

A Journey Through Inflammatory Illness

Dr. Kent Holtorf interviewing
Scott Forsgren,
FDN-P, NC



Kent Holtorf ([00:00:01](#)):

This is Dr. Kent Holtorf with another episode of the Peptide Summit. Today we have Scott Forsgren. He is a functional diagnostic nutrition practitioner. He's a health coach, a blogger, a podcaster, a health writer, an advocate, he just really does it all. He's at every conference I've ever been to, it's pretty amazing. He is the editor and founder of the BetterHealthGuy.com, which I highly recommend you go to, where he shares his 23 year experience going through the world of Lyme disease, mold illness, and the myriad of factors that these terrible illnesses entail. His podcast at the BetterHealthGuy interviews many of just really the top experts in the world, actually, and leaders in the field of integrative medicine. It's available on his website, BetterHealthGuy.com. They're on YouTube, iTunes, Google Play, Stitcher, and Spotify. He has been interviewed on numerous podcasts. He's lectured on his recovery from chronic illness at conferences and on several online summits. He has written for the Townsend Letter and numerous publications. He is the founder for the form of integrative medicine where he hosts an annual conference and brings together some of the top integrative practitioners that share practical tools, and that just ended, and I was honored to be part of that. It went really great, even with the COVID virus, we had to quick switch. So it was really nice. He serves as a board of director for Limelight Foundation, which provides treatment and grants for children, young adults, recovering from Lyme disease. He's just everywhere, I'm telling you! We're really grateful to have Scott and really to go through the struggles and what got him better and his long journey. I'm very excited to hear about it. I thank you for being part of the Peptide Summit and I welcome you.

Scott Forsgren ([00:02:13](#)):

Thank you so much. It's an honor to be here, Dr. Holtorf.

Kent Holtorf ([00:02:16](#)):

So great. So we'll kind of just get going here. Tell me about your personal journey with chronic Lyme and mold and how you got started in this and how it all ended up.

Scott Forsgren ([00:02:31](#)):

Sure. So I had a tick bite in Northern California in 1996, and I didn't become ill right away. It was several months later in April of 1997 that I had over the course of a weekend what felt like a very significant flu. So 23 years ago this year I did not have any indication of Lyme disease early on, was really trying to figure out what was happening. Over the next few months, my symptoms were so significant that there were times that I wasn't sure if I would survive it. There were times that that would have been okay, fortunately, I'm doing very, very well today. But at the time, I had probably my worst symptom was head to toe burning sensations. It felt like a sunburn around the clock and that lasted for many, many months. I had a low grade fever for about a year. I had things like muscle twitches or fasciculations, numbness, tingling, a number of gastrointestinal symptoms, cognitive issues, tremors. I had some motor like tapping sensations in my left foot that constantly just felt like there was a motor or engine that was running there, light sensitivity, sound sensitivity. For some period of time just getting up and walking across the room was challenging. My balance was off, so even sitting up in a chair was challenging, lying in bed at night was challenging. I would put pillows down one side just to give me that confidence that I wasn't gonna roll onto the floor because that's what it always felt like. So from 1997 to 2005, I went to 45 different doctors.

Kent Holtorf ([00:04:09](#)):

Wow.

Scott Forsgren ([00:04:09](#)):

The majority of them suggesting that it was psychological, referrals to psychiatrists, I did get diagnosed at the time with chronic fatigue syndrome, with fibromyalgia, we did explore MS as a possibility, but back in 1997, the only thing you could really find online was that chronic fatigue syndrome was something that may resolve in about a decade. There wasn't a whole lot known about it at the time. So for me, that was really not promising or acceptable, so I continued the search. In 2005 I started with a new medical doctor who really had no idea how to help me, but he sent me to an acupuncturist that worked at an outlet mall that did computerized electrodermal screening, or electroacupuncture according to Voll, these devices are known as EDS devices or EAV devices. So she was tasked with testing me for various foods and identifying the foods that I should avoid. The medical doctor suggested that was probably at the root of my condition. So after a couple hours of working with this lady, she suggested that I go back to the medical doctor and have him test me for Borrelia, Bartonella, Babesia, and Ehrlichia. This was the first time that Lyme really came into my consciousness. I didn't really take it that seriously right away. All of this energetic testing was so new to me and so I ran into her again a couple of weeks later, she really urged me to go back and get the testing done. We did a number of tests, some of them we had to repeat a few times, but ultimately over the course of about 9 months to a year, we were able to get confirmation of what she was finding that Lyme disease and coinfections were in fact a player in my condition. So that really peaked my interest in energetic testing. That was around the time that I started studying with Dr. Dietrich Klinghardt. I didn't yet understand it. I was in the high

tech world here in Silicon Valley working in the computer industry but I could see that this was leading me in a direction that was very helpful. So for me, it also was an indicator that really thinking outside the box sometimes is where the solutions actually lie. So energetic testing is something that I still very much utilize today and find very, very helpful. So I would say that that's kind of at a high level, my journey. Shortly after that, I discovered mold was an issue, that I had been living in an apartment that had mold for many years, but no one had ever connected the dots to say, "Well, mold in your living environment could lead to health problems," until Richie Shoemaker started talking about that. The book *Mold Warriors* in 2005 led me down that path as well. So there's never one thing and one of the challenges I think with Lyme disease is we can get so hyperfocused on, "Oh, if I can just kill the bug and just get rid of the Lyme, but there's usually so many other factors, and that's what we're going to talk about today, that we really have to explore. One of the things that was very helpful for me was working with Dr. Dietrich Klinghardt and really not just the things he recommended for treatment, but the framework or the healing model that he's put together really changed the way that I thought about recovering from chronic illness. So fortunately, today I'm doing very well. I do continue to take very good care of myself. I do take supplements. I'm careful about my nutrition. I manage my sleep and stress and all of those things that I probably should have done in the first place that possibly would have then led me to not going down this path of chronic illness, but I am blessed and fortunate and very, very grateful to have the level of health that I do now.

Kent Holtorf ([00:07:48](#)):

Wow. Well, and that—I mean, you said you should've done this, should've done that, you were out on an Island because even your symptoms were not the standard chronic fatigue syndrome, fibromyalgia, and those people got treated horribly. You're out here with these burning sensations. I can imagine the standard doctors that you go to, your experience, where they just say, "You must be crazy", you know? And just again, the luck or just the fate that you went along with the energetic practitioner insisting on checking for Lyme. I mean, even nowadays that's difficult, so that is great. That's—wow. Again, plague was something, but thank God you had a couple of episodes of things that really helped.

Scott Forsgren ([00:08:42](#)):

Absolutely.

Kent Holtorf ([00:08:42](#)):

So like throughout your journey, what would you say, looking back, would you have done over again or done differently? And some key things. It's always tough, especially then, no one knew anything.

Scott Forsgren ([00:08:58](#)):

Yeah. I don't know that I necessarily would have done a lot of things differently, but I think in my mind has kind of emerged the steps that I might take if I were doing it again. So there certainly were some things that I focused on 15 years ago that maybe weren't the things that were the most critical. I think we oftentimes jump into that mentality of, "Oh, let's just kill the bug, kill the bug, kill the bug." I don't necessarily think that that's the way that we recover our health long-term. Then a number of the tools have changed over the last 15 years since I was diagnosed with Lyme in 2005. So back then it was, you'll be on antibiotics for the next 2 to 5 years, possibly the rest of your life. That's just what we have to offer. Since that time there's so many herbal, homeopathic, many other tools that have emerged. So I think I might've—if I were starting over, I would certainly lean much more towards the natural healing path rather than doing years of antibiotics, which I did do back in 2005. I think those have some longterm consequences, at the same time I'm also open to the idea that we need many tools in the toolbox. So I don't know that I necessarily regret or would do anything significantly different, but I do feel like with the many years of going through this process, that we have a better understanding now. I think for anybody that's dealing with something like Lyme disease or mold illness, that the recovery can be shortened to a much smaller period of time simply because there are practitioners now that understand the puzzle pieces that we really need to explore and to try not to miss some of the really critical things.

Kent Holtorf ([00:10:37](#)):

I totally agree, and we're very similar where I was under the impression of, "Let's just kill this thing" myself and 3 and a half years of the highest dose IV antibiotics, "Kill the bug, kill the bug", now we're really backed off of that. We've gone through—there are so many different areas that it affects and kind of that multi-system treatment. You want to give us just a quick overview of your steps that you feel would help the listeners.

Scott Forsgren ([00:11:05](#)):

Yeah, sure. So, this is constantly evolving and changing in my mind. It's not necessarily a protocol, it's not intended to empower people to self-treat, but it is really intended as information from which you then can have a conversation with your doctor in terms of what things to explore and maybe what things to try. I definitely think Dietrich Klinghardt and Neil Nathan, Simon [inaudible], Raj Patel, a number of the doctors that have really been mentors for me over the year. So what I would say is, in my mind, the first step is really supporting detoxification and drainage with a focus on improving the terrain. I think that's absolutely critical. The second step would be improving the external environment. So we're really only gonna ever be as healthy internally as the environment around us. So here I'm thinking about mold exposure, electromagnetic field exposure. Number three, I think about optimizing sleep simply because it affects so many other things in our healing process. Number four, mental and emotional health. So what past traumas or conflicts might have set the stage for illness, or how has the illness itself traumatized us in terms of now we need to process that because we were invalidated not supported? Those types

of things. Number five, I think about ways to support the limbic system or retrain or reboot the limbic system, and also to tonify or up-regulate the parasympathetic nervous system. Next I think about, in number six, stabilizing mast cells, reducing inflammation, immune modulation. So really getting the immune system better balanced so that we're working towards that goal of having better managed the microbes that may be there, but we're doing them by getting the body to do what it was designed to do. Then moving on, number seven, looking at our nutrition, our microbiome, our gut health, making sure that we're really supporting that so that the immune system again, is supported as much as possible. So much of the immune system coming from the gut. Number eight, this one is really a grouping of things at this point, but supportive intervention. So do we need to support the mitochondria? Do we need to look at hydration? Are we drinking lots of water, peeing it out and still cellularly dehydrated, which is very common in these biotoxin illnesses? Do we need to look at something like supporting minerals and B vitamins from a condition known as crypto pyroluria? Optimizing our coagulation, making sure that our blood is not so thick, that number one, the treatments we're doing, aren't getting into the body, into the places we need them to, but also from a perspective of oxygen delivery. Supporting the adrenals may fall here as well. So once we look at those supportive things, now we've kinda got this foundation to build from, and that's when in step number nine, I think about the microbial overgrowth and what do we need to do to support the viruses, the retroviruses that may be activated within our DNA, the parasites and gut dysbiosis and fungal overgrowth and yeast and things of that nature. Some of which could actually, in terms of fungal colonization, come from environmental mold exposure. Then I think about Lyme and coinfection, so *Borrelia*, *Bartonella*, *Babesia*, even some of the opportunistic infections that maybe aren't from the vector that gave us the Lyme disease, but things like *Mycoplasma*, *Chlamydia*, pneumonia, that then can put an extra burden on the system. Wrapping up that focus on microbial overgrowths with some thought around whether or not biofilms may need to be considered and supported. Then number 10, I think about the potential for dental contributors. In some cases that may need to move much earlier in the process if there is an obvious dental issue that could be more significant of a priority for someone. But I also think a lot of times if we get the body enough balance, then even if we do need to do some dental work, we may then respond to it better, we may heal better, it may actually be much more effective. So I put that as step number 10. Then step number 11 is really regeneration, restoration, and repair. So after we've been through this process of being sick for, in many cases, years, in some cases, decades, even when we get to the place that we've addressed all of those stressors, we then maybe need to do some things to help support the body in restoring, regenerating, and repairing.

Kent Holtorf ([00:15:43](#)):

Great, great. That's pretty amazing. A couple of things jumped out to me. One is like, how could a standard physician put this all together? I think it is amazing that there's these integrative doctors that are doing this, you know? Some may not have all the parts, but even caring enough. We have patients cry in the office at the first— that we believe them! "You believe me?" You

know? It's crazy. Also, what really kind of stood out is your—is the emotional component, the limbic system, parasympathetic, where so often we find it after an emotional trauma, like a divorce, a death in the family, and which I think lends itself especially with chronic fatigue syndrome. "Oh, see, it's a stressed out woman." But I give a lot of lectures how that affects the immune system so much and you think stress lowers immunity, but it doesn't, it modulates it. Then with like PTSD and the limbic system, how—and then it just causes this vicious cycle, is what you're saying and where people with mold that don't have any Lyme or other problems, they're fine, but it's just another burden. I think that that's pretty amazing with that. You want to go through maybe the first part of it?

Scott Forsgren ([00:17:01](#)):

Sure.

Kent Holtorf ([00:17:01](#)):

We can talk about the detoxification and drainage and are those different things?

Scott Forsgren ([00:17:08](#)):

Yeah. So in my experience, again, the detoxification and drainage piece is the most critical. It's what I really put the most focus on personally in my own recovery and health maintenance protocol. It's amazing how many things we come into contact with on a daily basis that are toxic. The number of chemicals and pesticides and metals and all of these things that we need to think about. I honestly don't think that we would have symptoms of Lyme and coinfections if we didn't also have a concurrent toxic burden or a real issue with our terrain and certainly mold toxins can fit in here as well. So ultimately I kind of summarize this by saying that improving the terrain is the road back. We can also think about detoxification as an indirect microbial management strategy. So we know that certain organisms like candida or candida and parasites, they may be in the body as a protective mechanism to concentrate or protect us from heavy metals, for example, so that they're not damaging us in more significant ways. This is also helping to deal with some of that microbial overgrowth. So for me, the first thing we really need to look at is minimizing as many incoming toxins as possible. I think people forget this, but we don't need to detoxify from something we're never exposed to. So looking at personal care products, looking at scented products, laundry products, those types of things, making sure that we have pure air, pure food, pure water, thinking about toxins maybe that are introduced into the systems from something like breast implants or metal implants in the body. Those certainly can add to our toxic burden. So the difference between detoxification and drainage in terms of how I think about it is that detoxification is conceptually about binding toxins in the gastrointestinal system, getting them out of the body, minimizing enterohepatic recirculation. So once we get the toxins from the liver, we need to get them into the bile, the gallbladder, the small intestine. We really then want to grab on to them and not reabsorb them as the body attempts to recycle the bile. So that's

primarily what I'm thinking of in terms of detoxification. Then drainage is really about supporting the body's inherent capacity to detoxify. So looking at the liver and gallbladder, the kidneys, the lymphatic system, the extracellular matrix, or interstitium. Looking at the colon, the skin, the lungs, and really optimizing all of the exit routes or emunctories as much as possible. A very early priority is getting people pooping. Honestly, it's amazing how many people you talk to that say they have a bowel movement once a week or twice a week. Constipation and healing do not go together. So that's an early priority and certainly critical from a detoxification perspective. We don't want to forget the gallbladder either. Again, we need the bile to flow to really keep moving and if we can optimize that bile flow, we're actually then able to have a more effective benefit from the binders that we're taking. So we can take binders all day, but if the toxins are never getting put into the bile and pushed into the small intestine to meet up with the binders, then they're not going to be very efficient or effective. There's so many good binders out there. So I love Takesumi Supreme from Supreme Nutrition is great. There's a number of bioactive carbons from Microbe Formulas that I've really grown over the past couple of years to like. BioPure has a number of great products, things like chlorella and zeolites. Some people like bentonite clays and things of that nature. I think they all can be helpful and I actually like to rotate binders to some extent and use different binders over a period of time. Then when I think about drainage support, we're looking at primarily homeopathics. So, people may be familiar with companies like Energetics, or [inaudible], or DesBio. They have some phenomenal tools and then combining those homeopathics with various herbal tools. So we're thinking about, for the liver, milk thistle or dandelion, or for the kidney, Solidago, or for the lymphatics, red root, for example. So, so many great products in this realm, again, not forgetting the gallbladder either. Usually incorporating something that's very bitter to help with the gallbladder and that bile flow. I also think of trace minerals, which I happen to have some in this glass of water as another great tool for really supporting improvement of the terrain and reducing heavy metals over time. I think a lot of the reason that we hold on to heavy metals is a lack of minerals. So silica is another tool that can be really helpful as well, particularly when we're talking about aluminum and supporting detoxification. So I do silica every day also. Then I would say movement is important. We need to keep the lymphatic system going at a minimum, just walking. If that's all someone can do is take a few steps. That's going to be better than not doing that in terms of keeping our fluid flows moving and supporting the lymphatic system. Then we can think about so many other adjunct tools that I personally find tremendously helpful. So coffee enemas, personally, would be at the very top of my list. They got me through so many days of pain and suffering that I can't imagine what it would have been like without having that as a tool for supporting detoxification, supporting bile flow, all of the things that we're talking about. Colon hydrotherapy, ionic foot baths, castor oil packs, oil pooling, liver gallbladder flushes with the caveat that I think those should be medically supervised. Those can be really intense in some cases, so they should be really done with someone's doctor. Sauna therapy, at the right time. I think saunas can be provoking in some cases, there are toxins that are mobilized in the system as well. So if everything's set up to help excrete those toxins, it can be great. But if the pathways are not open, you can actually make yourself feel worse and autointoxicate essentially. Then I think, since we're

talking about peptides, BPC-157 from its perspective in terms of helping heal the lining of the gut. If we can minimize leaky gut, minimize the intestinal hyperpermeability and minimize the endotoxemia from lipopolysaccharides after we eat foods, particularly certain fats like coconut oil and others, I think that that is another tool that's helping to minimize the toxins that we're getting into the body.

Kent Holtorf ([00:23:56](#)):

Gotcha. We're just checking kind of normal—so-called "normal", healthy people who just have a little fatigue and everyone's gut is messed up. It's so permeable. I'm just thinking of—going through it all, already, obviously this whole detoxification and drainage needs so much more time to go in to depth. I was thinking silica, "Hey beer!" You know? That there's a lot in there.

Scott Forsgren ([00:24:21](#)):

[Laughing] I haven't tried that one. [Laughing]

Kent Holtorf ([00:24:25](#)):

But—and how about like sleep and detoxification or drainage? The lymphatics, especially for the brain, need good sleep or they don't open up. I know there's some research on that.

Scott Forsgren ([00:24:38](#)):

Yep.

Kent Holtorf ([00:24:38](#)):

How everything kind of goes together. Maybe to summarize that, because I can just see people going, "Oh my gosh, there are so many things." Do you take these different binders just on a rotating basis? Do you take them at certain times during the treatment? Or how do you—?

Scott Forsgren ([00:24:54](#)):

I personally feel that binders are something that should be in a treatment on an ongoing basis. I think that the world is toxic enough that having that additional support is a good thing. Now, do I use more than one type of binder in a day? Absolutely. Do I rotate them at times? Absolutely. I think it's gonna really be very individualized. Then one of the challenges with most of the binders is the compliance, because you generally need to keep them a couple of hours away from food, from supplements, from medications. So even if you can only get them in once a day because of that restriction, it's better than letting them go entirely. There are some of the newer binders, the bioactive carbons that I mentioned from Microbe Formulas that are more forgiving and can be taken with other supplements, with or without food and so on. So I find that's a nice advantage of

some of those binders, but yeah, I do think binders should be, for the most part, something that are incorporated on a longer term basis.

Kent Holtorf ([00:26:02](#)):

Gotcha. Is there a place you'd recommend the people watching this to go for more information on that? And just try to get some sort of summary, where to start.

Scott Forsgren ([00:26:14](#)):

Yeah, I mean they can certainly go—I mean, I've done some podcasts on these topics as well, so they can go there or they can always reach out to me directly through the website if they have questions as well. Certainly happy to help with that.

Kent Holtorf ([00:26:24](#)):

Great, great. Appreciate that.

Scott Forsgren ([00:26:26](#)):

Sure.

Kent Holtorf ([00:26:26](#)):

Then, so your next point I believe was external environment. Very key and a lot of it we can't control and it's very difficult, but what's your recommendations on that?

Scott Forsgren ([00:26:37](#)):

You know, I think from an external environment perspective, this is really looking at mold and EMFs. I think that we can take supplements all day long, but if our external environment in our home, our school, our workplace, if that becomes our kryptonite, then we're never again going to regain our superhero status. So I think mold is really the first one that we need to explore in this soup of stressors. Water damaged buildings lead to lots of different toxins, not just molds and mycotoxins, but different bacteria, a whole list of things that are in this toxic soup in a water damaged building. So I think for most people that are looking at Lyme disease, I think the mold piece is so critical to explore and absolutely rule out or address before we start chasing the Lyme microbes. I would say that the majority of people with chronic Lyme disease ultimately do find a mold component in their history. So I think that's really critical to look at and explore. There aren't any perfect tests. I think a good starting place is the ERMI or Environmental Relative Moldiness Index. So companies like Mycometrics or EnviroBiomics make those available. From dr. Neil Nathan I learned about some of the plate testing that can be done. There's a company called ImmunoLytics that you can put out some plates. I do think the ERMI is a great place to start. The

ImmunoLytics plates can certainly be another way of looking at the potential for a problem. Then ultimately, if there is a problem there getting an IEP, or Indoor Environmental Professional, to come out and do an inspection. I think that can be very, very helpful. There are tests that are emerging in the urine mycotoxin realm. So I personally am a fan of the Great Plains MycoTOX. I think that can be a phenomenal test and tool for people. There is some debate about whether or not the toxins that are seen in a test like that could be coming from the food that we're consuming, but at a certain point, a certain level in these tests, it's unlikely that it's from a food only source. So I think that definitely is worth exploring. Then once we identify the exposure, we either need to remediate it or find a new environment that is better supportive of our healing goals and health restoration. So this is an area, it is not easy. I often say that in the Shoemaker realm, I think the protocol is like 11 steps. This is step number 1, but literally once you get past this, you're well beyond the halfway point in terms of the things that need to be done. So air filtration devices can be helpful. They're not a solution to the problem. So I think you still need to look at what is the source of the cancer and get rid of it before you start doing other things. Very, very critical to explore the mold piece and then bringing in—there's various binders that can help with mold as well. Some that are more specifically targeted to dealing with mold like the BioTox product from Microbe Formulas. I really like—Beyond Balance has a product called TOX-EASE BIND and one called PRO-MYCO that can be very helpful in this realm as well. Takesumi Supreme, again. Cholestyramine is one that many people are familiar with. It can certainly be helpful. My observation has been that if someone is still getting an exposure that Cholestyramine can be really, really helpful. I do feel like in many cases, the natural options that have emerged are quite adequate if you don't have an ongoing exposure. Then when we talk about the microbes, if you've been exposed to mold for a long period of time, you certainly have the potential for colonization. So if you then were to fix your environment or move to another environment where there is no mold, you could still have a mycotoxin producing factory in your own body. So we have to think about, is there the need potentially for some antifungals? We'll talk a little more about that later, but that is a possibility from exposure longterm to water damaged buildings. Then I think once we've got the mold piece ruled out, we really have made a significant step forward in terms of our overall setting the stage for our healing process. Again, I think it's really critical if you're focused online, don't lose years of getting this piece explored because there's just so much time that you can save by exploring the mold piece early on. Then if we turn from the mold piece to the electromagnetic field piece, this is an issue that Dr. Klinghardt brought to my attention back in 2006. At the time most people were laughing at him about his perspective on EMFs. I don't think anyone's laughing anymore. This is certainly a stress that can drain our vitality, that can keep us in a cellular sympathetic dominant state that can minimize our ability to detoxify. So things like turning off wifi, tossing out the cordless phones, sleeping in a Faraday cage potentially, so many tools that can be considered. Turning off the circuit breakers at night, installing Stetzer filters. Some people benefit from EMF protective clothing. I have done as many of those things as I can do and I'm always looking for ways to consider EMF hygiene in my living environment. It's most important, really, to think about in the sleeping location. So if someone's gonna start with minimizing their electromagnetic field exposure, think about what can I do to minimize that in

the sleep environment? One of the things that Dr. Klinghardt has also said for some time is that the electromagnetic fields that we're exposed to, they also cause molds to create more mycotoxins whether that's environmentally or also the organisms that are within us. So in his model, one of the ways to deal with water damaged building exposure, mold illness, and so on is to turn off or to reduce your EMFs in your environment. So in the Klinghardt world, there is really no road back to health without considering the role of electromagnetic fields and really reducing those. So there's lots of ways to explore it, you can get various meters and do some self-testing. I personally have done that, but then I also hired a building biologist to come out, make recommendations, talk about potential mitigation options. I found that very, very helpful. Then another piece to consider is that EMF hypersensitivity can be associated with the heavy metal toxicity. So one of the reasons that I put detox first, before we talk about the EMF piece is we want to really start that process of also reducing the heavy metals in the system, so that we're then better able to tolerate the exposures to EMFs in the environment that we can't necessarily avoid.

Kent Holtorf ([00:33:29](#)):

Gotcha, gotcha. Yeah. That is just so difficult. It seems like with all that information for patients to say, "Oh my gosh, where do I start?" It seems like they need to find a doctor who basically understands that to do the testing part. I found those little Petri dish, you can get them on Amazon. You can put them around your house, it actually can be very good and send those off. At least you kind of have a sense. It's interesting with this 5G come in—we won't get into—that's a whole other issue. I was drilling down, doing a lot of research on peptides and I was figuring out how do these dipeptides, just two amino acids long, they can't find the receptor. But I found a couple of papers that show they're harmonic, that they actually vibrate and stimulate the cell. What is this 5G and all these EMFs going to do with that vibration? Is it gonna turn on, turn off, you know? Who knows. But that's such a critical part, of course, that we can talk for hours and hours on that. But I think that was a great summary for that. So let's go ahead and move on to sleep.

Scott Forsgren ([00:34:40](#)):

Yeah, so sleep. Everyone, I think, will be unique here in terms of the order, but again, the EMF piece is one of the reasons that people experience insomnia. So looking at the EMF piece before focusing on sleep, because that may in fact be the reason that you're not sleeping. Fortunately for me, sleep was never an issue throughout my entire health journey until about 18 months ago, I always slept well. That was a wonderful thing. About 18 months ago I started having some sleep issues, so this has been an area that I have been exploring quite a bit. If we don't sleep, we don't heal optimally. There's lots of supplements that people talk about, melatonin, which I'm a huge fan of. I jokingly call it my drug of choice. Gabba, 5-HTP, all of these things can be great, but I also think looking at things like what's happening with your blood sugar while you're sleeping. Now we can fairly cheaply get continuous blood glucose monitors and see is your blood sugar dipping in the night causing your cortisol to rise to get your blood sugar back up? That's worth exploring.

Things like weighted blankets, lots of tools that can really help from a more parasympathetic perspective, like brain tap is a system that I find can be very helpful for sleep. There's something called the Zeez Sleep Pebble, which is a little device that you put under your pillow that puts out the frequencies that get the brain into a sleeping state that I've been exploring over the last couple of months. I do track my sleep with an Oura Ring so I can get a sense for what am I changing that's leading to improvement? Fortunately at this point, I'm to the place that I can get a crown almost every night, which is good, but I still am always working to optimize these things. There's a new tool coming out called the Apollo System that I'm looking forward to as well that could be helpful in this realm. It's essentially a band that you wear on your wrist or your ankle that vibrates at certain frequencies that can also help with things like tonifying the parasympathetic nervous system, increasing sleep. It is supposed to arrive shortly and I'm looking forward to that. So everything that we can do to improve our sleep will exponentially increase our overall healing potential. I do think that there are some peptides here that could also be worth exploring. So things like DSIP, or deep sleep-inducing peptide, Epitalon, potentially. I know you have a lot more experience with the peptides, but sleep support is one of the areas where peptides could also be very helpful.

Kent Holtorf ([00:37:09](#)):

Yeah, I agree. We've found kind of the Delta sleep-inducing peptide, along with the pineal peptides, Epitalon, Pinealon, and then some sort of growth hormone peptide like the AOD, which is a fragment of growth hormone or some of the growth hormone-stimulating peptides or growth hormone stimulating-hormones. CJC Ipamorelin can sometimes be magical. Usually it takes a couple of weeks, but another big tool in the toolbox. We're talking about peptides here and just can be dramatic for some people. But I think it's so many parts of the puzzle as you are saying. [inaudible] the mental and emotional health, which there are some people that just struggle with that. They just live in this hectic environment and family issues. I think it's so much harder to get those patients better.

Scott Forsgren ([00:38:05](#)):

Yeah, absolutely. I think most of us have probably had some emotional traumas or conflicts that set the stage for illness and they don't have to necessarily be significant ones. We may not even be consciously aware of them. Others, again, can be invalidated by the process of illness and invalidated by the medical community, by their families, that itself can create a trauma. Either way, I think we then have to explore this issue. So accepting that we have these things doesn't mean that the illness is in our head. It just means that the mental, emotional health do play a role in the development and the ongoing continuation of physical illnesses. So in the Lyme community, one of my observations has been that it's a very common pattern to see people that are type A overachiever, perfectionist personalities, many don't feel that they deserve to be well. I joke now that I'm a type A minus personality.

Kent Holtorf ([00:39:01](#)):

[Laughing]

Scott Forsgren ([00:39:01](#)):

It's taken many, many years to get there.

Kent Holtorf ([00:39:03](#)):

I'm gonna use that one.

Scott Forsgren ([00:39:06](#)):

[Laughing] So things like cultivating healthy relationships, eliminating toxic people, experiencing joy in every way we can. I think that really plays a key role. So we want to do things as well to not identify with an illness. It is a part of who we are, but it is not who we are. If we identify with it and take it on, it will be more difficult to move past. So in Dr. Klinghardt's 5 levels of healing model, this is the third level. So things that you can shift at the higher levels are very powerful interventions because they have downward causation and can influence the physical levels and other levels beneath it. So tools that could be helpful in exploring here and I've done most or all of these myself with various practitioners, things like EMDR, which is Eye Movement Desensitization technique, APN, or Applied Psycho Neurobiology, PK, or Psycho Kinesiology, EFT, various tapping systems can be phenomenal. Emotion code can be great. If people are looking for a place to start, I'm a big fan of Amy Scher's work. She's got a book that she's put together called How to Heal Yourself When No One Else Can, that works on these mental, emotional realms, but also uses lots of energy therapies to help release them from more of a cellular memory perspective from the body as well. So it's a phenomenal, very self-empowering tool to start exploring this mental, emotional health arena.

Kent Holtorf ([00:40:41](#)):

Great, great. I think, especially with past trauma, they almost get hardwired that way. I think kind of—I don't know if this is a great analogy—like a feral cat. You can take it in immediately and it's great, it's like a regular house cat, but if they're out for a period of time, they almost get hardwired. So I think it takes a lot longer to work through those issues when you have kind of a past—of course, or current—really you have to get out of that, which is very difficult. But past really plays a part as well. What's—let's go on to the limbic system and retraining that and the parasympathetic system where all these patients are just—they're in sympathetic overdrive, fight or flight, fear kind of based. I'm very interested to hear what will you have to say about that?

Scott Forsgren ([00:41:28](#)):

Yeah, the limbic system arena is one that I really just started exploring about 2 and a half years ago, I would say. So, this is a step that could make sense earlier potentially in the overall approach, sometimes earlier, sometimes later. But the limbic system is the area of the brain that includes the hypothalamus, the hippocampus, the amygdala, the cingulate cortex, so we think of this as the alarm center, or the feeling and reacting brain. So it controls lots of different functions in the body, including the immune system, the endocrine system, including the autonomic nervous system, which is responsible for blood pressure and heart rate and breathing and digestion and so many different downstream things that the limbic system influences. So lots of things can trigger limbic system impairment. This could be mold exposure. This could be Lyme disease. This could be a chemical exposure or a pesticide or a bacteria or virus, or physical or mental or emotional trauma. There's so many things that can trigger it. But if you think of a threat like mold or Lyme disease as a tiger, you generally don't want to do something around limbic system rebooting and DNRS, or Dynamic Neural Retraining System is the one that I have the most personal experience with you. You don't want to do that when your tiger is still a tiger. You want to address the issue so that the mold now has been resolved or reduced, that the Lyme disease has been considered, that it's now essentially a kitten in your life, but your limbic system still sees it as a tiger. So once you've addressed the tiger, you then use something like DNRS to reboot the limbic system to say, "Hey, this is really not the threat that you're perceiving. You don't need to have that stress response. You don't need to trigger the adrenals to release cortisol, for example." So there is a time when DNRS—in fact, I would say of all the interventions that I've seen, the single intervention that's led people to highest ground most consistently is DNRS, but there's a place in a time for doing it. You don't want to do this if you're still living in your moldy house, for example, generally speaking. This inappropriate response of the limbic system can continue to hold us back by impacting our immune response and our hormones and all of these other things that create lots of symptoms in the body. So I like to say that some people think of DNRS as a mental, emotional tool, and yet it really is not. While it can be helpful for PTSD, for example, it is really more of a physical biochemical response in the limbic system. So looking at the amygdala primarily, the fear center, how do we get out of that trauma loop, so to speak? So, I think it's a phenomenal tool. There's other things in this realm that can really help in terms of supporting the limbic system, in terms of supporting the parasympathetic nervous system. We're generally not going to heal in a fight, flight or freeze or sympathetic dominant response. We really have to calm the system to heal. So again, brain tap is one of the tools that I think is very commonly helpful for people. Frequency specific microcurrent is another tool that can be helpful in terms of the limbic system, the parasympathetic tonification so that we can better rest, digest, and detox. Even things like the ionic foot baths, the one that I'm using actually uses frequencies to help support the parasympathetic nervous system, which then supports better detoxification.

Kent Holtorf ([00:45:21](#)):

Gotcha, gotcha. I bought one, I won't mention the product, but—to wear at night and it made me so mad. I threw it across the room. [Laughing] It had the opposite effect. But the DNRS, is there practitioners around? Are there centers around?

Scott Forsgren ([00:45:38](#)):

So DNRS is a system that was created by Annie Hopper after she, herself was living on a houseboat because she could no longer tolerate living in her home due to chemicals and EMFs and all of these things. So she makes this system available through a course that's available by DVD, that's available online through a streaming service. There's also a 4 day in-person retreat, which is what I did, where you go and you have 30 other people that have had a similar experience. I personally find the retreat to be incredibly powerful. There's an energy of that group healing experience that was phenomenal, but you can learn it through DVDs and streaming as well.

Kent Holtorf ([00:46:25](#)):

Oh, great. Great. Thanks. Yeah, let's move on to—I mean, all of these are such vast areas and kind of immune modulation, which we've really kind of come to know in terms of diagnosis and treatment, which goes along with mast cells, reducing inflammation, and that part of the protocol.

Scott Forsgren ([00:46:47](#)):

Yeah. So I think it's so important to not think that the success criteria for health is to kill the bugs. We really don't want to feel that we're in a battle or we're in a war, or we have to fight something in order to win. So it really is more about our response to a pathogen than the pathogen itself. If the immune system is hyperactive, overreactive, or responding in an autoimmune type fashion, that itself is creating a lot of inflammation and a lot of symptoms that we think of **as dis-ease**. It may not be the bug itself, but it's how we're responding to the bug. So a lot of this inflammation can be driven by mast cell activation, by histamine intolerance. This is an area that also can have many different triggers. So it could be parasites, could be mold exposure, Lyme, environmental toxins, EMFs. In fact, Dr. Theoharides,

Kent Holtorf ([00:47:58](#)):

Wow.

Scott Forsgren ([00:47:58](#)):

Knowing a lot about EMFs, I had not heard that before. So you—here, I'm thinking of things like a low histamine diet, which can make a big difference for some people, not for everyone, but it's

worth a trial. Looking at what are some of the high histamine foods people are consuming? Are you eating avocados? Are you eating bone broth? Do you have fermented foods? Are you eating kombucha? For many people, these are entirely the wrong foods and they are triggering mast cells and leading to more histamine and more inflammation and more symptoms. Then I look at incorporating various mast cell stabilizers, histamine reducers. People are familiar with things like Quercetin, or Luteolin, or Holy Basil. There's a number of great products out there to kind of calm the system from that perspective, but I do think that a lot of times when people incorporate the diet, the mast cell stabilizers, that they do notice a fairly significant shift in their symptoms because they've kind of drained the inflammatory bucket of the body, so to speak. Looking at immune modulation then is important. So whether that's with low dose naltrexone or low dose immunotherapy or homeopathy can have a great role here as well. Keeping in mind that getting well is not about boosting the immune system, which can actually make things worse. It's really about modulating, about calming, about integration with our microbiome. So this is also an area where I think peptides certainly shine and play a very significant role. If we look at the TH1 TH2 balance—and you do phenomenal lectures on this—but we're thinking in chronic illness being more TH2 dominant, more auto-immune leading, more inflammatory, more allergy, more mast cell activation. The TH1 arm of the immune system is what's managing the microbial burden. So if we're TH2 dominant, we have all of these symptoms that are inflammatory and autoimmune leaning, but we're not addressing the microbiome. So looking at peptides like TAI or Thymosin alpha-1, Thymosin beta-4, I think those things have a role here in terms of immune modulation, reducing inflammation, reducing mast cell activation. BPC-157, also in some people can be very helpful with mast cell activation. So by working on this immune modulation piece, we're already starting to get the body engaged again, to deal with the microbial overgrowth before we even think about killing bugs. I think this is really what we want to do is set the stage for the body to do what it was designed to do, because we, with our human brains, will never do it better than the way it was designed.

Kent Holtorf ([00:50:42](#)):

I can't agree more. The lectures, I've talked about TH1, TH2, TH17. A lot of the old literature is wrong, you know? Saying TH1 is inflammatory, but it actually ended up being TH17. But we have many people say, "Hey, my doctor checked everything. Everything's normal." And we're like, "Okay. Yeah, we'll see." We really look at that immune system kind of as an overall marker that balances TH1, TH2, to see how sick they are, it's the biggest thing that correlates with symptoms. I think that is key and the peptides can play a big part of that, that's what we found. Then what about mitochondrial support? I think that's becoming a huge part. There's no cellular energy and the coagulation and all that. If you can mention a little bit about that.

Scott Forsgren ([00:51:36](#)):

Yeah. So let me—so I think we jumped ahead by one. So just quickly to get into not forgetting the nutritional piece, the microbiome, the gut health, those types of things. So again, the immune

system largely coming from the gut, what I'm thinking about there is making sure that we're getting out all of the stressing inflammatory type foods that we're finding, the nutritionally dense foods. I am a big fan of having a daily power shake that has things like high quality protein, some collagen, a fiber blend, phospholipids, healthy fats, chia seeds, all of those things I think are fantastic. I am a big fan here of MegaSporeBiotic or spore-based probiotics to support the microbiome. I find that they're generally well tolerated even in people with mast cell activation or SIBO or those types of things. So this also, in the gut arena, is where I think BPC-157 certainly shines a lot. It's worth exploring. Then when we think about step 8, which you mentioned, the mitochondrial piece, hydration, so on. This is an area, the mitochondrial piece, that I've been aware of for many years and people take CoQ10 and things like that. But I think just in the past year or so I'm becoming more interested in the mitochondria. How do we provide the body with the energy or ATP that it needs to move towards healing? So things like red light therapy can be phenomenal. Things like various forms of NAD can be very helpful. The one caution with the mitochondrial piece that I'm just still really understanding myself is that ATP is actually—or extracellular ATP is the danger signal in Bob Naviaux's cell danger response model, so I think when we start getting into supporting mitochondria, you don't want to be too aggressive with it initially and you also want to watch and see. It may not be the right time for someone to have their mitochondria supported, but I do think it's a critical area to look at. Hydration is another one. It seems like most people with chronic illness, if you look at their antidiuretic hormone, it's very, very low. We drink water all day long, still are cellularly dehydrated. So what can we do? Can we use structured water? Can we use electrolytes, trace minerals, maybe just some sea salt in the water? There's various homeopathic products that I really like, like ReHydration from Energetix, that can be very helpful. But finding something more than just water, which for the most part is not going to be the hydration that we need on its own. Looking at kryptopyrroluria where the body's peeing out zinc and B vitamins. If our immune system is low on zinc, for example, it's like an army with no bullets as Dr. Klinghardt likes to put it. So that's an area to explore. There's tests that can be done for it. Supporting it is a relatively simple process, again, with the caveat of if you do it too quickly, you can create more problems. So a lot of these things I think, slow and low and gentle is the way to approach it. It's a marathon, not a sprint. When we try to sprint towards health recovery, we often run into a few brick walls here and there. Coagulation, this is another area that I think honestly is under, looked at in the chronic illness arena. The test, I don't think a lot of practitioners really explore this, but looking at the potential for thickened blood or hyperviscosity and what that's doing in terms of these chronic illnesses. Using various enzyme combinations like lumbrokinase or nattokinase. There's certainly pharmaceuticals that people have explored as well, like heparin that can be very helpful or lovenox, things like that. Then looking as well in this kind of supportive realm of do we need to support the adrenals potentially to be able to give someone some vitality and energy to kind of get better through their day? So this one is a little bit more of a grouping of several kind of supportive areas, but I do think the mitochondria, the hydration, the coagulation, all of those things are pieces of the puzzle that we don't want to miss exploring.

Kent Holtorf ([00:55:49](#)):

Oh, I totally agree. Just a few comments on that, the gut brain axis is becoming, you know—we're learning more and more of—you hear microbiome but the viral biome also. Each bacteria has a virus connected to it, if there's more viral DNA, then we have bacterial DNA, then we have human DNA. But it works through the parasympathetic, the vagus nerve and the brain affects the gut. So it's a vicious cycle and doing things to support that. Again, BPC-157, we're going to be adding KPV which is a Melanocortin peptide, which really reduces inflammation, heal that leaky gut. That leaky gut really just kind of is a vicious cycle. Well, so many things are. Coagulation, yeah, I'm a big fan of that. Really seems to occur in about—if we do the right test—80 plus percent of people with these chronic illnesses. Then mitochondrial dysfunction is—there are so many theories of even aging and even neurodegenerative diseases and so many studies have shown chronic fatigue syndrome, fibromyalgia, they have low mitochondria, but you have like CoQ10, all these things can help, but it's very temporary. There's some new peptides coming out, we're using them, like 5-Amino-1MQ, Dihexa that actually they're finding that the antioxidants inside the mitochondria are too low. So it messes up that whole electron chain. So I think that's kind of going to be one of the new big emerging therapies for a lot of these illnesses. We're getting some benefits just very quickly with those. I think for many, many diseases of aging and chronic illness.

Scott Forsgren ([00:57:39](#)):

You know, it's kind of interesting how much we both love our toys and our toolbox here—

Kent Holtorf ([00:57:44](#)):

[Laughing]

Scott Forsgren ([00:57:44](#)):

Because I'm hearing you saying some new things here, and that's certainly exciting to me as well.

Kent Holtorf ([00:57:48](#)):

Yeah. Again, we could talk for hours and hours on each of these things. Then we go back to what they normally would say, "Okay, what do you do to go after these bugs once you have all these other things set?" I agreed to getting from point A to point B, you try to kill these bugs, but you're giving mass amounts of antibiotics or even herbals. There's no immune system, they don't kill it, so your body can't take over. So basically you gotta get your immune system up, get inflammation down, get everything working better, to have a good chance to suppress these things and make them so they're no longer a problem.

Scott Forsgren ([00:58:24](#)):

Right.

Kent Holtorf ([00:58:25](#)):

You can reverse that thinking.

Scott Forsgren ([00:58:28](#)):

Yeah. So again, I mean, I think the—I intentionally put this towards the end because I think if you start here in most cases it's going to backfire or you might feel a little bit better, but it's probably going to be short lived. There's so many other pieces we need to do first to create longer term health stability and longer term health optimization. So once we really start supporting the body against these different pathogens, the order here could shift as well. So within this grouping there's kind of a different order in terms of how we might want to look at these. But I generally think of viruses as being one of the early on things to explore. If we look at how much people are affected by—you know, we hear about EBV and HHV-6, and all of those things. I've been surprised how many people are affected by herpes zoster. Not that they necessarily have shingles presentations, but that they have other strange things like hyperacusis or things of that nature. I think these viruses play a very big role. If you talk to Dr. Klinghardt over the last many years, he's been talking about these endogenous retroviruses, which by the way, are activated and made worse because of all the electromagnetic fields in our environment. So we're not born with, but conceived with retroviruses that are part of our DNA that are now starting to stress the system in response to our environment. So I think that that's an area that has to really be explored as well. Lots of good herbal homeopathic tools, BioPure has a couple of great tools. Cistus Tea is one of the interventions that really covers a lot of ground here in this viral and retroviral, and even Borrelia, and fungi, and various other things. So Cistus Tea is one of the tools that I incorporate into my routine as well. It can be very strong, I don't recommend people jump into the deep end of the pool with it because they will have some die off reactions in many cases. Companies like Beyond Balance and Microbe Formulas have some great tools. Sulforaphane, Pantethine, Selenium, Lysine, and again, some of the homeopathic companies like Energetix is one that has various viral support products. Then once we get the viral piece in place—and I think that's then something we do longterm. I think the viruses actually play a very significant role in terms of our overall health and microbial burden. Then I would generally shift to thinking about parasites, SIBO, dysbiosis in the gut. Parasites are so common, you don't have to leave the country. Testing is poor. Sometimes doing various forms of energetic testing, whether that's device testing or muscle testing. There are a couple of labs like Parawellness Research with Dr. Raphael d'Angelo that I think can be very, very helpful, but really exploring the gut. The GI map is another tool that I think is very good. So optimizing, again, the microbiome and depending on whether or not we're looking at larger parasites or smaller parasites like protozoa, giardia, cryptosporidium, toxoplasmosis, and so on. I generally think there are a number of good herbs and homeopathics that can be helpful, but there are cases where some of the pharmaceutical antiparasitics can also be very helpful to combine in with a broader protocol. Some of these parasite protocols can be

many months long. SIBO, or Small Intestinal Bacterial Overgrowth, I think this has become very common in the last five years or so. I don't remember hearing much about it prior to that, and now I hear about it all the time. So I think, generally speaking, the overgrowth of microbes is the result in SIBO and not the cause. I think we have to look upstream to things like the migrating motor complex, like the bile flow, like the vagus nerve. So we may need to address some of the pathogens here, but there may be some other upstream pieces in terms of SIBO as well. Then lots of different herbal things, biocide and MegaSporeBiotic. We talked about, um, for helping to balance the microbiome of the gut. And then I would move to thinking about the fungal colonization, potentially the yeast like candida or candida, the various molds that we might've been exposed to. So do we then need to incorporate some anti-fungal strategies? Keeping in mind that as you kill these fungal organisms, you are also potentially releasing metals into the body. That's also true with parasites. So we also need to keep that detox focus going when we're working on this microbial reduction strategy. Lots of herbs and things that can be used. Again, some people find that they need pharmaceutical interventions here, like itraconazole, for example. But I think over the years, with a lot of these herbal companies, the Beyond Balances, the Byron White Formulas, those types of things. I feel like we have some herbal—synergistic herbal formulas that are very, very supportive and don't necessarily need as many of the pharmaceutical options as we might have when I started my own journey with Lyme disease 15 years ago. Then we get to finally Lyme and co-infections, Barbesia, Bartonella, things like mycoplasma, chlamydia, and so on. Again, there is a place and a time for antibiotics certainly. I think if someone is largely functional and they're uncomfortable, they're admittedly miserable, but if they aren't in a wheelchair, they aren't having seizures every day, those types of things, I think sometimes starting with the natural options is a good idea, keeping an open mind to the toolbox of other things. But I don't think that antibiotics are generally the solution that lead people back to longterm health recovery. So lots of—

Kent Holtorf ([01:04:39](#)):

I'll agree with that. That's kind of what this whole thing's about and in doing the SOT therapy, which antisense therapy, which I won't get into too much, is that we're testing and we're finding a lot of people with even—you know, they have HSV-1, herpes simplex virus 1, just for cold sores. Like, okay, how bad can that be? It loves the brain, you know? It's interesting, things like BPC-157 kills HSV-1 better than Acyclovir at 1/100th a dose—excuse me, my voice is going. I think that that is key. There are so many things and they're often negative on the blood test, but they're basically in the brain, or we're finding like with Hashimoto's HHV-6 patients. It's all—you know, basically just in the thyroid, but it's not in the blood. Talking about kind of all of the infections, we had this one family that came from central California, they had a cheese farm, all of the family was sick. We had a microscope at the time and an immunofluorescent antibody, which basically—sensitivity and specificity very high—he was full of Borrelia. You could just see it, and he felt fine! It was the rest of the family that felt sick. So it really goes along with that.

Scott Forsgren ([01:06:02](#)):

Yeah. So I think that kinda covers the thoughts around the microbial piece. I do think that people may need to explore the biofilms. Again, being somewhat open. For example, in the Lyme community now there have been a number of very positive experiences with something called Disulfiram. So I'm always open to tools that are gonna minimize people's suffering and their struggle. I do really think this, again, is a place where the peptides have phenomenal potential. So the Thymosins that we talked about earlier, we were already doing the immune modulation piece. I know there's a number of others, LL-37 for example, and some other newer ones that I'm sure you're aware of. So I'm definitely excited about seeing how the peptides continue to shift our response to the microbes in these chronic illnesses.

Kent Holtorf ([01:06:55](#)):

Great. Great. Yeah, we're running short on time here. You want to mention just a brief line or two about kind of regeneration, restoration as you get through this and then any final words.

Scott Forsgren ([01:07:09](#)):

Sure, you bet. Yeah. So I would say, myself having gone through Lyme and mold illness, I think you get to a place where it's taken a certain toll on your body. So what are some of the things that we can consider from a regeneration or restoration perspective? I really like phospholipids, like phosphatidylcholine for example, I think that can be great. That's something that I incorporate every day into a power shake, but there are IV protocols, what's called the PK protocol that can be helpful. I do think the peptides, this is—probably of all the steps, this is where the peptides really shine in terms of repair, restoration, regeneration, things like photobiomodulation, using light to support our mitochondria and the restoration of our collagen. Vasper, which I've been using as an exercise tool over the past year plus that's been phenomenal, which is a cold compression bike type of setup that can really help with regeneration and repair and personally had very, very great results with that type of tool. Then just in terms of final words, I would just say that people should not lose hope. I think now more than ever, we understand so many pieces of the puzzle and people really do improve and get well and recover their lives and their health. You mentioned the Forum for Integrative Medicine in the introduction, so that is a group that I'm involved with that puts on an annual conference for practitioners. If they're interested in learning more about that and participating in those events the website is forumforintegrativemedicine.org. Then I'm also involved in a nonprofit foundation called Lymelight Foundation, where we provide treatment grants to children and young adults, 25 and under for the treatment of Lyme disease. So at this point, we've given out over \$5 million to grant recipients in 49 states. If people are listening that either are in need of support for their treatment or people that are listening that would like to support an organization like that, you can learn more at lymelightfoundation.org. Again, just don't lose hope. Don't give up. So much is changing in our understanding of these complex chronic conditions and I feel more optimistic and hopeful now than ever in my 23 years of recovering my health. So there is hope and people do get better.

Kent Holtorf ([01:09:30](#)):

Wow. I think that's wonderful and I agree, don't lose hope and it seems things are moving so much faster finally in this realm. People with hopefully a little more open mind and looking deeper. I think standard medicine, everything moves so slow. You know? This is where the action is. So, amazing interview and amazing amount of information. I really appreciate you being part of this. Yeah, thank you. I think it's gonna be a wealth of knowledge for so many patients. I'll say it again, don't lose hope. Look what Scott went through and look at him now. A friend of mine called him, he's an Adonis now. [Laughing]

Scott Forsgren ([01:10:16](#)):

[Laughing]

Kent Holtorf ([01:10:16](#)):

So, it's great. He's the picture of health. So again, thank you so much and appreciate you being part of the summit.

Scott Forsgren ([01:10:24](#)):

Thank you, Dr. Holtorf. It's an honor.