look at that problem, don't think about how you're going to solve this problem today. Instead, take a different set of thought process. You see what needs to happen? What kind of technologies will have to be developed if that were to happen? Let me give you a more specific example. Let's assume you say, "We want to settle on the moon." The person who's thinking about how to do it. They can come up with all the reasons why it can't happen and why it will not happen. If you simply were to ask them. "I don't want to know how, just tell me what needs to happen? What technologies need to come true, needs to be developed to make that happen?" The first thing they'll say, "Well how are we going to solve the problem of humans DNA not being destroyed by high radiation, because there's going to be tremendous amount of radiation and there's no way that humans can live there." Great problem.

Naveen:

Then you say, "Okay, if I tell you that problem can be solved, for example, we find the bacteria growing in radioactive nuclear waste. Now think about it for a second. Extremely high radiation, nature has figured out how to protect its DNA from very high radiation and it has also figured out how to use the radiation as a source of energy. Now imagine if you can take a genetic material from these bacteria. Use the crisper to modify our own genes in vivo and suddenly you could become radiation resistant. Nothing that I've said is beyond possibilities. I'm not saying, "Can we do that today?" But that could happen. If that were to happen, let's assume that problem will get solved. You say, "Yeah, that could possibly work."

Naveen:

What is the next problem? "Well how are we going to feed them? How are we going to grow food on the moon?" Well that's really not the problem, that's a solution you're looking for. What you're really asking me is, how are we going to provide the nutrients? How are we going to provide the energy to the human beings on the moon, because food is simply there to provide the energy and the nutrients. Really the question you need to know is now can we get energy in the nutrients? We just talked about what if the radiation was the only source of energy you need? You can say, "Honey, do you want to go out for a walk and get some radiation?" And that was the energy you needed. Now plants can do photosynthesis, there's no reason we could not do the radiation-synthesis.

Dave:

Believe it or not Naveen, this was in Headstrong or the Bulletproof Diet. Up to 5% of your energy as a human being already can come from photosynthesis, if you eat enough green stuff. It's actually in a scientific study, but no one talks about it. That's why sun exposure can be important. We already know we already we even have a little bit of that. But back to the original question. You ask a typical planetary scientist and they say, "Well we're going to have to have 100 feet of water to shield you from some of the forms of radiation and that weighs too much so we can't go to Mars." Your perspective is well what if you just modify the humans that are going to be going to Mars so they can survive the trip? There's some kind of a mental switch you're throwing there. I want you to teach listeners how you either learned or how you actively threw that mental switch to take the way you solve problems to the next level. Do you know how you do that?

Naveen:

Yeah, and that's what I was describing was really start to imagine if that world is possible, what needs to happen. As opposed to saying, how I do it, say what needs to be done? Once you start thinking of every problem and someone says, "Here's a problem, you say, "Okay." How do you break it down into smaller pieces and say these small pieces have to be solved for this global grand challenges that can be solved. Then you take each piece and say, "What is the underlying core issue that needs to be done? Does the technology exist or would technology exist in the next, three, five, 10 years because you can see own explanation where we are and where we need to be.

Dave:

That kind of thinking is why you are one of the game changers in my new book. And this is an obvious plug if you're listening and you haven't already ordered Game Changers, go to your favorite online bookseller and order a copy today, I'd appreciate it. In Law 12 which is titled Don't Lead a Horse to Water, Make it Thirsty, I actually based on our previous interviews based on additional conversations with you boiled down my best ability to figure out how you do your Moonshot level of thinking so it can be teachable. The idea behind this is that Game Changers don't get bored. "They seek out the things that fascinate them, that make them want to leap out of bed in the morning. That was actually a quote from you." The idea is you want to do something that you want to be a Game Changer yourself, you've got to find your passion and purpose, because without those you're not happy.

Dave:

What stands out, knowing you really well is that you actually do leap out of bed, actually I wouldn't say in the morning, you get up in the middle of the night, you're one of those extreme early morning people. I won't judge you for that. You come out and you're just

bouncing with energy and I have one time seen you a little bit tired. The rest of the time you are just vibrating with this passion for what you do. I want people who are listening to the show, people who read Game Changers to understand that if they don't learn how to turn that on, everything they do is going to be harder and it should be easier. Now this is a long cue up into my question for you. How hard for you personally is what you do?

Naveen:

First of all, I just wanted to state saying, I read the book Game Changers. If any one of you who have not ordered it is missing out on something. Dave cares to meet with amazing people. This is really he has distilled down for everything that every single person who you hear about and are who are successful about what makes them successful. As you and I talked about it. It's not about their habits, it is about how they think. To me there is no better book you could buy in your life to improve yourself than to buy Game Changers.

Dave:

Wow, that's a serious plug. Thank you.

Naveen:

Now having said that to me it is about finding your true passion. The way you find true passion is not somehow go on a self-discovery. You don't need to go out to the mountain and spend three years searching and finding your soul and true to who you are. There's a very easy way of finding what you actually care about. Ask yourself, "That if you had everything in your life, you had a billion dollars, you had amazing family, you had wonderful kids. What is it that you would do?" If you do that today, you will get everything that you want in life.

Naveen:

The money and the family, because people are attracted to people who are driven to what they care about. Find what you are willing to die for and then live for it. That's the kind of things even you do and one way you know you're not doing what you are truly passionate about is when you get up in the morning, at my case at four AM and in Dave's case at seven AM. But if you are not jumping out of the bed the minute you wake up, you're doing something wrong with your life. If you say, "Let me just hit the snooze button, let me lie down for another five minutes." You're not doing things that are worthwhile doing.

Dave:

Now Naveen, you're on the Forbes list. You're a successful guy who can really do whatever you want to do. You've built that, you came here to the US with nothing and your story is incredible. There are people listening to this show though who are on their way to a \$15 an hour job or maybe they're pushing a cart in a warehouse right now. I did that for five years by the way, I put parts in boxes, it wasn't very fun. But they're probably not jumping out of bed in the morning.

Naveen:

Dave, that is exactly wrong. I tell you I worked for \$3 an hour when I came to this country. To me you take pride in what you do. I don't care what I did. I wanted to be the best at it. If I am going to clean that floor, I am going to be the best damn janitor ever done. I want to take pride in what we do and everyone who sees that and say, "That man loves his work." Then take the time you have left to improve their skills. To learn something every day when you go to bed, you have to ask yourself, "Am I intellectually better today than I was yesterday? Am I emotionally better than I was yesterday? Am I

spiritually better today than I was yesterday?" If you're not making progress you're actually dying. The day you stop becoming intellectually curious is the day you die.

Dave:

That is very much the path that I followed at. I would get so bored putting parts in boxes, that I realized there was an award, a financial reward for everyone at my warehouse if we could come up with process improvements. I said, "I'll just do two a week." Because it's not that hard, we're putting parts in boxes, couldn't we do it better? I ended up raising what everyone at the warehouse got paid by about 5% for a couple of months before they changed the program because they realized it was increasing costs, because I was bored. That staying intellectually stimulated, it does take time, it certainly too me time, it took you time as well. I started out at 4.25 an hour, not \$3 an hour, but pretty similar and look where you've ended up today. This is a process. For younger people who are just getting going on that, your advice is do what you're doing with excellence and be really curious.

Naveen:

And never ever think that what you're doing doesn't matter. The fact someone is paying you to do that because it matters. If you are good at it, then they want to give you something even more. If you suck at your job and you tell them, "I want to do something more meaningful." They say, "You can't even do this job and you're asking me to give you a different job. The reason people give you a different job and more meaningful job, because they see you do so good at what you do and say, "I want that dedication, that passion, applied to this."

Dave:

Did you ever read the Fountainhead?

Naveen:

No. I did not.

Dave:

You did not, it reminds me a little bit that there's the heroic people in Ayn Rand's famous book that has really influenced Silicon Valley. I read it when I was 16 and it helped me and probably made me more angry than I should have been at the time. More angry at the injustice. The characters who are the very successful people when they're making a hamburger, they make it perfectly. When they're rolling a cigarette, they roll it perfectly. It's this idea that whatever you're doing, you've done with excellence and you've built that into your life.

Naveen:

And our culture of our company. Every person I hire and I tell them the same thing. This is what you're hired to do. I call that a cake. Everything else that you do outside, that's your true passion and you want to do that, that's an icing. It doesn't matter how much icing you put in, if there is no cake, people done want just icing. Do a wonderful cake, do so good a job that cake is amazing and any icing you put on top of that it's what people love.

Dave:

That is fantastic advice. I think it's important as people are starting their careers to understand that. If you're not doing what you're hired to do or you're doing it with resistance and anger or undermining others in your company or starting internal wars and building your own little fiefdom inside a company, people will notice. When they

notice they're not going to promote you. It's going to create discomfort for you and for others. Instead, you just come in, you kick ass-

Naveen: And help everyone else.

Dave: Oh of course and help others.

Naveen: That's how this, "Oh my God, not only he did a great job, he's such a good person, that

whenever he finds time he helps someone else do their job." That's how you get promotion, that's how you get more responsibility. You don't get more responsibility by bitching about how shitty your job is and why you don't like it and then expect someone

to promote you.

Dave: Yeah or bitching about other people at your company too.

Naveen: Yeah.

Dave: The complainers typically don't get promoted. What would your advice be or what

experiences have you had in your evolution to become this big Moonshots thinker for people who are at a job where they actually do that. They make the most perfect cake

possible, and they ice it perfectly and no one notices.

Naveen: The interesting thing is, then you're working at the wrong company. If people don't

value what you do, then you should go find somewhere where people care about having a perfect cake with a perfect icing. It is quite possible, that it is not your problem. It is sometime you find yourself in the wrong environment. That's what you see when you wake up in the morning, and you find that you are putting your heart and soul and it doesn't get noticed, find a different job. There are plenty of people who will appreciate

the perfect cake and the perfect icing.

Dave: Awesome advice, if you're not appreciated, move on. I've dealt with younger people

sometimes who are appreciated, but don't feel appreciated. In fact, I was one of those. I had nine months of working on my first Silicon Valley company, a company called 3Com, it was one of the earlier networking companies. I said, "All right, I have a degree in information systems, I've got nine months of experience, I'd like to be a director." I was really pissed off that they didn't offer me a director position. Now 20, 25 years later I understand what it takes to be a director in mid-level management at a company, and it requires some experience teaching, and some failing none of which I had at the time, but I was too egotistical to know that. In your own path, did you ever run against that in

your early days, Microsoft, stuff like that?

Naveen: I think a lot of it comes from as young people start to develop this self-entitlement. They have this entitlement attitude that, "I can be the CEO, I can the day I am out of college, I

should be the CEO because I am just as capable as anything else." Now I'm not suggesting you can't, but there is a lot of wisdom you learn by making mistakes. To some extent, I believe it's not about the years of experience. It's how many experiments

you have done, how many mistakes you have made and all of that combined is what makes you a great leader.

Naveen:

To be a great leader is not someone who never gets anything wrong, in fact, those are the people who will never succeed in life. Because when someone gets everything right, they're just not pushing the envelope far enough. Think about it. A basketball player, if you take four shots, all four of them go in, you're still going to have eight or 10 points on the board. It is the player when he gets the 50 points on the board is the person who takes 50 shots and misses half of them and that how you get to a 50 point person. If you ever in life, you want to 50 point person, you get comfortable knowing half the times you're going to shoot the ball up in the air, and it's just not going to go in.

Dave:

When I turn your book over looking at Moonshots, you've got Tony Robbins, Sir Richard Branson who wrote your forward, Dr. Oz, Deepak Chopra, Peter Diamandis, Ray Kurzweil, Vinod Khosla, and Tim Draper endorsing your book. These are some pretty heavy people, I greatly respect, some of whom I know. These are people you know, and you have worked with. I want to know early on, one of the people who was most influential in teaching you the value of failure.

Naveen:

To a large extent I was the best mentor for me has been life. Life never stops teaching, it is we who stop learning. In a sense that every time, every interaction you have is a learning lesson. To me the lessons of life that I have learned are really by living life. Obviously as you were reading the people on the back cover, the most important person missing there is actually Dave Asprey.

Dave:

Oh come on.

Naveen:

But it's true, you and I have known each other for a long time. I have a tremendous respect for what you do. It's your pure heart, your desire to give, your desire to make people's life better. You constantly want to improve everyone who gets in touch with you. Your just sincere desire to help people you meet is really the kind of person that I really define as not only a good human being, but a great successful person. To me, my hats off to you.

Dave:

Naveen, thank you. I still want to know though, tell me a story. Tell me sometime someone, when you were in the first 10 years of your career. Someone who has a name like on the back of the book. Someone who has had a level of success you hadn't achieved yet sat you down and said, "You're doing it wrong. You need to know this." Did you ever have a conversation like that?

Naveen:

It's rarely one conversation that changes who you are. There is not one thing in life that generally that fundamentally changes the trajectory. It is the continuum in life, it is one thing you hear and you normally will ignore it. Then you hear something else in a different context from someone else and maybe a third time and a fourth time. It becomes who you are by incremental changes. I don't believe these step changes in life that generally happen, generally they are these incremental changes that suddenly you

look back and five years later you're a completely different path, but that happens at a part of the continuum rather than these episodic step functions.

Dave:

It's kind of a linear evolution. But the way you think is non-linear, you're a Moonshot guy, that's exponential.

Naveen:

But even exponentially the continuity in the exponential part, what I'm trying to say. There is no break in this continuous part when you start doubling, suddenly you get to the knee of the curve when you start to take that leap, but that exponential curve is still connected. It's the continuum, except that it starts to get faster and faster as you start to get to the right place. The reason that happens is, as you start to change your thinking, you start to attract other people that think the same way. Not only you start to get into this virtuous cycle of every person trying to make you even better. When you are simply playing in the minor league and you are the best player, and you're not rising yourself to be in the major league when you absolutely suck, that's what makes you better is to constantly find and surround yourself with people substantially better in terms of thought process of how you think.

Naveen:

Suddenly you catch up to them, you may not be as good as them, but you start to get better with every interaction and you start to leap onto the next level. To me, it is always find yourself with the smartest people, the people you respect. People say, "How will I ever get a chance?" I tell you what, it is every one of us gets to do that. Is the matter of do we take that opportunity and do when the opportunity arises, or we end up becoming the shy person who would not do that. I go to the events and I know someone I want to meet. I make it an effort to do so. I'm going to give you an example. I thought everyone thought couldn't happen. Here I was at Vatican. I am in 15th row. I saw Pope stepping down from the stage wanting to meet people. I was in the middle. I got out while people are still sitting. I said, "I need to get out." Went to aisle, I'm in the front row shaking hands with the Pope.

Dave:

Wow.

Naveen:

When everyone thought I was sitting in the 15th row next thing you know I'm on the Jumbotron, and I had a conversation with the Pope. And people all they could do was, "Oh my God, I can't believe it." After the fact, everyone thought they wished they did that. It took someone to say, "I don't really care what someone thinks, I'm going to do because that's what I want to do. My second part of the things in life has been about has been falling in love with yourself. I really believe that we as young people as we grow or especially I would say the girls and women, they just have this hard time when they say, "I have to fall in love with yourself." I don't mean being self-conceited, I mean don't look for someone else's approval. Get so comfortable who you are. Find happiness inside you. Find that you're comfortable in your own skin that you stop worrying about what someone else thinks. Once you get to that point, you start to achieve amazing things.

Dave:

All right. It's definitely something that I've seen in you. You don't worry about what other people think. In fact, I would say even more than not worrying, you just don't care. That takes a lot of work for most people to get there, because we grow up. People

bully you in middle school or whatever. Your parents oftentimes say things that are not complimentary about you. It's a very common thing because parents get tired and you probably are misbehaving when you're five. I we hear all these voices in our heads. How long did it take you in your evolution as a human being to get rid of that?

Naveen:

I'll tell you, it is very interesting as a parent, because I think I could talk about myself or I could tell you that living as a parent, because now you see yourself as a child reliving that and it's amazing. As you know we have three amazing children who have achieved amazing heights, even better than we had done. Right from the beginning, we would tell them, "Our love for you is unconditional, but our approval is not. You ever have to ever wonder do we love you. If you ever, ever need something, you know we will give our lives for you." But we will tell we are proud of you. That is all you have to earn is when I wake up and say, "I am proud of you." I can tell you what will make me proud of you.

Naveen:

Our job as parent is very simple, is let the children know what makes us proud of them and they will live their lives trying to find out to do things. I told our children, "What will make me really proud of you is if you are able to improve the lives of more people than I am able to do, that will make me very proud of you." Imagine all three of our children are on path to doing exactly that. It wasn't, "I'll be proud of you if you became the best, best ball player." It was simply about what can they do to be a better citizen of the society. What can they do to improve the lives of more people in their own way? They're all going to do it in very different ways. Knowing what the goal is allowed them to pursue their lives to their full passion.

Dave:

When you talk about not worrying about what other people think about you, does that go for your own parents?

Naveen:

Well to a large extent, we have a loving, loving parents. I love my parents. There are times when they would give me some opinion, I would say, "Dad, I love you but, that is not what I'm set out to do." It's okay, that's part of me to say, "In large extent I am ... Not at this point, I know you love me. And what advice you're giving me, you're giving me because you love me." To me that is really what matters. Even if the advice they give me that I disagree with I always know they're doing it from the goodness of their heart. I never ever am angry at them other than simply giving them the love back.

Dave:

So you don't have that wiring to seek their approval, but you still seek their advice and then you take it or you don't take it.

Naveen:

That is true. Even to seek an approval only in a general sense, they wanted us to be able to go out and be independent and get out of the cycle of poverty and I did that.

Dave:

That's because you came from an impoverished family in India.

Naveen:

Yeah.

Dave:

Tell me a little bit about that. People haven't heard your story. Give me the story.

Naveen:

If they have not heard about it they have to go back to the podcast because you and I recorded all that.

Dave:

Yeah, we did that one on stage at the Bulletproof Conference. It was profound. In fact, I've got the podcast number for you here. It was episode number 452 recorded in December of 2017 called, "Listen to Your Gut and Decide Your Own Destiny, where you talk about really being impoverished in India and how you came to the US and how you were inspired to stay and all of that. That was something that your parents cared about was breaking the cycle of poverty and you've done that in an excessive way that has allowed you to give back in a big way, including giving away your book. Which is an awesome gift, thank you.

Naveen:

Well Dave that is really your kindness, you really want people to be better. To me there was nothing I could do you ask me and says, "I want every person who's listening to this episode to be able to be at their best." You asked me, "Would I do that?" And of course I would do that.

Dave:

Well thank you Naveen. The idea of every person listening to this episode in their own mind creating a moonshot, to me it makes me happy because not all Moonshots land, sometimes you miss or you might hit the moon a little too hard, but if you don't do it, then nothing changes. We're at a point in the world where some substantial things have to change to be a place where we all want to live. We need people of all ages saying, "I'm going to quit playing minor league, I'm going to step up a bit." Your book dials that in, in a really meaningful way. There's a fear that holds people back though. The fear is that they're going to scare people. I'm saying this because the first time I had a chance to hang out at the XPRIZE was at the 10th anniversary of the Ansari XPRIZE. I showed up. It was the most expensive non-profit event I'd been to. It was a meaningful-

Naveen: Was it fun or what?

It was crazy. It was about five years ago.

You were with Richard Branson and worked at Galactic and with Elon at the SpaceX. It

was one of the best things we did together.

I held a remote controlled vehicle that will be exploring the moon. I actually drove it with VR goggles over my feet. It was a chance to play with about 50 people where they were 10:00 at night at a bar using LEGOS to build lunar moon bases and having a contest. It was interesting because it was one of the first times I'd been in a room where no one intimidated by Moonshot thinking. They're all, "I could have a bigger Moonshot than you." It definitely changed my perspective on things. That's when we really got the chance to connect. When I talk with so many people, entrepreneurs I'm advising, people I know, they're afraid that if they think really big it's going to intimidate the people around them. I had some of that I was, "Oh I can relax in here. I'm just going to as big as I want. Yeah I really do want to live until at least 180 and all that without any resistance from the crowd." But in life, so many people, especially as they're getting going, they

Dave:

Naveen:

Dave:

face that resistance. Share your Moonshot and people will just immediately try to shoot it down. What's your advice for people to get over that?

Naveen: As I've said in the past, dream so big that people think you're crazy.

Dave: You encourage people to be [crosstalk 00:34:17].

Naveen: Absolutely. And know if people laugh at your ambitions, you're hanging out with the wrong people. Get rid of everyone. When you tell them your Moonshot and they laugh at you. They don't believe you can do that, just get rid of people and surround yourself with other people. Here's the thinking that goes. Why is it there's so many successful ideas that come out of Silicon Valley. People say, "How do I create a Silicon Valley in Budapest or somewhere else?" People somehow think, all I have to do is set a bunch of

incubators, set a bunch of VCs and somehow the magic happens. What they don't realize is magic happens in the thought process and the mindset. To give you an

example.

Naveen: When you go into Silicon Valley and say, "Dave, we are going to go to the moon." No

one looks at you and says, "Sure you? Right." They say, "Oh wow, what kind of rocket are you thinking of using? Where are you going to be landing? Are you thinking of bringing back that Helium 3 or are you thinking of rare Earth elements? How much water do you think there is on the moon? What kind of fuel do you think you're going to be taking using there? Do you want to use a hydrogen peroxide or something?" My point is no one ever says, "That's not going to happen." They start asking you more questions. They say, "You know if you use hydrogen peroxide, you know there is water there, that means H2O is there hydrogen peroxide H2O2, boom. You can have fuel right

on the moon, wouldn't that be awesome?"

Dave: There's a law in Game Changers my new book about being aware of and changing your

community. It's important because in a community like XPRIZE, where everyone is a Moonshot thinker, you definitely stand out, you're always on stage. The idea there is like I said, you get support. Your advice for people then who are worried about this

crazy Moonshot is they need to hang out with cooler people.

Naveen: No. Hanging out with the people is not about cool [crosstalk 00:36:13]. A lot of people

who actually-

Dave: Are curious.

Naveen: Who have just as big and intellectually curious. I want to come back to this chapter

about how you started with this. Really about not taking anyone to water or making them drink, but making them thirsty. What makes people thirsty is that intellectual quest. If you can create that intellectual curiosity in the children, in the people, in the employees, suddenly not only are they going to find that water, they are also going to drink that water. All their life they're going to be searching for that water and drinking that water. To me it's not just about being an entrepreneur, being a mentor, being a leader. This is the kind of things you start to move forward with. Everyone you get in

touch with you ask them, "What if that was possible? If that was really possible, what would it take to make it possible?" That changes everything.

Dave:

Naveen, as you plot your Moonshots, I know that you don't have a Moonshot, you have multiple ones. Walk me through a few of the ones that you're already working on. Things like mining the moon and things like that. Just so people listening understand the scope of what a big Moonshot thinker actually thinks like. Then I'm going to ask you about what's next after Viome?

Naveen:

If you think about it the Moonshots are the one if successful could change the lives of billions of people on this planet. You start thinking about what are the things God forbid from actually successful in doing what I'm trying to do. Would it actually improve the lives of billions of people in the world? You start to say, "What would that be?" You said, "Well could we potentially save humanity from potential extinction?" We all seven billion of us live on a single spacecraft. What if our spacecraft gets damaged? Whether we get hit by a large astroid or we humans are very capable people of destroying it ourselves. "Well I'm worried about this planet." Now let me tell you something. Don't worry about this planet. This planet will be just fine after human species die, so worry about the human species surviving. Don't worry about this planet. Remember there used to be dinosaurs. Dinosaurs were substantially massive mammals than humans are. A large asteroid wiped out all the dinosaurs from this planet. The planet survived just fine. Over time, millions of years later, now we have a human species.

Naveen:

If this human species gets destroyed, this planet will go on. Someday it's going to have another species and it could be super human for all we know. It could be the super humans lived before us, before the asteroid. All I'm trying to say is that from my perspective saving the humanity from potential extinction is what I did with Moon Express, is can we actually move the humanity from just Earth to be able to live on the moon, to be able to live on the Mars, to be able to live on Titan or Europa. I believe that even though Mars may be a better destination or Europa may be a better destination because it's not in Earth moon ecosystem. But if you're going to solve that problem of living on the Mars, which is high radiation, high temperature difference, low gravity. It's better to solve that problem while you're only three days away, than to be six months away. It's better to be a lunartic than to be a Martian.

Dave:

Lunartic, I like that. It makes a lot of sense. Small steps to becoming an interstellar species.

Naveen:

The second part was really about solving the problem of healthcare, because here we think about as we're living longer and longer and suffering from chronic diseases. It's so clear that chronic disease is not something you catch. You wake up one day and said, "Hey, we were just hanging out at the bar last night, I think I might have caught obesity." Or "I might have caught diabetes or I might have caught auto-immune disease ... It is not something you catch, it is something you develop over a long period of time. As we all know Parkinson's starts in the gut 15 years before you see the first symptom. Same type thing, heart diseases is not something you catch one day. It happens over a long period of time. I believe it's not your destiny, it's not your genes. Your genes don't make you who you are. The thing I find really puzzling is we spent all the time talking about the

human genome sequencing learning about our DNA. You are born with the same DNA that you die with, somewhere in between you get sick.

Naveen:

Your DNA has not changed. This can't possibly be DNA. Maybe it is really the gene expression that changes. Maybe it is other genes that are expressed in our body that could be microbial genes that changes, but it can't really be your DNA. That to me was the key understanding that expression of all the genes is really what's key for living healthy, so I started a company to be able to analyze the mitochondrial gene expression. All of the blood cell gene expressions all of the 40 trillion microbes and their gene expression and then using the Al to find out what is it they're actually producing.

Naveen:

Based on that you can actually do something about it, take an action. Is spinach really good for me? Is this thing really bad for me? We tell you what foods are good for you individually. Not some healthy food, because you and I both know there is no such thing as universal healthy food. But also tell you why. We're telling you not to eat appl and here's why for you apple is bad today. It may change three months from now when your microbial ecosystem changes. Now you're asking me, if I can now solve the problem of chronic diseases, aging is a chronic disease. We could solve the problem of aging. I don't really mean to say, "Hey another crazy guy who wants to live forever." But all I'm saying is it's not about living forever, it's about living healthy for as long as we live.

Naveen:

The diseases we get from aging should not happen. Whether it is you live to be 200 or you live to be 500, the point is if you are maintaining your body and you're maintaining and repairing it constantly. Then you literally are a new person born every day. It is a person dying every day and reborn every day, except your memories and experience are the same, but your body is constantly a new body. It happens whether we like it or not. We all know Dave and you are the expert at it. Every part, every cell in our body recycles, it dies and it regenerates. We are really not the same body. What if that repair mechanism only got better and it had unlimited repair potential. We could get rid of aging.

Dave:

I am all in on that one. That's one of the things I've-

Naveen:

You are the leader.

Dave:

It's one of the things I've done for 20 years in the non-profit setting. Frankly if you read Headstrong, it's an anti-aging manual, but a lot of people don't worry about aging until they're older, but we all want brains that work better now. I'm seeing a shift in what some of the thought leaders around the world are talking about where 20 years ago if you said, "I don't want to age." People would laugh at you. Now you say they say, "I don't want to age either. Is there something we can do about that?"

Naveen:

What are you finding that we can do something about it. Obviously there's a lot of research going on. There is no one in a Fountain of Youth you can pick from. But we now know the cells themselves. If you can remove the cells that start dividing, the only fact producing docs says it really helps. If we can also do the stem cell therapy and you have been a big fan of that, but the point is it's only a matter of time. We will be able to

understand sites of human biology. We will not only be able to prevent, but also reverse the damage that we have done. Many people are getting really good success. I really believe in our lifetime we will get there. There's a child already born that will have a choice when they want to die.

Dave:

Are you worried about what will happen if we have people walking around that are 150 years old? We already have a big population?

Naveen:

That means really the mindset of a scarcity. When people start to think, "Hey, this planet has seven billion people. What if you get to 10 billion or 12 billion or 14 billion, how would we survive? Now imagine if that's a question people asked when we were one billion that what if we ever got to two billion what would happen and two billion that thought, "What if we got to three billion." None of us would be born because they would have done something about that, right?

Dave:

Right.

Naveen:

The fact really is, there's no reason there's really any scarcity of anything. The mindset of a scarcity or sustainability as we call that today, which is a synonym now for conservation. You can now sustainability in my opinion that way we define is unsustainable. You can never conserve your way to become rich. If you want something, create more of what you need, not use less of what you have. The idea is why do we have to just live on the land called planet Earth? What if we could live on the moon, and Mars, and Titan, and Europa. Where is the limitation? What if there was abundance of food. We just were talking yesterday and the day before yesterday about how to feed the next billion. There were many ideas, not just to feed the next billion, they could feed the next 20 billion because what if as we're talking about, what if we discarded, predicted the past and that would itself is able to get 50% or 100% more food. That's already wasted that could feed the multiple billions.

Dave:

I watched you pitch that on stage to a room full of potential donors. Instead of saying we're going to robotically grow food in orbit or something. You said, "Here's the deal. There's at least a 50% waste because of insects and because of mold and because of other crop damage. If you could predict that you could use way less pesticide than we do now. Which would be good for the global biome, which feeds our microbiome. It would solve the problem very elegantly in a relatively short amount of time." You're looking at this from a Moonshot perspective and saying, "We have 50% more food than we think we do, so let's rescue that and then let's look at some other technologies."

Naveen:

Exactly. You can do vertical farming, you can do aquaponics, you can do aeroponics, you can do all kinds of things, but my point is ... Energy. We live on a planet where every 90 minutes more solar energy forms than we use in the whole year. Simply a matter of conversion, simply a matter of time we'll be able to convert that. I was just this morning at a breakfast table talking to a gentleman who says being able to figure out a very tiny nuclear reactor that's able to produce ultraviolet light that you can use the material that will convert them into energy, solar energy conversion at 57, 58%, that will solve all the problems. They were discussing this morning at a breakfast table what material you need to be able to use ultraviolet light instead of white light, that will produce all the

energy that we need. We were discussing this morning about another thing, "What if we're able to make it rain where it didn't rain and what if you want a children's birthday party on Sunday, we may as well get the rain to come on Saturday so we can reduce the moisture so it will be a sunny day on Sunday when we need it."

Dave:

Wow.

Naveen:

My point is here we are surrounding ourselves Dave, with people when we say, "Here's the problem." Someone says, "Oh let me tell you how we can possibly solve that." That is what I'm talking about. Getting rid of that mindset of what if there were two billion people or what if there's another seven billion people? You start to see if two minds are better than one, imagine 10 billion minds connected together, what problem can't they solve?

Dave:

Do you ever worry about the dark side figure out this? If we can send things up to the moon to mine for minerals, there's no reason you can't drop rocks on people you don't like. If you can cause rain in one place, you can cause a drought for people you don't like. Are you worried about this?

Naveen:

Remember, we all, technology in itself is neither good nor bad, it is the people who are good or bad. You don't want to stop the technology, you want to stop the bad behavior. You don't say, "Well cars kill people, so let's stop cars." You simply say, "Let's stop the drivers that kill people."

Dave:

Is there a Moonshot in your mind to build better people? I don't mean engineering us to eat radiation as a fuel source. I mean people who are generally happy and don't feel a strong desire to kill other people?

Naveen:

Well in going back to it, just a couple of hours ago we had that discussion.

Dave:

Exactly.

Naveen:

We were talking about, how do we create a society where people have compassion and empathy. That really comes down to really being happy inside. Once you start to look at who you are and you're comfortable with who you are and you find happiness inside you rather than looking for happiness from outside someone, it changes the way you react to someone. You can't control the world, but you can certainly control how you react to it. That's how you change compassion and empathy and create better people. You don't create a better society. You make yourself better and that makes everyone else better.

Dave:

I believe that compassion and empathy are trainable states. They're quantifiable and measurable. I know this because I had very little compassion or empathy as a young man. I was one of those angry entrepreneurs running away from fear instead of towards something that matters. I am fortunate I had a wake-up call and did a lot of unusual things to turn on those skills. I feel like it's time for us to start using technology to teach people that. Dabbling in neuroscience that makes that happen without my full effort

applied to that. I feel like there are enough people like you, like the people who are at XPRIZE who are thinking about Moonshots-

Naveen: I was on the phone with Dr. Deepak Chopra this morning.

Dave: There you go. That was great.

Naveen: Unbelievable, you talk about that as global consciousness, we are all one. We are simply

manifestation of the same consciousness. Yet we hate someone as if we are hating ourselves, really. That's what he said. He said, "Look, hatred is really just simply a sign of

you not loving yourself, rather than you hating someone else.

Dave: Hatred is very expensive biologically too, if your energy goes into that, it doesn't go into

Moonshot. I intentionally cultivate, even people that do things I don't like, I don't hate

the person that does them.

Naveen: Forgiveness is the same thing. You don't forgive someone, you forgive so that it makes

you being at peace.

Dave: That is very well said. Naveen, we're coming up on the end of the show. I want to drop

the URL for your amazing gift here. If you go to Bulletproof.com/Moonshots, you can get the ebook or the audio book as a gift, no strings attached. No money changing hands, nothing like that. Just as a straight up gift, because I believe it's worth your time to read the book. If you think about your time listening to this, there's a return on investment for every minute of your life that you spend. When you choose to read a well-written book, written with intent. You're getting thousands of hours of writing and tens of thousands of hours of experience that went into that book and it takes you about four hours to read it. The ROI on reading a book for you if it's a worthy book is exceptionally

high. It's actually higher than listening to this interview, which I also think has a pretty good ROI or I wouldn't be doing it. On that note, definitely take advantage of that gift.

Naveen: And by the way, don't forget to buy Game Changers.

Dave: Fair point, I almost forgot. If you go to any of your favorite online sellers now checkout,

just search for Dave Asprey, Game Changers and you will get the distilled knowledge of 450 people who have been on the show statistically analyzed, so that you don't have to do this one tip or trick or tool that some billionaire or athlete used because you're probably not like that person. But if we can find that most people who have done something very noteworthy follow a certain pattern, maybe you can look at that pattern

and bring that pattern into your life.

Dave: I spent a lot of energy distilling that into these 46 laws. Here's the back story, the reason

I did that is that I wanted to know that stuff for myself. All of the books that I have written have been to make my brain draw the pictures, the 3D maps in a structured way so that I could think about it properly and that's part of my learning process. By doing that I became a better human being. I'm hoping that by reading that book, that'll help

you as well. Pick up your copy of Moonshots at Bulletproof.com/Moonshots and while you're at it, pick up Game Changers. Thank you.

Naveen: Dave it has been an absolute pleasure chatting with you. I look forward to spending the

next day at XPRIZE together.

Dave: Naveen my friend, thank you for coming on the show. Again, thanks for letting me get

inside your head and tell me at what makes you tick and why you're so good at

Moonshots?