Introduction and Guest Background

Hi everybody. This is Doctor Keesha, back again for the reverse Autoimmune Disease Summit 5.0. And we're talking about healing the energy body in this Virgin version.

And of course, everything is energy. You know, autoimmunity is energy. We are energy. The planet we live on is energy. And so there's no conversation that's really exempt from the subject matter.

And this conversation is no exception. I'm really pleased to introduce to you, Doctor Eric Gordon, who's the president of Gordon Medical Research Center, a clinician and a researcher.

From 2007 to 2009. He created a series of medical symposia bringing together leading international medical researchers and cutting edge clinicians, focusing on Me, CFS, Chronic fatigue syndrome, Lyme disease, autoimmune diseases, and autism.

His collaboration with Doctor Robert Novio and his research into metabolomics, mitochondrial function, and chronic inflammatory disease is now bringing one of his dreams to life.

Doctor Gordon was a coauthor of a groundbreaking study, Metabolic Features of Chronic Fatigue Syndrome. Welcome to the summit. Well, thank you, thank you, thank you very much.

And I always like to specifi be clear that, you know, we should be doing some of the questions of the paper and the patients. Doctor Inovio contributed the brains.

I mean, it's it's his work. You know, I, I wish I could say it was mine. You know, we we continue to collaborate and discuss and learn, but, he really is, an incredible visionary, because he one of the few clinicians or he's no longer a clinician, but he's one of the few doctors who actually spent a long time treating patients, but also has just encyclopedic knowledge of, biochemistry and evolutionary biology.

And, as well as virology. Actually, his PhD was in virology. And so it's just the ability very timely urology right now. So I'd love to bring us because part of, you know, like the the title of your talk is autoimmune and long Covid.

And there's a relationship between long Covid, our long haul Covid and this becoming an autoimmune issue, much like Lyme disease can become an autoimmune issue when it becomes chronic.

And I would like to to dive into that and, talk a little bit about that. Well, you know, in my mind, most like I say, I preface this with everything we say about biology and the human, the human, condition, always has exceptions.

Autoimmunity, Long COVID, and Brain Inflammation

Okay. But with that said, in my mind, most autoimmune disease has edits. Heart or it's trigger is usually some chronic inflammatory state, often low level.

You know, I'm sure you're talks you've often gone over how, you know, you have celiac disease and gut inflammation and, you know, all these low that we call I consider them low level infections or inflammation, chronic inflammation, inflammation.

But sometimes they're triggered by infection. And, you know, what we call long Covid is, is no different. You know, I think what's different about, long Covid is that we're seeing the same family of responses that we see in, me, CFS and in what, you know, people call chronic Lyme because many, you know, some chronic Lyme patients have persistent infection and do respond to antibiotics or other antimicrobial therapies.

And sometimes the bug is gone, but the body is still reacting as early as though it's there. And that's the autoimmune, the autoimmune component because and the brain can be reacting and chronic quite well.

That is with long Covid, right. We can have this neurological brain response. Yeah. But to me the brain is what controls the body. I mean the nervous system, you know, but it's you know, obviously it's a feedback loop.

You know, we all know that, you know, the vagus nerve gets most of its information from your gut and the but it's when the brain is has enough energy, you can relax and you can tell your immune system to relax.

You know, I always remind people that, relaxation is what takes energy when you contract muscles. That's kind of falling off the cliff. Okay? The relaxation of the muscle is what takes your body to make ATP and to actually use energy, you know, and to create energy.

So it it is and and when the brain, doesn't have enough energy, it gets irritable. And the, and with irritability comes all the, emotional responses that people have, you know, and so if you're someone who tends to anxiety, if you're someone who tends to, a little obsessive thinking, these are just these are self-protective mechanisms that usually we keep under control.

But the more inflamed the brain gets, the more inflammation that's in the body, the more of these cytokines or chemicals that your cells make to communicate and to, tell the body that there's inflammation there when they get into the brain, they create the inflammatory situation that will then, lead to anxiety or OCD or depression.

Just depends on how you're wired, but also with outside of the moon part of it. And I think this is even just as scary, if not scarier. The micro glia start to carve away your connections, right?

And so you start winding up with areas that aren't connected. And you have this brain fog. Oh, absolutely. Or just as some of us, as we get older, we find the same thing is that.

Yeah. Aren't we we we do lose, you know, connections in our brain and we actually choose them up, you know? Absolutely. When, when the glial cells are activated, you can actually begin to chew up brain tissue.

Luckily, we can also that can be helped because we can actually see that, we do, these MRI that are with some mathematical permutations called neural quant.

I mean, that's just one, the name of one companies, but there's several out there. And we can see in things like, you know, mold, mycotoxins, illness and in chronic Lyme disease and in probably any other chronic inflammatory disease, you can see parts of the brain that expand because they're inflamed and other parts that shrink because as the inflammation went on, they've atrophied a bit.

But what's really exciting is when you deal with the underlying inflammation and you supply the right nutrients, these things can come back. And that's what what what I, you know, because for too long, medicine has had this idea that if there's something happens to your brain, you're cooked right and finished.

And, it's amazing the good plasticity and the ability, for things to heal, you know, so well. And the higher your level of adverse childhood experiences in your, you know, in, in your past that also triggers this microglia carving.

Right. And, and we know that once you down regulate the hyper vigilance of that limbic system and start to come into that self-soothe and self-regulation that that stops, and then the neuroplasticity starts taking over and you can build new bridges.

And so absolutely, you know, you can go from high volume right side of your amygdala and, and shrinkage of report prefrontal cortex into the very opposite.

And that's beautiful. And that is what gives us hope. And and one thing I'd like to emphasize to people, because what confuses folks is how some people have X event and, you know, they really have persistent problems and

other people seem to sail through.

And this is where, one of Doctor Navios papers that have never really gotten the press that it should have. He did a study for the Department of Defense, know about I think it was ten years ago now, looking at, people who were deployed to Afghanistan and Iraq and, basically 10% of the people had 90% of the post traumatic stress.

Okay.

Cell Danger Response and Mitochondrial Healing

And he could see that based on their metabolomics. So how your body actually self-soothe biochemically helps determine your, risk of these adverse events through especially, but especially in childhood, because that's when the brain is most plastic.

That's when we're developing. So you can really unfortunately develop patterns that are hard to change. I just remind people that because, you know, self-judgment.

I can imagine that's a big part of what you try to teach people is how to, you know, temper that, is really it's really easy to do, especially when you're, you know, your spouse seems to like sail through and you seem to fall apart easily.

And you get that idea that somehow you're morally less when. No, this is just how we're built and understanding, you know, like and have compassion for other energy patterns.

You know, we have one of five about how we respond and one of them is rigid, you know, and and another is, is fluid like water. Another one is more air where we will just leave our body and disassociate.

Another is fire where we get aggressive. You know, another one is Earth, where we just hunker in and you know, and hold on and get stuck. And we have, you know, each of us has a different way that we developed in childhood and probably have some, perhaps karmic and genetic predisposition to.

And here we are. And and it armors our body in a very specific way. And you're not going to be like your spouse is a very small percentage of a chance that you will be like your spouse, you know, so you're not broken.

You're just different. Right? And that's so important. It's just being gentle. Because what I find is that in my patient population, that almost all of them were what I call, you know, if I asked them, they were the sensitive one in the family.

They were the ones who felt what was happening without a lot of words. And that's a gift because they often have very fine sense of taste and hearing and vision.

Yeah. See. Yeah. And but, you know, and it's a, it's a wondrous gift, but it unfortunately comes with a price in our modern world because of, you know, the level of, just toxicity and lack of, of, of ease of physical activity and, you know, nurturing from the Earth, I mean, all the things that we know make, make a healthy body and, and give the signal.

I mean, that's something we'll talk about a little later on is how you need the signals for healing. And they're not one. I mean, that's in medicine. We've always taken things.

I mean, well, not all medicine, but unfortunately modern medicine, we tend to think in what I call a, a trauma based model where, you know, there was an accident, bullet wound, you know, which were great at dealing with because that's our.

What's the active ingredient? Let's distill it down in a reductionist way. And we're not reducible that way. Neither are our experiences. No biology does not work.

The way machines work, I always tell people, you know, we make machines. That's why we can be, you know, we can build bridges really well, but we we don't understand biology at that level.

And you. Because you can't. Because nothing does one thing in the body, right? It's all multiplicative. And so, you know, when we try to and we can, you know, a big event is a big event.

But how our body deals with it goes back to that beauty of the multiplicity of possibility that makes us individuals. Let's talk about cell danger response and how it's related to auto immunity.

Yeah. Well, I think the first thing I always like to remind people it first of all, and hardly anybody's heard this response, but people are beginning to talk about it.

And, I think I, like people mentioned that it's a concept. It's not a thing. Okay. It's an overarching concept for how your, body, maintains itself. You know, because really, it's Doctor Inovio calls, you know, one aspect, the healing cycle.

And the healing cycle is what we do every day. You know, we each we build, you know, we eat, then at night, we sleep in, it's nighttime. We often break down injured tissue or we try to, you know, take care of old cells and we build up some new ones.

And then, of course, our liver move our length. Yeah, absolutely. You know, like the holding at night, you know, you get the, the link in the, in the, it's a lot of work happening at night for you to think that your body's resting.

It's working. It's working hard. Really? But that's the healing cycle. That's what happens every day. And that's why when you're healthy, you know, you injure yourself, you know, you overdo.

And in fact, that's how we grow is by pushing our bodies in exercise to the point where you actually injure tissue a bit and then usually, you know, during the day, but mostly at night you heal it.

Okay. So that's great. That's when everything is working well. Now if you have a bigger injury, you then go into a, we're more than a few cells or are injured.

You go into what Doctor Nabeel calls the cells danger in response. And he's broken that down into three pieces. Basically, the first one is the inflammatory piece, the end.

And so a lot of inflammation and removal of dead tissue because, you know, that's what you got. You got to clean it up. The second part, this CDR, what he calls CDR two is when you're rebuilding that.

And that's a growth phase. And interestingly enough, that's the phase that gets disordered in often in autoimmune diseases. Okay. It's this because, you know, like I said, it's this is an overarching concept.

So it's not just about rebuilding tissue. It's also about how your immune cells okay, monitor and regulate themselves because, you know, I'm sure in some of your other, some it's when you've got more into the, you know, the nitty gritty of the physiology and less, you know, it's it's the, you know, the T cells and the B cells, but they're always ragged.

Self-regulation is what's gone awry in autoimmune disease. And so that has a lot to do with how, the lymphocytes, self-regulate in this so-called CDR two phase when, when they're turning themselves on and they're making more of themselves.

Okay. And so that's often happening in an imbalanced way, in autoimmune disease. And the CD3 is at the point where the tissue has repair and growing back because the CDR two is when you are, repopulating cells like stem cells come in and they and the other cells nearby start to grow.

But in CD3, these cells are maturing and they're now beginning to talk to their neighbors again, because the whole

thing about a healthy body is good communication, just like a healthy family or society is a healthy sex life.

Everything is about good communication, right? Right. And that's what. And that's what. So when the CDR, when the system is working well you go through this phases CDR one CDR or two CDR three and then back to the normal, a health cycle of just small repairs and fixing things that need to be fixed that aren't too big.

I call like the the health cycle is more like, you know, you're fixing you just cleaning up stuff around the house. The CDR is when you have to call the contractor, you know, less, so and the thing that's really interesting about this is that, you know, you know, has positioned the mitochondria as the regulator of this system.

And most of us think of the mitochondria as the, the powerhouse of the cell. What makes ATP and what, you know, keeps our energy thing going, our energy system going.

But, he, you know, he's he's a mitochondrial specialist. Actually, he was the first president of the American Mitochondrial Association. This is one of his big things.

And mitochondria have different forms. Okay. They had these long they they they actually form well normally when they're doing our background let's keep our cells healthy.

They're mostly in these long filamentous forms that are communicating. They actually touch attached to each other and communicate okay. But when we go into the CDR one they break apart and he calls it the spaghetti and meatballs model because you have these long filamentous forms which are, you know, then the ones we considered normal and then the meatball ones are when they've broken apart and they're kind of not communicating with each other once again because they're hunkering down for survival.

Okay. So the mitochondria in the CDR one sense danger. Now the most, probably the most primeval danger sense is to bad chemicals and viruses because because these this cycle happens in single cell organisms.

It's not about people. This is how life works at every level. And so during that hunkering down, it's I always say it's a little bit like in the feudal ages when, you know, like, the invaders would come, people would burn the fields and retreat to the castle.

Well, that's what happens in the CD1. Okay, you lower your ATP production, okay? You start making these big molecules that can be hijacked by the virus, okay?

And you start putting some of that ATP that you're still making a little bit of on the cell surface, and it acts as a communication molecule that tells the other cells that there's danger here and that produces a sickness behavior.

Long COVID, Clotting, and Persistent Spike Protein

By the way, if you if you inject people with ATP, they actually will feel, sick, you know, like, flu ish, achy, all over tired, not hungry, want to go hang out in the corner and hide because.

Which is interesting everybody. Because in cellular biology, we tend to think of ATP as a little units of energy that every cell needs to function and as good.

Right. So what's really disgusting? Well, it is good because. Exactly. But to think of it like causing sickness behavior if you inject is fascinating.

Well it's because it's a, it's a communication molecule. It's like everything in your body, the volume affects the message. Okay. Just like, you know, when you say please or if you scream, please, you get a very different message across.

Which is why homeopathy works too. Yeah. So it's it's the tone. And, you know, ATP is a state. So you have like at least I think in humans we have like at least 17 known receptors for various purely called a pure energy.

And ATP is made up of purines. It's just part of the part of the make up of your DNA and RNA. And so you have receptors for these molecules, okay, for ATP and UDP and a whole bunch of others.

But these are crucial because without a little bit of ATP leaking out of the cell, you don't learn the way that dopamine tells your brain to learn something.

You pay attention is because a little ATP came out. So it's a molecule of attention, you know, and attention goes to to memory because you got to remember the stuff that's dangerous.

And it also tells you, you know, if you put a lot out, it lets you know you're really in trouble. You got to like, hunker down and protect yourself. So that's kind of the CDR one in the CDR to, and the the mitochondria are sort of coming back online a little bit, but not completely.

And, and during the CDR one and two, you're but getting most of your energy from burning glucose from burning sugar. And that's why people who are chronically ill often, you know, they it's not just a sweet tooth.

It's it's it's the only thing that makes them feel better. It gives them a little energy is because there are mitochondria aren't doing the normal job of making all those 3436 ATP.

You know, you're only you have to burn glucose and you got to burn a lot of it to get energy. So red jello in the hospital was not that bad. I do like, but yeah, you know, that is my whole entire medical career.

I have Pooh poohed red jello, and that was, well. Well, what? You're getting a little protein and a little sugar could be worse. So that's that's. I never saw that with the red food coloring, but.

Okay. Yeah. Yeah, maybe. But that could be something. But so yeah, it's just trying to get the complexity that the mitochondria when they're going through these things are not broken.

And that's one of the reasons why, when people are really in the throes of being really sick, a lot of the, the supplements that we feed people don't work so well, you know, is because a lot of them are there to, quench oxygen of stress or to help the mitochondria work more efficiently.

But the mitochondria, when they're in that meatball form. They're not going to be using a lot of CoQ10. Okay. And a lot of these other nutrients that we normally think of in the mitochondria.

So that's why it doesn't work. But as you're healing when you start entering that CD3, when you're beginning, the cell is now maturing and going back to functioning and talking to its neighbors.

Then the CoQ10 really works. Yeah. And so I just want to because I know for years people would come in with shopping bags full of supplements. You know, and, and just to go back for a step, the reason I fell in love with Doctor Navios ideas is because it helped explain why, I was treating people when I was treating kind of healthy people in the 90s.

The supplements were great, you know, the people who were just tired and wired, you know, working too hard and pushing themselves, not sleeping enough, not eating well.

But they're still okay. They're just fatigued because they're kind of pushing. The supplements often help, but with thicker people, it changes, it changes.

And so your mitochondria have changed. But and and the well I don't want to go too much. But one of the things I just want to emphasize here is that, you know, going from stage to stage, CR 1 to 2 to three, unfortunately, we don't know the magic trigger to get them to go.

And that's why I it's so important to do things that are just generally that gives signals to the body that the war's over, such as, you know, maybe being outside, being in the sun movement a little bit, you know, if you've got with

the, you know, that, post exertional malaise, if you're somebody who who exercises and feels terrible for 2 or 3 days afterwards, well, don't push.

But if you can walk around your house, walk around your house, if you can walk a half a block, walk a half a block, that little bit of motion we want to get more of that structured water and place in your cell.

Oh yes yes yes yes. It's it's just so important to do the not so glamorous but probably really basic important things. And again, you know, people get frustrated because when you're really sick that doesn't get you well right.

But keeps giving your body the signals that when you or you're, you're, you know, the person you're working with to help your health return to health, you finally hit on the thing that your body needs.

You'll be in a much better shape and ready to move on if you actually are spending some time in nature, even if it's just a few minutes just getting outside.

So I just one of my big things don't don't wait for the miracle right now. That's so true. Okay, so so how is this similar to let's let's talk about long Covid and persistent vaccine injury.

Well, okay. You know, is exactly what causes long Covid. There are different ideas and I think they're all in play. And again, in some people, one is more important than the other.

You know, the two main what I call I like to call things stories because to me, you know, medicine is story. People like to think that there's like rock solid facts, but, you know, again, when you're near death, we have rock solid stuff.

You know, you're in the ICU. Really? No. A lot of good things to do. But when you don't feel well and we have ideas, I'm not so sure. But anyway, we call it the art of medicine, right?

Which is very frustrating when you're the patient and and you would like answers. And especially in this modern world where people, you know, we all see the wonders of technology.

It's it's really frustrating to realize that, again, they work better when we build it. When, when God or, whatever your, you know, way of looking at the organizing, forces of the universe created it.

We don't know so much, but but anyway, the I've lost my train of thought there. That was very. That's what happens when you get really all these. You can lose things.

The, So I lost where I was going, so, we were talking about. Oh, yes. How how long? Covid. Yes. So, there's a fellow doctor, Bruce Patterson, who, really early on, he, he had always been interested in the in persistent viral infections. Okay.

He worked at Stanford up to about 2010. And then he went off on his own because he was working on things like dengue and, cytomegalovirus. These are things that are persistent in the body sometimes, especially dengue.

And most people, it's an acute infection, but sometimes it can be chronic. And he started to see that he could find persistent pieces of the, of the virus, not necessarily a whole replicating virus, but a piece that was stimulating the immune system living in a monocyte now a monocyte is one of your white blood cells.

It's what we call macrophages in when they're floating around the bloodstream. Okay. If you, again don't want to overwhelm people, but it's a it's part of what we call your innate immune system.

And so he found and so when when Covid came, he and he and people right away were having persistent infection early on, it was clear that we we couldn't find any virus.

But people were feeling terrible and fatigued for months. He started looking for them and he did find in these we calls a typical one subset of the monocyte that often tends to patrol the blood vessels.

Okay. He found pieces of the spike protein, the S1 piece, just a small piece of it. But this should have been metabolized by the monocyte. You know, it should have been you know, it can last 15 to 18 months post-infection, but it hangs out sometimes in, in the, in these monocytes.

And when these monocytes then latch on to a blood vessel in a particular area, it signals inflammation. And it calls more inflammatory cells there. And so if it's in your liver, it's going to make the liver a little unhappy.

If it's in your heart, it's going to make the heart a little unhappy. And so he came up with some ways to, a dislodge these monocytes and cause some and get rid of them, and help interfere with how they were talking to the immune system.

So he has a whole program for that. Okay. Yeah. It helps a bunch of people. Okay. And then there was, a researcher, Doctor Pretorius, in South Africa, who, noticed that lots of people with Covid had very high, abnormal, thrombosis.

You know, we did see that. All right. In the beginning. That's one of the dangers is blood clots in. And also we see that's one of the dangers from, the vaccine so that we this blood clotting, that's what happened with the JNJ one, that big thing right away.

Of the, clots in the brain. But those are very, very those are, those are very unusual. Let me put it. I don't want it to be very clear. Those are very unusual.

But they prove the point that this can happen very, very rare. My dad died after the vaccine. Oh my God. Yeah. Well, you know, because the vaccine, it's a double edged sword.

Okay. I mean, like, I, I have to believe that, you know, from the change in the mortality figures, when we started using the vaccine, especially in older people.

Okay. People, people over 60, over 70, and especially over 80, you know, it was it made a huge difference. On the other hand, I wouldn't be surprised if we had a lot more cardiovascular deaths because the vaccine does create a pro, thrombotic.

I just it makes the blood clot easier. Okay. And we have seen that I, we've followed some people after the vaccine and you can measure that this marker called D-dimer, which happens when you're breaking down clot goes up now.

But anyway, so Doctor Pretorius started looking at the blood and what she was finding, though not just that it was forming, more clotting, but these were abnormal clots.

Okay? Because normally our body's pretty good at breaking them down. That's why we see these high D dimers. Because your body's working hard. Well, in some people with long Covid, the dimers aren't even elevated.

Okay? Is because the, when you have a lot of inflammation, which the spike protein creates, your, the, the, the blood clot itself forms differently. Instead of being, in the fibrinogen, instead of being in these, like, you know, three nice three dimensional shapes becomes pleated and more linear, and the enzymes that normally break down blood clots that normally break down five, fibrin don't work.

Treatment Approaches and Clinical Takeaways

And so you have these microscopic areas of fiber and deposition, you know, and often whether it's hiding virus or hiding other, toxins. That's a question I don't have the answer to.

But you definitely having a lot of inflammation. And when you start forming these, you deprive areas of blood flow. And so you get lots of the, you know, brain fog or just, you know, basically every symptom that patients get relates to decreased energy production in an organ for a time.

And that's what confuses, doctors is because these don't often leave traces in the normal blood testing. Yeah. Okay. And that's why chronically ill people, have such a hard time.

Because until we find the test that shows them. Because I'm old enough back in the, in the in the 70s, Ms. was still, they were just beginning to get that it was real.

I mean, they in the 60s and 50s and this was considered a psychological. I mean, you know, it was mostly women hysterical, you know. Yeah. What are we going to do?

You know, although we're from Victorian times, we are a histrionic group. Yeah, I get it. But can I say, yeah, that. But that's that's the history of medicine. Okay.

When we don't understand it, it happens more in women. It must be psychological and that's okay. Hormonal hormonal women have on the head. Send them on their way.

Yeah, I apologize, but, yeah, that's that's been the stories and, so, you know, so until we can measure things, that's what happens. And unfortunately, these chronic disease diseases even quote unquote long Covid, and especially the vaccine reactions, the typical blood tests are normal.

You know, your blood count and your liver and kidney functions tend to be normal. So they're not looking. We have to look a little deeper. And unfortunately, the the blood tests that doctor Pretorius uses are ones that are that are really simple, but they're really, at this point, only done in hospital labs.

They're not. You can't get them commercially yet, so we're kind of stuck there. But what's interesting and I, I'm just going to I won't go too far on this, but since we're talking about these blood clotting things, is that, there was some doctors, and.

I'm sorry. I'm blanking on on her name. I apologize for that. But in Germany, who started, using a type of a Ferris's, and if rhesus is like cleaning the blood, it kind of like, takes your blood out and it goes through either a centrifuge or a filter.

And she was using a device in Germany that uses a filter. Okay. That was a I believe she was using the one that was originally developed for people with super high cholesterol.

It's not popularly it's not used much in America. There's only, probably a handful of places that use it, but, it, it it's used for people with super high cholesterol and a few other things.

And it does filter these out. And she was using them when people with post Covid long quote unquote long haul Covid and getting some good results and she and Doctor Pretorius are now working together and publishing some papers.

So it's it's really very exciting. And they're getting some good results. I personally think that a combination of using that with the regular type of a forensics, which, just kind of filters the blood through a centrifuge and removes the immunoglobulins because one of the things that drives lots of chronic autoimmune diseases, and this is where I think the connection is with long Covid and autoimmunity is, there are antibodies.

There are, you know, these the spike protein leaves behind lots of antibodies. And also even after the vaccine, we can see lots of antibodies to the spike protein.

And then your body makes antibodies to those to clean them up, which is kind of interesting how like I said, this is not an easy, simple system, right.

And some people again, most of the time the body works really well. We make all this stuff and we clean it up, we get rid of it, you know, but sometimes if the cells that are doing it are in this CD2 and are too enthusiastic, they keep going.

They don't get the signals to stand down. And then you wind up with too many antibodies and and you start making autoantibodies to them. And that's where the regular apheresis, I think can help.

But if the blood clotting is there, you probably need the help. It's called help. Which stands for, heparin. Anyways, it has to do with it's an acronym.

Like most acronyms. It has to do with heparin and LDL cholesterol. And, fibrinogen. But they didn't want to use fibrinogen. So then they put the P in for plasmapheresis.

But anyway, but these are two different systems to clean the blood. That's the bottom line. And I think going forward, and unfortunately, when I say going forward, it's going to be a slow going forward because in America, I bet you we don't do this in establishment places for another 2 to 3 years, because that's how slow.

I mean, it might even be five. I mean, it breaks your heart for often 10 to 15 years behind the research and clinical. Oh, yeah. No. Told me I was being optimistic because this seems like so important, right?

So many people are being you know, the thing about chronic Lyme disease and me, CFS is that it hurts lots of people, but it it's it's like a batch here in a batch there.

Covid has hit so many people at one time that the medical establishment can't do what it normally does, which goes, well, you're not certainly my research.

Yeah. And the problem with the research is that they spend so much time on trying to understand the pathophysiology that they don't spend enough time on.

How do we fix this? Right. This time the pathophysiology is giving us some direct hints. Yes, it really is. The blood clotting. But it's still this looking into the blood clotting is still not happening at the mainstream level.

They're still spending a lot of times at these centers of excellence for long Covid, which basically consists of, you know, pulmonologists and cardiologists and rheumatologists, you know, and neurologists seeing people, you know, the neurologist tells you, you know, well, your headaches and brain fog are, you know.

Yeah. You know, the, pulmonologist tells you what your lung function is. Fine. Because, you know, what I have found has worked in my practice. Yes. Standard processes, proto morphogenesis.

Oh they've added those in. So the proto morphisms are giving your body the cells of the like organ. Yeah. That's the whole basis of it. Kind of like homoeopathy.

And so if somebody has, gone into long haul Covid and is having cardiac issues, we give the cardio trough and PMD, it works like, my patients, none of them have long haul effects if they have neurological issues.

We use the neurotrophic PMD when if they have lung scarring, we use the pneumo trough and PMD and I keep them on it for three months. And it's been remarkable in how well it works.

That is very exciting. And, you know, I, I really like, you know, I mean, I said, I use the standard process. I, you know, especially for people who have, you know, I used to use a lot of the ones from the hypothalamus in the country because you have these things where it's obvious there's been some, immune attack, if you will, you know, on these organs.

And that is they seem to work, you know. So I sat and thought about it and thought, you know what? No one's offering anything. So let me just try this.

And I have been astonished at how well it has worked. So there is exciting. I'll have to I'll have to add that to the material, because unfortunately, when you treat, you know, like that the Doctor Patersons protocol, you know, it's they're basically all drugs and they, they work.

There's, you know, I mean, like a lot of people can't tolerate them. And some of them are very, very expensive. It's actually one of the, I think the safer one, you know, it's got a black box warning from a, not from a long time ago.

It's ridiculously expensive. So it's it's nice to have things that are just as inexpensive, accessible to and get us, you know, and, and I've not had anyone have a bad side effect to them, you know.

And we put that in combination with the like darknet protocol. Right. Yeah. But the I feel I said I, I like that again I the I haven't seen you know again I always start people sort of on that and begin by the time I see people most of them have done that.

Yeah. And failed at that. Right. So this is our addiction to it. Yeah. Yeah. And I think that that would be a good one because you know, again, the FCC one is a nice it's immune modulating.

And that's what we're trying to do. But sometimes people have gotten to the point where that's not going to cut it anymore. And then for people keep keep going going further I mean that's always been, you know, our process in, you know, it's just the nature of my clinic is that I don't tend to see people till they have failed the actual empathic.

And we're in the same medicine. Right. You know, it's like the, Yeah. And it's, the train track. Yeah. Yeah, yeah. And then then you just have to find you.

It's, it's a it's really just about listening because many times, there is a therapy out there. It's just that the individual needs a different note. You know, we all we all respond differently to the into the interventions.

But so these are the to me the, the main rationales on behind long-covid are the clotting and the persistent, spike protein, you know, and then it's the person's immune system and what their, how they, how they dance.

And, you know, it's like all autoimmune disease, you know, you start with, calming as much things as you can, making life as safe as possible. And then you and then you see what's going.

Unfortunately, the conventional world, looks at it with they have two hammers, you know, either the either the prednisone steroid, you know, thing, which is just put out, shut the system down and pray that it reboots itself.

And it's really that's, you know, and and often it doesn't with Yeah. Well, well that's right in the zone. And there it is again. You know, and it's just like, okay, no, you can't destroy your gut microbiome and your adrenals. Right to.

Yeah. To do it that way. So, no, it's, it's a, it's diminishing return because again, if, if the trigger is truly gone. Okay. The body is amazing enough that sometimes really that does work.

Yeah, but it's, but generally there's something persistent in the system, a habit pattern maybe, I mean, and that that's the beauty of working with the brain again, because I.

Oh, my, I always tell people, your immune system is just like the rest of you. It's neurotic. Yes. I always say that to you. It's. It's like your mind.

Once it learns a pathway, it will go back there again easier. Yeah. You know, and, so we have to we have to often, help retrain it. And, you know, that's why there are so many, so many, so many different ways of dancing with this.

But, anyway, so we're in and we're actually out of time, and it's been fun. I really appreciate you spending this time, sharing even just a fraction of your knowledge and wisdom about this.

It's it's been fascinating. And thank you so much. Well, thank you. And I do, and I also just love every time, every time I talk to anybody, I always love what I learn.

And, you know, the standard process had been on the back of the shell for a while. I'll bring them to the front. So thank you. My pleasure. Thank you again and everyone.

Until next time, be well.