Introduction and Scott Forrest Grantu2019s background

Hi, my name is Doctor Matt Cook and welcome to the Peptide Summit. I'm with Scott Forrest Grant, who's a functional diagnostic nutrition practitioner.

He's a, health coach for, patients with chronic illness. He's an incredible source of information on Lyme and mold and, and, and I think wellness, but wellness for people who I think are struggling with a lot of, health challenges and probably with some of the most complex health challenges.

And I've known him for years. I found him always to be a source of truth and information. And, and, and and he's helped many of my patients. So, and that's been a great experience for them.

So, I'm deeply grateful that, you took the time to be with us. And, welcome to the podcast. Thanks so much. I appreciate the invitation. So we were just I was just I asked, before we got on, and your answer was so good.

I said, oh, pause. I gotta we gotta share that with people. So it's, it's, tell me tell me how it's going. You know, things are great. The last couple of years obviously have been challenging for many of us, but I, I'm doing well.

I'm healthy. I'm super excited about so many of the things that are emerging in this realm research, new new tools and therapeutic interventions. And so I feel very, very hopeful.

And overall, having come through this journey, personally, I'm incredibly grateful for where I am today. And then you managed to avoid getting Covid by being relatively sheltered.

I have, yeah. And that's, you know, that's a choice. I don't know that it's a choice that I can make, for too much longer. At the same time, I think when you've been through a health journey like I have with lime and mold, I think you value your health a little more.

I think for many people that have never lost their health, they they don't really have that perspective. And so, I definitely have been much more limited in the things that I've done, but I'm still incredibly happy doing the things that I feel passionate about.

And so it's definitely not a decision for everyone. But, so far I still am quite healthy and I feel like that's been a good decision. That's awesome talk.

Maybe just for a background give give us a little. Tell us tell us your story a little bit just to kind of maybe a little insight. Yeah. So my story started in 1996.

It's been a long time. Tick by. Northern California was fine for a few months, and then over the course of a weekend, it was like a flu times 100. Everything just kind of spiraled out of control.

Had never experienced anything like it at times. I wasn't sure if I was going to survive it. At times that would have been okay. Probably the biggest symptom was more neurological, head to toe burning sensations that felt like I had been at the beach and had a terrible sunburn.

Balance issues, needed to prop myself up to sit up straight or put pillows down one side of the bed so that I didn't feel like I was going to fall onto the floor while I was sleeping.

The list of symptoms just goes on and on. And if I look now at the list of things that can happen with Lyme and mold and all of these things, it makes a lot of sense.

But it still took eight years and 45 doctors to get the diagnosis of Lyme and ultimately then moving into looking more into the mold arena. So it was a long process.

And interestingly, what finally gave me the clue to explore Lyme was a medical doctor that sent me to an acupuncturist to do electrodermal screening. The lady actually worked at an outlet mall, and I went and did some testing with her, and her recommendation was to get tested for Borrelia, Bartonella, but PCR, PCR, Liqui and I thought it was a little bit too crazy, like after eight years, is this really where I'm going to find my answer?

And lo and behold, we did do some blood testing. Some of them we had to repeat a couple times, but we ultimately confirmed everything that she was suspecting.

And then that led me into the clean heart realm and some of his energetic techniques and, you know, the rest of it. Definitely a journey. But I feel so incredibly grateful today to be doing really, really well.

I still take good care of myself. I still take supplements. I still work on detox. I and I'm not going back to the things that I did to mistreat myself before I had this condition.

And quite honestly, I think in some ways that was kind of the universe saying, hey, you need to prioritize yourself a little more. And, and so I got that message loud and clear, what would be some of those things that would, would, would be ways to mistreat yourself, that would affect you?

Well, at the time when I got sick, I had just moved to California. Shortly after graduating from college, I was working at a startup. I was working, you know, days, nights, weekends, one of those environments where they had, you know, the free diet sodas.

And so probably was drinking, you know, 12, aspartame laden diet sodas a day and just not really taking good care of myself. Too much stress, not a good diet.

Those types of things definitely added up and kind of, I think, open the door. Probably resulting adrenal fatigue and immune dysregulation and all of those things to ultimately developing a more serious condition.

You know, it's crazy. And I just so this is for all of those people listening. We we get marketed things. And then it's surprising how quickly and easily you can buy into something, you know, and I think potentially the work if you said they always had a skit on Oberman years ago called The Worst Person in the world, but if I had the worst product in the world, like a hundred days a year, it would be like diet soda.

Lyme and mold illness origin story

And I have seen a quite a few people in my career who this is just as a tangent to what we're talking about today, but I have seen many people that had really no cardiac risk factors, that drank diet soda, that had heart heart attacks in their 50s and early 60s, and also women that were young and, and so then, that is one of the things that I always try to talk to people about.

But then I echo that sentiment because I also in my own journey, and I love that you share that, I ended up getting into being healthy. And then now I don't do any of those things either.

But but, you know, when we were and when when I was in medical school, you know, it was like, it was almost like, a regular thing that people would do stupid stuff all the time.

Yeah, absolutely. The, the the, and so then you you really, developed sort of a process for how to think about complex on this, I would say, you know, and then started working with people, from a high level perspective, helped me, in terms of how you put things together.

It from, from, from just kind of with broad brushstrokes. And then we'll to kind of get into some of the details. Yeah. You bet. First, I definitely want to give credit to the, many amazing and brilliant mentors that the universe has

connected me with over the years.

So clean horror. Doctor Neil, Nathan, Simon, you, Raj Patel, I mean, just some amazing people that I sometimes pinch myself wondering, like, how did I manage to, have these people as mentors?

So it is, as you mentioned, it's just kind of a, a way to think about recovering from these conditions. It's not a protocol. It's not a rigid. You must do the steps in this order.

Obviously, everything should be personalized. And so really my goal was to just put something together that people could then have conversation with their doctor, with their practitioners about maybe some things they hadn't thought about.

And so it's at this point, it's an 11 step kind of framework or model. The first step is supporting detoxification and drainage really to improve the terrain.

Step two is looking at the external environment. So mold, EMF exposure, those types of things. How do we create a safe environment that's supportive of the healing process.

Step three is sleep. Step four is the mental emotional contributors those things that are traumas or conflicts that could be impacting our health? Step five is looking at the limbic system, the nervous system, how to tone the parasympathetic nervous system in support of healing.

Step six is looking at mast cells inflammation modulation of the immune system. I actually think the modulation of the immune system is probably more important than killing things.

Step seven is looking at hydration, nutrition, the microbiome, and the gut. Step eight is a few different things. That people should think about, which includes mitochondria, the adrenals, cryptopia, Luria, very common, and people with chronic Lyme and then hyper coagulation.

Probably the most overlooked thing in this conversation. Step nine then getting into the microbial pieces, and there's a whole breakdown in that group of a potential order again, that can vary person to person.

Step ten is looking at the dental contributor. So amalgams, root canals, cavitation or fairly common. And then step 11 is regeneration and restoration.

After you've been through this whole process for rarely days or months, usually years or decades, and you've addressed those triggers, what then needs to be repaired in the body?

And I know that's an area that you are an expert in and probably know way more than I do. But I think that's critical as well. We can address the infections as David Jernigan.

But he kind of thinks of it like termites. And so maybe you've addressed the termites, the bugs. So to speak, some of the other factors, but then you still need to repair the structural integrity.

Okay. That was fantastic. I would totally agree with that. Sort of as a framework. I didn't know that was your framework, but I love that, the, and so then interestingly, you go through that thing, we could talk about peptides on each and every one has ten things we can talk about supplements.

We could talk about IVs, we could talk about regenerative medicine, but as you as you hear in that story, there was this there was, I, step 8 or 9 was like the microbial pieces, but then everything else is kind of systems immune modulation, bouncing, turning up energy detoxing and then basically getting the body working.

I, I always kind of try to say to people that I try to think about the body like a McKinsey consultant would think about, you know, analyzing and putting things together and then coming up with a roadmap that sort of addresses everything, which is fundamentally what you're talking about.

And I totally, I totally, love that. And. It sounds like and, you know, what we do is we try to help people project manage each of those pieces. And it sounds like you're doing the same thing, you know, and, and when somebody is real toxic, starting out with detoxing and drainage really kind of makes a lot of sense.

And then kind of working from there. What what would be some ways that you found success fall in that category? Yeah, yeah, I think the detox and drainage piece is really the key to this whole thing.

If our terrain is toxic and we have a toxic burden, I think that's when the microbes move in. We could also think about detox and drainage as more of an indirect to anti-microbial strategy.

So why are things like parasites and candida or Candida? Why are those allowed into the body? Some people think because they concentrate heavy metals.

So as we're working on detoxification, the terrain then is not as supportive of a lot of these things, and it makes it a lot easier when we get to needing to address some of the microbial overgrowth.

I think the first step here is to minimize all of the incoming sources of toxins. People don't think about things like, personal care products, cleaning products, anything with a scent, their air being pure food, being pure, water being pure, those types of things, breast implants or other medical implants can be a contributor to toxicity inside the body and is something to think about.

So for me, detoxification is really about binders. How do we minimize antero hepatic recirculation of toxins? How do we grab on to the toxins that are in the bile and help to maximize the excretion of those through the stool?

Otherwise we just have kind of this recycling process. That means that we can have mycotoxins and other things that maybe aren't an ongoing exposure, but are still a prior exposure that continue to affect us.

Drainage, then, I think of is more, supporting the channels of elimination, the among trees, the liver, the kidneys, the lymphatics. I love the whole conversation around the extra cellular matrix.

What can we do to, unencumbered the matrix? That's a critical piece. That's sponge for a lot of these toxins that we think about. Thinking about if someone's constipated, that's not going to go with healing.

So how do we support these channels of elimination? How do we support the gallbladder? Doctor Kelly Halderman talks about phase 2.5 detoxification. So if we're getting toxins into the liver into the bile, but they're not, then moving through the gallbladder into the small intestine to meet up with these binders.

In some cases they're getting dumped back into the bloodstream. So that whole bile process is really critical as well. You asked about some of the tools.

I think, a number of great binders for many years, I used and still do, like the Cassini supreme product from Supreme Nutrition. I think that's great.

I love a lot of the bioactive carbons that Doctor Todd Watts has put out through, microbe formulas or Cell Core biosciences. And then there's others beyond balance.

Have some bio pure have some great ones. Things like zeolite, bentonite clay. I think that tonight clay has a bigger role than maybe we recognize, particularly in the mold realm and also in the realm of microplastic, which is another area that I think, needs more exploration and is really just starting to get some attention.

If we're consuming a credit card sized amount of plastic every week, that's significant over time in the drainage realm, I really think more about homeopathy.

Here is kind of the primary way to explore this. So whether it's energetics or picanha or desi bio, I think that they have lots of fantastic tools that can really help support from a German biological medicine perspective.

Support the channels of elimination. We can use herbs. I think combining the two is great. So things like milk thistle or dandelion for the liver, solar dog go for the kidneys, red root for the lymphatic for example, can be fantastic.

Trace minerals I think are important. If we don't have the right minerals in our body, that can be a reason that the body tends to hold on to more of these heavy metals.

So really supporting the body with minerals. I've got some keen on minerals in my water here. And really looking at what can we do that nice. What can we do to, to really provide the body what it needs so that it doesn't need to hold on to some of these toxicants?

Movement is important, just walking is much, much better than not getting some movement. We need to keep that lymphatic system moving. Things like coffee enemas.

Those were huge in my journey. I there were times I don't know how I would have gotten through the day without them. From an inflammation of pain perspective, they were phenomenal.

Colon hydrotherapy. Some people like the ionic foot baths. That's a big doctor clean heart thing. Castor oil packs, oil pulling liver, gallbladder flushes with the caution that I think they should be medically supervised.

I think some people are not going to do so well with those, and it's not something to do on your own. And then soreness can be great as well. Again, I think people have to be careful about the timing with saunas, for example, if they're not sweating, if they're already adrenal compromised, you may want to do that.

Once you have a few more of these foundational things in place. We think of sauna as leading to sweating out of toxins, which is true, but at the same time, we're potentially mobilizing toxins inside the body that then have to be excreted or they are redistributed.

And so I think sauna can be great, but we have to do some work before we jump into sauna in most cases.

Detox and drainage framework

So those are the things that I think about for detox and drainage. Okay. So then that's 100% I'm going to keep going, but then I'll just unpack a couple of things that you said, because then that's interesting for, as toxins build up and kind of accumulate in our body, they sort of they have this ability to disrupt.

They can disrupt neurological function, they can disrupt, immune function. And so then you said this term, just so people understand entero hepatic circulation, we take all this toxins in our liver and we push them into the gut.

But then sometimes for people who are real toxic, that it goes down a little bit, a couple blocks on the gut and then gets reabsorbed, back into the body, and then it has to go back to the liver.

And so we, we have this little circulation where we're just moving toxins around, but never getting them out of the body. And so then all of these binders basically can catch on to the toxins.

And some of those might be it's things like a metal and that that metal could be from your tooth, or it could be from salmon or, or other, you know, tuna that you're eating or things like clay or I mean, things like mold, or things like, other, other, other bio toxins like the plastic.

And so then having a diversity of different things that you can take is you, that can bind onto these things and pull them out of the out of the body, I think is super helpful.

It's so great that you talked about the homoeopathy because I think that those are subtle things. The tend to have very minimal side effects that can be quite helpful for, for some people.

And and then figuring out detox lymphatic stuff, whether with movement or light touch or we have energetic things

like high format that we think are great for that.

And and then, you know, one, one tidbit that I found that I think is helpful that and I, I echo what you said about the sauna is, and then I started doing this myself.

I will make a, a, a drink that is, that either, the talk is me supreme, or then I'll use Chris Shade's ultra binder. Yeah, or Quicksilver. And then I'll put a little lemon in it and, a little Kenton and then I'll.

I'll drink that as a drink when I go in the sauna, which I did today, and then I. And so then my, my idea is, is that I've got a little bit of a binder that I take when I take the sauna.

And then just because, as I told the person I was talking to this morning, I said if I could only if we were only going to do one thing, I said, I would have you do fire and ice, and so I would have you take the sauna and then do the cold plunge every day.

And I find the, the combination of those two things generally I do that and I basically feel kind of perfect, like now, I mean, like I feel and it's kind of amazing and it's interesting.

I try to have people build up to time, but I've got a bunch of people in my life that I would call warm people that do not like cold, and I onboarded them to this stuff and it kind of changed their life.

They love it now. Nice, nice. So I love that, the home. I love that you said the thing about the home things with and smells are kind of big immune triggers for a lot of patients.

But you have these significant things and that is a great I did a thing with Fran Drescher this fall. It is a huge deal to detox the house, but then knowing that that's just something that you're going to project, manage and, and kind of operationalize, I think that's important.

Yeah. I mean, it's certainly those things that we talked about earlier. At the same time, the two biggest things in this realm for me are water damage, building exposure, which we kind of generalize and say mold.

The reality is there's a lot more than mold there. There's no toxins. There's bacteria like acting on my seats, for example. But if we're getting exposure to our Kryptonite Kryptonite on a daily basis, we're not ever going to again regain our superhero status.

It's really important that our environment is supportive of our healing. I've often said that our internal environment is probably never going to be healthier than our external environment.

So first, looking at what can we do from an environmental exploration perspective? There are no perfect tests. We can look at things like the Army or Environmental Relative Maltiness index from Michael Metrics or enviro omics.

We could then potentially add some mold plates from immuno latex if someone's not constrained by resources. Ideally getting a professional indoor environmental professional, an IEP, there's a good list of them at the ISI, website or isi.org that have been really vetted, that work with people with these kinds of conditions.

You don't want to just find someone that tests for mold and says, oh, everything's great, because the reality is that it takes a higher bar for those of us with these conditions.

Then once we do that testing, we can also then look at the mycotoxins burden in the body. So real time labs is probably my favorite in that realm. Great Plains offers a panel there.

Vibrant offers a panel that many like as well. But, these tests are debated, but I do find them very helpful. If you have high levels of mycotoxins coming out of your system, why, it could be the environment.

It could be that you're colonized with some of these organisms that are producing mycotoxins in the body. It could

be that you're now supporting detoxification.

And these tests have really, really gone much higher, which actually is something to celebrate, not something to fear. And so you have to kind of, use some skill in, in kind of ascertaining what the test is telling you.

But if there's still mycotoxins coming out in the system, with the rare exception of low level mycotoxins from certain food exposures, I think that's something that we need to keep on exploring.

Looking at the environment, either remediating or potentially moving, it's debated. I know some people feel that you can't get well in the same environment that you became ill in, and I think that is true for some people.

At the same time, if 50 to 90% of buildings in this country have some degree of mold, if it's not a significant issue, sometimes fixing a known problem is going to be more achievable than trading one problem for another.

And so that's where working closely with an IEP can be really helpful. Air filters can be great, but they're really not going to solve the problem. You have too much like a tumor in a cancer.

You have to remove the tumor before you start doing other things. And so I do like them. I do have them. I have two of them in the room that I'm standing in now.

At the same time, getting rid of that exposure is critical. And so coming back then to what else do we do? Binders are important in this realm. There are some products that are a little more mold and mycotoxins specific, like the bio toxin binder from cell core, for example.

Pro miko from Beyond Balance. The talk assuming can be helpful here as well. Call us diamine and well, call for some people. I don't find a lot of people tolerate polystyrene incredibly well, so sometimes smaller amounts of styrene.

Mixing that, or pairing that with other natural binders can make it a little more tolerable. And then looking also at, you know what? What are we doing to make sure that's just not an ongoing exposure?

So we're talking here about peptides. And a part of that conversation could be VIP and some people. So if someone's dealing with chronic inflammatory response syndrome, Doctor Shoemaker talked about VIP or vaso active intestinal peptide can be helpful.

But a lot of times you need to really do some things first, get rid of the source of the exposure or deal with some other bacterial overgrowth in the sinuses, potentially those types of things.

And then once we deal with the mold piece, looking at the electromagnetic field exposure. And sadly this is really increasing. I mean, I've actually, for the first time in the last week saw two 5G towers.

You know, in the Bay area here. And so they're they're getting rolled out, from what I can tell. But the emfs are a big issue. I think they keep our cells in more of a sympathetic dominant type mode where we're not then able to efficiently detoxify.

So turning off Wi-Fi, getting rid of cordless phones, sleeping in a Faraday cage. Which sounds crazy, but is something that I've done for the last 15 plus years and I think is something that I definitely think can be helpful for many people.

Getting the either a demand switch or flipping the circuit breaker to your sleep location where you might be getting influenced by dirty electricity, for example.

So all of those things can be really helpful in creating an environment that's going to be more in harmony with the healing process. It's also interesting that Doctor Clean Heart talks about the effect of emfs on mold and their production of mycotoxins.

So why is mold illness such a big issue now when it wasn't years ago? Sure. Building standards and tighter buildings and energy efficiency and those types of things.

But it's also very likely that the exponentially increase in manmade electromagnetic fields is also contributing to some of these mold issues that we're seeing.

So working through the mold piece, working through EMF related issues, the EMF sensitivity or electro magnetic hypersensitivity syndrome that many people may, experience, there is a connection there to heavy metals as well.

So many people are more sensitive to electro magnetic fields if they're more metal toxic. So that detoxification focus that we talked about in step one is also helping to support the body in being less reactive to some of these things.

And so really this this step again, is just, creating that external environment that is going to support and facilitate the healing process as much as possible.

Okay. That was a good one. The, how do you do with Faraday cage on the bed? There's a number of different types of, reflective silver lined cloth that you can use.

So, most of the companies, less EMF has them. Doctor heart uses a place called Little Tree group.com. So essentially it's a cloth that looks like a mosquito net, and it goes down the sides of the bed, but also over the top and underneath the bottom in most cases, if you're on the ground floor, the bottom may not be as important, but it's amazing the difference that you see when you take an EMF meter stand right outside the bed.

It's quite high when I did this many years ago. Go inside, drop it down, make sure again. And it was well over a 98 or 99% reduction in measurable emfs.

Once you drop that mosquito netting down. So it's a it's a pretty straightforward thing to implement, not cheap. They probably cost about $1,000, but spread that out over 15 years.

And I think it was a good investment. Okay. That's a good one. So then let me, that you're such a wealth of information with every question, it could, every question could be a whole podcast.

The, cat, I'm going to. Can I tell them about VIP for a second? Yeah. Please do. And then that would be, that's going to be, very useful and sort of interesting sort of concept.

Because, The, the one theory about mold is, is that, mold as a mycotoxins accumulates either potentially because you have a, you're colonized, or exposed to or, but particularly to this water damage buildings.

And then what you said, I think is kind of 100% right on track in terms of like this current thought that, the sirs or chronic inflammatory response syndrome, is this, this inflammatory response that the body has that is in reaction or response to some combination of mycotoxins plus some bacterial infections that kind of makes them probably some gram negative rods and then that, has an effect of, causing the brain at a genetic level to kind of go into a fight or flight state.

And that's probably because some that probably lowers a protein called MSH in the brain. And, and then but then what happens as a result of of this. Is this the brain had a almost like a genetic level goes into an inflammatory response state, hence the name.

And and so it kind of is printing inflammatory genes because the idea is, oh man, this is a bad situation. And then we have to deal with this inflammation.

Now in many cases the response the cure may be worse than the disease. The response, the inflammatory response is so profound that it makes people feel so bad that it's actually potentially worse than actually what's happening from a, from from the, from from the mycotoxins and, and so then what?

And so when I first met you and then when I first was meeting a lot of people with and mold years and years ago, the idea was this that everybody was trying to get to this point when they could take this peptide called VAP.

And the reason being this is that VIP regulated what they call the transcriptome, and it changed at a genetic level. I would go into the DNA and then change them from printing inflamed kind of an inflammatory response, genes to regulate to not an unknown inflammatory state.

And there's this test that they do called the gene test that is, is an attempt to to assess that. And, and as, as you think about it, as we're walking around in the world, what we do is we're reacting to the world.

And one of the reactions is we decide which genes to print, just like based on if might be hot, we might put some warm genes on. So it's at a genetic level.

We're reacting like that. Turns out that there's a whole, category of peptides that are kind of bio regulators, kind of like VIP, but VIP, if you give it too early.

Environmental mold and EMF exposure

Just exactly like you said, people can have a lot of troubles. The bio regulator, peptides, and the immune ones are, Christian, psychology and, and violent villains for the spleen, thymus, which is also kind of a detox, organ, the spleen.

You can use those. And there are injectable and oral versions. They're so small, just a few amino acids, you can absorb them orally. And then the neurological ones, panel on cardiogenic and, epithelial on.

So of those six and then you always when you're taking bio regulators, you always take vessels and so vessels and plus the immune or vessels and plus the neurological.

And we often will do carded card cardiogenic. So then that group is will regulate at a genetic level sort of which genes are being printed. And what we found is that is that for this population we can we use those peptides, as an alternative to VAP.

And then much before and then interestingly, the, the I tend to see mast cell symptoms, pots and other neurological symptoms will start to get better.

And I'll have a percentage of people who say, oh, I've never had pot since you put me on bio regulators now, it's this is not 100%, but it's a, it's definitely, an important trend for us.

And so then then how and the reason that I like to talk to people sometimes who don't necessarily do a lot of peptides, but who've been thinking deeply about complex illness for a long time, like yourself, is we're going through a framework, and this would be a very good framework, because essentially, as soon as he started talking, I started taking notes because that's basically a robust and complete approach to thinking about these issues.

And then the, the, the, the peptide part can be kind of a profoundly helpful part. And then that can be a great place to start, either orally or inductively with something that starts to regulate.

And that's kind of at a genetic level. But then potentially the most important thing you can do for complex illness is begin to regulate the biological systems back into balance, particularly immunology, neurology, cardiology and vascular.

Yeah. And I love what you said there about the spleen because one of my observations has been in Lyme co-infections like Bartonella and bobcat that the spleen definitely is impacted by them.

And so providing that support could be very significant. So then I think was it was sleep next. Yeah. So sleep is next. And I'll, I'll kind of truncate this a little bit.

But you know, there's lots of different supplements and things that can be great. Melatonin. One of my I say it's my drug of choice I love my melatonin pinnacle is another.

But sometimes with sleep it's looking at the EMF exposure. That can be a huge trigger for insomnia. It's looking at maybe using a CGM or continuous glucose monitor.

What's your blood sugar? Or is it dipping down at night so that your body's producing cortisol to bring your blood sugar back up, but then you're wide awake?

What's your oxygen saturation again? Incline bed therapy is something that I've used and find helpful weighted blankets for some people. Brain tap, which is a device that can be really helpful for getting people into a parasympathetic nervous system state.

The Apollo neuro band is another that some people use in that realm. So I personally. Sorry, would you say I just the guy that made that he's a friend of mine.

Oh yeah. Yeah, yeah. Awesome. Yeah. And so I really like to use the, the aura ring in airplane mode as a tool for changing things in the sleep environment and seeing what patterns I can observe.

I found it very, very helpful over time. And then another piece of the whole sleep conversation is histamine and neuroinflammation. So sometimes working with some of the mast cell players and mast cell stabilizers, antihistamine means can be really helpful.

I know in the peptide realm there's probably a number of them. But Dr. Sippy, for example, or deep sleep inducing peptide. So anything we can do in this realm of sleep is really going to potentiate or exponentially influence our healing process.

And so that's why it's really critical. And is that the beginning of this whole process? Okay. That's a good one. The the, you know, I, I, I, a friend of mine said, John Francois said there's only two things that you need to do.

He goes manage inflammation and manage, glucose. But I could add a, I could say maintenance, say three things and manage sleep. Because if you can do those, then basically and you can sleep, you're going to be okay.

And I love using the ring also myself. You know, the, the it's interesting. The sip can be helpful for some. I find it a little more helpful for like jetlag type of stuff as a short term piece.

The paper towel on can be helpful for resetting circadian architecture and the for from a peptide perspective. We're looking to do with that as a milligram a day as, as as for, you know, two or 3 or 4 months in a row at low kind of a micro dose.

Interestingly, traditionally people were doing ten milligrams a day, twice a year for appetite line as kind of a, and that was based on some of the Russian literature that had been, for people who are not sleeping and really struggling, I will often have them do, ten milligrams a day, ten day protocol to get started.

And, and then, often I had 4 or 5 people this weekend tell me, oh, my God, I've been it's been chaos and stress and catastrophe and I haven't slept. And then we we did the appetite and they slept.

And then I convert them from ten milligrams a day after ten days to a milligram a day for a couple months, and then, and then in parallel to that, doing the ironing and, and magnesium at night and, and melatonin and so and, and and and then as you said sleep hacks.

You know, I love the, the, the, the Faraday cage idea. I, I, you know, I love the EMF at night. And so then suddenly it's got back to kind of being a McKinsey consultant.

And then figuring out everything that's involved in there and kind of project managing that stuff. But, but then if you

do that, you feel better, you detox better, you sleep better.

And then these are all things that help immunology and biology start to overall work better. And then and that is at least half of the game in complex illness.

I think. I totally agree. Absolutely. The the limbic and kind of neural system, nervous system. Where where do you want to take me here. Yeah. So step for, before we jump into limbic system.

Step four is really the mental emotional piece. And I do kind of separate them a little bit because limbic can be entirely physical. It can be an emotional or mental trauma that triggers limbic system impairment.

But I think it's important to separate them just because some people have some, adverse, thoughts about exploring the limbic system because they think you're saying it's all in their head again.

And so the mental emotional piece, I think there's two things that could happen. One, people have had some emotional traumas and conflicts that set the stage for illness, impacted their adrenals, their immune system and so on.

Or you could have had such invalidation by the medical community being told that your physical condition is all in your head, that that creates a trauma for you.

And so either way, I think that's something that we need to explore. It doesn't mean that the illness is in our head, but it does mean that mental emotional health does play a role in the development of these chronic conditions.

And so in the Lyme community, my observation has been that a, a pattern is a type A overachiever or perfectionist, sometimes not feeling deeply like they deserve to be.

Well, I joke that I used to be a type A+ personality and now I'm a recovering type A minus personality. Probably will never be a type B personality, but doing everything we can in this realm is really critical.

And if we look at Doctor Clean Hearts five levels of healing model, that the bottom of the pyramid is the physical biochemical interventions. The mental emotional work is third level work.

And so it has much more profound impacts, more powerful shifts that have a downward effect on the physical body as well. So looking at things like eMDR or RPN, which is a doctor, clean heart applied psycho neurobiol ology or has psycho kinesiology, EFT, emotion code, lots of good tools in that realm.

Amy Shearer wrote a book that I really like called How to Heal Yourself When No One Else Can, based on her experience recovering from chronic Lyme and then ultimately becoming an energy therapy person, working with how to release a lot of these imprints and cellular imprints from various emotional, traumas and conflicts on our biology.

Sleep optimization strategies

So then step five is getting into the limbic system. I would say that the limbic system retraining tools as a single tool, and not one thing is going to solve all of the problems.

But of all the single tools that I've seen over the years, working with tools like DNA is the dynamic neural retraining system from Annie Hopper or the Gupta program from Ashok Gupta.

These often make huge shifts. I used to say it was almost miraculous, but then I started seeing people where they were really having miracles. People that were bedridden, eating five foods, and three months later they were traveling with their family out of the country on vacation.

I mean, big, big changes for people. So the limbic system is really the anxiety switch or alarm center, and it

influences the body in many ways. The immune system, the hormonal or endocrine system, the autonomic nervous system, which then cascades into blood pressure, heart rate, breathing, digestion, all of those things.

And so the limbic system, is critical. And the limbic system can also be impacted by inflammation. So sometimes a lot of the things we can do coming back to inflammation, immune modulation play a role as well.

But I love the DNR as the Gupta program type tools. And what I think about here is at some time, your Lyme infections, your mold, those really were a tiger and your body or your limbic system correctly responded by raising an alarm and responding to that threat.

But at some point you've address those things. It's no longer a tiger. It's more like the kitten walking outside the window, purring at you. And yet your limbic system doesn't see the kitten, it sees the tiger.

And so this is a little later in the process, because in an ideal world, you have addressed your tigers, and then what you're doing with these tools is you're recalibrating or rebooting the limbic system so that the actual threat is equivalent to the perceived threat that we're not perceiving something that's more threatening than it actually is.

So I'm a huge fan of these tools. I do think there is some value for some people. The ultra ultra sensitive patients that cannot take even a capsule of Taka sumi or, you know, tablet of Chlorella, for example, without reacting.

Sometimes this is a way to make them less reactive so that you can then start working on that physical level as well. But ultimately you want to address the Tigers as much as possible.

These are built on a platform of environmental awareness as well. If someone is not in a position, these two systems do take 30 to 60 minutes a day for many months.

It is a commitment. I've done the news. I found it tremendously helpful, but not everybody is ready for that. So in the limbic system realm, tools like Brain Tap, which is Doctor Patrick Porter system can be helpful.

Frequency specific Microcurrent can be amazing in this realm for supporting the limbic system, the vagus nerve really supporting that parasympathetic response for rest to digest, detoxify and heal.

Heart map is another, even some of the ionic foot baths. How they're in part facilitating detoxification is by putting parasympathetic frequencies into the water, and the body is made largely of water.

And so that has an effect on the overall system. So here we're really looking at the fact that we're not going to heal when we're in this fight, flight or freeze mode.

We really have to calm the limbic system, calm the nervous system, and work on supporting parasympathetic tone to maximize our healing process. Okay, so then I would agree with, I think, just about 100% of everything you just said I studied.

Yeah, it's my the first thing that I did, in my journey was I studied body talk, which was in like 2001, right when I got done with residency. And I kind of opened me up to this, this conversation around applied kinesiology and energy medicine.

And that led me to get, like a doctorate of medical qigong and go into Chinese medicine, study. I read, nice. So then I ended up spending 10 or 12 years sort of deeply in that energetic kind of world and, have while I was studying biology and biochemistry and all this stuff at the same time.

And so I love all of that stuff, and I kind of love those people. And, you know, I think theater is another person. They're playing hard who has embraced that.

And I find it so helpful for a lot of people. The limbic system, you know, I do the stoic ganglia block to sort of reset, fight or flight and, I do a, a thing called the vagus nerve hydro dissection.

And we'll treat the vagus nerve in a couple of different places. And just a funny anecdote. I was in, Joshua Tree, and, we, we were walking in, and then we got turned around and and then we, we're walking back to where we were supposed to be, but we had run out of water, and then we ran into these people, and, I go, I was like, oh, hey, what do you do?

And she goes, oh, I work for a company. Then we had been walking around talking about the vagus nerve for like two hours and talking about like autonomic nervous system, which is for us to relax.

So we come up, this lady gives us water full of cucumbers, and I say, what do you do? She goes, oh, I'm a wreck. For a rep for a vagus nerve stimulator company.

I go, I know exactly what that is. So then interestingly, there would be frequencies, there would be vibration techniques, there would be electrical techniques, there would be my injection technique there. All of these ways.

And these are all ways that are basically we're trying to reboot and reset fight or flight and the cell ganglion block just turns fight or flight off as, as part of the reboot.

But interestingly, Scott and I think you're going to like this one. They've done studies for people with complex illness and mold, and Lyme will have decreased blood flow to the brain.

Mental emotional healing and limbic retraining

And that correlates with patients who have small fiber neuropathy and neuropathic issues peripherally. And so then what these tend to do is reset and increase blood flow back to the brain.

And then where is that blood flow going when it goes up. What's the first thing that's going to do is going to hit the limbic system which is going to be again to reset basically how people feel.

And then, you know, and so then I would argue with myself, what's the most important thing to do to detox the home and get drainage and detox going, or to try to do something to help somebody feel better so that they would have hope.

And then and then that hope would be an inspiration that could carry them forward and, and the journey and so I think I love them equally. But I think your, your sequencing is perfect and, and correct because if you don't start to detox them, that hope is never going to be able to to gain a footing.

But, I bet that's kind of awesome. I love I love what you're saying. I love talking to you. I feel like I'm standing outside the door of toys R us, hearing about all the cool toys and tools inside.

Oh, that's funny that that's that's, it's amazing. And, you know, people are I'm kind of talking about all this stuff, and people are sharing information, and I feel that there's going to be an exponential sharing of ideas and your ideas and, and the, and stuff on the tech side, and then what's going to happen is it's going to be you're going to be able to get these things as if you were just going to go to a toys R us and, and, and start to do them.

So it's going to get I think, easier. What's, what's next is that neuron is nervous system yet. Well so the, the nervous system piece was what we just kind of touched on.

But the next step is step six. And that's where we get into the mast cell piece, the inflammatory piece and modulation of the immune response. So I think getting healthy is not about killing bugs.

I don't think the bug makes the disease. I think it really is. I think it really is that host response to the bug that makes the disease. And so if we have a hyper vigilant, hyperactive, overactive, auto immune responding type immune response, I think that's creating a lot of the symptoms that we think of as coming from the bug, but it's not necessarily the case.

And so looking at the fact that much of the inflammatory burden in the body in these conditions is driven by mast cell activation syndrome, by histamine, microglia certainly play a role as well.

But if we're talking about the mast cells, these can be triggered by mold, by line, by environmental toxicants, by lots of things, by foods, temperature changes.

But one of the things that's really interesting here for me is hearing Doctor Theo Theo a few years ago say that mast cells are ten times more activated in the presence of a cell phone.

And as much as I had already heard about these things from doctor calling card, that was, I stopped and went, wait a minute, is that really what he said?

And so I think the biggest triggers for mast cell activation are water damage, buildings, parasites, and exposure to emfs. And I think we're going to eventually understand that the Emfs are playing a bigger role in terms of triggering the mast cells.

So what do you do? The first thing that can be very helpful for many people is doing a trial of a low histamine diet. It's not a super easy thing to do, but at a minimum, looking at, you know, are you drinking kombucha every day, which is going to be bad for some of these people?

Are you having avocados or are you eating bone broth? Are you doing lots of fermented foods at some time in the future? It might be a great thing, but if your histamine bucket is already overflowing, then we want to get some of those things out.

Once we do that, we can look at some of the mast cell stabilizers and histamine reducers. So quercetin, luteal and holy basil. I like the neuroprotective product that Doctor Theo created.

I love Ben Lynch's, Seeking Health probiotic histamine acts. It's a probiotic blend that helps to degrade histamine. Most probiotics are actually going to make this problem worse and promote histamine, which is exactly what we don't want to do.

You mentioned, Chris Schade earlier. I love his his star aid product from Quiksilver. I think is great. Some people do well with things like Katara, fan or pro Milan.

There's lots of tools in this realm, and it really does lead to a difference in how people feel. So coming back to what you were talking about, what can you do to make people feel better?

Dealing with the inflammation, dealing with the immune response, dealing with the mast cells really makes a difference. But at least from my perspective, the mast cell activation is not the core problem.

It's kind of like saying you're inflamed. Well, why do you have mast cell activation? You have to look at why what are those underlying triggers. And then you need to address or remove the triggers.

Plug the holes in the roof. If you're thinking about the Brita sand model, pull the the nails out of the foot. If you're thinking about the Horowitz model, but you need to figure out not only what can you do to help symptomatically reduce that inflammation, but also address the triggers in the inflammatory realm.

Some people do well with some of the pro resolving mediators like SPM active or the, gut specific fish oil. I'm not sure about the marketing on that one, but Microbiome Labs has a, gut specific fish oil that can help there.

And then looking at immune modulation. So low dose naltrexone I think has a big role, especially right now with a lot of the immune dysregulation from the the last couple of years, low dose immunotherapy.

Looking at Tai Vincent's work, I think can be great. Homoeopathy can be helpful. I'm particularly excited about some of the work of Doctor Sam Janik. He's, with cogency immunology, and he's put together a number of

products that now are available under pure encapsulation.

I think those are great. When you're looking at how do you modulate the to one and two response. Most people in this realm are two dominant don't have enough to one support.

That's also where a lot of these peptides really come into play. In fact, I think the peptides, at least from my perspective, and I'm sure you'll educate me here.

But in the immunomodulatory realm, I think that's probably the step where the peptides shine the most. Looking at thymus and alpha one and thymus and beta four or maybe even V for some of the mast cell and histamine issues.

So I think peptides play a big role here. And just remembering that getting well is not about boosting the immune system. I think too often people think if I can just boost the immune system, but it's more about modulation, about calming and really creating more integration and tolerance within our microbiome.

I would yeah, totally agree with that. And then interestingly, your the time as a metaphor is kind of like a keychain with these different, actives segments.

And so some of the fragments are even more anti-inflammatory like, especially in the 17 to 23 and the 1 to 4 and the 1 to 4 fragment of super anti-inflammatory.

And because they're smaller, patients with immune activation like Lyme and mold patients tend to react less to them, but so still get quite a good benefit.

And, and then I would 100% agree with everything you said the, and then, you know, one thing is, is that sometimes calming down the gut can be helpful in just causing there to be less leaky gut and then less.

And that will calm down immune activation and mass activation in the gut. So I think Cfpb can be helpful here. TPC can sometimes be helpful here. There's something called La Raza tide that binds on design.

Yeoman can be helpful here that people will combine with those. And so then and then even and and that's orally and then BPC 157 systemically you can take to have a gut effect.

And but then, but then and then definitely I think of all of them, the thymus and Alpha one probably is the best modulator. But then the bio regulator immune modulators can be sort of superimposed upon that.

But and so then and the bio regulators from people having a reaction to them are going to be the least. And, and so then that can be a great place to start.

And, and so then interestingly, just as people are listening to this, too often when people have mast cell activation, they'll eat. And then the histamine will trigger an immune response as well.

A sudden people can get abdominal pain or a diversity of all kinds of unusual symptoms. And, you know, five years ago I remember nobody knew it. This was and then suddenly they people started talking about it.

And there's online communities. And all of a sudden this is something that we began to recognize a lot of patients with complex illness have. And there's probably a diversity of things kind of mapping on to it.

And I think peptides are helpful. But everything that you said is also very helpful. And then it becomes a little bit of a trial and error of managing symptoms with sort of different products that you discussed, and then beginning to kind of regulate and modulate the immune system and the nervous system overall, from a systems perspective, to actually reset how our overall reactivity so that we don't need to manage symptoms.

Mast cells, inflammation, and immune modulation

Totally agree. Beautiful. Hydration. Yeah. So step seven hydration nutrition the microbiome and gut health. And the hydration piece I think it's you know it seems straightforward.

But the reality is many people with these bio toxin illnesses have a low antidiuretic hormone. They're drinking lots of fluids or peeing it all out. They're still cellular dehydrated.

So structuring water lots of ways you can do that. Electrolytes, which I have in my water here, trace minerals that I have in my other water here, a little bit of sea salt.

Can be a good way to start as well. And then I also like there's a homeopathic tool from energetics called rehydration that adding some of that into the water can be nice.

There's other waters and things that you can purchase, though. Quite honestly, I think many of them are on the more expensive side. And so I think just some of these little additions that we can do to our water can make it much more hydrating thinking than about the gut.

I'm getting rid of the food triggers. So I think, you know, gluten has to go. I think dairy, at least a one Cowdery is going to be bad for many people.

Sugar is going to be bad. The high histamine foods that we talked about. So getting those out, but then looking at, you know, what what diets. And that's where it's very complicated.

Everyone's going to be individual I think the low histamine diet for many people, and this chronic Lyme and mold realm is a good thing to try. If you don't get a great response to it, then maybe that's not going to be the thing for you.

But I've seen it really help a number of people. And then also looking at whatever we're doing nutritionally, are we getting not just gluten free but still, you know, empty calories, but are we getting nutrient dense?

Nutrition in our routine. And so I love every morning starting out with the power shake, I've got high quality protein. Some people can use collagen powder.

Some people that's going to be a histamine trigger. So that that's going to vary, a good blend of fiber or some silly, phospholipids past the title choline and all of the blend of the phosphate title sarin and ethanol, amine and inositol and all of those things, some healthy fats, some chia seeds, flax seeds, organic, not Malcolm.

And that's made a huge difference in my recovery for regaining muscle and things that I had lost over the years, and then also supporting the microbiome.

I'm a huge fan of the mega super biotic in Christian's work with Microbiome Labs, it seems to be well tolerated, and most people with mast cell activation, even in people with Sibo providing those keystone strains to really optimize microbial diversity, it can help with inflammation.

It can help with immune modulation. It can help with leaky gut. So lots of things there. I do think BPC 157 has a role here for helping to support intestinal hyper permeability and and healing the lining of the gut so that we're not as reactive to the things that are coming through these hollow spaces.

I like the iron gut health product used to be called restore from Doctor Zach Bush. So lots of things we can do here, but just making sure that we're not forgetting to dial in the hydration and nutrition and that we're supporting the gut, not getting lots of inflammatory foods and doing what we can to support the microbiome 100%.

We're going to keep going because otherwise we're running out of time. Mitochondria and hyper coagulant. It. Yeah. So I think the mitochondria is an area that I really have.

And maybe I just missed it to some degree. I mean, I knew it's important, but the last couple of years I'm really

getting how important the mitochondria is.

So we really need cellular energy to do detoxification, to really function, to repair. I do like photo, bio modulation, red light therapy in this realm.

I think that can be helpful. You know, CoQ10, PCA, lots of different types of NAD precursors like GnRH and man, those types of things that can be helpful.

One challenge can be that if you're aggressively supporting the mitochondria, we think about the cell danger response model from Doctor Bob and Aviao, where extracellular ATP is the danger signal that leads to the body going into this kind of protective hyper native type state.

And so, I think supporting the mitochondria is important. At the same time, some of these things you don't want to do too aggressively, if the body's pressing on the brakes, you don't necessarily want to press the gas too strongly.

So the adrenals, that's an issue that people have talked about for a long time. Some of the Adaptogen products can be great. I think that that there was more of a focus on the adrenals.

I think now it's tending to shift to the mitochondria. How do we really support the energy production factories in the body? I also talk about Cryptopia Luria in this realm.

So Doctor Clean Heart, was the one that brought this to my attention many, many years ago. If we are picking out our zinc, picking out our B vitamins, picking out some of the other, co-factors that are needed to support the immune system, that we don't really have that foundational, immune response.

And so he says then that the white blood cells become like an army with no bullets. So looking at whether or not Cryptopia or Luria may be playing a role, it is something, again, to go slow.

You don't want to be too aggressive in reintroducing zinc. That can lead to a release of metals that can trigger mast cells, that can make you feel much worse.

I'm telling you that from personal experience many years ago, and I did it far too quickly. And then the piece that I think is, maybe most overlooked in this realm is hyper coagulation.

If we have thick blood, which is super common with chronic infections, with heavy metals, with mold exposure, with, we're not then going to get nutrient delivery, we're not going to get oxygen delivery as efficiently.

We're not going to have waste removal as efficiently. So looking at things like, Lembra kinase or Baluchi or natto kinase, some people may even need for a short period of time some of the pharmaceuticals like heparin, Logan, OCS, those types of things.

But you can do some really good testing in this realm to see. And I think a lot of symptoms people experience, particularly some of the pain related issues, can be from this hyper viscous blood and so few different things here to explore.

But I think, I think these are critical ones to not miss the the mitochondrial piece. I also sort of echo what you said, because to the extent that you can turn that on and fix that, people feel better.

And I think infections have a way to steal energy from the mitochondrial pathways. And that's why what do we how do we how do how did we define viral infections for the last 20 years?

Chronic fatigue syndrome. You know, so, you know, you steal energy, you don't feel good. You know, on the mitochondrial side, human and as a mitochondrial peptide, that's, I think, somewhat helpful.

SS 31 is another peptide that I as a quite, quite interesting and feel good. And it mitochondrial category and

probably worth a podcast all by itself.

But yeah, the interesting thing is, is that when you, when you modulate that immune response, then you have a more balanced physiology in your blood vessels.

And so you don't have things binding on to things that are that caused that blood to get thicker. You know, one thing that improves viscosity right away when you do a treatment is ozone.

You know, treatment. And then suddenly you begin to find there's all of these other ways to manage that. And for, for example, with quote unquote digestive enzymes and some of the things you mentioned.

Totally. I totally, 100% echo that. And then I also echo in this aspect of the journey, and I think that this is, you're 100% spot on it. Everything that you've said and it's, interesting journey in terms of how hard to hit some of these topics.

And then if you're like us, when you figure out you have a problem, you go, oh, let's go all in on this. And so like an example of that would be like when people found out about NAB.

And so then, you know, we were doing 1000mg of NAB five years ago for addiction people. But then if you if you turn up mitochondrial and detox pathways with an add on super sick linemen, all patients, you'll really run into a lot of trouble because they weren't prepared for that detox.

And so there's an aspect of kind of like, when you're training for a marathon and then, you know, getting through Lyme and mold is kind of like going through a marathon.

So to build that training detox base and then move to the next level and the next level, and so then adding, adding in things that are going to reset and turn that engine on, but not doing it too aggressively so that the patient gets overwhelmed.

Absolutely agree. You know beautiful I think frequency specific microcurrent, by the way, is another beautiful way to support the mitochondrial production of ATP as well.

So that's a that's another tool that's fairly high on my list of favorites. Yeah I love that too. That when you said it earlier I was like and I've done quite a bit of work of years of that.

And then you just that I thought oh you know what I need. That's a very good comment. I'm going to, I have to revisit that. Our conversation on that, the, the, the next one was might have microbial pieces.

Yeah. The part that everybody's been probably most people at least wanting to hear about. So we ran out of time. Thank you. And we got a lot of time for Matt Damon.

So you know, we know now that killing bugs really is not the priority. But I think it is still important. And so the order here can change as well. So I tend to think starting with support for chronic viruses for endogenous retroviruses.

And the reason I put that first is because I think oftentimes those are fairly well supported, or fairly well tolerated. So then thinking about parasites, the gut, Sibo, fungus, yeast, mold colonization, those types of things, then the Lyman co-infection piece fairly far down that path and then possibly some biofilm support.

I don't think everybody needs biofilm support. Not all biofilms are bad. I think some people do. But if we think about the viruses, I think that EBV, HBV, six, herpes zoster, a lot of these endogenous retroviruses, I think they play a fairly significant role in the symptom picture that results.

And so lots of tools. I like natural things in this realm. So Bio Pure has a number of tools that Doctor Clean Hearts put together. And the vital nine systems, tincture or tea can be great beyond balance.

Have some nice tools. Cell core has some good tools. And then things like sulforaphane, Pantene, selenium, lysine, homeopathic can be helpful here as well, shifting then into parasites and Sibo and gut dysbiosis.

Parasite testing is notoriously not very reliable. So I think you have to do some testing with functional medicine labs, but also then maybe with some of the energetic tools.

So I like para wellness research with doctor D'Angelo, where he himself looks at stool and urine samples under the microscope. I found that very helpful.

Hydration, nutrition, and gut health

But things like Zito or Quest for or a Syrah or Doctor Simon use acupuncture, meridian assessment or autonomic response testing. Sometimes those can at least give us some insight, looking at not only the worms, but a lot of the protozoa and stuff Giardia, the toxoplasmosis, the cryptosporidium, those types of things.

Doctor David Jernigan years ago formulated some products in that realm that I like the Paragon product. I like to use herbs and combine homoeopathy in this realm as well.

So things like energetics, paracord or under 39 can be really nice. So looking at the parasite piece, looking at the Sibo piece, I would say that the Sibo piece is really fairly small in terms of the microbial contribution to Sibo.

I would say the bigger pieces are the autonomic nervous system, the vagus nerve, the migrating motor complex, the bile flow, all of that really critical.

So killing bugs to recover from Sibo is probably long term not going to work very well for people. It's a piece of the conversation, but it's not the whole conversation.

Looking at other dysbiosis like Clostridium, Klebsiella, those types of things. Biocide. And can be a great tool. The mega spore, again, can be very helpful for exploring the fungal, yeast and mold pieces.

So not only the Candida or Candida, but also things like Aspergillus that we talked about from exposure to water damage, buildings, tools like mega micro balance from the same people that make mega spore biotic beyond balanced Byron white formulas, lots of good tools there.

Some people like to use it. Draconis all, which is a pharmaceutical antifungal that can be helpful in some people. I would say if you're going to explore some of those tools for colonization, ideally you want to make sure first that you're not getting an ongoing re exposure to that water damaged environment, or it's probably just going to come back.

So then we get to the Lyme and co-infection. So Borrelia, or what most people think of as Lyme co-infections but Bartonella opportunistic infections, Mycoplasma, chlamydia, those types of things I tend to think it's a little better tolerated to use tools that are more specific in a layered fashion.

So rather than using something that's going to hit Borrelia, Bartonella, ABC, all of those at the same time, using some of the tools from Byron White formulas or Beyond Balance or neutral medics or things like that, where you can kind of focus first on the things.

Bartonella, for example, very commonly maybe the the biggest symptom producer out of the Lyme complex of things. So what can you do in that realm and then work through those methodically eventually, then consolidate down to broader spectrum support so that you don't have too many things in your program looking at whether or not you need to do something in the biofilm realm.

Some people do. I tend to really like herbs and homeopathy in this room, but I'm also very open. I mean, I myself did antibiotics for a long time back in 2005 when I finally got diagnosed after eight years, there weren't very many of these tools.

It was, we're going to do antibiotics. I do think there's a number of people that have had some good response in the last few years to disulfiram in this realm, so keeping an open mind that I'm most drawn to bio pure vital plan, Supreme nutrition beyond balance, des bio mapr.

Herbals, research nutritionals new traumatic. I mean, lots of different things there. Ozone absolutely love. And I think that plays a huge role in many of these different steps, including the immune modulation, the 2 to 1 balance piece that we talked about earlier.

I know there's some peptides in this realm, like 37, for example, that some can use. I'm, I'm watching with some of the induced native phage or phage therapy from Doctor David Jernigan that he's been working with at his clinic in Tennessee and hoping that that presents a new tool.

And then I also sometimes think that we can't always use just oral interventions in this realm. So what can we do in the realm of frequency? I know you're familiar with the the wave one device from free medica, for example.

Lots of things that we can do in the frequency realm, even frequency specific microcurrent can be helpful. Not that it's directly anti-microbial, but in really supporting the body in this realm.

So lots of different approaches, and love to hear your thoughts as well. Yeah. So I would also echo echo that and I agree with that. And you know, it's it's interesting.

Let's, let's say there would be 2 to 2 conversations that would be going on. In this area. And let's say you can always kind of break it down. And there's two types of people in the world.

There's one person that was the hardcore antibiotic, person, and then one person that was an overall systems thinker, which is basically what we're we're talking about today.

And then, this one, 210 approach of a total way of thinking about things, the, the people. I saw this great lecture a few years ago, Harvard, Hopkins professor that said, the analogy for neurological Lyme was, drug resistant TB and to get an antibiotic into the brain to treat a neurological thing, you needed.

Mitochondria, hypercoagulation, and energy support

And and when they think drug resistant TB in the brain, they say for antibiotics. And so then his analogy was, okay, we need to do for antibiotics to, support, neurological Lyme.

And so then as much as I love those people, I would I would say I'm more in your camp than that camp. And then yet I like to think about that idea. Okay. Well, what would for antibiotics be?

Well, L. L. 37 as a peptide is an outrageously interesting, molecule. And, you know, we, you know, I, I've had a bunch of patients that had cellulitis that had all these other things and cellulitis, and I put them on all 37 and it was like dramatically better overnight.

The, and and so it's, quite effective ozone as an antibiotic. And then let's say you have two herbs that you got somebody on. And so then that's four antibiotics, you know, and, and so then, and, and then thymus and alpha one is sort of like an antibiotic.

It's immune regulatory anyway. It's also immune stimulating. And so then that could be five. And so then now we're cycling through. And then if I even think about protocols that I've seen that you've done, they're often in that ballpark of two to 3 to 4 things that might be anti-microbial.

And then you're going to cycle on and off of those. As we're working in the context of everything else. And does that mean we may take the cycling for a month?

We may there may be some actual antibiotics. And then guess what? Vitamin C and high dose is kind of an

antibiotic. And and so then now we b and and then you know I'll just jump to the regenerative side for outside of the United States then we're thinking kill ourselves.

You know where we grow, grow your own killer cells and give those back to you, which is they're going to, work on senescence and, and then also kind of regulate your immune system and help fight infections.

So then now we're beginning to say, okay, we can actually get to that level of three or 4 or 5 antibiotics, but potentially without having to do that whole having to take antibiotics, because we're we're managing the microbiome and kind of keeping that optimized and I, I love the herbal stuff.

And then thinking, think is thinking about the infections and the context of this overall conversation, like you do and trying to find some balance. Yeah.

And I think that the important thing, at least for me to think about, is I don't think we're ever going to fully eradicate Borelli, Bartonella. And but I think they're part of our microbiome for the duration of our existence on this planet.

And so the goal really is to minimize the overgrowth is enough. Unburden the body enough with all the other things we've talked about so that your immune system can respond like every other person that carries these same bugs and never manifested a disease process.

And so some people feel like, what do you mean? I can't eradicate these? And it's a discouraging conversation to me. It's actually an empowering conversation because that seems an impossible task.

And so the fact that we don't have to eradicate every last Borrelia, Bartonella and Bbca and Mycoplasma and chlamydia and virus and parasite and whatnot to become healthy again, to me is really an empowering perspective.

Yeah. And, you know, we live in Silicon Valley. You're moving to Colorado, but there are some criminals around here, you know, and yet you know, where we live and balance and kind of manage our life.

And, you know, the the if I, I have some patients who are profoundly ill that have a lot of this stuff going on, and then I've got a lot of patients who are profoundly well that have a lot of the same stuff going on.

And so then once and I think it's important that's had a great kind of maybe point to end on and kind of think about for the future is, is that basically what I would say to people out there is, is that if you can begin to kind of follow this type of 10 or 11 step process and we're like Spinal Tap, are we count from 1 to 11?

And so then if you can outline kind of a process like this and bring this into your life and kind of get everything working, the side effect of that generally is your life starts to work and you feel pretty darn healthy.

Microbial strategies for viruses, parasites, and Lyme

Absolutely. Yeah. And just very quickly to touch because I know we're running out of time. The last two steps really thinking about the dental pieces, cavitation root canals.

I think that comes fairly late in the process for most people, particularly because I think this works better once the retroviral piece is addressed. Once the parasites are addressed, it may come earlier for some, but I also think this is an area I don't want to jump into to aggressively without having a really good collaboration between your dentist or oral surgeon and the what I call the captain of your ship, and who's helping to guide you overall.

The last step. Step 11. Is this, really your wheelhouse? Regeneration. Restoration. What can you do here to help once the termites are gone? As Doctor Jernigan has said, I think that bioidentical hormone replacement can be helpful in some people.

Often times that cell danger response comes into that conversation as well. I love a lot of the phospholipids. Some of the IV title choline, sodium, phenol butyrate, those things.

Peptides obviously huge possibilities here for, restoration and regeneration. Photo bio modulation for rebuilding collagen and things of that nature after dealing with Lyme.

Really helpful. I love exercise with oxygen therapy. I do it every day. The level two system. I think getting that oxygen has been fantastic. And then, you know, I'm observing a lot of the things that you work with stem cells, exosomes and whatnot.

I haven't been super impressed with jumping into stem cells, thinking it's going to systemically solve your Lyme or your mold, and you don't have to do a lot of these other pieces.

But I think once we get to the point that we have some localized issues or we've done all of the other pieces first, that then there is potentially some opportunities here for those also to support this regeneration and restoration process.

So that's the 11 steps. It's evolving. I'm learning new things every day as, as everyone else. But hopefully that's a helpful model for people to think about now, I love it.

I think you're, a wise sage. And and then there's a lot to unpack here. And so then, this is, that was a fantastic interview. I think you clarified, a direction for a lot of people to think about.

And, and so then what, I'm going to do is I'm going to have you on my podcast, and we're going to go into this a little bit more in detail. And, and, and then I would be encouraged, encourage people out there that, you know, this is it's a lot to kind of like and interestingly, if I would have had this conversation with you, and this is embarrassing because I was like a fairly, well known doctor, and if if seven years ago I had this conversation, I wouldn't have even understood almost anything that you said you'd like.

You know, even just the supplements and the brands and things like that. And I'm on this journey with you, too, you know, I had dinner with somebody, and he goes, you know what I was impressed by?

He goes, I, I go, what he goes. How much you've learned in the last two years, you know, it's staggering. And and this field is really evolving. And I think it's evolving, you know, to some extent with people who are on the medical side, but deeply from kind of a grassroots perspective.

And you've been there. So I, I'm grateful, for the work that you're doing. Keep doing it, keep sharing the information. And I look forward to having you on set, you know, thank you so much, Doctor Cook.

I enjoyed the conversation. A couple of wrap up points. I'm on the board of the Limelight Foundation. And so if people are listening and they are potentially in need of treatment grants, we provide treatment funds to children and young adults 25 and under, if they're interested in either, potentially being a grant recipient or supporting that work.

Limelight foundation.org is where you can get more information. And to your comment, so many things are evolving at really a rapid rate in this realm.

I'm super excited about the things that are being put together in many ways. A lot of the things that are happening in the Covid realm and long Covid are also getting more attention on these chronic Lyme and CFS, Amy, and those types of conditions.

So I think my last comment would be just don't lose hope. There's so many reasons now to be hopeful, and people do get better from these conditions. Right.

And then you mentioned disulfiram, which is there's going to maybe when you come back or I'm going to do a little talk on that, I it can be miraculously helpful, but you have to do some things you have to do to get it right and some things to think about in terms of dosage, because if you get the peripheral neuropathy that comes from it, I am very good at fixing peripheral or helping with peripheral neuropathy, but I haven't been able to help that one.

Which is interesting to think about. Now then, that's just a job for me to kind of to figure out. That's what I was thinking too. I know, but but but then just keep keep that in mind then with the idea that, that once again, I echo what you are doing, which is, is these herbal approaches and these kind of, winning, winning kind of, from the from your own body's perspectives, hearts and minds with simple strategies and kind of getting going with low risk things.

I echo so, thank you so much. It's, I'm I'm delighted and grateful. And I hope you have a wonderful week. Thanks, doctor. Cook. Well, okay.