PODCAST:

THE SOLUTION TO THE PANDEMIC YOU WON'T FIND IN THE MAINSTREAM WITH ZACH BUSH, MD

TRANSCRIPT

Hi, I'm Kate Northrup. And I'm Mike Watts. And we're partners in life, love, and business. Welcome to The Kate & Mike Show where we share insights and interviews on entrepreneurship, relationships, parenting, self-actualization, and making a life, not just a living.

Hi, welcome to The Kate & Mike Show. This is Kate. This is Mike. Welcome come back to you repeat listeners, and welcome if you're here for the first time.

So we have an episode I am so excited to share with you. I think it's also quite possibly the most important conversation we've had to date on the podcast, especially because the information shared is so timely to the pandemic and to the global response, which is one of many possible responses. And perhaps based on the data revealed in this episode, you know there are all sorts of different choices. And I think it's just important to know that.

So this guest, Dr. Zach Bush, I heard on a podcast that he was on the Rich Roll show back in March, and the episode was called A Pandemic of Hope. And it was one of the most calming conversations. Like I just felt so calm, listening to the incredibly grounded, scientific evidence about viruses and the microbiome and glyphosate and toxins in our environment. And since then, I have gone very far down the rabbit hole of basically all the interviews I could possibly find with today's guest. So I'm really excited to be introducing you to him today.

When Mike and I were mapping out the final episodes of The Kate & Mike Show, we both agreed that if there were a single guest that we could have on in our final episodes, it would be Dr. Zach. So we're super excited that he's here. Yes, it was. I'm so grateful he took two hours out to, I was talking to my mom this morning about it because she's been listening to Zach Bush a lot because I've been telling her to. And she was like, is this a 2-hour interview? Yeah.

I was like, is this two-hour interview with Zach? And I was like, yeah, it was two hours. Exactly. She goes really? And I was like, yeah, she was really surprised because he answers questions very uniquely. I'll just leave it at that because you'll see if you have not heard him speak before. It's an unusual cadence and a beautiful experience.

It is. And Kate and I have listened to probably like 20 to 30 hours of podcasts since we first listened to his episode back in March. And to second what Kate said earlier, it was the most hopeful person that I've heard this entire time since March. And that's why can you continually consume so much content from, but not hopeful from like a spiritual bypassing place. Not even hopeful from a like positive psychology optimism place, like actually hopeful and helpful from a, an evidence-based place. Yes, though he's obviously a really spiritual guy, right? It's like facts, right? It's like just the facts, man. And yeah, in this day and age it's like, facts: Is this true? Is this not true?

And there's so much that we see on a daily basis that it's like, we're questioning whether it's true or not true. And I would say, you and I were talking about this earlier. It's like when he was first speaking, we could feel like in our body that like, Oh, this makes complete sense. And he's going to talk about the toxicity that happens inside of the environment and in our world in this episode. And so what I have been able to kind of put together in my own theories, I'll just put it like that. I-- like this is not proven what I've put together, but like how much that impacts the rest of our life. And you'll kind of hear a little bit more about that as we go into this episode today.

And just so you know, he is going to share some things that you may not have heard before. And he's going to share a different perspective on things than you might be hearing in the mainstream media. Please stay open. If it challenges a belief that you've held or something that you're hearing somewhere else, stay open and just say, "Huh, what if this were true?"

And then feel free to just, you know, come on down the rabbit hole with us and do your own research and learn more. But I just want you to know it also may push your buttons, some of it. And I think that's a good thing. Like I really think we need to be aware of cognitive dissonance and the tendency to stop listening to things that challenge our beliefs. And I think we also need to be aware that there is no ultimate Truth. And so holding multiple things true at the same time and being open to different perspectives is critical. And that's what I loved about our former guest, Valerie Carr, and her book, you know, See No Stranger. So please just stay in that place of wonder. And if you stay in that place of wonder, get ready to have your mind blown.

I would say since we have been listening to Zach, that is what has happened to my life. We talk about him since all the time, introduce him to people all the time, but I've been holding back because what I wanted to do was send an episode out around to everyone we knew, including you, with us and him, so that we could really ask him the questions that, you know, were sort of burning for us. And so great.

And it's created that to what you said about the state of wonder. It has created that space that I have found actually in that, in this transition that we've been going through as a global entity with COVID and all of everything that's happening right now. It's like, how? What's the purpose of all of this? What are we actually doing here? How do we move forward as a community together? Because that is what is happening, right? And this is not Zach. This is just something I've been thinking a lot about with all of the stuff going on right now. And we're having here in the United States, we're in a very intense situation until November, but it's like, what is happening now is somewhat forcing us to come together as communities, societies, with people of completely different thoughts. I think that's the invitation. Yeah, exactly. Let's read his bio and let the listeners

listen in. Okay. So get ready.

Zach Bush, MD, is a physician specializing in internal medicine, endocrinology, and hospice care. He's an internationally recognized educator and thought leader on the microbiome as it relates to health disease and food systems. Dr. Zach founded Seraphic Group and the nonprofit Farmer's Footprint--which we contribute to monthly, we recommend you do too-- to develop root cause solutions for human and ecological health. His passion for education reaches across many disciplines, including topics such as the role of soil and water ecosystems in human genomics immunity and gut/brain health. His education has highlighted the need for a radical departure from chemical farming and pharmacy, and his ongoing efforts are providing a path for consumers, farmers, and mega-industries to work together for a healthy future for people and the planet. So with that, we give you Dr. Zach Bush.

Welcome to the show, Zach, thank you so much for being here.

What a pleasure to be here with the two of you.

Well, so I just have to say we're both a little bit nervous. I will just say like, that doesn't happen very often. We do this a lot. I don't think I have ever listened to so many podcast interviews with the same person as I have yours.

Like I never have before gone to the podcast app and typed in somebody's name and just like listened to all the things. So I just want to start by saying thank you for being here. It's such a, you know, it's an honor and I just, I love the way you think and just, you've provided me a lot of peace and calm during this year. So thank you.

I'm glad to hear that.

I second that entire thing. Yeah. It's been nonstop Zach Bush all the time. So I wanna start by asking you something that I've been curious about, which is, you know, you are doing a lot of things. And I wrote this book called Do Less.

We talked, I saw that your book today, it's like, dang, I really need to sit down with this woman. She needs to give me the cohort pointers in life. My wife would be very happy if I would just listen to Kate.

I was just curious, you know, between biome and Farmers Footprint and you know, your clinic and all of the things that you're doing. And, you know, I see you doing interviews a lot, obviously, you know, the moment is right for that. Like what sort of support structures do you have in place to help you with all your companies? And then also, how do you set boundaries for yourself around

your work? And maybe you don't, I don't so that you don't overwork because when the mission is so big and so urgent, I'm just curious how you turn it off.

That's great. Yeah. I mean, how you do a lot of stuff is you have a lot of amazing people around you. And so I'm surrounded by some of the most heart-centered, driven, and purposeful people on the planet. And it's really a joy.

So my staff across all my companies, you know, encompasses about 70 full-time staff and another, you know, 30 or 40 part-time people around the country and then another 30 or 40 sales reps on the ground and stuff. So when you get up to, you know, over a hundred people working on purpose towards different goals, it's pretty extraordinary what happens in a day or a week.

And it's, you know, gotten to be my point of real honor, to be at the tip of the spear of a lot of capable of people doing really beautiful work for the planet and people. And so it's allowed me to think very broadly, but you know, to in full disclosure, none of this was my plan. Like this was all, you know, I'm not sure any of us really have free will in the end. That's an interesting discussion maybe at some point, but I was very much on a very positive track in academia 10 years ago, I was, you know, cruising, I'd been chief resident. I was already board-certified twice and really enjoying my cancer research. I was developing novel chemotherapy from vitamin A and you know, literally my mentors were like grooming me for, you know, chair of medicine someday, you know, and I just felt like I was cruising. Like I was the man that, of course, they were paying me about half as much as a McDonald's manager, but when you're in academia and they let you walk through marbled halls and all of that, you feel special even if they don't pay you accordingly.

And so, you feel awesome and you feel so cool in that white coat and your stethoscope and cruise around the halls. And, and there's something really, you know, incredible about being a doctor. And that's you are constantly at this point, especially when you're in hospital medicine, you're constantly at this life-and-death kind of barometer.

So everything has an intensity to it. Everything has a distinct sense of import that is hard to get outside of that world. And so I was, unbeknownst to me, very much steeped in a drug environment. I was drugged with my own story, with my own gravitas, my own knowledge base and you know, all of this. And so I was in a literal physical stupor.

I was majorly depressed at the time. I didn't know that for quite some time, I was very, with depression, obviously treated a ton of it in clinics, but more than that, like my inlaws and everything else struggles through that, I had seen a lot of it. And it was just like an interesting journey of seeing on one side of the world, wanting you to think you're perfect, you're on the track. And on

the other side, your soul is collapsing that you can't find your purpose. You don't know why you're here. You don't know why you're jumping through their hoops. And so if I had seen your book at that time, I would have been like, that's the stupidest thing I've ever seen because clearly you have to work 120 hours a week to do important things.

And I was working myself into the dust, like it was intense. And part of my work was to raise kids and I have two great kids that I love to death. And so I would get up at the crack of dawn or before dawn run to the hospital, put in a 12-, 14-hour shift, run home. So I could eat dinner with the kids, read to them and play with them and throw them around on the couch for an hour until they were exhausted. And then I'd stick them in bed. And my daughter would be talking a mile a minute and just, she's a little jabber-box and just talking and talking and like, am "Is this girl never going to fall asleep?" And then she would just like, mid-sentence suddenly like fall asleep and fall over in bed and cuddle up and go to sleep with me. And there's this pattern of life where you figure out survival, and 120 hours a week of anything seems reasonable. 'Cause there's actually like 168 hours in a week or something. So there's still plenty of time in there for sleep.

And so you're cruising along and you're like, you know, really doing it right. You feel like, and then suddenly the wheels come off and your whole life deconstructs. And so that's what happened to me actually almost exactly 10 years ago. And by 2009, it was certainly falling apart. But by February of 2010, it was like hitting a brick wall and everything fell apart like a, it was, you know, things that were completely seemingly out of my control were falling apart. Like the university lost funding from the NIH. We'd been funded since 1969 with our clinical research center, lost funding there. And so it was just like all of these massive cataclysmic events that just started slamming doors on what I thought was a super successful career in the making. And suddenly at the end of 17-year journey of trying to be, you know, this academic superstar with a whole house-mortgage-worth of school debt. By this time I was suddenly faced with the reality of, I think I was going down the wrong path and that's a very good opportunity for self-destructive thought processes there. And that came on me when I was in a depressed state.

And so I gave you all that background to a simple question of like, how are you doing right now? And what are you doing to balance all these things? And the answer is over the last 10 years, I've figured out essentially exactly what your book I'm sure says, which is a beautiful truth, that if you find yourself being the necessary producer in your life, you're probably not being a receiver and you're not ready to receive from the world and universe around you.

And I can tell you that there's no amount of effort that you can put in intellectually or from a learning standpoint that can allow you to be in a flow state. You will always be chasing the wind. If

you feel like you are the producer that needs to go and create that future for yourself. And so I find great danger in all of these, you know, intention boards and people putting together their dream board and all of this stuff, which is now you have to feel like you have to go out and create that. And if you don't hit those marks, you're somehow failing. Whereas if you woke up with the attitude of a wildflower in a meadow at 12,000 feet in that magical zone, right before you hit kind of the end of the tundra there, and you're just like, you know, the first living life form as you come from air down to crystalline snow-covered mountains. And then suddenly there's that first meadow and there's these little tiny wildflowers that are just exploding with life and beauty. And they have absolutely no responsibility other than just being there and being beautiful. And nobody is going to see that flower.

No human is going to go up and touch that space. No bird is going to fly high enough to go see that flower. And yet, if you're blessed enough to do a hike like that and to stumble upon a meadow like that, you realize that nature is doing something glorious without any sense of expectation that anybody would see it, without any expectation that anybody would appreciate the accomplishments of that little flower in the field without flowers. So on purpose and so fulfilled by being in a biophotonic relationship between sunshine and a dynamic microbiome soil that's rich with every nutrient that this earth would provide for life to spring forth. And that flower sits in this dynamic magic miracle, spinning space of light, turning into particle form and particle being charged by the biophotonics and then creating something beautiful. That it is how we will be extremely productive without any need for finding the boundaries for finding, you know, the, to-do list that best fits us. And all of that is if we really reach a bee state, if we reach, you know, maybe that's, that's not just figured out. Maybe if you can be a bumblebee and reach that bumblebee state. If you are a bee, then there is no concern that you're going to screw up the balance piece and, you know, am I being a good dad? Right now that's always a concern. My kids are all grown up and they, I'm sure, don't think of me at all, but at least a couple of times a day I'm like, Oh my gosh, I haven't really reached out to my kids. And when I do, I'm not really sure how to support them. Right. And you know, and they're of course like being the flower over there and I'm like feeling some responsibility to that flower and they're beautiful and there's nothing I could do to perfect their beauty any more than they are.

And yet the world would have us build these to-do lists, build these self-expectations that would allow us to sense failure even when we are being insanely successful on all of the important levels. So, sorry about the rambling meandering road there, I suppose, but I hope I answered it.

That was great. That was perfect. We did. So I almost never planned questions, but we actually planned them out and wrote them down because given our experience of listening to you, we

were like, we're going to get in about three questions. Haven't asked one yet. And what are we, half an hour? The next one that I for sure want to make sure that we address, which of course I have heard you talk about many times, both of us have, all three of us have. For those listening, our neighbor Sean is here also. He's listening. He's our spectator. The first time we've actually, and we've never had, we've never had a viewer of our podcast before.

What is the deal with viruses and what is the deal with COVID? Like, we just, I can't not ask that question.

Yeah. So that was your last question because I think you only gave me two hours to talk. So, so the, what the hell is a virus? That is a good question these days. So, you know, my career has been really taking off on a vertical trajectory because nobody gave a crap about what a virus was six months ago. Can I, can I stop you one second? Yeah, because also, 'cause I've heard this concept around COVID is a disease as well, right? Like I've heard people interchange this disease and virus, right? It's like we have to stop this disease. Like "we're quarantining 'cause it stops the disease" is a thing I've heard many times in the media or maybe not in media, but just things that I've listened to. So just to kind of maybe explain the differences to those as well. Yeah.

That's a good framework. I'm glad you pointed that out because that word would not have occurred to me. So yeah. So I mean actually that's the perfect place to start is that we currently have a narrative going on in the public that we have a global pandemic of a novel virus that's going through and causing death, you know? And so it's causing illness and death.

And there was a concern early on that we would overwhelm hospital systems. And so we had to go through all of these drastic measures. Initially it was so that we weren't overwhelming hospital systems, you may recall, but the narrative changes every two to three weeks because there's only so long you can listen to the same thing before your brain goes numb.

And so they have to shift the narrative a little bit, just, you know, and take us on this path. And that's normal for anything. It doesn't matter if they're talking about the pandemic or they're talking about the upcoming elections, the narrative you'll watch always creep, and it's because they need to keep us in motion. And when I say "they" and "us," I'm talking about anybody with an agenda needs to keep the audience in motion. And you guys asked, you know, before we started here, is there anything that you would just die if you had to answer again? Like, is there any like thing you're so sick of answering? And of course, if there had been any of them, it would be about COVID, but the dialogue keeps changing. So the narrative around this and the fact that you bring up the word disease, not we're being told, there's this disease spreading around the world and you know, the narrative and the verbiage is important for us to keep up with because the lexicon

is sneaky. The lexicon will slip us into ancient human behavior patterns that are very low-vibration, very brainstem, fight-or-flight behaviors. And it's driven by language. And it's so subtle because language is so imbued with emotion. And we often don't realize that or, you know, as soon as you stop to think about it, yeah. That that word definitely is associated with fear or love or joy.

But when you're in a common narrative and the common narrative is to [inaudible] you to that kind of rush of experience with that initial emotion, and it becomes a behavior rather than an emotion. And emotion lasts for about seven seconds. It happens in a little tiny part of the brain called the hippocampus. And the hippocampus is a tiny little, little structure. The hippocampal formation. The hippocampus is actually where you create intense emotion and around that, interestingly, is where you create memory. And so you've got short-term memory and its ability to translate into long-term memory wrapped in the amygdala, which is where intense emotion happens. So this is where really the fear and lust and anger and all of these things really sit is in the amygdala. So you have this bizarre neurologic structure in the human, which is very unique, much different than other species, in that we have integrated emotions with memory. And this means that we respond in a very set behavior when we start to get set into our old programming. We can get literally like somebody pushing the button and you have to replay the whole history of the fight-or-flight state of being human. And so what's happened on the planet right now is we've been told a narrative of a pandemic of a virus that's spreading around the world. And this taps into some very old science, this ignores the last 30 years of data on the microbiome and everything else. But it takes us back to this time where we thought that the human immune system's job is to sterilize the entire environment. And it's not by coincidence.

If you can hear the background noise, that is a large military jet flying over spraying something behind it right now. So there's an interesting interplay between our emotional experience and I can get triggered by a plane flying over now, just aware of how much activity is going around me that is in this fight-or-flight mandate that we are at war with something. And we've been at war since we became human, really, right? And so if you look through human history, if there's one narrative that's always existed, we are at war. And interestingly, because of a global economy, it's gotten very complicated to fight wars, to stimulate economies and the growth of empires. And so what we've done, I think recently, brilliantly, is to turn our attention, that warlike mentality and the economic driver, that war does to a new war against the invisible of not terrorism anymore, but the invisible of this disease, this scary paradigm of viruses that can attack us anytime and can leap out.

And the scariest thing is your enemy is probably your neighbor. Your enemy is probably your kid. So don't let your kids come over 'cause they could be the enemy. And so you can see how the

narrative of 20 years of 2000, you know, 9/11 marching at us with this sudden terrorism on our soils to the idea that there's terrorism in the air, in the form of these invisible attackers that can sneak out and attack anybody.

And if you look across the global statistics on this pandemic, the average age of death in Northern Italy, for example, or Austria or any other or Iran and the other country that's highly industrialized and everything else, their average mortality is around 75 years of age. I think Italy was like 80. And so you have very, and yet in the United States, if you watch the news, they're always featuring that one person that was quote-unquote, perfectly healthy at 35 and then got a hug and died, and that's impossible. There's no 35-year-old, perfectly healthy, that can die from a single virus. We can look at HIV, we can look at Ebola. We can look at any of these things, and healthy people survive these things. In fact, they live with these organisms in their bloodstream for decades and oftentimes with absolutely no ramifications. And so what is a virus becomes a very important question for us as humanity because we're so tempted to slip into this warlike mentality and believe that we are at war with this invisible terrorist. And it's the job of this human immune system, which doesn't exist.

And we can go into that. But there, there is no such thing as a human immune system. There's no organ in the body that is the immune system. And the last 30 years of the body has shown us through genomics, something extraordinary. And this is really paradigm-shifting science here. And I would say there's only a few times in history of the last 2000 years, we've seen this big of a paradigm shift happen in science. The first eye that I could point to would be, you know, 2100 years ago or something with Pythagoras, with the Greeks who find out that the planet is not flat. The earth is round and a sphere, and that's mind-blowing at the time. And here we are 2000 years later and we still have a flat-earth society and people that haven't grasped the idea that this is a sphere.

And so this is where you get these huge paradigm-shifting ideas that take a long time to get traction. And you're going to see a lot of dissent against the new paradigm for hundreds of years. In that case where that paradigm started to really come into normalcy was with Galileo 1600 years later when the telescope is developing, it looks out in the universe and says,

Oh my God, literally, Oh my God, we're not at the center of the universe. We are actually orbiting the sun. And that was like mind-blowing for everybody that challenge science, a challenge, religion, a challenge. And everybody what we're not at the center, like, how is that possible? We're the only species like us, right?

We're the tip of the entire universal development thing. We must be. We're not at the center. In fact, we're like in this weird little suburb of a tiny little galaxy around an average to small size sun in

a middle of a billion-star galaxy that floats somewhere out in a miserable suburb of a billion other galaxies. And we're just insignificant. That is still too hard for us to consider.

And so we continue to find important gravitas in our politicians and in our businesses and everything else and act like we're doing something important. Oh my gosh, like a billion-dollar company. Wow. That's amazing. No, that's not amazing. A billion-star galaxy in the middle of it. Brilliant. That's amazing. This is slightly interesting in that, yeah, we import this stuff that just is not even really radically important at all, forgetting the magnitude and the grandiosity of the nature that we're within. And so again, we're answering what is a virus. So this is what, why you guys can only ask it one more question after this. The virome is not a living thing and this is very important. And so I've been lecturing on the microbiome for years and I would always throw the viruses into the ante because people would like to know that they're there.

And so my whole pitch has been for a decade. Now the microbiome is friendly. The microbiome is our foundation. We don't need, there's not three good species of bacteria. So your probiotic is not correct. Like there's not like all of those bad guys you'd have to overwhelm with the good guys. This is not a battlefield. This is not a soccer field.

This is literally an ecosystem of millions of species that are trying to be in relationship. And ultimately what we find out from that journey is the human immune system is actually that of diverse relationships in balance. And so there's only global immunity. There's only ecosystem immunity, which means balance or homeostasis. There is no such thing as human immune system. And what's really underscoring that is to start to do genomic assays on organ systems to find out that I don't think liver a healthy kidney or healthy bladder, healthy breast, all have yeah, microbiome in them actively working to nurse. May those organ systems into health, the way in which bacteria have been communicating to create diversity of life within their species. And within the whole biome of, of the microbes is through horizontal gene transfer. And this is where a single organism can bump next to an adjacent one and pass a piece of genetic information directly into their cytoplasm.

And they can then take that up and make the, we see this happen every day in ICU. If you put somebody on antibiotics, there's going to be one or two of those bacteria that figure out a genetic loophole to the damage from the, and they can pass that horizontally, not through reproduction. They don't have to reproduce to pass on to their babies this resistance, they can instantaneously pass that skillset of genetic, you know, update horizontally through the population. And suddenly a whole ICU is contaminated with all kinds of bacteria that are resistant to the drugs you've been using. Same thing happens in a farm field, seven years into using the Roundup antibiotics across

your crops. Suddenly you have all sorts of weeds that are Roundup-resistant and are growing.

You've never had these weeds before and suddenly they're going berzerk in your field. There's been horizontal gene transfer across the species from the microbes in the soil, to the plants, to the mitochondria within the protozoa or the, the mitochondria within the earthworm. All of these things are capable of all this horizontal gene transfer. The real breakthrough in the diversification of life, however, came not from horizontal gene transfer, but through the development of the virus, the virus is a long-distance package of genomic information update. And so now you didn't have to be adjacent to the bacteria that made the breakthrough of the software update that would allow for more resilience and more adaptive capacity. Instead, you could pass this over great distances. These have become so important to the way in which life happens on Earth that we cannot find a genome that's not highly composed of viruses, really. We're slowly decoding the viral genome to understand how the human genome was built. And already, we're only a couple of years into this process and there's quadrillions of genes to consider. But in this process, we figured out that each of you are already, and we know at least 50% composed by direct insertion of viruses into your genome to allow you to be human.

And to do that. It took millions of years of exposure to quadrillions and quadrillions and quadrillions of viruses to find the ones that you need. So in the transition from single-celled organisms into multicellular organisms, then to mammals, we developed a better and better regulatory system as to which viruses we would turn on and replicate to spread throughout our system and to pass on to others and which viruses we would go ahead and internalize into our genome to store for long-term data. And then a subset of those would even be integrated into our reproductive genome that would pass into a sperm or an ovum to go on to pass on a new gene trait, to the humans that we would reproduce with. And so to do this, the virome became very good at targeting its information. And so the main difference, you know, if there's any between a virus and this horizontal gene transfer phenomenon where you're kind of passing information locally, is that the virus seems to be more specialized in its delivery system on the proteins, on its surface to target it. And so this is very much like FedEx picking up a package for our scans. It knows exactly where that needs to go now. And it will show up halfway around the world on the right stoop. How the hell is that possible?

Like it's so bizarre that we're capable of delivering to that degree. And viruses are 10 times better. They're very specific. Not only does it know which cell it's going to show up on, it would be able to deliver itself into the exact drawer in your house that you wanted that thing to belong. Okay. It's so specific and knows exactly what receptor on which type of cell it's going to touch.

And it's carrying information to tell the cell what type of genomic information it has. So the cell knows whether or not it needs that and wants to reproduce that or not. So when we start to back up and ask, what is the virus? In the end, the virus is a nonliving organism. We need to be clear about that. And so it's not part of the microbiome. It's not something that needs to be killed because it's actually doesn't live instead. It's a targeted transfer system for genetics globally. And so when we say there's a viral pandemic, that is redundant. Life is a pandemic. That's how this Earth began is we had a pandemic of life occur here, and it was out of control beautiful. And it was out of control complex in its development because of its variety.

And the human is a very pathetic snapshot of that beautiful pandemic of life that occurred here. And to give you a sense of that, a flea has 30,000 genes. A human has 20,000 genes. A fruit fly has 13,000 genes. So you sit somewhere between a fruit fly and a flea in complexity. And Kate's looking at her husband being like I told you, I told you, I knew it, not terribly complicated.

And so, you know, somewhere between a flea and that fruit fly, you wake up every morning and think you are important. And you think that you have all of this responsibility, you have all of this, you know, to do list and you're taking care of the kids around you and you're doing this or that in reality, the only thing we're really called to do as a human species, if you look at our neurologic structure and everything else, it is to observe, we are here to be witnesses to the beauty. We are programmed for being witness. We are not programmed well to make anything. The microbiome makes stuff. There's 125 trillion genes in the fungal kingdom. There's 20,000 in ours. 125 trillion genes in the fungal kingdom. They're making stuff, we're here to be witness to it. And so when you start to really ask, what is the biome, it is the language of life. It is the pandemic of life on Earth. And if we see ourselves as opposed to that, then we have opposed ourselves to life. And we will ultimately perish for that opposition.

Hmm. That's so relaxing to think that our purpose is to observe, I just, my body feels so relaxed. That's amazing. Okay. So then disease. No. Yeah. It a virus, in fact, a disease? Is COVID disease? Yeah. Great question. So this is where if I answer this fully, this probably gets taken down or something. So yeah. Well, no, it's just, it's a podcast, so it won't have it. I don't think so. Don't put this clip on your Instagram feed, the video. We don't even share the video. We don't do anything with the video. It's just so we can see each other, right? So this is the good stuff. People, good stuff. It's coming. All right.

So are people passing away right now at a high rate on the planet is one part of the narrative. That's important because I'm losing patients all the time to all kinds of different diseases as has been said there. And so I fill out death certificates that say cancer or heart attack or pneumonia or

whatever it is. I fill out these death certificates. And so when a patient dies, we have a responsibility to kind of put a name on it, categorize it, whatever it is. But when we start to look over here at a virus and ask, can you ever put virus as a cause of death? The scientific answer is absolutely not. That is scientifically impossible that somebody dies of a virus because the virus itself is a small genetic piece of information that's transferring information on how to make proteins. That's it. Where we run into this confusion or how this confusion or narrative gets to throw itself, you know, off the cliff of reality, here is through a set of circumstances that are near each other in time and seem to have a linear causation or consequence. And so when we see somebody who is dying from, and the doctor is about to put COVID-19 on the death certificate, that virus has been gone on average for three weeks to as much as three months earlier. The virus isn't even detectable anymore. The virus, when you get an acute viral infection with something like a coronavirus is only in your bloodstream detectably for three to five days. And it's only really, you know, peaking high enough to cause a downstream passage of information to other cells, whether it be within your body, you know, giving the genetic update to other organ systems or you know, enough so that you're producing enough so that it's going out into your breath and other respiratory secretions and everything else so that you can give the genetic update to other people in the environment so that you're not selflessly holding what's been important update for you that you've decided to make. You want to pass that on. That part lasts only for probably 24 to 48 hours. And so you have this small spike where, you know, detectable for five days in kind of an infectious, you know, capacity, if you want to call it infection, but it's, it's a communication state of the virus is there only for that short 48 hours of time.

And the peak of that tends to be right around the very first moment that you start to have symptoms. And so the very first time that you get the common cold, and the first time you start to feel like, Oh man, I'm a little congested and maybe a little headache right now. That's probably where your peak is. And within a couple of hours, your viremic load is already diminishing or your viral load. So the viral load is diminishing. And by the next day you wake up and you don't feel better. You feel worse. Now you're like super congested is starting to get sinus pressure viruses. Now, you know, diminish now no longer part of it. Two days later, you're starting to get secondary sinusitis, a bacterial thing. You haven't been doing good sleep hygiene. You don't have good nasal microbiome. So you're starting to develop a really unbalanced system that's starting to have to go through massive correction through inflammatory processes, build tons of cells that are in the wrong place or inflamed or whatever it is. And so now you have fever a couple of days later because now you have a secondary sinusitis or you have a secondary pneumonia a week later and you have to deal with that.

And the body has to kill those bacteria and go through that whole process. If you've gotten COVID-19 antibody testing, you know that they tell you your antibodies aren't going to show up for at least two to three weeks after you've been sick. Sometimes they'll say you have to wait five weeks to go get your antibody testing because antibodies aren't going to be detectable.

Wait a second. I thought the immune system for viruses was antibodies. And yet the virus was only there for two days and gone before I even, you know, started the even really get sick and long before I ever had an antibody to that thing. So why did the virus go away? How did that happen? And this is, you know, I can't believe this hasn't become a, an alternative narrative out there, which is really that viruses do not respond to antibodies. Antibodies are not the way in which you stay in relationship to a virus. If that was true, none of us would make it to seven days of age because a baby at day seven of life has 108 viruses per gram of stool, 108.

You know, you're looking at a hundred million viruses per gram of stool present in a seven-day-old. Why that's important in this discussion is that a child can't make any antibodies until they're three to six months of age. And so if we had a common narrative, which is the immune system is at war against viruses and it uses antibodies to kill viruses and protect you from them and therefore you need a vaccine to protect you so that you can have antibodies to this virus, none of it measures up at all to any of the signs that we've known for 60-80 years, but it certainly doesn't fit into the more recent stuff showing us just how much virus is in the bloodstream of a human and a given moment. Right now, both of you sitting there,

you look pretty healthy. None of you look acutely under distress. And yet both of you, you have 1015 viruses in your bloodstream, right this minute. And so you start to do that level of genomic complexity and realize the viruses aren't making anybody diseased. Viruses aren't causing any detectable illness in the vast majority. And of course that's what's happening with this pandemic is at least 50% of the people, if you read Lancet, that you read to anybody in the, and all the journals will tell you 50% or more are asymptomatic. Then another 40% of the remaining 50% are mildly symptomatic. And then there's a small percentage that are severely symptomatic, and a small percentage of those that will get hospitalized. And then you're down to 0.0003 that will actually, you know, have a mortal event.

But that mortal event happens three weeks to three months after the initial exposure and disappearance of that virus. And so to say that anybody's ever died of coronavirus is actually technically completely wrong. And coronavirus was an event that happened way upstream. The disease that happened subsequently was an imbalanced state of your, your organ system and your response system due to a depletion of response elements.

This is very much like let's go with maybe a windshield. And so, you know, you jumped in your car and I just got back to, into my location here and I hadn't driven my car and weeks. And it's like, you know, there's this film all over everything, you know, seawater and saltwater in the air and dust, and there is a film I can't see. Well, and so there was a temptation for me to say, well, that dust is terrible. That dust is totally broken and that windshield needs to be replaced. It's clearly dysfunctional. There's dis-ease with my visibility through my windshield. So I've created this whole story about the fact that an ecosystem has been created. A terrain shift has happened on my windshield and now I'm blaming the terrain rather than all the behaviors that led to it. And then I go to hit the windshield washer fluid, and it doesn't screw anything because I haven't been filling up the reservoir on the windshield wiper fluid and so nothing there. And so now the damn car doesn't work and that thing there, and now I'm driving, I'm pissed off. And so I don't notice the light 'cause I'm pissed at my stupid windshield and there's no windshield wiper, and I hit a car in front of me and have a concussion and end up in the hospital and everything else. And in the end, it was some film on my windshield. And I go and put on a death certificate, dirty windshield.

That's basically the same kind of phenomenon we're dealing with coronaviruses. You've got all of this dysfunction. You forgot to fill up the reservoirs. You didn't wash the windshield. You haven't taken care of the damn car in months, and then you get in it and you're in a pissed off emotional state and you're totally distracted neurologically, and you're not paying attention to keeping the line, you know, life in the lines, and you kill yourself. That's essentially what we can now show through all the public health statistics is the dis-ease that is causing death from this current pandemic situation it's chronic disease.

And so one of these chronic diseases is the current aging process. And I have a lot of relatives that have lived over a hundred years. I've got great-grandparents on both sides that have gone over a hundred. I can tell you that age is not historically a disease. It is today. Every year that goes by the speed at which we lose mitochondria within ourselves and therefore how biologic agent is accelerating. And so just the presence on a toxic planet from one year to the next has become its own form of a disease. We have created such a toxic environment that we cannot tolerate life on Earth. And I love thinking about for a moment, those old Star Trek episodes, where, you know, Scotty and, you know, beams Spock down to the surface of the planet.

And he talks back up to Scotty. He's like good news. This planet supports life. If he were to beam down here today, I wonder if Spock would recognize that this planet supports life because one in three children, you know, has some sort of spectrum disorder or other chronic disorder by the time they're seven years old. By the time they're 16, we've got 52 to 54% of kids with a chronic disorder or disease.

And the diseases, the dis-ease that they're manifesting is intolerance to their planet. They're allergic to the air they breathe. They're allergic to the pollen from the flowers that are around them. They're allergic to food that they would put in their mouth. They can't tolerate a normal hydration protocol. They've got chronic diarrhea or whatnot. Our planet is becoming intolerable to life. And that is a big warning for us as we started to think about as we start to blame some tiny little genetic code of a virus for the dis-ease that we're seeing, we have to come to terms with the fact that we haven't been taking care of the car. We have not filled up any reservoir. We're sleep-deprived. We're dehydrated, we're vitamin D deficient. We are vitamin C deficient. We are nutrient deficient. Our soils are deficient. You know, we are totally running life down to an empty tank. And then we blame the cancer, which is just a symptom of an empty tank. Cancer has never jumped out and killed in a healthy person ever.

In my clinic we measure phase angle, which is a really cool measure of how much electrical charge can a single cell hold. And that correlates really well with your intracellular hydration. Cancer shows up around a level of four and the, and the range is typically around 10 to 13 is your ideal health. Death happens at 3.5. Cancer happens at about 4.5. So you need to be nearly dead before cancer really appears in a life-threatening fashion. And when we do our chemotherapy trials in medicine, we will very commonly report a one-year or three-year or five-year benefit to a chemotherapy. And we say, we decrease breast cancer, death, breast cancer, mortality by 15%, by the way, any placebo with any trial ever done in history is 30% of efficacy.

Well, we can get an FDA approval for a drug that's 10 to 15%, you know, as long as we're almost half as good as a placebo, we can get a drug approved. So we can show that 10 to 15% of efficacy then we put that drug into play. And in the end, The reason why we always have to be so careful about the way we use this language around disease and mortality, because we have never changed all-cause mortality. People die, no matter what we do. You can give them surgery, radiation on people, the all-cause mortality really doesn't budge. It's usually, you know, one and a half to three years out from an initiation of a trial, you see everybody starts to die. And so that's because again, the phasing has gone from 10 to 4.5

and it's cruising towards 3.5 before they ever joined the trial. They're on that trajectory. And nothing we do in medicine takes somebody and moves them back up that phasing. Nobody steps in to show you how to hydrate. Nobody shows you how to get an electric charge from mitochondria. And nobody shows you what real nutrition at the microbiome level looks. And so nothing we do changes that line. And so they all have to die at the same point. Now what gets filled out on that death certificate in a clinical trial is how we claim success. If they die from a heart attack and they didn't die from breast cancer, then we say the chemotherapy worked. Literally if they died from a

stroke, that chemotherapy worked because they didn't die from breast cancer.

And so this is the extraordinary phenomenon that we've created the appearance of pharmaceutical efficacy. When in fact we're just being observers to the march towards death. So everything we've ever called a disease is a symptom no more obvious than that is any syndrome that would come after viral exposure for you to get sick after a virus or within the context of a viral exposure means that you were so out of whack with your inflammatory cascade, with your capacity for regeneration, with STEM cells, with the macrophage sweep-up, T-cell system. All of these things were so depleted, so overtaxed, so overwhelmed by your day to day toxicity that you couldn't respond. You couldn't get there. And right now, now the only thing we can be really certain about about the pandemic right now is none of the numbers are accurate.

Are they too high? Too low? I have no idea. All I know is none of them are real. And so I'm always astonished to go to Johns Hopkins website and they say there's been 1 million, 313 deaths. I was like, that's a very specific number. You have no idea how many deaths are being attributed to this, our record-keeping system and our method for logging deaths is really inaccurate.

And you see here all the time now. Well, you know, if we suspected, even if they test negative, we expected, they were probably had COVID. We go out and put code. And so, you know, but nonetheless, we seem very certain about these numbers. Let's say that these numbers are certain, you know, around the world, we've seen around a million deaths and amazingly 25% of those deaths have happened in the United States, which is extraordinary because we only have 4% of the world's population. And we thought we were like the cutting-edge global technology for medicine. So we got the most expensive by seven X, at least to the next, you know, most expensive one being Japan. We're seven times more expensive per capita - man,

woman and child - in any other place in the world. And yet we had, you know, at least 8X the kind of mortality that we saw anywhere else, because we had 25% of the global, you know, death in the context of 4% of the population. And we saw younger death here than we did anywhere else. And I think those stories have been overemphasized.

I think the numbers are ridiculously low still, your risk of dying under age of 70 is low. Under 50 gets ridiculously death under the age of 30 is almost nonexistent. And so in the end, it's very safe to be young and in this pandemic right now, what we should have obviously done is if we had really any concerns, as soon as we saw Italy go down and Iran. And some of those early countries we should have immediately said, All right, if you're over 60, early retirement for the next three months, you guys hang out, we're sending out the youth, all the kids are gonna work everywhere. They're going to run the restaurants. If you're over 60, congratulations, you know,

promote that middle manager at 30 years old because they're going to work the restaurant. No problem. Nobody's going to die. We could have done that, but we didn't. We wanted this to be a really extensive narrative around our import of increasing our pharmaceutical dependence and rolling this thing out. So in the end, in a very long-winded fashion, classic Zach Bush, disease is a symptom ontology. And we've created a bunch of words around that to make it sound scary and make it sound like this stuff leaps out at us.

But certainly, there is no such thing as a Corona disease. There are symptoms of downstream empty tank when you weren't taking care of the system. And in your effort to update the software where this virus depleted you and you tipped into some sort of downstream cascade, just like if you get the common cold, which is completely benign, but then three weeks later,

you ended up with an entrenched sinusitis. That's not because of the cold virus. And nobody seems to understand that they're like, Oh yeah, well that's secondary bacterial everything else. Why did we forget that? Like, why are we blaming all this death three weeks later on coronavirus when it's the common cold? Coronavirus is the common cold. And so we have the common cold that's got a little bit more complex protein structure in this coronavirus than other coronaviruses, which suggests that it interacts with our system a little differently. So it's going to attack different systems. And this one that's specifically attacked is our cascade of clotting mechanisms at the small blood vessel and the way in which we deal with hypoxia or lack of oxygen. And so it's different than a syndecan coronavirus by a little bit, but in the end, it's really the same phenomenon where you have a slight challenge to the system. And for most people, that's absolutely no problem. If you are in such a state of disarray, imbalance, you get that slight challenge. It may tip you off, you know, into your own inflammatory cascade, but you're going to die of the consequences of your own physiology and not the physiology of a virus.

Got it. Hmm. So one thing I have not heard you talk about is why within that context so disproportionately has, COVID affected people of color, Black people and people of color.

Such an important question. So if we look at the population of citizens around the world, not just with this COVID, but any respiratory season, the respiratory seasons are so fascinating. They are predicted down to the day, every year in the Northern hemisphere, in the Northern part of the United States, you know, above basically the 40th parallel. And maybe you could go down as low as like the 35th parallel, but somewhere between 35th and 40th parallel, you're going to end up with--

Where's the 35th parallel?

The 35th is down around like, you know, that must be around southern Tennessee, something like that, you know, across there. Boulder, Colorado is as at the 40th parallel, if you think of Colorado, like in the center of the country and in the center of that state is Boulder. So it's roughly there halfway across Colorado is your 40th parallel. So anywhere North of there, you're going to see in the third week of November, flu season starts, which is truly amazing if we keep the story that viruses are pandemic and they start over in Asia and they have to move over here every year, that's how it happens. That's how we create the influenza vaccine, which you have to put in quotes because it's never prevented influenza in its history.

We're gonna be coming back to that.

Yeah, and so it's, it's a vaccine, meaning it's going to induce an antibody that has nothing to do with neutralizing antibody or viral propensity. And then, but to get that, we have to go figure out which strains of influenza are coming at us this year. So we rush over to South Asia, every kind of March, April, which is their wintertime and South Asia. And figure out which strains of influenza look to be happening this year. So then we'll inject those into rabbits, make the rabbits, make antibodies to those. And then we extract those proteins and we come up with this weird extraction process and then say, okay, now we have an antigen that is these three strains of influenza, and we're gonna inject those into humans with the expectation that that antigen is going to trigger that same antibody response in the human. And therefore somehow protect you.

Every couple of years, you hear the announcement of the end of flu season, whoops, sorry. We just totally screwed that up. Those are the wrong three strains. And so we saw a pretty high mortality rate this year. It turns out that the mortality rate has absolutely nothing to do, whether we hit the strain or not in that vaccine. And so it's fascinating how ineffective that vaccination program is. And yet the perception is we need to protect ourselves from Asia. And yet it doesn't make any sense at all that there's suddenly, every third week of November in the above the 40th parallel, we suddenly get hit with a virus from Asia. How is that possible that the virus knows how to time that so damn perfectly every year? And it's like, you know, they like catch the same United flight every year with patient number one that comes over and then the CDC tracks that patient number one, It's like, Oh, here comes influenza from Bob, from New Hampshire. And here it goes. It's like, there's no way that this is biologically possible.

And yet we're willing to listen to this narrative as scientists and physicians for decades, that there's a flu season. We somehow accept this. And we somehow accept that this is possible. What's really happening in the third week of November is a complete transformation of our atmosphere. We go into a massive carbon dump into the atmosphere in the third week of November as we go into fall.

And so when we lose, we start to shift into the solar winter and the microbes in the soil go quiet and you lose, or you gain that dormancy of the plant life. We stopped sucking all the CO2 and methane and other small carbon particulate into the,

into the soil. And we put it all in Into the air. And all that plant life of the Northern hemisphere has to start to decompose. And so all those leaves sitting in New Hampshire or anywhere else are decomposing and its methane that's off-gassing. So you get the CO2 methane and small particulate matter into the air. And your question was how come African-Americans and other minorities are suffering so much? If you look at where we have the highest concentrations of air pollution it's going to be in the most industrial sectors of any city. And it turns out those are typically the lowest socioeconomic pockets.

And so it has, you know, first of all, nothing to do with skin color, it has everything to do with where do you live compared to the production of the small carbon content that's going to be complicated by the seasonal shift. So seasonal shift, carbon goes up everywhere, but if you're in an environment that also has ExxonMobil next door and is, has got a bunch of, you know, fuel distillation going on next door, and you're in a part of town where none of the cars have catalytic converters that work, and you've got a high exhaust, kind of transportation type output and all of this. And you happen to be adjacent to New Jersey or something that's, you know, dumping herbicides and pesticides into the farming industry nearby. And that seems to be this collision between agriculture and industrial, you know, energy and transportation that creates this perfect storm in the air.

And so, first of all, I think the risk is age, over 70. Second is regional where the carbon content's the highest. And the reason why this then influences viruses is because viruses bind to small carbon particulate. And when you get carbon-binding viruses, you can suddenly get thousands. If not millions of viruses binding to a single tiny particle of carbon, that's now delivering way more virus than that human should have ever seen.

And so it unbalances our genomic relationship to that virus because of this high ability. So now you're taxing the system to come into balance through an extra, extra difficulty or challenge there, the next highest thing. And that paper came out in China first, showing that the level of PM 2.5 was one of the best predictors of mortality from this current pandemic. That can also be said of influenza because that's also been proven, but any respiratory virus that combined PM 2.5 years as mortality in areas with higher pollution. One of the reasons for that is when you have--

Can you explain what PM 2.5 means? Like when you say that.

Yup. PM 2.5 is particulate matter is the PM there. So particulate matter 2.5. So it's a carbon particle smaller than 2.5 microns. So a tiny, tiny, tiny little carbon molecule it's able to bind viruses, and those carbon particulates are able to go into your tiniest airways. And so you get really dense delivery of what should have been a respiratory kind of upper respiratory experience for that virus is now being delivered deep into your lungs. And so the higher your PM 2.5, the more deep delivery is. Also attached to that virus though, or into that PM. 2.5 carbon particulate is things like cyanide and cyanide has lots of mechanisms for not being able to get into the body. So PM 2.5, shouldn't be able to get into the body. We have all kinds of mechanisms with the mucosal layer of the lung and, you know, barrier systems that have tight junctions and all this. So neither the PM 2.5 or the cyanide is causing problems unless it binds to a virus, and the virus is a delivery system. So the virus knows how to bind to the surface of the lung and get absorbed into the lung very rapidly. So now you're, you've got a Trojan horse on the back of a virus, which is cyanide. And when cyanide goes into the bloodstream, it turns out that the very first thing that happens is hypoxia, loss of oxygen-carrying capacity. And if you read any of the accounts from New York or Northern Italy or Iran or Germany, or you know, Hubei province, you're going to find out the patients that end up dying were the ones that showed up blue, and they showed up blue almost instantly.

They didn't have fever, which is very interesting. 5700 patients admitted to New York hospitals were published it in JAMA, I think was their publication. And so there's American medical association publication. So JAMA 5700 patients and they listed all of their vital signs and all of their admitting laboratories, their average temperature was stone cold normal, no fevers. Their average white blood cell was stone cold normal, no signs of infection, no signs of left shift, which would suggest the presence of a virus. So the people that we said died of coronavirus showed up with hypoxia, which the virus can't cause. There's nothing in the virus that can cause hypoxia, except that the virus can bind PM 2.5, which binds cyanide, which causes histo-toxic hypoxia. It's the most common cause of this condition. When you get that condition, you can't carry oxygen, no matter how much oxygen you give to the system. And so in New York hospitals, and we're slamming everybody who human shows up, any suspicion of this thing, and we're throwing them on a respirator, we're putting them on 40%, you know, levels of oxygen, which is horribly toxic to the lung. Oxygen is very injurious to the lung tissue. And so you'd go on anything over though, like, you know, 17, 20% typical of air, you're going to start to get oxidative injury to the lung. So they're already going through some sort of hypoxic injury due to cyanide poisoning. And then you give them a huge lung injury what's going to happen over the next couple of days is they're going to fill those lungs with fluid.

And if you go back to SARS in 2002, I found some accounts when I was doing research early in

COVID, that's described the presentation of those that died from SARS. And so here, 18 years ago, they show up blue and then everybody has to wait, no matter what they do, the patient remains hypoxic. And then within two days, their lungs fluid fill with fluid. And then over the next seven days, they'll they get secondary pneumonia is, and over the next two weeks they'll die. That description is exactly what happened here 18 years later because we didn't learn the first time. Because we kept blaming a virus when in fact they were getting the exact same phenomenon in 2002 and then 2012 with MERS. And now again, 2018-19, we started to see the wrap-up right before this pandemic. Earth Justice sued the US government for the amount of cyanide that was in our industrial cities specific to our regions of poor people.

So that our communities that were most socioeconomically compromised had the highest levels of cyanide anywhere. So we had a setup and then the Australian fires happened and the Australian fires put more PM 2.5 than we have seen in decades into the air. And so we suddenly have a perfect delivery system and it turns out in 2017-18, I mean in 2018-19 the flu season,

right before we see this pandemic, we have the lowest respiratory mortality in a 17-year pattern. So we happened to get lucky one year, which meant that the population that would have died from a respiratory condition last year, didn't and aged. So now we have an extra-age population that's set up for a respiratory disease. Then we get the worst fires in history, blankets the world in PM 2.5 November, December hits in. We have an abnormal season this year. Usually we sit at peak mortality to happen in February, March. Instead we saw it at about eight weeks later than that in a bore. Again, if you track the amount of PM 2.5, that could have carried that further or into different trajectories, it kind of fits as well.

So a lot of interesting factors that set us up for the fact that, you know, some people are saying that this thing was planned. People knew before this thing happened that this was going to happen. And I would say that was absolutely true because we knew at the CDC that we had a low mortality year last year. So we could have easily come along and said, Oh my gosh, there's a pandemic of Fat-Cat-Buddha disease. You know, make up something random and say, this is going to kill the world this year. And we're going to see a really huge spike in mortality and only show them the statistics compared to last year. And it's going to look like we have this massive amount of respiratory death compared to last year.

But if you look at the seven-year trend of mortality, we're now spot on. We've now caught up to the mortality we should have had last year. We've caught up this year and we're right on mark for the age-adjusted and population-adjusted statistics for how much normal mortality should we see from a respiratory cause this year we're spot on. And so did we have a pandemic?

Yes. If you want to say the word pan, meaning global and demic, meaning a trackable condition, we had a pandemic. Was it due to a virus? There are 1031 viruses present in the air at any given time. 1031 is larger than any number you've ever imagined. It's one with 31 zeros after. It's 10 million times more than our stars in the entire universe. Not your galaxy, not your neighborhood out there. It's the entire universe, 10 million times more than all those stars are the number of viruses is in the air right now. There's another 1031 viruses in the soil beneath your feet. And there's another 1031 viruses in the ocean water. And so there is 10 million times, 10 million times, 10 million times, 10 million times more, more than our stars in the entire universe of viruses that we live in and amongst and breathe and eat and drink and exposed. I've 1015 in my bloodstream right now. Is there a pandemic? Is there a global phenomenon of death? Yes. And it turns out that humans have been dying at a hundred percent rates since our origin.

We all kick the bucket all the time, and we die in a very predictable fashion. And we know that respiratory death is going to be as predictable as cardiovascular as cancer. And we can look at seven-year trends and tell you how many are going to die over the next few years, not necessarily next month, but we can tell you on average where that's going to average out because of these longterm public health statistics.

And not once have I seen a single media channel carry anything on the seven-year trends and they never age adjust it, and they never population-adjust it. Population is growing, notice that the population is growing by the way type in global population count know counter and watch the website that's counting in the global population right now and tell me which direction is going in the midst of this global pandemic that's apparently the scariest thing in humankind. Watch our population grow. It's like a spinning wheel of up. This is not going to challenge human life on Earth. This is not going to cause any threat of extinction.

The extinction we're headed for is the failure to reproduce. And over the last 40-50 years, we've seen one in three males now develop infertility from lack of sperm count as we've gone from a sperm count of a hundred million per milliliter, down to 48[million]. And so we've had 52-57% decrease in sperm counts over the last 30-40 years in every Western country in the world. And so we are on the precipice of extinction, and it has nothing to do with a virus. Good news is the viruses will outlast us, and they will carry a message of hope and, you know, prosperity to the future species that will spring out of this Earth.

Wow. Okay. So for what you just said right now, the reduction in sperm count, let's just take males for this instant. Is that I'm just going to explain this back to you. So to make sure I understand in Mike's language from Zach's brain, is basically because of the way we've treated our land, soil, or

our land, air, and water, whether that is like our food that we're consuming, the toxins that we're putting on all of our, you know, our agriculture, and then you affect the water, what we've done in there into the land, all three-- land, air, and sea-- basically as leading how we're living our life in a toxic environment, our male body is not able to function optimally because it's constantly fighting toxins away. And it's allowing like it's decreasing sperm count in men. Is that, I mean, is that right? Like in that just, that's a super basic example, but.

Yeah, no, I think somebody could take that basic information and take that home and put that in the bank. I think, yes, definitely the toxicity of our planet is causing this extinction level of dysfunction within our reproduction or within chronic disease epidemics, you know, whatever you have. And you know, we built whole cities down in Houston that we call Texas Children's Hospital to house children with cancer. And this has only been 10 years in the making. Like, you know, it's not like this has always been like this, like, and yet this isn't headline news, and we're not stopping global economies because our children are having an epidemic of cancer.

And so this doesn't stop anything, we spray more glyphosate and more toxins in the environment. Every year we continue to sell Teflon pans, you know, they're proven to poison our children and it doesn't stop us. And so there's something I think that's not scary about the word of poisoning for some reason. It's not scary to anybody that we're poisoning ourselves with all of our convenience.

I don't know why that is. I, I'm not sure. I think it must be a little bit of a defense mechanism at the human brain level that says, well, it sounds like it's my fault. So I'm going to put that into some sort of category of denial, you know, or something like that. I don't know. I honestly have no idea how that works neurologically, but in the end, it's actually a little bit more insidious than, than even just toxicity in that in 1976, we added the chemical Roundup, which is a family of chemicals. Glyphosate is the active ingredient that they list, but there's at least 16 very toxic things that they put into Roundup so that it delivers at a very rapid fashion at very low concentrations.

We just had to actually got back just this last 10 days in our laboratory. We just did an extraordinary study looking at kidney tubules and gut cells and vascular system and its response to glyphosate as a single agent versus the finished product of Roundup. And we knew Roundup was causing problems for years. We couldn't do any Roundup experiments 'cause they would kill ourselves so fast that we couldn't really do it really well.

Gi Chi Yen our MD-PhD from China. That's just a brilliant human being. And a phenomenal scientist has really mastered this technique in our laboratories over the last year. And he's now doing extraordinary dose-response curves with glyphosate versus Roundup. And what we're seeing is somewhere around a hundred thousand to a million times more toxicity out of the Roundup

formula than we see with glyphosate. And the reason why that's pertinent to this is because levels of toxicity that we see for kidney tubules for example, is that two parts per billion, which is exactly where we start to see, you know, normal levels in our entire water system. And there are certainly areas of higher agricultural interacts where you're gonna get way higher than that. But in your typical urban San Francisco or type environment you're in and fine-tune at five parts per billion, pretty typical. And you're gonna find that in all of your food is going to be in somewhere between two parts per billion to two parts per million.

So yeah, a big thousandfold, you know, and concentration is in your food. But so in a very biologic levels, I mean daily exposure levels, we're seeing death happen, kidney cell toxicity. And with this level of Roundup exposure, the reason why, you know, there's direct toxicity, that's that shows up and the reason why it's scary is because way before you get direct toxicity at these two parts per billion or whatever,you start to block the normal physiologic pattern and the capacity of bacteria and plants to make amino acids. Amino acids, as you may recall, are the building blocks for every protein. So you asked about sperm specifically, and sperm are very complex structures. They look a lot like bacteria, they behave a lot like bacteria. The only humanoid type thing is the tail of it. The head of it looks a lot like bacteria and its functionality is very similar. There's no mitochondria in the head of a sperm. And so it can't produce its own energy there. And so the mitochondria is relegated to this second device, which is the tail of the sperm that helps propel it forward. But it's really a delivery system for a package of genetic information, which sounds a hell of a lot like a virus to me. And so in the end, if you really want to go with the fact that viruses are infectious, then pregnancy is a really fantastic example of a daily infection that happens all over the world.

It feels like it sometimes.

I have no doubt that that's true. Yeah. You're going to get all of the weird symptoms. You get the weird flushing and feverish nausea and change in bowel habits, all kinds of things happening is that that male infection happens. And so, you know, there's a bizarre situation of protein dependence of all these structures. And so proteins that over 280,000 different proteins that make up a typical human body. And that's probably a woman and a male, maybe less than that,

but you've got 280,000 proteins and they're made of just 22 amino acids. And so in some ways, this is a lot like what you would expect, for example, with the English alphabet. So you got 26 letters or something and you got five vowels. Of the 22 letters of the amino acid alphabet. That's going to go make these 280,000 different proteins, just like the 26 letters have no problems, spelling a quarter-million words, no problem. You just change their order, and their meaning shifts with them. And all that same thing happens in the protein world. So you change the spelling, you

rearrange the amino acids, you get all this incredible biodiversity of proteins in there. They have totally different functions. Some of them are structural like scaffolding.

Some of them are really workhorse machines that are there to clean up toxins or to change the way in which metabolism happens. They are always moving electrons everywhere. They work and function as digestive enzymes, whatever it is, all those proteins are made of 22 amino acids. And of those 22 amino acids, there's nine that are called the essential amino acids. These are the vowels within the English language.

And so if you eliminate Z from the English language, you'll screw up my name and maybe a zucchini, but not much else harmed in the effort, but you take an A out, you're going to misspell a huge number of proteins. And so when you take an essential amino acid out, you are going to misspell practically every protein out there because the essential amino acids can't be made by the human system. We call them essential because they have to come from either a plant or a microbe in our gut or in the soil system. And so those essential amino acids are the ones that got stolen away by glyphosate and Roundup when they moved into our crop system and water systems in 1976, really got out of control in 1992, when we started using it as a desiccant to our crops.

And we start spraying wheat, which of course dawned that gluten sensitivity era in 1992 and '93, when we started spraying around up on our wheat and suddenly we're all, you know, allergic to, or are sensitive to this gluten stuff. It's because we have a toxin now delivered at high concentrations in this food. And that toxin blocks the shikimate pathway, Which isn't an enzyme pathway that makes the essential amino acids. And in fact, this is how Monsanto got away with getting this thing approved the first time as they said, it can't hurt humans because it only poisons the shikimate pathway, and humans don't have the shikimate pathway. So it must be totally benign. And so they put it on the market saying it's safer than water, literally. That was their tagline: "Roundup, safer than water" because we don't have the enzyme targets.

Nobody at the EPA apparently dug much deeper to find out what the shikimate pathway was doing to find out. They just deleted three to four of the essential amino acids out of the alphabet. And so now imagine 1996 hits, and suddenly corn, soybean, sugar beets, and 30 other crops over the next 10 years would be genetically modified to be sprayed directly with a chemical that's now poisoning the soils and the plants.

So they can't make the essential amino acids. That's when the sperm counts started to really plummet was late-eighties, early-nineties when we started to get enough into the water and food system that we couldn't make the essential amino acids that are critical to this problem. And is that specific to Roundup? It turns out that the chemical that Bayer makes that is reason they

bought Monsanto. They got EPA and USDA and European Union approval for a new chemical that they genetically modified with a new GMO crop called Liberty Lake. And so Liberty Lake is now growing throughout the Midwest of the United States as a new crop that can be sprayed with a new chemical that blocks a new enzyme pathway that you can no longer make it an essential, another essential amino acid. And so we have now got multiple pathways in the same water system. One of the Mississippi, for example, that's collecting multiple toxins that are blocking now four or five of the essential amino acids. And you can't make a healthy human being anymore in the womb. That's the terrifying effect of the EPA or the data that we just shared with the EPA.

We showed them three different studies that demonstrate the generational toxicity of this compound. With the first generation that you spray, they already have a formed body. They have all their essential amino acids. They've got a good reservoir proteins. They're there. And so you expose the first mouse to an injection of glyphosate or Roundup, and they live out a pretty normal life. Normal pups, no real harm, no metabolic. Generation number two, you don't expose them and you just take the consequences of that generation is born to a parent that had the essential amino acids deleted, and that generation has obesity, autoimmune dysfunction and all this. Third generation: cancer, birth defects, stillbirths, all that. So there's a generational effect as you delete the essential amino acids for us to build healthy human bodies.

And so then you add to that the complexity of reproduction itself, and you're seeing a process of a drop of energy and a drop in metabolic capacity where the mitochondria is poisoned at the same rate that you're getting misspelling proteins and you get dysfunction across the system. And so the same, you know, 52 to 54% drop in sperm counts, we could say to any complex organ within the human body, we're literally poisoning the human system, and it's going to show up most obviously in reproduction and chronic disease and death. But on, on the bookends of worth and death, everything else is lost that same reservoir of potential for life. And so we were looking at this extraordinary moment where we haven't actually seen the third generation of Roundup kids yet, and that gets me a little frightened for what we're going to see over the next 20 years.

And so when we go into the third generation or fourth generation, what's that going to look like and honestly, we just have no idea. We've never been able to take that study out to four generations in the mice yet. And so we don't know how bad this gets, but what we do know is that humans are beautiful. And the humans that I get to be around on my hospice service are really among the most beautiful. And so the children that are showing right now, the children that are showing up right now are souls that want this journey, souls that want to be here at the tipping point of human history, to say, I'm willing to walk that walk. I'll step into a body that suddenly at 18 months of age is going to have a massive neurologic injury shortly after a vaccine where I develop a high fever,

and I suddenly lose all verbal capacity and I can no longer look my mother in the face. And I'm going to scream uncontrollably for four hours a day and hit my head against the wall until I have a callus the size of a baseball on my forehead. And that's the journey I want right now. A soul is willing to walk that journey so that it can be part of a shift and transformation of consciousness within this species within this planet, perhaps, and I am humbled by that. I'm overwhelmed by that. I'm I feel so inadequate on some level when I'm faced with those journeys in my clinic, and I see children willing to walk that journey. And I look at myself, I'm like, how can you ever feel, sorry for yourself or anything for two seconds because you picked such a wimpy journey. You go around and everybody's like, Oh, you're so clever because you're running your mouth like diarrhea and blah, blah, blah. And like, yeah, it's like, it doesn't make any sense why anybody wants me on their podcast. They never get to ask a question.

But these children are here on purpose and they love us. And these kids in my clinics blow my mind. You know, being hugged by an autistic child is that's a blessed thing. That is a blessed thing. These are literal angels walking among us who wanted to take this journey with us and show us something. And what they wanted to show us is that beauty is all around us. You need no voice to be witness to and to express beauty. You can be a nonverbal, autistic child and show the world something of grace. And show the world something of patience. And show your parents something of humility and show your parents something of priority. The priorities in a room with an autistic child, just change. You cannot maintain any focal point that you may have had before that child walked in. It has to change the moment that kid comes in the room. And they'll make sure there's the right level of chaos if necessary, make sure that that priority level changes. And I think that in the end, we may find out in the context of a couple hundred-year history of humanity in the future that we took the turning point, we made that final turning point,

that final transformative thing because the autistic children could not be programmed with the former paradigm. They did not understand the emotional program. They had not the lexicon that kept us all locked down in a brainwashed state of fight-or-flight response and lack of creativity. And they forced a new transformation of creativity. And it was because their brains refused the old program.

And they were there spiritually to show up through any kind of crisis and, and degree of suffering that may be on the journey. And they had to show up to do that walk, and they were willing to do that walk. And for that, humanity finally aligned itself with a nature that was much greater than itself with a much more divine design than humanity could have ever found for its own transportation or technology or communication technology or information tech or whatever we've got going.

It pales in comparison to the brilliance of the mycelium within the soil and its intelligence of bringing fiber-optic systems of communication through vast farmland through these mycelial networks. And they can not only pass us the information. They can also follow that with resources and their passaging minerals over hundreds of miles, to places of deficiencies in soil systems, to repair Mother Earth for that's what their real purpose is to heal her and let her do life abundantly. Again, a tree falls in the woods, and I just saw this incredible genetic study that has to be shared is a single tree falls in the woods. And one year later they can track a hundred thousand species living within the decaying mass of that tree, a hundred thousand species out of one, that's the kind of generative capacity of Mother Nature.

Humans are not here as some sort of manifest destiny of life. Life called in an opportunity and invitation to participate. We miss understood that invitation. We corrupted that imitation. We destroyed the fricking party. We are the ultimate party crashers when it comes to life and we have an opportunity to reset. And I think our autistic children and our children with cancer are patiently showing us the face of our mistakes.

Thank you so much for that. I'm curious because you've mentioned it a few times. I heard you talk about our sort of current paradigm of pro- or anti-vaccine, and how it's like the wrong conversation. That it's just not even really relevant. So Mike and I have been a little bit active locally in the conversation about vaccines. Because it came up in the state of Maine earlier this year. It was voted that every kid-- we got rid of the philosophical exemption. So you have to be vaccinated. Yes. And we were speaking up to keep people being able to have a choice about what they inject in their bodies and their children's bodies. So I'm just curious, like, why did you say that pro- and anti-vaxx is just like, not even, it's not even really relevant? Like what is the paradigm actually about immunity?

Yeah. Yeah. The new paradigm is we depend on all of those microbes for our health. And so to be for, or against them is an old concept, they literally are. We're because of them. We're not for or against them; we're because of them. And so that's the kind of paradigm shift that I'm really hoping to engender is that our scientists and our physicians need to simply start asking different questions and they have. They've been asking different questions, getting different answers for 30 years, but you go to the NIH or the CDC or WHO, you're going to get a very old narrative, a very old story. And they love showing that, Oh, the alternative to vaccination is anti-vaccine. And the reason why I don't like the anti-vaxx movement in concept is because being anti- anything is a zero-sum game.

You, you can't actually be anti, you have to be something. And so what I'm trying to help the

anti-vaxxer world realizes we need to be pro-immunity. Pro-life was a very smart move. Don't be anti-abortion, be pro-life. That was a smart marketing decision by that movement. And action. We need that kind of mentality. We're not anti-vaxx. We are pro-immunity. And we are going to ask questions for our children that are, how are you making this child's immune system better? Because I'm looking at the data. And it says here that the military study done with influenza vaccine shows that my child is more likely to get coronavirus if I give them a flu vaccine. Okay. Why is that? So how did I, instead of, you know, injecting all this stuff, how do I create an immune system that would be in balance with all of that? And so they could be in harmony with every virus? 1031 viruses before the child can even make an immune system they're in balance with this virome. So what is that? Oh, there's something called innate immunity?

Well, what's the innate immunity. That's the immune system that actually happens to create balance with viruses long before an antibody ever kicks in. Well, how do I support the innate immunity of my child? Well, the answers are to support healthy boundaries first. Your very first section of innate immunity is healthy skin and healthy gut lining. Well, how do you do that?

You do away with Roundup, which destroys the tight junctions that are the innate immunity. Roundup literally it was the beginning of the destruction of the innate immune system, making us prone to vaccine- to virus-related symptoms of any sort. It turns out we've had 12,800 pandemics of viruses since the 1976 debut of Roundup. We opened up the floodgates of dysfunctional relationship to viruses.

The moment we eliminated the frontline of the innate immune system by adding Roundup to our food and water systems. And so I want you guys to be pro-immunity, and I would love for you guys to go into your community with a message of we're going to make our children more healthy and more resilient than any children before them. And certainly far healthier than their classmates that continue their current toxic lifestyles and then get a vaccine.

We're going to do something dramatic. We're going to prove that our kids are healthier, the immune system level, without the vaccines than with them. That's a strong position and where I would love to move this movement to. Let's not be anti-vaxxer, let's be pro-immunity. Let's prove how healthy and resilient our children are. So if you want to jump on the bandwagon and go to my website, there's a little banner you can click on. I think it might be on my link tree on my Instagram too. And it's a change.org petition for child health immunity and vaccination, where we start to ask those deeper questions of what does, what does innate immunity look like in children? And how do we foster a healthy relationship between our children and the microbiome, and in fact, the virome to create really vibrant health? And not, again, we don't have an epidemic of infectious disease in

our children. We have an epidemic of autoimmune disease in our children. Their immune system is dysfunctioning, not at the cost of viral infections, at the cost of destroying their own bodies with that immune system that's now so confused.

And so we need to stop the confusion and really address the real chronic disease sides of immune dysfunction, which are things like autoimmune disease and cancer and not any problem with a coronavirus.

Yeah. We'll make sure to link that petition in the show notes for sure about this episode. Okay. So this is all so excellent. I want to make sure that we get in the next one that I wanted to ask,

which is I have-- you go, all right.

Just based off what you said about Roundup. I recently saw there was a lawsuit that I think it was Bayer has to pay $10 billion due to, I didn't read everything, but I knew it was like a headline I read due to determining Roundup was bad. Right. And cause these issues to happen. Can you briefly describe like, what's the money situation here? You know, if we're paying out, I mean, okay. Rational conversation. I have to pay a 10-billion-dollar fine because what my product did to people. So the rational mind is like, that product should just be pulled, right? Like why do we keep using it? So like we hear about the WHO, you know, like we hear about in the news in the United States, Trump's pulling out of the WHO. Trump's pulling out of this. And then like, then we have Gates and then we have Fauchi and then we have all of this stuff, CDC, the CDC and like how, who is actually besides Zach Bush and all the podcasts you're on, like from a governmental oversight committee, like who's actually looking out for us as humans or is there no one in the government?

No, no, no. I don't think there's anybody in the government that knows how to look out for you. It's too complicated. It'd be ludicrous for us to expect a legislator, to know how to, to deal with 1031 viruses in the air. That's ludicrous. There's no way that, that some legislator knows how to create health. So the reason why we see these draconian, ridiculous situations where you can, you have to wear a mask into the restaurant, but as soon as you sit down, you take that mask off, no problem. But if you stand up to go pee, you sure as hell better be wearing that mask. I mean, it is so ludicrous now, like it's so intolerable that at the intellectual level. So go outside. My poor wife has to deal with me. I'm getting a little bit better. Like I'm, she's keeping me on a very high dose of kombucha or something like that. Just keep my microbiome rich, just so I don't lose my shit, but it's very difficult honestly, to be in the world right now for this misperception that the government is going to protect us. And you know, for the record, because I'm about to say something that everybody's gonna be like, Oh, he's politically motivated.

I'm an Independent. I voted on both sides of the aisle over and over again throughout my life. And I'll typically vote a single, on a single ticket for different sides of the aisle because I see strengths in all of the voices. And I don't think we think we have a democracy until we see balance within that ecosystem. Just as we would see with any immune system. If we don't have the yin and the yang together, if we don't have the microbiome represented thoroughly in our ideas, we will suffer just as much as we do biologically when we move into the psychological and the philosophical. And so for us to have political balance, we need to hear all the voices. And of course, there's no variety of voices there. And the common narrative is so tightly controlled right now. But you know, when we back up for a moment and ask, is there anybody for human health? The mechanism that the government has been handed is unfortunately the healthcare system. And so the healthcare system, anybody can back up and say the American health system is currently clocking in at $3.7 trillion a year. That rate has been going at an extraordinary growth rate of kind of 6 to 8% since I was, you know, a chief resident back in 2004 or five, I actually held a big think tank of CEOs of insurance companies in 2004-5, because we had just entered something called the death spiral of insurance. And so by '05, it was clear that the endpoint for private insurance in the United States was 2009. We could not survive past that without bankruptcy in the entire system.

And so I was putting together these think tanks and ultimately I built a university-wide think tank of, I wanted multi-specialties there. So I invited sociologists, ballerinas, like everybody at the university, come and talk about healthcare. Like the doctors are not figuring this stuff out. Like we need business minds, we need sociologists. We need anthropologists to ask this question about helath.

I was very much pharmaceutical in mind. I didn't think I was anti-anything. I was just trying to figure out what's going to survive 2009. How do we push it past that? The death spiral of insurance happens when 1% of the population drops out for every 1% increase in costs. And that's where we had hit in 2005, we were actually growing at 6-8% increases in cost by that time. And so we were seeing 6- 8% of the population drop out. And of course, if you're gonna drop your insurance, one that's most likely to drop is one that's not using it. And so you're like paying this ridiculous premium. You're like, why am I paying $400 a month, again, for something I haven't ever been to the doctor? I went like once because I had a hangnail or something like, so the hangnail people drop out. And so they stopped paying, which means that you consolidate the sicker people, and now the cost of care just went up again for that. So that's the death spiral of insurance is when you, your pool becomes concentrated. Meaning that every year, the thing you're insuring against becomes more and more concentrated at a higher and higher prevalence within the condition. 'Cause people who are not having your condition are dropping out. And so by 2009, that was

going to become catastrophic. And so it didn't matter what president came in next. We were going to have an American Affordable Care Act and that had to be passed. And so everybody credited Obama, but it could have been Nixon.

It just doesn't matter. You can put anybody president there and they are going to be told such a dire story that you are literally, you know, 18 months from the end of American healthcare, unless you put this act into place. The act, by the way, did nothing to improve nutrition, nothing to improve, you know, intrinsic health of our population. Nothing to shift our, all it did was say, everybody has to sign up for insurance again so that our insurance companies don't go bankrupt. That was the entire Affordable Care aAt. And it's still like the feather in the cap of the Obama administration. And I love the Obamas as well. I love Michelle, at least. And I have great respect for, for our president as well. Amazing man. And Michelle, I think, is an extraordinary character. If we all walked around without kind of character, we would be an extraordinary society. So huge respect for these people. But in the end, they achieved only what had to be done by the pharmaceutical companies and the insurance companies to secure their position that was going bankrupt. And so that's why that thing happened.

And so why everybody was freaking out so dramatically when Trump starts rolling back the Affordable Care Act is they're like, well, we're going to be on the ropes again. We have to do something drastic if we're going to support this thing. And we can't get that thing to happen under a Trump administration. And so what are we going to do to infuse trillions of dollars into a healthcare system to buoy us up before we lose the integrity of the system again? And so we created a pandemic story that just infused literally trillions. We printed $2 trillion and we continue to print more. We handed $500 billion, remember, $500 billion were handed to random pharmaceutical companies to start making vaccines that nobody thinks they're going to ever work. Because we needed a huge infusion of cash to stabilize a system that the president just pulled the plug on saying, I don't care if you guys go bankrupt, you guys need to get your house together. We're not going to keep paying this thing. We're not going to force Americans to pay into a healthcare system. I have a huge love for all my liberal democratic friends in San Francisco and LA and New York and all of this, but I have something to tell you, which is you are playing into the hands of the pharmaceutical companies to guarantee that every American has to keep paying the pharmaceutical hospital medical system more money by saying that your number one thing now, which by the way, at the presidential debates with 16 people on stage and the democratic, you know, race for the presidency, every one of them in that, I think it was the second or third one 'cause they were like 64 initially. But when we're down at 16, they all stood on that stage. And every last one I was at the very last question, which was, is the one thing that you're going to

achieve. They all felt compelled and necessary. After the first person said that they knew they all had to say it, which was that ecology is our number one thing we have to address climate change. We need to address the collapse of the ecosystem to the last one. Every single one. And I was just like dumbfounded.

I was like, finally, finally, somebody saying that we should look at the relationships between soil, water, and air and humans and get at that. That's the number one presidential thing. And then somehow between that and a new pandemic and today's thing, the number one thing on the Biden's list now is we need universal healthcare. Well, you're damn straight, you do because you're going to have a bankrupt insurance company in the first 18 months of your pregnancy, your pregnancy, that we would call a presidency. And so we have got to make sure you birth something quick, and it's going to have to be universal healthcare. And that's number one. Now everything they tell you, everything splash and the democratic thing nobody's talking about planet Earth anymore. Nobody cares about the global warming. It's all universal healthcare. If you are going to vote a Democratic ticket because you hate Trump, you are anti-Trump what are you pro? What are you really pro for? So if you're going to vote anything, I want you to think about what do you really want the future to look like and realize that it's not going to come from that ticket.

And so your responsibility is to go build the future, do not vote Democrat and feel like you did any service to your country. You screwed us up deeper 'cause you just put us in a deep locked relationship with universal healthcare coming down the pike to make sure that we all become fully dependent on a pharmaceutical model that can be mandated at a federal level for the first time in our country, federal mandates, which is exactly what they're setting us up for this mandatory vaccine that they keep saying isn't going to work very well, so you're probably have to get three and then you're gonna have to have a booster every year. And that sounds a hell of a lot like this flu shot that we have to get every year, which has never been shown to reduce the amount of flu we get.

And so we are in this relationship and so do not let go of your sense of responsibility. The moment you check that box, you cannot outsource this responsibility. If you showed up right now with 7.8 billion souls on the planet with children's suffering at a rate that's never been seen before. You have a responsibility to show up and make the future that we want.

And that's what we need to do. Voting is not going to change that future. There is no cabinet, there's no agenda there that looks good. It all looks like more entrenched, special interests with a high-speed slam dunk for federal mandates for global healthcare. And it sounds good. Sounds altruistic sounds like a Democratic ticket, but the whole reason we flipped the whole rationale of

Democrat versus Republican. The whole red states used to be blue. The Southern Democrat was the whole thing. My grandfather worked for Eleanor Roosevelt and you know, he spent all that time going down through Tennessee with the soup lines, with the New Deal and all the philanthropic efforts to get us out of the Great Depression and all of that. They were all Southern Democrats. And you go to Trump territory today.

That was our democratic stronghold. Those people didn't change the platforms did. And the platform changed from help your neighbor, which was the attitude of the deep grandparents that I grew from. My great-grandmother grew up in West Virginia and all that. And I'll tell you in coal country or in farming country, which was in my other side of the family and Kentucky and all that, you took care of your neighbor. And that's what it meant to be a Southern Democrat is we take care of ourselves. We take care of our own and we take care of our communities. Suddenly that subtly got shifted in the 1970s to, we got to take care of everybody. So we created this kind of socialism kind of concept. And so we developed Medicaid and Medicare coming out of the sixties and all of that.

And so the sixties and seventies march towards this subtle message of everybody needs an even playing field. Everybody deserves the same thing, everything, that became the Democratic thing. And that was obnoxious to the core in the center of our country. Because if you look at the Democrats today, which are in these strongholds of Miami-Dade County, New York, LA, San Francisco, you drive 30 minutes outside of any of those towns and you are in red territory. The difference between blue and red right now, are you making anything? My bet is if you're voting blue and you're one of those cities, you don't build anything. You actually make money, mobilizing money, and that's it. You move money around.

Yeah, you're a marketing, you're an advertising. You're in sales. You're not making anything. You're certainly not producing the food that's going into the world. You're certainly not producing the oil that would drive the car to work. You're not certainly producing the electricity that fuels your Tesla as you're cruising down the road feeling so good about yourself. This is a real crisis that as Democrats, if we want a liberal ticket, we aren't doing anything real, we've been hearing a false sense of identity, a false sense of participation in life by insulating ourselves, by layers and layers of wealth and layers and layers of comfort and convenience, such that we don't do anything anymore. And so when Trump wins again, which I am amazed that I can even say that sentence, because I think it's going to happen. It's because we clumped a bunch of people that don't do anything anymore but to talk bad about the people that are actually doing everything, they're growing our crops. They're literally harvesting the strawberries that are on your fancy little beverage there. They're doing all of that stuff. They're making the oil that runs our industries. They're keeping our

economy alive.

And we damn them every day for being Trump supporters or being red or being clueless or being backwards when in fact they're the only ones doing any real work and we sequester ourselves away. And in case you didn't keep up with politics in the United States, we don't have a Popular vote. We have an electoral vote, Which means that if we go all move to the same seven counties, we're never going to win an election. And that's somehow appropriate to me that we should never run a country or win an election if we're not making anything. There was a time when the Democrats of, you know, Detroit built every car, everything, those are Republicans building the cars now. We switched the platform. We need to lose the parties and act for a Constitutional leadership again. We need a Constitutional leadership in this country that would understand the concepts of freedom of speech, freedom of the press, freedom of health. That was Benjamin Ross that had the insights with the Constitution that they should write in health freedom, because Benjamin warned, he said, if you do not write this into the Constitution that there's health freedom, then there will someday become a group of rich individuals that will come to own the health industry, and they will distribute it per their preference.

It's exactly what's happening today. Benjamin Rush saw all this coming down the pike some 200 years ago when that document was written. We have an incredible, incredible national document in the form of the Constitution and the Declaration of Independence. Those documents are divinely appointed if you ask me, because I have not seen any wisdom pour out of humans like that since.

And we ignore that every single day and the way in which we are willing to be in these, you know, sequestered in our wealth pockets, not doing anything real. And I include myself in that. I am so humbled by the farmers that I work with at any time with a Farmers Footprint, you go out on a farm, good God. Talk about some breaking hard labor and love for the land, man. They just want to make this land sing and they want to create beauty out of it. And then a bounty for their, the world around them. They want to feed the world. That's what they want to do. And they were handed a crappy toolbox to do that by the chemical industries. But if you give them a different paradigm and you reward them for the hard work they do to create the future we want and the food we want, they are more than willing to do that all day long. They're not against, you know, poisoning the planet and they don't want to poison the planet. They're not against, you know, movement towards an organic food system. It's just been stacked. The cards are stacked against them, such that it's almost impossible for them to make that move without you.

You need to know your farmer. You need to be so close to that farmer, that they start to make money from the food they grow again so that you can have a participatory conversation as to

what kind of food you want and reward them for producing that. And so if you really want to be a good Democrat right now, you will leave your city.

You will drive 30 to 60 minutes out of town and you will meet somebody who's making something real and you will become to participate in that community. Don't just go out to Yosemite, go out into the communities and stop by and go look at some hard work and people that are picking your food right now in the midst of some of the worst forest fires in history, they're out there in the smoke picking strawberries that just got sprayed three hours ago with 16 different toxins that are going to cause cancer in them and their children. And they're doing that because they have no choice, but to keep moving forward and you dam them as if they are idiots or as if they are somehow, you know, don't have the political insight or altruism that somehow you have because you're a, you're a liberal-minded Democrat. And I'm not again, I'm picking on Democrats right now because I think that we're on our high horse because we're so anti-Trump and we need to just look at this situation and be like, what the hell are we really voting for? What the hell are we really doing?

I totally agree. This whole idea of what we are for as opposed to what we are against is so powerful. So in our final moments here, I would love to know. And you touched on it with your work with a Farmer's Footprint, like, okay, so someone's listening and they're like, Whoa, like this is a lot of information that's different from what I thought. And maybe they're, you know, maybe they're like, uh-oh, okay. But I've heard you speak so many times about the amount of hope that's present right now.

And so my final question really is like, okay, so, Oh you do? Yeah. But we're not going to have time. Just, I'm going to fight you on. Can you leave me one? Yeah, I'll be brief. t's the one I asked you earlier that you said it was the last Or is that no, that's the last question. Okay. This is the one, which is what are we, what should we do? Like what should we be focused on right now? You said meeting your farmer. I'm proud to say that I have salsa danced with my farmer.

Woah, taking it to a totally different level.

Yeah, he came into my 30th birthday to surprise me because Mike doesn't really dance, but our farmer does.

That is a good job outsourcing the dancing.

I like that. Yeah, know your skillset. But beyond that, like, okay, what should we be focused on? How can we be part of the solution given that obviously like the government is not going to handle it for us?

So we have to move, you know, soil, water, and air to our first priority lists. This whole 1% for the planet was just 99% too short. We literally have to be all-in on planet Earth. We are looking at the sixth-grade extinction. We're losing one species every 20 minutes, or as it turns out by the record of the virome, there is more viral information to new adaptive capacity, new biodiversity than ever in history, from what we've done. Every time we see a great extinction, life comes back more abundant with more intelligence. That's fascinating to me, Earth didn't struggle back over 60 million years to recreate the dinosaurs earth came back with more intelligence of the mammals and the extraordinary. And again, we wouldn't have mammals, if not for the viruses that moved us forward from reptile to mammal. And the way in which those viruses were formed was under extreme stress. Under stress the virome started to produce more options for adaptation.

We are the result of an adaptive, intelligent system of life on Earth. We need to align ourselves with that very quickly. 'Cause if we do, not only do we prevent the extinction of ourselves and 90% of life on Earth, we get to see the rebirth. And that's what I am here to hope for. What if we got to see over the next 200 years, a vitality and biodiversity of plant life, animal life, insects that we have literally never seen before on the planet over the next few million years, unfolds life in some vastly beautiful fashion that we can't even imagine. But even in the next 200 years, we could see a bio-diversification of soil systems and plant life and the resilience and nutrient density in our food that will heal our children from the toxicity that we have set into motion.

And that's what we see in the lab every day. And it's what we see on the farms every day is biology heals faster than it destroys. It's more rapid in its reconstruction than it was in its deconstruction. And it's logarithmically rhythmically faster. And so if it takes you 20 years to form a cancer, you can reverse that same underlying process in a matter of months.

And so it's very exciting just how extreme this is. You can poison a piece of land for 60 years, and if you just do the right thing for nine months, you see life return and a resilience and a beauty that hasn't been witnessed in generations. And so this is the speed at which adaptation and this pandemic of life happens. If you want to be a part of pandemic of life and you want to be a part of pandemic of hope, then you're going to align yourself with Mother Earth. And so you need to think about your daily lives. What are you eating right now? What are you drinking right now? How do you drive and where do you drive and why do you drive there? What kind of work do you do is that really life-giving are you feel infused with joy and life at the end of an eight-hour workday.

If you don't feel more excited for what you're doing at the end of that, then you must be doing the wrong thing. And so start to be very strict with yourself. And your expectation is not on some sort of productivity. If your expectation is on joy, align yourself with the joy in your spirit and the

purpose of your soul. And it's going to align itself naturally within the biologic systems of soil,

water, and air. You may not know the first thing about farming, but as soon as you start to look for joy in your life, you're going to find out that it includes being barefoot outside, maybe on a beach, maybe the backyard. And so then suddenly it's like, well, why can just play out a seed? You do not even know you became a farmer.

And I'm excited that when this pandemic kicked in for the very first time in generations, everybody ran out and bought seeds. I love it. We bought all the hardware stores out of seeds and we did the right thing subconsciously. We said, we need to get back. And that was before anybody was thinking about immune system or anything else, everybody-- suddenly toilet paper disappeared.

And they were like, I should plant a garden. Like, how did you make that connection? 'Cause I've been screaming at you for 10 years to plant a garden. You didn't do it. And you ran out of toilet paper, you planted a garden, like that's bizarre. But that's exactly what happened is this sudden realization of, Oh my God, I have a 5,000 mile supply chain for my toilet paper that just got disrupted. What does that mean for my meat supply? Oh my God. I need to go buy out all the meat. So five days after the toilet paper, we bought out all the meat. And we did run out of that for a moment. We're like, well, where's my meat coming from, wait a second. There's a hundred cows and a single hamburger because we were applying on one factory to produce all this at once. Like that's disgusting. And oh, 18 million pounds just got recalled of beef because of E.Coli. 18 million pounds. Like what are we doing? Like where's this coming from? And why is the food system so sick and how come we're sick if it all came together?

And so we needed a pandemic of fear to create the pandemic of hope. And that's how humans are. We will refuse to see the truth until we're slammed up against a fear paradigm. And so, as, as frustrated as I get at the media and the common narrative and the CDC and all these other structures, I have to thank them for creating a catalyst for change. And I think it backfired on them. I think that there were certainly in some camps, a huge impetus to create a huge economic benefit to a very few people. And, but it backfired. We see more pro-immune system people than ever in history. And there's more questions about vaccines than we've ever seen in history, not because they have a vaccine on the market, but because we watched their narrative hide a bunch of semi-half-truths and create this kind of fear paradigm in us. And it's just, they've got, they put all their cards on the table and they weren't ready with a good story. And so they misfired over and over again. And they've contradicted themselves over and over again, none of the science measures up anywhere. And so we need to take advantage of this opportunity and create a pandemic of hope that our children can be healthier than us. If we do the right things now and in these next

few years.

Thank you. And the final questions based off, you just alluded to it a little bit, parents are about to turn their kids back to school and anger, this crazy school schedule. So your advice that you're telling your own kids, I know you have older kids, but like what are you talking to your kids about these days as a dad and the message like, do you have a message that you've been telling parents as they've been navigating In these waters?

You know, that's, that's an incredibly tough question. I think in the end where we run the most risk is when we tell our children anything. And if we're not listening and watching and witnessing as parents, we're bound to screw it up. And so I want you to watch your kids this evening around the dinner table or whatever it is. And I want you to think about the conversation we just had and ask yourself has my child's lifestyle got them aligned with water and air? Is my child aligned with the biology that would support them into a future? And if you're watching their behavior and you suddenly become concerned that there's nothing that they're doing that has them aligned with soil, water, and air, then you probably have a vulnerable household, and you need to realign that. And you can do that very quickly and you can simply, you know, create, you know, zero tolerance for screens on weekends or something like this and get out in nature. And make it cool. Make it an adventure. When was the last time you ran your hands beneath the leaves of ferns in a deep forest? It's a crazy, weird feeling and as beautiful. When was the last time you ran in the high mountain meadow? Had you ever, have you ever taken your boots off in that meadow and let those tundras touch your toes? Because there's an intelligence there,

there's an experience there waiting for you to have, and Mother Earth will tell you something beautiful, that she actually loves you. And she cares for you. And she has tolerance to your, your ignorance and to your disconnect. And she's got a huge invitation for you to step back into her and reconnect.

And so as a parent, are you in the way? Are you putting a bunch of expectations on your child to finish their AP classwork so they can get into some university that's going to go teach them the common paradigm? Or are you going to take them out of school? Because you suddenly got licensed to, and you're gonna start to work from home and your create a homeschool co-op or are you going to, if that sounds like idiocy, are you going to engage them on one of these, you know, burgeoning education platforms and they're taking all their curriculum on a daily basis from professors all over the world? And when are you traveling as a family? And where are you traveling to? It's gotten really cheap to travel globally, 'cause there's house swaps. And so go on houseswap.com or whatever it is, and switch for a house in Tuscany. Hell, Italy's nice. Go there for

a month. Free. The Italian family will enjoy your house somewhere in the Midwest, wherever you are. So switch some houses around, share. Let's create a barter system again, and let's go back to an economy of value, where we value human experience and human interaction over digital experiences.

And in Ikaria, Greece, they are one of the "blue zones" on the planet and they all live over a hundred years. They tend to, you know. And so I had this dinner with this couple from Ikaria and I did this beautiful toast at the end about the microbiome and resilience and food and the love they pour into their food and the guy listened very patiently. He said, you're completely wrong. And I was devastated because I thought I had nailed it.

And he said that the reason we all live over a hundred years has absolutely nothing to do with our food. The reason we all live over a hundred years in Ikaria is because we all know to set an extra chair at the dinner table every night, hoping that somebody new shows up that we've never met. And we never ask each other, what did you eat last night? But we always ask, who did you eat with last night?

And that was a sad, sad lesson for me to learn. 'Cause I had not done that well. I had been teaching nutrition and isolated in my home with my little nuclear family far too long. And I had not been inviting people into my home enough. And so tonight, watch your children, tomorrow night, invite somebody new to the table.

Thank you. This was amazing. We're so grateful. Everybody listening, go to ZachBushMD to learn all the things. Farmers Footprint. Oh yeah. ZachBushmd.com. Right on biome, all the things. We're so grateful for you and your work. Thanks for being with us.

Thanks for having me on, appreciate y'all.

What if you knew beyond a shadow of a doubt that you were doing the right thing at the right time in your business? For 28 days, I'm hosting a free experience called Right Thing, Right Time. And during it, you will do a simple, incredible data-tracking practice that is going to help you align your business and your productivity and workflow with the innate intelligence of your body and nature to get into peak flow. So you can kick indecision to the curb, work less, and get better results. You can learn all about it and join us over@katenorthrup.com/RTRT.

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