Optimizing Peptide Therapy: Theories, Principles, and Breakthrough Innovations Transcript

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Introduction and Speaker Background

Hi, everybody. Welcome to the Peptide Summit. My name is Doctor Matt Cook, and I am speaking, with one of my heroes, Doctor Isaac Elias. And I, and we've been talking for the last, 30 minutes and just talking about stuff because I had 30 minutes of questions, to get going on the 30, the ten hours that I would like to talk to him about.

We have a lot of mutual friends, and, and for the last basically eight years, people are like Isaac, Elias, Isaac, Elias, that. And, and so then suddenly somebody, proposed having him come in on the peptide summit and he said yes.

So it's just the highlight, basically, at my whole year that you're with us and and I think that for me, that's because, you are one of the great thinkers in integrative medicine, who, like us, has been very interested in some of the bigger procedures that, can help detox patients with significant inflammatory problems, like with, plasma therapeutic plasma exchange and plasmapheresis and some of some of those things, he's well known and, extremely well thought of in the world of complex on this, on Lyme disease and also in cancer.

He's a MD and has a background in and integrative oncology as well as in, family medicine. And so it's just my, highest honor to be with you. I'm delighted to be here, with you.

So, thanks for joining us. Yeah. Thank you so much for having me. And, yeah, we had a great conversation. I've learned a lot from the from the talk we had the prior prior to starting this interview.

And I'm glad for the opportunity to, to make a contribution to this important topic. Of course. Okay. Perfect. This is one of the, podcasts that, my goal, my goal is, is that I'm going to talk to you 6 or 7 or 10 or 20 times because I have that much that I could talk to you about.

And as, as we were kind of going back and forth an email, one idea that we came to was to have a little bit of a conversation around the overall scope of, of how to begin to think about complex illness and how to begin to prepare patients from a detox perspective.

And in terms of some of the bigger things that you can do in terms of resetting immunity, autoimmunity, chronic infections, and inflammatory states. And so we're going to try to get into some of that, because I think this is going to be fertile ground work that that we can make.

That is going to be, something that is then that you can build on by starting to talk about peptides and stuff like that. But the framework of what we're going to talk about, I think is going to be an important kind of, background for people to understand.

And so maybe with with that in mind, tell me a little bit about just, just, a little bit about yourself, your, your, thought processes in medicine and how, how how we got here.

Yeah. So I think my thought processes, a result of my life journey, you know, as a child, I'm a native of Israel, and my father was a civil engineer. And as a child, we traveled to with him to different countries where he developed the voting system.

And so I grew up early age in Ghana. Then I grew up in Brazil when I was ten, and I grew up in Korea, where I was exposed to Buddhism for the first time into yoga and to taekwondo.

I used to practice with the national team of Korea because they had to to learn English. So I was very fortunate. So I had a multicultural upbringing that really prepared me for having them.

What a disciplinary view. And when I went to medical school, yeah, I knew I'm going to do integrative medicine, and you're not going to be a regular doctor.

But, you know, I still survived the seven years that it is in Israel. While studying Chinese medicine for three years and organized the course in herbal medicine.

Then I did the master of science in Chinese medicine in the United States. I was really successful as a young doctor and I felt it's too early, too soon.

So all these years while I'm doing this, I always was engaged in meditation practice. Since I was 16. And, I had a big influence when it came to, let's say there's a 30.

I started training in Tibetan Buddhism, which I still training for decades. So there's a part of me about meditation and healing. I was I learned and treated some of the most legendary Tibet, you know, Buddhist masters in the, in Malaya.

And it's the same time a while specializing in integrative oncology, which I was always interested in. I, I also was an active researcher. So I have dozens of papers, I have multiple NIH grants.

So I combine all of this. And with all this journey, all this journey allows you to really address complex diseases, because the trick, you know, about about addressing complex diseases is really addressing the person.

So, you know, if you really see the person, the picture will unfold. And, with that. So this very complex journey and I tend to I used to tend to do very complex treatment, which I still do sometimes they simplify my life.

Now I realize that there is some kind of very guiding principle in our human, and the guiding principle is that we lost the connection with our heart.

You know, our heart is our greatest healer, and I don't know if we'll have time to talk about it today. There's a physiological reason for, for, for for this statement.

And really when I looked at it, it said epidemic of inflammation and fibrosis. What we see now is the Covid. For me, it's not a surprise if you look at my patent and my inventions from over 20 years ago, they are all around the cytokine storm.

So in 95 I recognized and got involved with a specific protein called galectin three, which is a carbohydrate binding protein, a galectin binding protein.

Complex Illness, Detox, and the Survival Paradox

And galectin three initially was implicated in driving the metastatic process in cancer. There were a really impressive paper in J. And I. It's when you give modifies it respecting it can reverse it.

And then I developed the first commercially available, the modified C perspective, and picked the sole. And we now have over 75 published papers. But as you looked at the effect of galectin three, there are close to 10,000 papers.

You looked at papers on my compound, which are done by multiple universities. Every disease, you know, you will see renal disease in lung disease and liver disease and acute diseases and chronic disease and fibrosis.

So when I really look deeper, I recognize the basic process, the drives, our aging process and chronic illnesses and acute illnesses. It's the biggest finding of the last two years that I'm focusing on.

And this is a survival paradox. It's really what we have built innately to survive innately. So if we are built innately to survive, it is to be spontaneous.

We can't control it, otherwise we won't make it. And this is where the sympathetic system comes into play, the part of the autonomic system. But then we have the parasympathetic system that really regulates it, and we can balance between them relatively easy.

But then there's a biochemical response. And it's really it's really triggered one of the key proteins in the trigger that is collecting food. So on one level my journey to took me to understanding the extracellular, the pathways, you know, and how it affects the mitochondria and effectors into one and EGF and and PDK and PD aids and and I know and of course in cancer I will be glycolysis.

We can touch maybe later. But then it also looked at how what we can do about it. So now when we look at what disturbs and disrupt our system and puts us into survival mode, into a crisis, then it's a whole gamut of things, right from from psycho spiritual to psychological to trauma to mental to emotional.

What I would call like scars and energetic. Emotional to physical scars to toxins, you know, to heavy metals, to more toxicity, to infection. And and then with all of this, we have our genetics and we have our epigenetics.

So how do we address the whole complexity? It's really for me personally, I'm at this stage in my life of what I call unlearning. You know, I learned a lot.

And then you kind of shed of the concept and you get a little bit of a deeper insight. And the survival paradox is a deeper insight because you can see how how it affects cancer, how it affects the cytokine storm, how it affects fibrosis.

And it's specifically relevant for peptide therapy because you're trying to get your body to regenerate right, to try to get it, to get to where it's healthy.

So if we look at the rejected, the survival for somebody who is very young fetus, you know, like if we use stem cells, etc., their survival is growth is regeneration.

It's healthy to know when we get older our survival is repair. And so the repair is driven by galectin three. So if you do an injury we I published the important papers for example in in aka sepsis.

In sepsis it causes acute kidney injury in the very acceptable animal model. And you show that within minutes of doing the injury it's called cycle. It's it's a procedure you show within minutes collecting into spikes only later interleukin six spikes.

When I blow galectin three when I give them motivated or motivated suspecting I attenuate the IL six. There is no kidney damage and there's a great improvement in the survival from 60% this to 20% this.

So what happens is we want to see what puts us in a survival mode. And in this sense, you're working. My work is not easy because we are bombarded all the time with EMF.

We stress with lack of sleep. We, the too much information and with thousands of chemicals, hundreds of pesticides and with heavy metals. So it's an ongoing journey where we have to understand, we have to help our detoxification system.

Detoxification is the first step. And if anyone has doubt about it, look, what do we do when we come to life? The first thing we do is we exit, we detoxify.

The last thing we do is we exit. So detoxification is a letting go process and the survival the survival response is a holding is a not letting go like every cancer has.

The every cell has the wisdom to express itself and then dies up after this. It says it doesn't want to do it and goes into survival mode, doesn't accept the impermanence of things.

That's what the cancer cells. Because I said the cells decided not to die, then what does it do? It creates a micro environment that you and I deal with all the time.

Right. How how does it create the micro environment? By bringing in three three, its latest formation, five of them that bind to different growth factors, inflammatory factors, immune evasion factors, integrated lattice formation, literally coating.

So the biofilm it will be the basic structure of it. And then the micro environment is very different. It's a toxic the receptors change. Insulin receptors go down p53 goes down.

You can get cancer pathways. You can get inflammatory pathways, you get metabolic pathway and mitochondria doesn't functions. No not really. Mitochondria in many level is the smallest organism in our body even within the cell because it has its own boundaries.

You know, it decides what to do a little bit. So all of these we want to see in the big picture, the more we can see the big picture, the less we have to.

That's really the okay, I you gave me so much to, question you about with that intro. So I 100% love that. We're going to finish with the heart and all of that stuff, because I think that that's crucial.

You know, it's interesting to me and it was interesting to read your articles and I appreciated that because, you know, coming from a background, I'm, I actually am in anesthesiologist by training.

And so then one of the things that people will do from the anesthesia or the surgical world to try to begin to understand how a biochemical process would work around an organ is, is that they'll go in and then tie off and the artery that goes to that organ.

So basically, kind of in an effort to kill that. And then that's fundamentally, I think what happened with your study of acute kidney injury. Right. Yeah.

This is yeah, I knew one of the studies, one was a safety study and the other was why it's called into it. It's called perfusion reperfusion. Exactly.

Which is what happens in cardiac surgery. You know, when you put on the heart lung. And that's really so that's what really happens in Covid in Covid actually patients with AKA so 40% of Aki and 50% of them will die because basically the cytokine storm will give a message the moment the kidney gets damaged.

It's a game changer because it creates. And there are some amazing papers on the topic. I mean, there's so much to talk about that not directly, but the the amazing papers were with our compound published by not not by me by multiple centers, 1100 ICU patients.

They show the level of galectin three before cardiac surgery in patients with no preexisting like heart failure or kidney disease, will determine very accurately who is going to get Aki after the surgery if you do.

Yeah. So yeah. So this is yeah. So you're right. It's the perfusion issue, which is we are really having in a micro level on the cellular level. Right. When you have a micro environment.

Right, right. And so then you know I had always thought about that. And so you we were you're always reading perfusion reperfusion articles. And, and really about the liver the kidney and the heart.

And so then that would be like kind of a trajectory of thought and that, that I maybe I've been around kind of for 25 years in a way. And you longer and, but then I think that the interest and and interestingly that is almost kind of like a model of what's happening at a cellular level for people who have kind of chronic hypo perfusion or maybe because of infections, they have, hyper viscosity and clotting and decreased blood flow.

But regardless, what happens is, is this galectin three is this protein that is kind of helpful potentially in initially in helping maybe prevent an infection from coming in and it creates a latticework.

But when that is chronically happening, too much of it basically leads to scarring where basically, your scar off an organ or an area and then that leads to fibrosis.

Right? Yeah. So this is one pathway. So the galectin three will drive the inflammatory pathway I L1 b I'll six ten. It's alpha. They all driven by collecting three through of the inflammatory macrophage.

And it will drive TGF beta. But here in this thing galectin three level will kill you acutely. So what happens you need galectin three for five minutes five minutes.

You know we show in our studies it's amazing. You look look look look at crp crp. It goes up hundred fold between like under one and 100. When someone is very inflamed I il6 goes up 1000 fluid.

Collectively we will go up 30%, 40%. It's such an upstream that the smallest change will create over time a big change. So we have we have shown when we give MCP and also when we do a for resistant rats.

We actually do this kind of research as part of, of my work. We show that we are able to take down galectin three after two hours. But even if we don't get everything comes down after two hours of eight hours, it's done.

It's work. But it starts a crazy cascade of events. So what's happening is we mobilizes the system, but then it causes inflammation. It actually helps often to to have an an abnormal immune response.

Because one of the concept of survival that we really have to understand, we are not the only ones who want to survive. The bacteria want to survive. The fungus want to survive the virus want to survive.

So if you look at Covid, the spike protein of the Covid is almost identical to galectin three. The, basic papers are very important. And I was trying to do a clinical trial on such a cheap, you know, MCP.

It's $100 a month. But it was so pharma luck. You know, I couldn't get clinical trials despite papers. A colleague I published when she was in Harvard published an important paper in from in Mexico City showing that in the biggest hospital in the when Covid patient came in regard less of the involvement of the lungs, the level of the latency is that are determined who will get to the ICU and who will get it.

Time of admission. And I published two papers on this, on the on sepsis and on post cardiac surgeon. When they walk to the ICU, it's sepsis patient no resisting condition.

You check the galectin three, you will know who will later get AKA and more important, who is going to die. So there's a whole field testing we all engaged in in trying to change the environment on a on a chronic basis, which is what we do in the clinic, you know, in an acute basis.

What I'm working now more in an ICU environment. I think we have some fascinating solution for sepsis. But this is a this is not specifically for this topic.

That's a that's a well and so that that will be an opportunity for another talk. You've been a big a big researcher and a big I would say influencer on this thing that I want to unpack for people.

Modified citrus pectin. So what is this and how how can that impact galectin. And tell me what's going on with that. And tell me about your company. Of course.

So modified to seed respecting. I developed the first commercially available modifies it was taking pictures on in 95. And since then we have published over there were over 75 papers published on on on picked up.

So some of them are maybe not all of them. Many universities we did research with Harvard with, with Colombia,

with the USDA. We, you know, we with multiple centers.

We just our latest paper is a multicenter trial in biochemical recurrence of prostate cancer, showing that, MCP, slows or reverses the biochemical recurrence.

So basically, MCP block galectin three. And for this reason, it is for me, it is the Fonda. It's a foundational supplement because people it's like when people people really talk to me finally, and because I'm so busy with other stuff, not that I'm shy, but I'm busy with other stuff.

And then they say, oh my God, I think this is the best kept secret in town. People really need to know galectin three drives the inflammation drive. It's not one more component.

So the problem is let's say you you you look at the studies letters. There are for reasons it removes il6 it doesn't work because the other cytokines, when you address connecting through, you stop the whole cascade.

So in this sense it's getting the recognition. And I've made the observation on the role in inflammation.

Galectin-3, Inflammation, and Modified Citrus Pectin

So it was it's over 20 years ago. And but it's finally got the attention where about 1012 years ago. And now it's there's a lot of focus. So galectin should be the neat thing about it.

Not only does it look, it modifies it respect it. Not only does it block galectin three, but it also removes heavy metals. It also I published a number of paper.

It removes some mycotoxins. It will break the biofilm. It is a prebiotic because it helps in this healthy survival. It's really a it's really a gift from nature.

I really look at it in this way. How do you, for someone who, let's say, had mild systemic inflammation and, and some mycotoxins, from an environmental exposure and some, some mild to moderate symptoms of, systemic illness, like, let's say, Lyme disease.

And you were going to start what kind of how how do you, how do you start someone from a dosing perspective. Right. And then and what time of day how do people how do you, how do you go through that.

So the, the optimal dose is 15g a day. And interestingly enough, almost both mycotoxins in Lyme patients tolerate it very well. So and I'll I'll talk about it in a moment. Why.

Because it is a very important it regulates neuroinflammation and obviously if you collisions we drive neuroinflammation. The Alzheimer plaque is 20 times more galectin three than normal tissue glia gets gets stimulated by.

It's kind of like because it has the same relationship with macrophage. So you good you get to 15g. You want to build it. You know you can start with five grams.

So you either do five gram three times a day. I most of my patient and I do 7.5g twice a day. It's you can take it on empty stomach ideally, but you don't have to.

You can take it. It's close to minus ten 15 minutes. So you know, ten minutes before a meal and before bedtime. You know, this is a good time to take it, but it doesn't have to be away from medicines or or food.

As much as we thought it was an initial thought in 95, and we have shown that it's not an issue. And so then in terms of like, you know, but a lot of times people think about like some of the other binders that they take from Ikea toxins, they'll take charcoal.

There's the idea is you're going to have to separate that from what not. Not necessarily. It's not okay. No. But it's very different. Like you cannot put modified to just baking as a binder.

It is a binder. But as I explained to people, there are different binders. And there's more to speaking because of the effect on collecting. So when you blow in some people, it's dramatic, and some people will take even six months or nine months if we ever know, in our prostate cancer studies with people after six months, only the ones who benefited continued in.

Some people who did not benefit decided to continue, and they started getting results after nine months and they got a result of the three four years.

So it takes each of us a different a different physiology, different chemistry that affects us. But the idea is it and because galectin three is so involved in joint health, for example, a lot of people will report improvement in their joint pains in the joint mobility.

A lot of people will improve, will report improved memory. And so I think that's one part that really is making this a foundational approach. And for me, you know, I if you look at my charts from 15 years ago, I didn't give everybody my research.

It was packed in and it wasn't my first supplement. Now it's my first supplement, not because I'm involved with it, because the research is black and white on literally every condition, you know, and, and also it helps.

So naturally it will help to potentiate other treatments. So for example, if you are doing a I mean, not talking specifically about cancer when you're giving peptide therapy, we're trying to change the pathways.

You're trying to give the body a new direct, and you really want to make sure it's not going down the survival mode. So one thing is using what is acceptable spectrum.

But the other thing that you open the conversation or is, is we got to detoxify on an ongoing basis. So in this sense, I think in general it's important to detoxify.

And one area that I have to admit I knew, we all know, but I didn't pay enough attention to because it's like a given is pesticides. And I think, driving are driving chronic illnesses.

You know, if you look at the deterioration in the health of so many people, you can you can almost connect it to all these toxins that, you know, like, you look at blood in the umbilical cord.

I think I just went to study yesterday, 287 different toxic chemicals than ever. It's getting to the fetus already. So I've. I've been doing a lot of work lately on how to remove pesticides because MCP does something.

And we actually now starting clinical trial, I developed a very, very neat supplement called glide for detox. That specific takes a glyphosate and and other herbicides in there.

So it there's a number of binders but in a sophisticated way. And and yeah, the initial feedback is great, but the idea is that we have to detoxify and we have doctors like all the time because we live in a toxic world.

So detoxification is what we talk to for supplement. And a detoxification is also internally. Can we when we have an interaction, do we respond with a negative emotion, which we all do.

You know I do. I you know everybody that oh can we respond with an open heart. You know then it's actually a different we, we are less toxic. And that's the idea of so we can detoxify or we can transform.

So there is a transformative healing effect in the body. And at the end when we talk about the heart, I will explain to, yeah. Okay. So then I, I 100% agree with everything that you're saying.

And then it's kind of interesting just to. Write for, for like a young doctor out there or some I've got a lot of pre-med medical students. And so we're talking with this, just hearing how you're speaking is exactly how a, a wise doctor should think.

So that was that's I love just listening to you. The and if somebody comes in and you're concerned about pesticides, what how do you like to test for that?

Are you. You know, I right now I use great planes. Yeah. Me too. That's the most agreeable test. You know, it's, I think they are reliable. Again. A lot of these companies are not interested in research, you know, like, you know, I, I know it because I try to get the support to, to, to do trials, but I think, I think it's it seems to be a reliable test.

We have to know that urine test is tricky because we don't know where is you know, it doesn't really reflect what happened 2 or 3 years ago. Maybe it does in the tissue. It's shedding.

I don't like to to like to to like induce like, like with heavy metals because you never know which tissue is going to give it in when. So, you know, like if you give them before for let's say taking mercury, you know, it comes from different tissues and different times.

So I think I'm getting a good sense of the urine. And I see a difference. Like when I treat people the, the GLP and the in the, in the, in the glyphosate, you know, the life of that the, the general toxins will go down in the patient will will improve.

And in this sense it's very interesting. You can sometimes do it, I mean with supplements, you know, when they take the picture. So they definitely say different.

But that's what sometimes you get to go into therapeutic areas where you really. Yeah, you really have a system you know, by. And why do you do it. Because our as many people have you know it's genetic in in this in peas and they don't detoxify well.

And we all well see it's like you doing it to work for them especially for patients who are struggling, you know, patients who are trying to get better and trying to get better.

The idea that they can sit and something is happening outside of the body. So are no side effects happening outside of the body. And it's doing the work for them is conceptually and you know, it's really it's it's a different concept especially.

And yeah. And so then no, I'm so big on this and that's why I'm so excited to kind of be connecting with you the so then but just to sort of highlight what you said, I think it's important that, maybe when I was growing up in western Montana, eating all of my food from a garden, I remember there was an idea in my family that, like, we didn't need to really focus on detox because we never basically we ate 100% organic, healthy lifestyle all the time.

Like, no, no, the world is so toxic that even though I eat only organic, I have actually incorporated a lot of, detox strategies into my life, you know, and for for quite a while, I used, your product and I'm coming back to it, so I and and so I'm, I'm a fan of that, but so then here we go.

We're doing all of these detox things and kind of working on our stuff. But then suddenly you go, is there a way in medicine and science that we can detox to the body in a more substantial way?

Right then, just like some detox strategies? And then that's what we're talking about with a free and, and plasma freezes. And so you're just at the top of my list on this.

And so then tell me what what is what, what is happening with this? Tell me how you do it. Because it's interesting for people to hear both just before you say, I want to touch on the pesticides again.

Oh, yeah. So and then we'll go to this nature's ways. So if you look at pesticides, they affect our, our soil, our

ground. They affect our plants which affect the animals that eat the plants and they affect our waters.

So nature provided us with solutions. So for example, if you look at the like for detox my product. So I use the Sheila G. And full Vick acid from the soil that shows can buy in full, can buy in the life was I I use alginate and kill one the different binders, but alginate is more of a binder.

Kelp also is and nourishment. So I give nourishment and I use a special pectin, not modified perspective. High molecular highest ification pectin, which binds in the gut.

And then it was I use the glycine is the fueling because it's similar to glyphosate. So I just gave it as an example that we always want to tap into the wisdom of nature and then go into the details.

And you as somebody trained in Chinese medicine as well, you really you really understand it. So looking at this and understanding how we are bombarded, the concept of acid rain, this is a way to detoxify is a key concept, not only to detoxify, to change the extracellular and as a result of the cellular environment of the patient.

Now it's not a permanent thing, but when you change the environment, you know, your environment is you are changing, the environment is the person is becoming different.

I, I collaborate really with the top apheresis people in the world. And, you know, some people are on the chief editor of, of Journal of Clinical Services, etc..

And so I actually got to speak, I spoke in the, in this very last eyesight initiative society for for reasons before Covid to 15 to 17 to 19. And they spoke to us from I think when I spoke representing some data, I brought the concept that, you know, people are changing is we do have a revision and we can one day tailor make a series based on 3D printing in an interesting.

And one of the leading people who really came to me said, I think I actually got you. I can see this happening. So the idea that we use that for this to create a different environment, and then you put in your peptide and then you put in your lives and then and so what it does, it changes the environment.

So on ecology I will use it pre chemotherapy. Pre radiation therapy as close as I can to the beginning and especially pre immunotherapy because all the Pd-l1 inhibitors don't work when there's a lot of inflammation.

And while I'm developing personally a column to remove just galectin three the more generalized the phrases available, it removes the slew of inflammatory compound in and and oxidize lipids.

So when you move oxidized lipids, they have a greater affinity to positive charges in metals. Very important you know. So you're moving heavy metals. So often I will integrate collection into the process actually.

And I will support the shedding of toxins. You got to know how to do this not right away but by using facilitated calling during the services. And then specific IV's afterwards.

So it's not the regular of resists, but what you does if you do it correctly, it is very unusual for somebody to feel depleted post afterwards. Most people feel better.

People are very toxic. It can take a few days. And the thing is it it's a helpful tool, but it cannot be a standalone. You know, we we have to integrated with everything that you and I and people like us are doing and developing and, and I have to admit, kind of talking to you, I kind of see the next generation.

I'm no more in my in my reflection age. You know, I'm doing research to know teaching. Still tweeting, of course, but I'm very focused, afraid this is my thing, the one thing I like, I do, you know that the focus of the clean, that's really what we do because it does take a it is it is a specialty, you know.

And then there are more generalized phrases like, you know, plasma exchange, which I used of course, for same

condition. But it was fascinating to me what we are talking.

In 2019, I was in Japan. It was in October, November, just before the Covid in Kyoto, and there was a session about new horizons for the elderly for visits.

Okay. And the very famous German clinician said the idea that he thinks it can be used in inflammatory condition. You know, I like, like any discovery, you know, you lay like, you like crackling.

You hear it? You know what it is? Of course it can be used. It's the most important use, you know. So so for micro talks, it does struggling it that it it's really it's really it can be a game changer.

And sometimes it's a lot of treatments and sometimes it's only a few. So then I would echo that. And so then if you if you imagine that mycotoxins are our neurotoxins right.

And then they're floating around, they get in our body and they start to float around in our bloodstream. And so then when you do, basically imagine blood coming in and then it's going to go through a process, a filter of some kind.

And that filter might separate, lipids or it might write about plasma in general. And so then and it's there's going to be, what we do now, but in evolution, because of people like you, of being able to create a separation.

And so the, the blood comes back, but then we can pull something out. So then this goes back to our kind of detox strategy. And then, if you think of all of physiology go back to anesthesia often one thing happens and then a whole bunch of things happen as a consequence of that.

So then there's and that initial thing happens here. And then that drives another reaction and another reaction and another one.

Detox Strategies, Pesticides, and Apheresis

And then each of those drives several reactions. And so you can go from 0 to 100. And then we could call that a cytokine storm. Exactly. And then if we went from 0 to 20, but we were constantly doing that, that that might be something that would be kind of like what's going on with a lot of complex illness patients.

Right. And so then I think, and if you go ahead, if you go to ten, it will be like a inflammation, you know, that we have like subclinical. Yeah, exactly.

And so then with that in mind you have a cytokine storm chronic illness patients. And then basically people like you and me that are just looking to repair and maintain and stay young but have some inflammation.

And so then within that then imagine that there's a molecule. You are the central in driving that inflammatory process. And then one of galectin three would be one of those molecules.

And so we can pull that out. So I would say again this is my my work. It's nobody's able to do it yet. But the galectin three once I'm done with my, with my column, it will be done.

But galectin three, you know, it's a I work with some very renowned people from Harvard. I did some papers with the with David David Sax, who was discovered MHC two is the basic immune recognition.

And I remember he sent me an email saying you can share when when you came in. And so I work with large animals. I think, you know, you really have something.

We just shut down the inflammation, you know, shut it down is the abnormal inflammation, the beauty. And what I think is to be is a central protein is because it can still be expressed locally when it's needed.

You're not stopping the expression where it's needed. You're just cleaning up. And that's why, picked the soil,

modified it was picked in is so is so foundational.

I'm mentioning the name because, you know, I am like many other innovators, there's always about science where people value the science and put out. Because what if I was picking is it is a generic name.

Anybody can take it picked. And because the modified seed respecting there's no. So it's all the research was done on a specific most effective respecting.

But yes. But of course you can't do only this. You have to address the other thing. And that's the beauty of the picture. But the you know what your analogy of the little bit, ten, 20%, hundred percent is great.

And sometimes you you need to do 100% for literally a few minutes. And then stop it. So when we are young, we can regulate it. Right? When there is a cut on a baby, it heals without a scar.

We get a cut. Now we're going to get a scar because our our injury repair is designed. And so then and that I think then brings up from a trajectory perspective of integrative medicine where we have this big opportunity because if you say what is what's the defining conversation of of our sort of next ten years, and I think it's going to have, the word Covid in the conversation somewhere because it's such a, it's, it's going to be a problem that, you know, hundreds of millions of people are going to have to, deal with and some of those having long term consequences of it.

And, you know, I in parallel with studying functional medicine and studying some of these big things and realizing I my conclusion and I think you're conclusion, you can't do one without the other because there's, there's so dependent, but you really can't do the big interventional things without having a baseline concept of base of a strategy.

And so then if you were, if you were to then build on here, we have 10%, 20 to 30%, 100%, cytokine storm is 100%, 10% is inflammation. And and and so then we begin to think about things that we can do.

And so one thing we can do is we can do some of our sieves where we can pull the inflammation out of the body. We can we could have as your number one supplement, modified satisfaction, which is going to begin to affect certain proteins and then certain that, and then also is going to help quite a bit with detox and doing some binding.

Other directions in terms of strategies and interventional procedures that you would build on kind of as, as next ideas. After that, you know, so I would now put into the detox addressing pesticides because we get them with the food and also we have to realize you can be in it, you can grow organic, but where you live, the airplanes landing in SFO are probably flying above.

So you're being showered with LED all the time, you know, because planes plane fuel is letting fuel selected, you know, and people don't know it. So so you you grow organic in the garden and sure enough it's full of lead.

So we have we have to address it. And I'm usually I'm I'm a non alarmist person. You know I, I'm not Titan I'm my whole philosophy. Then I think we need to look at very basic things that are very very very challenging.

And this is the concept between how much the patient can do and how much the doctor has to do. And we start by by going all the way to the doctor intervention and etcetera.

And then we want to do listen, listen, listen, listen. This, this sage in Chinese medicine is the doctor sage is the one that doesn't have to do anything.

You just meet with the patient and everything changes. So we need to do what we can do for our life. So I think if a fundamental thing for us is to move our body and to move and to move our body in a harmonious way, you know, now there's a big movement for exercise, but it's becoming very competitive.

People run marathon and, and, you know, and get their pulses to insane levels, which which in my opinion is not

balanced. You know, it's create oxidative stress.

So create movement, create movement physically create movement emotionally, create movement behaviorally, be open minded. You know, one of the issues that you know.

So when you when you are working nice to you I mean it's like, look what you're doing. Think it's so different. You know, it's when we have something that is we're not familiar with, we either fight it or we ridicule it, or we have fear of it, which are very survival responses.

Right. So the fear is isolation. It's a micro environment. It's the fighting is a is a the fighting approach is the cytokine storm. So you can see it in patients.

So in this sense we have to look at our body and see what can really change our body. And if we look at our body you know it's amazing. We I'm rounding the number up a little bit just to be convenient.

We are made out of 50 trillion cells. Not a million times a thousand is a billion, times a thousand is a trillion. We can't comprehend this number. You know how many reactions every cell has in a second?

I didn't know I'd meet. Take a guess. 10,000. This is what I said. Close to a million reactions a second. Okay, so can you comprehensive this body 50 trillion having 100,000 to 1 million reactions per second is all working together and not falling apart.

If that's not a miracle, I don't know what's a miracle. How does it happen? It's this. It's this, mutual support. Mutual support between cells, between tissues.

But it's driven in most tissues. They survival so additional that I'm going sometime I'm going to get more blood, like nine digits. And then when the body's jogging, I'm going to get less blood.

And then, you know, and we're going to work around it, you know. And so every organ in the body, every tissue, every cell wants to get clean blood. And it let's go dirty blood did the basic detox and nourishment.

And in the membrane we have the transformation. Things change. So the only organ that functions differently in the body is it is built to take our toxins.

If it doesn't get it, it won't survive. It's our heart. Our heart gets dirty blood. It's fundamentally a different organ. And if you get it with no discrimination, if it's actually no one, it doesn't say, I'm going to take it only from the liver, only from the brain takes it from everywhere.

It connects with the universe, right? With the breath. What is the our personal drama for the universe is nothing. Our toxicity for the universe can continue except when we start hurting our environment, right?

That's the problem now. Our. And then what? The how does it gives without discrimination? That is survival of the heart. In my book, the The Survival Paradox, I've expressed this concept in my book, The Survival Podcast, which I published a few months ago.

We brings this idea as with and goes over all the major diseases cancer, auto immunity, kidney, heart, detox, healing. This comes of survival and freeing from the survival paradox which I little bit explain this.

So the heart gives and what's the how does the heart? Who does the heart nourish first? The heart first nourishes itself through the coronary arteries.

So the heart notices itself in order to nourish others and is part of nourishing. And what's also interesting, I was thinking interesting. It's kind of an analogy I came up with.

No, I didn't find it anywhere. Is it the heart gets blood supply only after it finishes its work. The blood is outside of

the heart. It's the only organ in the body who gets its blood supply after the fact.

You know the blood is already out. And that's part of the transformative qualities of connecting with the heart. I call it open health medicine. There's the infinite healing power, and each of us has this potential.

And in this sense, that's what amazing healing happens. So in my work, when I have time in the Covid definitely disrupted it. You know, it's hands on.

I work with the person, I teach meditation and healing a lot, and I try to help this. And for the patients with toxicity, it's very helpful. And so this is all nice.

And it's it's practical actually as a whole very detailed meditation help to make it. It goes all the way to cell biology and epigenetics. But putting this aside, why is it practical for somebody with mycotoxins or Lyme disease or chronic pain?

It is because these people are hooked into a pattern. They're hooked into a pattern of pain that has physiological effects, right? Biochemical acid, but also has never logical effect.

They have one symptom that reminds them that, you know, somebody will after a headache, will get, let's say, nights with or I have a headache, I'm going to a good night's with.

There's a certain neuronal connection that happens and we need to disrupt it. We need to stop it. We need to allow for different things to refresh. And that's, for example, the great benefit of neural therapy, right, of injecting Scouse.

You know, your Jacob's skull is broken. It's insane. Think about it. You inject, the skull is broken. Sometime it gets better by 10%, sometimes by 50%.

But it never comes back. The body forgets. So in the same way, we want to also do the things on an emotional level, on a psychological level. And this is where the real hope for healing is.

This is the place where we know, is it? Not? Everybody will be a miracle, but anyone can be a miracle because everything is changing all the time. And that's really the basis of our work.

We are trying to change. How is it tissue function? But for the tissue to function, the thinking has to change, the feeling has to change and then the physiology.

So we come to it from both end. And in my journey specifically, one journey was this galectin three and signing how to to move from scurrying inside bodies and stuckness to to change the environments of the silicon, get oxygen and then my meditation journey, you know, they all say the same and they kind of made in many levels, references.

There's a connection there because they're afraid this is done outside of our body. You know, it's bigger than the body, right? Than outside of the body.

That's a little bit kind of connecting a few things together. Okay, okay. So, you know, we studied, I did a lot of qigong studying. So I'll give you my thoughts on what you just said.

And, and they talked about the the emperor resides in the heart, which is the in the emperor one's peace. I did, and so most of my meditation experience was either around yoga or around Chinese medicine.

But we did a you just reminded me, and I haven't thought of it in a while, but we studied, in the ritual shamanic tradition, with a shaman named Brant Segunda.

And he was an interesting guy who was a Bay area guy who had studied with, the shamanic people. And these are, these would be native, almost kind of like Native American, but in Mexico, in Mexico, shamanic people, and so in their in their image and in their imagination and their unconsciousness.

The, animal of the heart is the deer. And then what happens is they connect to the universe through their heart. So just kind of a when when you said it, I go, oh, that's just like what they talk about.

And, and and then interestingly, what happens with inflammation, you know, we, we talk about toxicity. You know, now basically we're finding that if you get metals down, coronary artery disease gets better.

And so there's a inflamed inflammatory part of the inflammation in those heart blood vessels that are primarily flowing. When the when the the heart's relaxing.

That's toxic. I think that fundamentally things like lact and things like mycotoxins that are those things are probably implicated in and in cardiovascular disease.

And and then you brought up neural therapy and people may not know what that is, but basically you can take if there's a scar and inject that scar with broken.

And this comes from Germany. And basically I think it's a really very good idea. And probably a third of what I do in my life, I feel like it's somewhat derivative of neural therapy, because I've been doing ultrasound guided injections around and peripheral nervous as an anesthesiologist.

And then I had heard about neural therapy. And so then I started looking at scars with an ultrasound and doing injections. And so we have quite a bit of experience using prochain, but, using growth factors and peptides and other things.

So yeah, you make some it's amazing because with you with ultrasound can even look at internal scars. But it's amazing. Exactly. And so then a lot of times if you look at a scar, you'll see you'll see it go down like an angle.

And so then we'll, we'll put our needle right into where the scar is. But and then it was interesting because I had heard about this we started doing quite a while ago, you know, 60, 50 years doing, an approach to treat the fight or flight nervous system, called the stellate ganglion block, because the fight or flight nerves live right next to the rest and relaxed nerves, they're they're in between two muscles called longest colon, longest capitis in the front of the neck.

And then what we do is we come over the brachial plexus and then we come basically deep to the jugular vein. Right next to the carotid is where these nerves live.

And then we put local anesthetic there and basically put those nerves to sleep and sometimes the vagus nerve. But you can you don't have to do it with just with local anesthetic.

Heart, Trauma, and Healing Through the Heart

You can do it with other molecules as well. And then what that does is that resets the balance of fight or flight and rest and relax. And then one of the most profound things that it will begin to impact is the heart.

And so now you were as a way to kind of think about, as a way to, to engage us in this conversation, but then to think about something like heart disease.

You have this spectrum of inflammation that could be inflammation, that could be toxicity, and then that toxicity could be metals. It could be, things like pesticides and stuff like that.

There could be an imbalance, a fight or flight. There could be kind of a spiritual aspect of, of what is the heart. And so then trying to think about all of those things is interesting.

Yeah. It's amazing. Well, it's these tools I mean, your patients are very fortunate to do can do these things. You know, when we look at this, we have our genetic makeup.

If you look at how many people made us, you know, every generation is 25 years, right? So two 5475 is a ton of it is, you know, you're like is 16, you go to 1500.

An infinite number of people made us. So we have infinite. We are all connected. We are. There's no way that going back 10,000 years, one of us hasn't had a mutual parent.

Well, it's impossible mathematically, but the genetics are how to change the epigenetics is really no is really what we make it change the the famous biblical Jewish saying, I call the fruit that I should need to know that everything is predetermined.

But we have the choice. The predetermination is our genetics. The choice is our epigenetics. So often when we when we heal ourself. So if we have a healthy lifestyle, it helps our epigenetics.

When we heal from our heart. It's a multi-generational healing. And in in the book, in my book, when I talk about healing, this kind of survival, I talk about about the about my grandmother and grandfather from the Holocaust and named after my after after my grandfather Isaac.

And and then the trauma I was holding in ladies, you know, unexplainable, very strong chest pain. We saw with some scoliosis the upper back. But since age like 14.

And I knew exactly. And then when I healed it now it's A56 or no pain after 15 years. You know, I can like everything is more open. It's like insane. But then it changed the way my mother is relating to the Holocaust, and I didn't tell her about it.

So it went to my grandfather and it affected the next generation. So this is a real power feeling. When you do these injections, you are allowing somebody to get to this level of healing.

The heart doesn't have to hold all this generational, conceptual, traumatic information. And then the people recalibrate. Then if you give them peptide or regenerating power, they're going to go in the right highway.

You know, so that so so then I, I is 100% my belief system. And so then I always tell people that there's often multi-generational trauma happening. And so then it did.

So your your grandfather died in the Holocaust. No, he didn't die. He made it. But he held his trauma. He died age 50 from stomach cancer. Yeah. And that 58 thing.

And my grandmother died just in 2007, 98. And we were at her grave, my mother suddenly telling us, you know, where they're buried? Right next to the other.

My mother is telling us, you know, she didn't have the right number. Ten out of 12 siblings were killed by Hitler. It was five out of eight. Then I went back to check.

We were never told this, you know, here I am, you know, I mean, almost 50 years old. None of my sibling websites, dude knows it. We're like, wow, he never talked about it.

It was stomached in his stomach. He couldn't handle it. He got stomach cancer. My grandmother, she was a fighter. She led them to escape and she survived two cancers, lived to the age of 98.

You know, each one a different pattern. And my mother was very successful in life. Amazing woman, still alive and healthy in her late 80s, mid 80s. But then we were never and she never could talk about the Holocaust.

You could never see a movie. And then it when she would meditate next to me, she would come to my meditation retreat and when she would meditate just next to me, memories would surface for him just from meditating close to me, you know.

And then she would interpret them sometimes a little bit differently. But then suddenly, after I had my own healing, she suddenly went to a ceremony about the Holocaust and was watching some movie.

Think about the local. She would have never watched before. Something suddenly shifted in her. And so this is just my own example. And there are, of course many other examples.

But it's the power of healing. And so it's really it's a multi dimensional healing. And it's really interesting. You know, it's a this, this galectin three and MK is interesting.

We've talked about nature giving a solution because MK is a powerful kiloton of lead. It's a stronger signature of flint. And you know when we manufacture it we have to use special pills that are allowing lead from special areas in the world in special pipes because it because most fibers it pectin bind to lead so easily especially the specific.

So it's impossible to get rid of lead of mercury published on the US and on so on on uranium all the positively heavy metals. So and that's why it is it's probably one of the mechanism of the cardiovascular health beyond the galectin three.

You know, it, you know, because of its help. So yeah, it's so then you know what I, I we always had this idea I learned this when I was setting energy medicine.

But there and yeah, I was using this term and you could think about parents and kids, but you could also think about kids and parents. There's a, there's a song I always like to reference a song if I can, but there's the song that John Prine, sang called Sam Stone, and it was about someone who came home from Vietnam and was addicted to heroin, and everything went kind of horrible and he dies.

But, the, the there's a line in the song that says little pitchers have big ears. Don't stop and count. The years old songs never last too long on broken radios.

And so the idea is, a little pitcher is these little kids. They have big ears. They remember everything that we sat right at. And so then and then you also your mother also remembers everything.

She used that. And so then like and then often what I feel like is psychic lee around trauma that there might be some expression of pain and trauma that's unresolved.

And so then everyone has an idea that it's unresolvable because it hasn't been resolved by the family. And so then what one way that you could define that would be the with the word karma.

But then that's coming along, coming along, coming along. And then you heal it. And so then they're all looking at you and they're realizing, oh, he healed that.

Okay, that means we're probably going to heal from this. Right? And so then that is totally so this is when it's very but in my case, I never told my mother that I because I couldn't share with her that my trauma was because of the Holocaust.

And I had I had certain things that I cannot share because of the sensitivity around even, you know, around the healing was so deep and so, so much forgiving that for Israelis and Jewish people to do what they want to accept, it's possible.

So I don't even share and I don't want to share here, because when people are going to hear this, nobody's listening. But, you know, just because there were certain people in charge of the Holocaust that they could feel their suffering in anyway.

But when the healing happened and this the beauty that I really didn't have to say, for example, my mother, her father died when she was 17 and she could never go back to the moment all your life, never thought about it.

And then when she was meditating with me one day, suddenly, you know, we don't do it, you know, the memory came back. So it's what happened. It's me allowing my space to get bigger.

It was nonverbally no effect. And that's the power of the mind. But the real power of the mind is the power of the heart. Because the mind is driven by concept.

The heart is no concept. You know, the electromagnetic field of the heart is the biggest field in the body. It's, you know, every cell in the body is affected by our what's happening in our heart.

And that's the power of hard medicine. So, you know, it's the vagus nerve giving so much information from the body to the brain, you know. So you're opening this.

You are opening is a communication. You know, it's remarkable what you said. It's and of course, the heart will change. How did you heal yourself? It was through this, through my meditation practice and certain inner work and psychological work and kind of not.

It's what happens when things surface up deep inside. So the different meditation techniques, but the ultimate meditation that definitely not a talking in such a conversation that is like the most esoteric meditation in Tibetan Buddhism, there is no meditation.

Everything is free. It's very hard. Like right now I'm talking to you and I'm meditating and that's like I would be sitting there. There's no separation.

It takes decades of training and some people get lucky and find it. It's hard to find that. But, you know, I just and I definitely studied with great teacher.

So I have some a little bit of this. Not a lot. So what happens when the issues come up. They just get freed. And then when they get freed, it's like a bird flying in the sky.

Like writing in water. It disappears. If you hold it, analyze it, it just becomes another pattern. So the idea is that when insights come to come like, you know, like I'm talking to you now, but my thoughts are coming from I feel my thoughts coming from the heart because them coming from the head.

So then it's flowing, it's moving. And then it is a different healing power. But that's how I do it too. Yeah, I know I was going to tell you, you didn't try to do it because of what you shared with me today.

You actually naturally do it and you're trained in it. You know, a lot of the energetic work, the shamanic work, I mean, you know, for someone like you, for someone like me, we are so fortunate.

Every patient is amazing. Every day is amazing compared to algorithm driven medicine. And in this sense, we almost feel like, you know, I open my heart to regular doctors, even if they don't agree with me.

I'm not trying to convince them. It's a waste of time. But they are really good people who just went on a path that didn't allow them to open their eyes.

You know, I was fortunate. I went to medical school knowing that I'm not going to do it. Knowing I started knowing that I'm not going to do regular medicine.

I survived, you know, I it was hard for me to finish medical school. And I was a pretty good student. My my professors were not happy at that alternative. But, the differential but seeing things, you know.

But so then it's interesting because then this might be kind of a good kind of final direction for us in closing, because and then I'm going to, I'm going to, we're going to talk a whole bunch.

But, but then, what. My impression is, which is the awesome is, is that, you know, I, I'm reading you know, I, I, I

pulled all of your articles and read all of your articles and they, they don't read like alternative medicine.

They read like clinical physiology. That was done at a, at, UCSF, you know, they're they're, they're, they're basically they read like basic science. And so then but then the secret of medicine as being kind of connected to your heart and then, and then, helping to tell, tell is helping to tell yourself something of a story about how you're healing and, and what's happening as you go through this journey.

And so we talk about the hero's journey. When we talk about trauma, then we talk about and, you know, for me, it's interesting because the hero's journey is always changing as you as your your story, as you get better, your story gets better and you evolve and learn, learn, take time to go through it.

But I think you hit on something that really is the truth. And I think directionally integrative medicine is just going to adopt more and more science and more and more basic lab research.

And then if you can wrap that around to kind of a coherent thought process of, of being a human being, where as you reset physiology, it has a side effect, not just of having you be healthier, but having you be maybe spiritually calmer at some level.

Yeah. It's it's so true. You know, it's it's I mean, you know, it's I think this conversation reflected, you know, in your work reflects you didn't. Yeah.

On one level, you know, I, I, you know, I'm, I have in age grand self-published with me with, with really with leading authors in the, in the fields, you know, but and I can share with them whatever they can hold, you know, and they can hold their own belief system sometime.

I know that certain I can get certain results that are even not comprehensible by then, like, the people can't comprehend it. The degenerative liver kidney disease can be reversed, but it can be reversed, you know, so you have to work in.

I speak the language, and I've learned not an easy way to to stay within the language. But then, for example, in my book, The Survival Paradox, in my work, in the clinic, in my meditation and healing retreats, then I will.

It's the whole, you know, and they show the whole picture. And the idea is to empower the patient to really to really connect with the with the infinite healing power.

Peptides, Regenerative Medicine, and Future Directions

But in order to do that this, then we have all the methods that we talk to, you know, today. So yeah, it's fascinating. I can only imagine where where you're going to be in ten years.

I would love to know. I'm, I'm kind of. I just started to see that. So then I'm. But so then let me say let me say so this is the peptide summit. So then let me say some ideas that sort of I have and kind of some trajectories of, of where things could go.

Because I think that that's interesting. So then and we are talking about inflammation and then, and then physiological pathways that, that could, it could one expression is cytokine storm and covet and organ failure.

And another expression is inflammation. And basically the toxicity of life that causes us to kind of get worse sometimes that is driven by an infectious process, sometimes that's driven by a toxic process, or sometimes that's driven by a handful of other things.

But let's say, and infection and toxicity would be high on that list. Or, and then often there's an inflammatory response. And so then we would me and you would be thinking about plasmapheresis, plasma exchange with some of the other things that you're doing that will pull out lipids, for example, which I think are extremely interesting surrounding that immune peptides and the immune kind of the peptide concepts, things like thymus

alpha one was one of the original ones which regulates immune response.

And so I find that one fairly interesting because if it's too high can come down. If I can pull out some toxicity, it will work better. It's called think things like, we I really like the fragments, the thymus and beta for better than thymus and better for us.

So like fragment one to for fragment 17 to 23, also known as to be 500. And so then these can really have a fairly profound effect on regulating and modulating inflammation.

And so you'll you'll see them bring inflammation down and we'll use them, for everything from neural therapy like around nerves to systemically to even IV.

And then we'll find a lot of synergy between that and things like plasmapheresis. The once you start to detox, people, one of the things that you mentioned early on is in the setting of fibrosis and toxicity, one of the first things that happens is our mitochondria, which make our energy become dysfunctional.

So then there's a variety of peptides that stimulate mitochondria. The and so then as you begin to kind of but I, I find people to do a lot better if you regulate immune function and work on toxicity before you add those in.

And so then that's kind of an interesting idea. And then there's other things, to supplement wellness for. And so you have that whole category constellation of things.

And then there's the bio regulator peptides both orally and injectable. And so there's bio regulator peptides for blood vessels. The heart three for the brain three for the immune system.

And so then now there's small molecules that in fact may have more to do with epigenetic expression than anything. So they're going yeah, they're so small they go in and affect transcription.

And, and and then even in terms of like mycotoxins, we're looking at like the Gini test, looking at to see if people are printing inflammatory genes, watching that come down and then using kind of a, a constellation of all of these ideas, then what I'm going to do is we're going to talk more about this.

But then directionally we we have basically all of kind of the Ibe functional medicine that existed before you, which was, before Isaac, but we'll call it before Isaac and after Isaac.

Vitamin C, glutathione, antioxidants, all of those things are great. Then we've got these kind of bigger interventional things that really detox the body.

And then within peptides, regenerative medicine, stem cells, exosomes. Now we have a constellation of things that can begin to regulate bounds, immune expression and then and then begin to optimize biological health in for everyone from the sickest of the sick to people that are just living their lives.

And and so then that would be I some of the directions, some of where I see things going in the next year or two. Totally and probably even longer. Yeah.

This is a beautiful you really outlined it so beautifully. It's amazing. I mean, it's nice if you can do it in a year or two, it may take longer, but, I mean, it's really it's it's quite amazing.

Your thoughts. Yeah. Really it's well, I every almost everything I do, I've had hundreds of conversations about you. I can't even believe I'm talking to you, but, the, I've standing on your shoulders on anything that I'm doing, I have to admit.

So I'm grateful for the work that you did. I loved hearing, about the heart work that you've done. I studied Tibetan Buddhism a little bit, too. Have you ever heard of Lama La?

I think, but I'm not sure. He's. He's, Caucasian, but he's a Tibetan. Buddhist, teacher and monk. And he's hilariously funny. We always I wish he would always talk to us and then make us laugh hilariously and then mention something like, really true.

And then you would. And then he was that you were too blocked to understand what I said. So I had to make you laugh so that you could receive it. But, I'm delighted that people got to receive you and understand a little bit about you.

And I think we understand from I understand a what a great human being you are, what a thoughtful physician you are. And, and so I'm grateful for the scientific and, and spiritual and medical research that you're doing.

So thank you for being with us. Thank you so much for having me. What what a great conversation. And I am going to bug you with some more conversations in the future.

Okay. Perfect. I can't wait. Thank you, thank you. Okay. Thank you. Bye bye.