Introduction to Functional Edge and Dr. Moorcroft

when covid started i was like long covid we treat long line we just call it chronic lime or persistent so we all know how to treat it you know and i and and then it's like a lot of people talk about mast cell activation then what i love is in my training when we talk About pans and for anyone who may not be familiar that's pediatric acute onset neuropsychiatric syndrome and what that means is We have an infectious or a toxic exposure that triggers not only the symptoms of the potential infection, but also triggers autoimmunity.

And then that auto immunity and the infection itself, both can set up inflammatory cycles. PANS, we call it encephalitis or brain inflammation. But we also have evidence, same thing with like rheumatoid arthritis or lupus.

You can have body-wide inflammation where infections trigger auto-immunity. Welcome to the Functional Edge. I'm Dr. Julia Ward, and this is where science meets real-world strategies for living healthier, sharper and stronger.

From uncovering hidden environmental toxins to unlocking peak performance and mental clarity, we cover it all. Ready to take control of your health and thrive?

Let's dive in. Hi, hello and welcome to The Functional Edge where we explore the science and stories behind root cause medicine. I'm Dr. Julia Ward and today I am thrilled to be joined by Dr Tom Moorcroft, an osteopathic physician who specializes in chronic infections, tick-borne diseases and environmentally acquired illnesses.

He's known for helping some of the most complex patients finally get well using an integrative, science-based and heart-centered approach. Dr Moercrof, thank you so much for being here today.

I've followed your work for a while and I deeply admire your commitment to those struggling with chronic complex illnesses. Yeah. Well, thanks so much, Julia.

Great to be here and super excited for the conversation. Awesome. All right. Why don't we get started with what first drew you into the field of chronic infections and complex disease?

You know, I think like so many people, you know it was kind of a personal journey thing. I was back in the day, it's like I, was in natural resources and I wanted to, like, just saw like we weren't taking care of the environment in a way that I thought was sustainable.

So I and terrestrial ecology. And we were doing all this great stuff. I was outside, we're studying stuff, and then we'd all get together with all the other researchers and we would talk.

Then they go, oh, you should publish this. Once we publish it, We should do another study and another to study. The planet's not even going to be here by the time we are done.

So I'm like, who can I reach out to who would be able to motivate and stimulate change quickly? And I was like, the kids, if I get the kid's excited about it, they'll get their parents excited and maybe we can make some progress.

So I did. And that was working at the Institute of Ecosystem Studies in Millbrook, New York. It's now called the Carey Institute, but I would do a lot of outdoor education and it turns out they were actually doing a lotta research on mice and deer and dear ticks and stuff like that.

I found out later. But I was teaching outdoor education and I got apparently got bit by a tick.

Personal Lyme Journey and Early Misdiagnosis

I never saw it, but I developed a huge rash all over my body, joint pain, brain fog, fatigue. My boss actually found me one day staring at a computer screen and i was drooling all Over myself and she had to kind of shake me awake.

So I went to the doctor. The guy was like, hey, you've got classic Lyme disease. He was doxycycline. Take 10 days and you'll be good to go. So I did, I happened to lie down on the floor for like four days after I started the meds, just dying.

I was in so much pain, sweating, alternating with chills. In July, that was like 23 and my parents had to help me to the bathroom, which is, you know, kind of lame.

And, but then I got better and like in 10 days I feel pretty good. But over the next like six, seven years. you know, the brain fog, that joint pain and all that other stuff crept back in, and then I started going to the doctor, they didn't know what's going on, so of course they told me it was psychiatric in nature, go see the psychiatrist.

They're like, oh, your dad has depression, you must be depressed. I go, I was fine until I didn' feel good and after I did'n feel for like three years and everybody told they did't what to do, now I'm starting to be angry, not depressed, miserable, So anyway, and then they're like, oh no, those meds don't work the way they work for other people.

We're not sure why it's not working. Oh, you must have bipolar. You know, all the good doctors and lawyers have that. I'm like no good doctor or lawyer I know has untreated bipolar illness, but hey, that's okay.

But I tried the meds because I didn't know any better, you know, and I had a bunch of side effects. Nothing worked. And then ultimately I was feeling, stuck in a corner, really kind of caged in.

I went to my primary and it's like, dude, I've got joint pain, brain fog and fatigue. It's been like four or five years now. Can you help me? And he's, like I know exactly what you have.

He's you've fibromyalgia syndrome. And I was like, you've seriously got to be kidding me. You just diagnosed me with a syndrome that describes what I just told you, which is joint pain, brain fog and fatigue and muscle pain.

And because you believe in that, You have no idea what's wrong with me, Which means you also have No idea how to fix me So I was kind of frustrated and then I kind staring at a wall again in school and I like every day I wake up and go down that path over there.

And I know what it is. It's joint pain, brain fog, muscle pain fatigue, irritability, don't feel good, life stinks. But I'm recently married, I've got dogs.

I want to go outside and play. Want to be skiing and mountain biking again. Play ultimate frisbee, that kind stuff. Like a big outdoors person and like I wanna get back to all of that.

I don't know how to get there. I just know that if I focus on this, I get it. And if i don''t focus, on it, i get, it i'm going to just focus. On something else.

Then within a couple of days, somebody referred, you know, just handed me a yoga DVD and I started doing it was exceptionally difficult. But over time, slowly but surely working on that, following my breath, learned how.

To get better. About two years into that I was about 70% better and then I ended up training with an osteopathic physician and a naturopath. and they happened to treat Lyme disease.

I had no idea when I signed up to go to their place they did this. And then once we had that all straightened out, like it took them another four years to get me all better.

Oh, and what was really interesting is not only did they re-diagnose me with Lyne, that was they said was chronic, then they diagnosed me With Babesiosis, which they had never talked about.

And in that first beginning when I was sweating and shakes and chills and all this stuff, that was probably the Babesia showing itself, but no one told my parents or myself to be looking out for it.

And that can kill you. So I'm like, wow, you guys missed the ball pretty hardcore back then. You know, and then after that I got better. Right now it's been 13 years and I haven't had a symptom attributable to either one of those.

I know you can get better and you know that really just worked out really, really nicely in the end because I am better, 13 and a half years to go from the start of this to being fixed.

So it was tough. And so when I started seeing it clinically, I was, it's just aware I wasn't planning to treat Lyme, but I saw it, was open to it. Then as soon as you diagnose one person, successfully treat them, and then they refer somebody in a wheelchair and you get them out of a wheel chair two, three months later, then like your whole practice becomes Lyne disease.

When I started to see people come in who felt like I did, I knew how they were suffering. And I also remember that first day when I was in the other office.

It was the first time in eight years I saw people who sounded like me. I never knew there was another person who'd felt as bad as I felt or the way I've felt.

When every person you see day in, day out at their clinic was really similar to me, it didn't make me physically feel better, but I'm like, It's not just me and it's really not in my head.

feeling like, okay, I'm not just out there by myself. This is something that's happening. Was there a defining moment or a patient that made you realize that this was your calling now?

Probably not. Well, the first person I treated with Lyme in my private practice, was just doing osteopathic manipulation. That's what I wanted to do. I want it to open up the energy pathways, get things flowing, let people just live optimally and go to that next level.

And I remember really clearly in our training, people were like, hey, learn what meds feel like. Learn what disease processes feel. And then I put my hands on this young lady and I was like you have Lyme disease.

It felt the frequency, the vibration of a pathogen, and it seemed to me like Lyne because I kind of could remember what it felt like in me. So I just kind send the tests off and was hoping in between then and the time I got the results that I would figure out who I could send her to.

Because I didn't know anybody at the time to treat her. And then by the times the labs got back, I did not know who to send her to, so I treated her and then it just kind of opened up from there and more and people came and were getting better and feeling heard and having hope.

Before you know it I went from working in the hospital and slowly growing this private practice to this deluge of people who were suffering who are all like, oh my god I hear you can help me.

So I just said I think I can, let's go down this path. Probably in two or three months, I was full-time, this is all I've been doing. So it just kind of sort of fell in my lap, if you will, but I just was kind open to it because I knew what it was like to suffer and I wanted to help them have hope and get better.

That's awesome. You often talk about combining the best medical science with simple natural approaches. What does that look like in practice for you? I always remember there's a paper from right around 2009 that the Institute of Medicine put out where they said 9% of medicine has great evidence, 10% has okay evidence and the other 81% is art.

What it means is that what we do as physicians and other healthcare practitioners is We look at the best evidence we have, and then we look our clinical experience and all of our training.

And then, we go, oh, but now I have a unique individual in front of me that all the guidelines and the papers are not written about. They're written generalizations.

That can help me, then I've got to sit down and see what works with them. So that's where our clinic experience comes in. Hey, maybe I'm combining something or like medications and botanicals that no one's studied, they've studied them separately and I can blend them And if it makes sense, and then I can start clinically weaving in and out and layering these things and I see progress, I think that's the thing.

It all boils down to our relationship with our patient and them sharing with us what's going on, how they're feeling. I often ask our patients not to tell me what they think is wrong.

Do that in the beginning, obviously. But don't come up and say my Lyme is flaring or my Bartonella is flying. What I want you to say to me is, this is what I'm feeling.

This is the experience of being in my body and in mind and my heart is like. Because often times we'll find that more than one thing can cause the symptoms but the way you present the symptoms and the ways I take your symptoms, and I blend them with all the labs we have and all of the other physical exam stuff, then we can really make some progress.

So, I also don't think we should exclusively rely on medical evidence because a lot of this stuff that we're saying about Lyme disease, Bartonella, say 10-15 years ago, wasn't actually supported scientifically until 5-6 years.

So there's like a decade or two decade lapse, but that doesn't mean your clinical experience doesn' help. We were talking earlier about those of us who work in hospitals and stuff, and it's at different times.

And it' like whether you're a surgeon or an infectious disease doctor, I cut my teeth working in the ER in critical care unit and we would do the best thing we could and do that until it doesn''t work.

When it does not work, you do it the next best you know of and you just assess and reassess. And so I think of like the critical care unit and the ER is this really short period of time.

But realistically, all we're doing in chronic illness care is spreading out that timeline.

Clinical Philosophy: Evidence, Experience, and Individualized Care

but the principles of do what makes the most sense now and then reassess and change it and sometimes do something that you know might not do harm. You're not sure if it'll help, but it kind of makes sense.

Well, you might add that in and reasses it. And so I just think of it as there's two analogies I think about and one is chess. I talk about lime chess and truly chronic illness chess, I'm a chess lime, chess grandmaster.

And I am assuming that my opponent, you know, the pathogens are also grandmasters at this game. What's interesting is we know all the possible moves and we've actually studied each other.

We know what the other person's probably going to do. But if you and I were playing chess, I might have studied every video of you, everything anyone's ever said about how you play, but I don't know.

What mood you're in today. So in the beginning, But I know how to win the game and I knew all the rules. So then I go, I'm going to move a pawn or I going move whatever piece.

And then that's helpful, but then also going go out and know that I might lose a few pawns while I am trying to figure out what mood you're in and what strategy you are going apply today.

When we have more than one infection or we like Lyme disease and then we get COVID and we then have a mold exposure, a lot of times the overlap is what causes the complexity.

So we need to start somewhere. And that's what I think about. Let's not go ballistic. The other thing too is you don't always have to do IV antibiotics or these crazy big things to get the results.

Sometimes you do. But other times, it's just understanding how the body works and how to support it. And I think in my osteopathic training, I'm really fortunate is that Dr.

Still, who started the osteopathy tradition, said, hey, look, the buddy has the ability to self-regulate and self heal. So as I went through all the philosophy of osteoapathy, our job is to catalyze healing.

Whether it is a dietary recommendation, an herb, or even a prescription medicine, I'm thinking of it as a temporary catalyst and my goal is to get rid of if at all possible, as soon as possible once it's done its job.

Because we're really just supporting the body healing itself. So I am always trying to figure out what does the really need to do that. Yeah. Well, from your perspective is Lyme disease and for that matter like chronic infection in general, do you think these are becoming more common?

Yeah, I think I, think that it is, and I there's a couple of main reasons and like Lyme disease. When I was at the university of Vermont for my undergrad in the nineties, it was really interesting.

You almost never saw a tick at all in Vermont and my aunt and uncle lived in Southern Vermont. They're like, yeah, like we've been here for like 30 years or 40 years.

And they're, we seen three ticks. But now you've got ticks way north and you never saw any in Burlington where I was. Then now way North of Burlington and up in the Canada.

And so we have like a lot of the environment that ticks like to hang out in and why we always see them associated with. chipmunks and mice, and even people talk about deer, but it's probably more the rodents that they're the big issue, is it the edge.

It's between the lawn and the forest, it that 10 feet in either direction and now they seem to be even going further than that. But it is that area where chip monks and mouse have a lot of food and can live.

So anywhere you see a lotta them, you're seeing that, so habitat modification has led to the spread of ticks and their range being greater. And then also global climate change has led to, hey, we're not getting as cold a winter.

Like right now, like I'm usually skiing already this time of year and I've not, it, were not even close. I'd have to go like, you know, fly to another state, right?

So things are changing and those patterns of change have, You know we, don't have the deep cold snaps like we used to have. It's like cold, but then it's warm again and the ticks range is growing.

So that's part of it. You're having increased exposure to more people as the geographic range expands. And then I also think there's just a level of chronic toxicity that's gotten out of control, you know?

And it's like, if you just think about 2025, I mean, the amount of negativity, irregardless of who you follow and who like and don't like. The amount negativity in the world is like just going up and up.

And its like the stress financially of prices going up, people not making as much and then the, you know, the uncertainty with different things and technologies like AI.

I just think of things as like, for anybody watching, I mean, we've got a ball jar, like a glass and it's half full of water and you're the vessel and can only hold so much.

So if you are halfway full and I give you a little bit more, probably okay. And then you just want to bring the amount of crap in your, you know, your glass jar down in you're cup.

But if you overflow the cup, it doesn't matter what the, the you, know a lot of times like, Hey, people with Lyme or Bartonella after, they get an exposure to say like with lime, You might have a deer tick bite or whatever.

They might've been living in molds and had a fine time, but then that kicked them over the edge with toxicity. I know that's a of the work that you are doing.

is to bring out a lot of it doesn't matter where it came from we just want to diminish the amount of toxicity and we can pull that off great you know and so I think that that's a big deal there's I call it chronic toxin overload but it's just like the You know, it's not to say like, hey, being stressed at work is going to cause you to have Lyme disease because it is not.

But once you have lyme, disease and you've all this inflammatory stuff, stress is inflammatory, your diets inflammatory. So a lot of it just becomes this inflammation due to too much toxicity.

And it's just a combination of all of that. So that's, I think, one of the big players in the spread. The spread is the geographic and the weather stuff.

And then the susceptibility and lack of recovery is probably because of some of toxicity. Then obviously we have new exposures like, you know, SARS-CoV-2 and all the variants and other jazz.

It's a lot of stuff going on. I find my brain right now is going like, why are you saying all these things? It's almost like I'm getting mybrain confused by talking about all the possibilities.

And that's why it's so hard. That's what it so prominent because there's s much coming at us and bombarding us these days. When folks work with people like myself and yourself, that's why we're always like, hey, like let's play chess.

Let's move a pawn before we start moving our king. let start to be really methodical about it and let crawl before walk and walk before run because going back to like the ER and the ICU and stuff, we always talk slow is smooth and smooth is fast.

And I've seen that be equally applicable to emergency situations and recovery from chronic illness. So when I had acute Lyme, if he had just given me three months of treatment and actually looked for Babesia, I'd probably be fine.

Well, beyond Lyme, I mean, you know, we're seeing other like things like mold toxicity, pans, pandas, long COVID. Do you see the overlap or shared mechanisms amongst these conditions?

Yeah. I actually think that's one of the best questions like I've been asked in a really long time because yes, they see all of those. And I, actually, it's funny when, when COVID started, and I was like, Long COVID, We treat long Lyne.

We just call it chronic Lymer persistently. So we all know how to treat it, you know? And then it's like a lot of people talk about mast cell activation, and that's a challenge.

Then what I love is in my training, when we talk PANS, for anyone who may not be familiar, that is pediatric acute onset neuropsychiatric syndrome. And what that means is…

we have an infectious or a toxic exposure that triggers not only the symptoms of the potential infection but also triggers autoimmunity and then that auto immunity and the infection itself both can set up inflammatory cycles and in pans we call it encephalitis or brain inflammation but we also have evidence this same thing with like rheumatoid arthritis or lupus you can have body-wide inflammation where infections trigger auto-immunity and One of my mentors, Charles Ray Jones, is a well-known pediatrician.

I mean, he probably treated more Lyme disease patients than anybody who's ever lived, because it's something around 30,000 people at the time he died at 93.

He was always talking about infection-induced autoimmune encephalitis. And I think what was really beneficial about thinking about it, which gets to the answer to your question, we've got infections and toxins.

We've go autoimmunity and we got inflammation. Now we know what we need to treat. When you look at all of the long COVIDs in the mold, I think the biggest thing, when I'm thinking about autoimmunity, what is that?

So that's like your body views itself as not self. Or in other words, you start attacking yourself and you can have autoimmune thyroid disease, type 1 diabetes where you knocked out your own pancreas.

and all these other things. And so when I look at that, I just go like long COVID is a hypervigilant response.

Lyme, Co-Infections, and the Rise of Chronic Illness

Now, granted, there's a trigger, like inappropriately retained spike protein or the vaccine can have so much more spike proteins than any natural infection that it can trigger that inflammation.

But Lyme, it ongoing inflammation and the problem is with inflammation is once you have, it's like a chronic pain syndrome. If you had pain, its easier to have pain.

The easier it is to pain the more pain you'll have and you get into what we call positive feedback loop. And with that you could substitute fatigue, you can substitute anxiety and inflammation.

So the inflammation you're having, the easier is it to be inflamed, more inflammation, and then you go into this self-perpetuating loop And I think that that's one of the biggest challenges is, irregardless of, the original trigger.

And this is something we learned from pans too. Any of other toxins that could potentially trigger a pans or an autoimmune encephalitis, whether you're a kid or adult, either way, those things can continue and help perpetuate the loop that was started from something else.

So an example. I can't tell you how many kids I've seen who had Lyme disease over the summer, they mostly got better. They may have a few little symptoms floating around, but nobody's really too worried about, or at least them and their parents, like, oh, their pretty better, and they're primary is like oh you know, you'll get better in a couple more months.

It's just a little post-treatment stuff. Then they get strep when they go to school. and then they get strep again and all of a sudden it's like boom and it is like way beyond any strepinfection you've ever seen and its way worse than any Lyme infection you have seen because now its like Lymes set it up but then streps triggered the autoimmune encephalitis but Lymen was already chronically there and now it emerged again.

And so like in my story like one of the things that happened to me is I had a lot of mercury amalgams. But my brain was great. I mean, I had tons of fillings.

And but my Brain spot on. I mean I was like top five in every school I ever went to without really trying that hard. It's just the way mybrain worked. When I got Lyme disease I at times said I Was brain dead.

Obviously I knew I wasn't medically brain-dead. But I to the point where if you asked me to do three times two in my head I Had to write it down. i couldn't process it.

So after the fact, what was interesting is when I got appropriate treatment for Lyme and Babesia, everything got better except the brain fog. It only got like 70% better.

All the physical stuff, the fatigue, all gone, but I could not think. And then I was like, wait, somewhere in my training,

I learned metals weren't good.

I had even had the amalgams removed. But I'd never done a lot of chelation because I didn't know any doctor that did a lots of it at that time. So I took a course in chelation.

I talked to another mentor of mine, Richard Horowitz. He taught me how to do oral chelasion specifically for chronic Lyme and chronic illness patients.

And I did it on myself and like two months later, three months, later I have 50% of my brain back. 10 months. Later, I felt a hundred percent. 14 months Later I kept working at it.

Like, Whoa, my brains working better than I ever thought. and so I was like wow and we know in lime that that can trigger you to lose certain minerals and you may put some of those metals in its place but we see that a lot that one thing starts it and then another thing's perpetual keeps it going the reason I bring that up is one is the overlap of everything makes is hard and it makes the symptom really crazy sometimes and some people are like that's not lime or not just lime, and I'm like, you're right it's not lime.

It's lime and metals and Babesia and Bartonella and mold and MCAS. So that's why it looks different than lime And it gets in the way of healing, it makes it much harder sometimes.

I just think it is like if we're aware that more than one thing can do it. And the biggest problem is like people, oh, my Bartonella is acting up. I'm like, well, your Bartinella might not be acting out.

It might be that you had mold exposure on top of your bartonell and making your Bartenella like symptoms look worse, but it's the mold. You know, I try to be very on top of like going back to what you asked earlier about, you know why am I such a big deal using the best evidence we have and also the art?

Because when I talk to other doctors I want to talk with them in their language and educate them why this looks weird. compared to what they learned in school.

And then when people are working with folks like us, I also want them to know that, hey, we get it. We know all the things that could happen, or at least we know a ton of them.

There's always something someone's discovering. But we can't just nuke it all or only treat one thing and expect it to happen. we have to layer these protocols.

You have do things like the ozone dialysis, the hyperbarics and all that stuff. and whatever it makes sense for that patient. And that's why one person's treatment plan doesn't always look like someone else's, even if on paper they both have the same infections.

Yeah. So what would you say are the biggest challenges you face when treating someone with chronic Lyme and co-infection? Holy moly, that's a great one too.

I think the number one challenge is that people think that they have to look outside themselves to heal. And they look at it like they need to be on the right protocol.

They need the see the doctor. If their doctor says one thing and they talk to their friends in a support group, They might need to go to another doctor or they might to add like I talked to somebody this morning.

I added this, this this and this. And I'm like, well, why did you add that to our protocol? Because that changes the rules of the game, like the chess match.

At this point, I've been in medicine since 1995 and I been Lime since 2003 and treating it exclusively since I have been private practice since 2008. So if you think that you can go to a support group and talk to another person, oh and the other thing is I'm one of the few people that will talk is actually completely healed for over a decade with

zero symptoms.

So I've been the patient, I been a doctor, and I do this all the time and teach awesome people about this too and try to help shortcut their learning experience towards expertise so that we can alleviate people's suffering.

But I'm like, do you really think that if you grab three things that somebody in a support group said, that's going to be the cure for you that those of us who do these all day, every day for our entire professional lives don't know about?

So a lot of it is it's like we're reaching out here and my point is in my healing 70% of It happened when I focused on what I had control over and then I still needed four years plus and three and and these other doctors to get that last 30% back So I'm not saying we don't need it, but I am just saying like, what can you control and control that?

I have so many people don´t follow the protocol all the way. Why not? Actually, at the beginning of COVID, I had a guy from New York City call me. We were having a fight because, Doc, i know I've seen other Lyme docs for like four or five years now, and I´ve been working with you for about two.

He goes, in the last three months I'm completely better and I finally understand what you mean by origins of health. He goes, I came in and every time you told me to do something, i would think that I knew better myself better than you and so I would tweak the protocol.

he goes I got so frustrated six months ago I started doing only what You told Me and he was three Months in I was fine and now it's been another three month and i'm great and it has been years and He's still great now.

Obviously, not everybody has it, but he'd done like eight years of treatment before he finally followed the whole protocol. So it doesn't mean that if you just listen to Dr.

Ward or Dr Moorcroft, you're going to be like, everything's going be hunky-dory in three months. But the point is, he did a ton of treatments, But he was always dinking around with other stuff.

And when he got a tone of the appropriate treatment without dinky, He saw rapid improvements. I think that it's not even the physical stuff people do.

It's the mental torture. of being sick and not feeling like you have any hope. The only thing that's challenging I find with teaching others is not what drug, what protocol, and what lab.

It's what to do when you feel not sure. How to feel comfortable knowing only part of the picture because the next step requires you to be comfortable doing something and reassessing.

as a patient to understand that just because your doctor says, we have these three options, number two is the best option for you today based upon X, Y and Z.

And I'm not sure what's going to happen. I would like to see this happen and whatever happens, I will be able to take that information and come up with the next step.

not to take that as they don't know what they're doing, but they are an actual expert showing you a calm confidence of someone who actually knows what's going on.

Because in my opinion, if anybody tells you they know exactly what to do from Lyme disease, run. Just run away. They are completely lying. Now that doesn't mean like, hey, if you have acute Lyme you shouldn't, you know, You should runaway from somebody who says do treatment and you'll be better.

Do the treatment, but I'm talking chronic illness. Acutely, I would usually treat longer, But if your in chronic illnesses land, just understand that there are no for sure's.

Right, right. And anybody who say's there's a hundred percent for-sure is a 100% lying And it's same with your friends.

Shared Mechanisms: PANS, Long COVID, Mold, and Autoimmunity

I mean, it'd be venom and autologous urine and oh, should I do SOT? Should I this? should do that? I'm like, if you have a question, bring it up. It's cool.

But it like let me do the work. This is what I specialize in. And you're paying me, whether it is an insurance-based practice or cash, one way or another, you are employing me for what i'm an expert in and I find that the biggest challenge because, and if I wanted to be a little bit more, I think that's the real answer.

And I get myself in trouble a lot by talking reality. But for real, like I do know that, hey, if you have Lyme and Babesia in the same mouse, I know the symptoms of Lyma and babesias will all be worse and they will not look normal.

And also know, that if infected with Babsia after you infected Lymen, then the amount of Babisia floating around in blood will be way less, even though I injected the And when you look at it, it's hiding somewhere we don't even know where yet.

It's just because there's not the funding. So yes, symptoms can look all complex and they can looks weird, but how many people have come to you and said, hey, you know what?

You can't possibly seen anybody as bad as me. And I unfortunately chuckle often and I'm like, You don' even the half of it. But it doesn't invalidate their experience.

It's just to say that other people are experiencing things and we all know what to do, but we have to figure out what order to it in and what your body needs first, second, and third.

And it's almost like I said, there are two analogies I like. One is the chest, the other is Rubik's Cube. Because I have a friend, his son can do it 42 seconds.

I was like, Jesus. I watched the video guy has a video like one of these like, I guess you could be a professional Rubik's cube person, but he would take, he had a 10 or 15 minute video where he's like follow my steps exactly while we're doing it and you'll solve it.

I had to do the. Following his exact steps, like 20 times before I got it right. Cause I didn't even realize I made a misstep. So with the Rubik's Cube, you have to turn it this way, that way that, forward, backward, sideways, backwards, sideways again.

And if you do one thing out of order, even if thought you were doing it right, but then you took a misstep, either if don't catch it you got to start all over, which a lot of my patients see.

But if do catch, then have you to backtrack several steps and start over. And I think that's a lot of what we're dealing with. Like, we know where we are going, but some of it is flexible based upon your individuality and the pathogens.

And when people want definitive answers and they want it all from you and don't want to look at what's inside and what they can work on, I find that really challenging because suffering I should be any shoulding, right?

I Should be better. Why isn't it working for me like it does for everybody else, which that's don't ever make that statement either. But it's like, these are things that bring down like your immune function through your emotions and your thought processes, but also physically, it brings your health level and you're immune function down and it destroys heart rate variability.

And these are all things you have control over. Medicines don't fix heart-rate variability and most of them don t really fix immune functions. They just kind of suppress it or jack it up.

So again, like these things your patients and my patients, and everyone listening has control and so I find that they're sort of the bring it back home, you know?

And that also, the cool part is when you do all that work, You also start to heal all the trauma. You start too, really do things that I would love for everyone to experience healing from the inside out, not from outside in.

Every once in a while you got to do outside-in. Yeah. Got to all of it. But I just think the order of starting inside empowers you and boost your immune system so that you're more resilient or any and all other things we've been talking about.

Yeah, and I feel like we're starting to realize now how much things like trauma and nervous system dysregulation play in these chronic illness patterns and how it can have such a huge impact on somebody's health.

And so I do want to come back to that, but how do you handle patients who are extremely sensitive? Or they say, I react to everything. Everything is super sensitive.

Yeah. I mean, I think there's a couple of ways. One is stop giving them the stuff they've been taking. Like if they'd been only doing meds, all go to maybe botanicals.

Most of the time people come in who are telling me that are like, they're super sensitive to all the natural stuff and maybe they'll just do better. A lot of super-sensitive people just to better with regular pharmaceuticals But more specifically, I mean, why are you sensitive?

If it's more of a mass cell activation syndrome type of sensitivity, which a lot of it is, that's just hypervigilance of the immune system. Mass cells are white blood cells that are part of our immune systems that let out histamine and tons of other things of substances that we can't commercially measure that is leading you feeling crazy.

And like, like all the crap on it, you know, the weird sensations under the skin, vibration, tingling, twitching, food sensitivities, everything in the world.

There's no possibility that you're so sensitive and so allergic that your allergic to air, your allergy to a glass of water, to breathing. When it feels like that as a patient or when it sounds like to the clinician, I'm like your immune system and your nervous system, which really are all one thing, but we talk about them separately.

are really just like on high alert all the time. And there, it's just, like, DEFCON 3 or whatever level all of the, time and what we need to do is bring that down.

So if you look at a lot of work in mast cell activation, two things work, right? One of them, which is secondary, is antihistamines and mast-cell stabilization.

A lot times we could start there with either prescriptions, botanicals, you know, nutraceuticals like quercetans and isochoracetins, etc., etc. Or a combination of pharmaceuticals and the natural approaches, and then maybe a temporary modification of the diet, et cetera.

The number one thing that we find works in mass activation is this limbic amygdala nervous system retraining work. So whether you're doing DNRS or Gupta or Primal Trust, I have a program, or I use Brain Harmony, it's a great company to use.

I mean, there's lot of people who can, depending upon what you need, But I'm like, the simplest thing there is to work on heart rate variability. You can do that by breathing.

Just, I mean, hailing for four, exhaling for for, you know, just notice it and just if you notice you're breathing in and

breathing out for five minutes, he'll naturally slow down.

And if he start to think about breathing into the center of your chest, and then once you really getting in on breathing, into my heart, into that area, it's great.

And your nervous system is calming down, you're getting more parasympathetic. Then you just do a little gratitude. You think about something or someone that you really love, sports you love.

DJing, we were talking about earlier with me and your hubby. What do you like doing? What will you do? Or someone you loved. Or what will, what do you look forward to doing?

Or was something you did 10 years ago that you can't do now that really lights you up and whatever it is, it really gets you grateful and excited. Think about that while you're breathing.

And if you happen to have like a heart rate variability monitor, you're gonna quickly see that you are in greater coherence. Greater coherance means more resilience to stress, more resilient to infection, greater immune function.

That was just free. You spent five minutes a day sitting on your bed, or you can do it while you sleeping. Your more parasympathetic, so you gonna heal more easily.

You're going to be, you know, your heart rate variability went up and all these things are simple and natural. And so you don't even have to do a full program.

It's not about how long you do any of these. In terms of each session, it's more about the consistency over time and creating the habit of it and the habits of breath awareness.

The habit. Of gratitude makes it really simple. That's a really big boost. So that's the starting point for almost all of things. Cause like long COVID.

post vaccination, COVID vaccine in particular, induced inflammation and any of the Lyme and mold stuff. And then mast cell is a syndrome of one of those things or maybe other triggers, triggering that hypervigilance.

If we can bring the hyper vigilance down, then our treatments can work. because otherwise they give you a treatment and your body, like I said, you're already overflowing from your cup.

Anything I add, even if it's a small, hey, maybe I gave you Tefanaquin to treat your Babesia and for the first five days you have a bit of a die-off reaction or a vital reaction, as I like to call them, because your vitality is actually working.

It's not a bad thing. But if you're constantly in super fight or flight or freeze and you go in between fight-or-flight and freeze, and your never getting to true relaxed safety, happiness, you know, community engagement, that parasympathetic healing part, no matter what we do, whether it's right or wrong, if it is a change, your nervous system freaks out.

Managing Sensitivity, MCAS, and Nervous System Regulation

Because in order to get from nervous freak out and hypervigilance to chill, You have to go through safety. And what's really interesting to me about thinking about safety is the nerve.

We talk about. Safety. And it's like, you have to know you're safe to heal. Well, things like Lyme disease can impact the parts of the brain negatively that allow you to be able to recognize the cues of safety, like vocal intonate, voice intination, gestures, and even facial expression.

If you are in freeze mode and or you. Have Lyma disease impacting certain parts your brain. You can't recognize

that the person you were talking to is cool.

Your body's just like, they say they're cool, my brain thinks they are cool. But your nervous system deep down, reptilian, protect you, keep you alive, doesn't.

And then, but your higher brain goes, of course it's safe to heal from Lyme disease. I'm not a dummy, I want to be better. So the challenge is, we're not talking about that part of your brain.

We're talking the parts that's trying to keep your alive to procreate, right? And pass on your genes. So then another way to think about that in my mind is safety might be a little charge because everybody knows it's safer to be healed from infections and keep it or at least most of it almost all the time.

Let's talk about your comfort zone. One of the things is your body gets into a comfort, zone every single day for six years. I felt like complete and utter shit.

And then when I started the yoga journey, I was so my fascia, my connective tissue, so my muscles are so tight, I could barely do it. And then so I'd do the breathing and the movement for like 90 seconds and then the other 90 minutes, you know, i'd have 88 and a half minutes left, and I would just breathe.

It took me like six months to get to a full practice of yoga, but what was really good about that was I couldn't go past my comfort zone because I thought I was only talking about physical and i was so physically jacked up.

I wouldn't overdo it and ask my body to emotionally change more than it was ready to because I was doing a physical practice that I physically couldn't do.

So when you want to go from your comfort zone to somewhere else and heal, you need a little bit of uncomfortable. And that doesn't mean that you have to be hurting, but you got to feel a lot uncomfortable So one of the things we talk about in medicine is hormesis, right?

And to me, hormesus is like just enough intensity or duration of a stressor to help you get better. So we actually find that if we stress our body, like we go to the gym and we work out or we're running or training for a marathon.

If we do it right, and go a little hard, we back down and periodize properly, go hard when we need to, rest when you need, then we follow a plan. We follow the training plan, the protocol.

Even if we don't understand why it works, but we trust our coach, we follow that it, works because we're stressing our body just enough for it to grow and heal.

But we have to do two things. You have grow, and then we had to rest so we can heal what's really rad is there like 1800 plus papers, school literature, like medical papers research papers that tried to figure out what the optimal level of that stress is.

And it's 20 to 30% over your baseline. So if you're walking a mile and you want to push it to the next level in our analogies here, you only need to do 1.2. If you do more than that, your in bad shape.

So don't try to a do a 1 and a half, do one point two. And if your already walking mile, another point 2 is really not that far. but another half miles a bit further.

So this is a way to understand that from wherever you're at, you only need a little bit of stress, but you do need to stress it. You can't not do anything and you can not feel uncomfortable.

But you don't want to do so much that your uncomfortable is too much and your body's, oh my God, I'm about to die. And so it's really kind of cool. And that's what a lot of the breath awareness does.

That's why we were talking earlier, and I know we've talked before, I love doing electronic music dance sets. I've

been doing a ton at medical conferences to teach physicians and other healthcare practitioners to come back in their body and feel a little uncomfortable.

So a of them think the uncomfortable is actually dancing in front of other people. But if you get a bunch of your colleagues and close friends and maybe a drink, we get you to loosen up a little and engage.

But what dance and especially if your working with someone who understands the beats, the tempo, frequency and the ambiance and they set up this experience, you come into your body and you feel safe doing it because you're more worried about what you look like to other people that you've forgotten.

that you've actually embodied yourself again. And somatic embodiment is one of the best ways to heal from trauma. Because as soon as I do that, if I'm dancing, as an example, lymphatic drainage and moving the toxins out of my body, I am getting my heart rate up a little bit because if i get my heartbeat up and I burn some energy during the day, now at night it's easier to sleep.

I got sympathetic, but good sympathetic Now at the end when that's done my body naturally goes and resets to a little more parasympathetic than before and it doesn't have to be dance You know, if anybody wants that well, I've even put up sets online, you know We've done like virtual dance experiences for people to do that.

It's one way that works for me But whatever it is that like breath It allows you to come in your body. So even if like you're saying, if you love music or you loved reading, do your breathing while you do it.

Purposefully take a few minutes and listen to a tune you Love and Listen to it as you are breathing and focus on your Breathing, but get a Tune that really resonates with you.

Your brain will be so emotionally involved. And your heart will be so emotionally involved that you'll kind of forget that. You've actually healed yourself a little bit.

So you can kind. Of trick yourself to be a. Little more comfortable rather than hit it head on. And sometimes you need to do that, but sometimes that goes to 50% over your baseline really quickly.

That's kind, of what I mean. Like again, same thing applies though, just to. Be clear to medicine. If sometimes they need. To just hit you over the head.

And a full dose of a medicine might be better than a half a dose because we're putting the fire out rather than stoking the Fire. But a lot of times we do need to ease people in the certain protocols.

And most of the easing in is that that terrain and the cleanup stuff that you and I talk about with people all the time. So I really find that, you know, finding something you're passionate about that allows you to get into your body.

And I don't care if it's reading. Like my, my wife and daughter in like actually probably right around now are going to be going a glass blowing, but they spend mother daughter Monday nights.

There's just the two of them and they spent three hours blowing glass. And it's like, it is crazy. And they just love it. You've got the heat. I don't know how to do this.

It's fun to be together. Fun to learn something new. If I broke it, doesn't matter. There are so many things. Find something different and have a good time with it That's like one of the biggest needs to healing, because there's a lot of really good doctors like you, Julia, and it's, like, people are in our offices, but they're leaving so much on the table, they don't do it at home, too.

Yeah. So follow through, that's the two really big take homes is follow, find a really, good provider and give them a chance and not two weeks or three weeks, or whatever.

Give them, a good chance to let their protocol work and then do the work you can do at, home because you are

worth it. I mean, you deserve to heal. you know, as best you can.

And neither one of us or anybody I've ever met is a God that's in charge of healing and can wave a magic wand and make someone completely better for sure.

But we're all doing our very best and we understand how the rules of the game and how it works. So I would love to see all of our patients focusing on what they can control and focusing all what the want rather than what other people tell them they should be asking you or me.

Well, what new research or therapies excite you the most in the world of tick-borne or environmental illness? I think one of the biggest things, as I'm sure you know, is the research on tephanaquin and babesiosis is very promising.

We've really never had anything where we can use the word eradication in tick borne illness. There's literally more evidence of chronicity of Lyme than there is of cure.

In that 20 to 25% of people who do get lung Lyme, if you will. And there's more research showing that all the time. But in the acute babesia infection model, If you can use tefenequin or tefeniquin and atovacone in a right setting, we have found eradication of babezia.

Now, it is an acute model meaning you just got infected, not that you've been infected for three years, but we've never in an Acute model of Babesiosis been able to find that before.

I found that this is one of the medicines that can often in someone who's stuck and presented recently at a few conferences, a couple of different cases of like they've been treating mold for five years and the person's no better.

I repeat their labs, I find babesia and yes, they also had mold still too, but it was the addition of treatment for babesiosis that you know, changed the game.

And so, it was the part that unlocked the person. It wasn't the only thing.

Research, Recovery, and Patient Empowerment

I've seen other people where they had strep, caused pans, and then they get lime on top of that, then we find they also somehow got Bartonella. So, they've got this triumvirate of things going on, everybody's treating the bejesus out of it.

The kid plateaus and crashes, he gets a little better and he crashes. And I saw him and I said, yeah, you've had those things, but they've been treated up the wazoo and you're still stuck.

What else is going on? We treated the babesia and tefenequin was at that point, he was so burned on treatment. That's the only thing he would take once a week pill.

But within four months, the kid was 90% better. And it wasn't that like, They didn't need to treat the Babesia was the only thing they needed to tree.

It was just like that was a part that people weren't looking at. And so I really do like. That and I have to admit there's so much more evidence and research coming out on all the other stuff we just talked about, you know, because I felt like as a patient.

I felt like I had no control. And what I'm telling people is the research now shows we have way more control over our own health than big pharma and like conventional society at large teaches us.

So I've been really excited that people are looking at it and doing research. We're seeing some people who've treated old for like three years or Lyme for three year incorporate these other practices and within six months, they're 50% better than they were at the start of that six month.

I mean, that's ridiculous. So I'm always happy when they're like, hey, you know, like if I had the option of giving my control over to the dentist and my primary care doctor and some other specialists and Lyme specialists, and, my whole life and whole healing and the whole future was beholden to them doing a good job.

When I thought that was the reality, that sucked. But when I know that like hey most of it is what's going on in my heart and in mind, I did that backwards, but anyway, in heart, mind.

You know, it's like they're so connected. I don't even know the difference anymore. But you know what's interesting is when I know that I have more control, I feel so much more powerful.

And then and I'm always like, let's become the world's worst viral and bacterial and fungal host. You Know, It's funny, after I got better from Lyme disease and i kept up with all the lifestyle changes, i haven't been bitten by tick.

i was bitten my ticks all of the time. and even when i still lived in tick central, there were nowhere near me. It was crazy. it was like if they looked at me and they were like nah, not going to work.

Because they want to perpetuate. It's like just have this really good idea and the other thing that's interesting too And again, there's research on this I always tell people our ass and have you loved your lime?

Have you love your mold today? And they're all like kind of flipping me the bird at this point, but I say no no listen If I hate on it, I create a situation where there's stress and tension and we're holding tight.

And so if I have Lyme disease in between my two hands here or whatever, do you really think that I can get out? It's gonna be really hard. But if love it that's a big expansive thing.

Love and like are different things. Just because I love doesn't mean that it's okay to be in my body. So I'm just like, hey, Borrelia, Lymedisease, love you.

There's the door over there. Don't let it hit you in the butt on the way out. If there is something I should learn, put a postie on a corner of the while you're leaving and then close the door.

But it's almost like family. You gotta love them, but you don't have to like all of them. That's what I mean. It's like you have the like it, it is not good, you do not deserve it.

And if you want to get better, hating it and being pissed off at it it the best way to keep it there. To hang on to it? And the research behind what i just said is just exploding.

Because in the conventional medical model, people aren't getting better the way we used to think they should and they used too. So people are really, it's crazy.

I've done hour long lectures that have like 350 references supporting what I just said, because whenever I go to do healing mindset or how do you really get better, everybody wants like three times the amount of references or more.

than if I said, oh, a Lyme disease will kill you forever. So there's so much evidence that shows you have a lot of power of your own healing. And if you work with a highly trained practitioner, that's what you really need, both.

It's not one or the other, it's a yes and. But I just love telling people that they can do a lotta stuff at home for free, do things you like, and take credit and feel in your heart that you love what your doing, even if it like Hey, I woke up today and I go to the bathroom on my own because for a little while I need my parents to help me to bathroom that sucked.

For practitioners wanting to learn this work, where should they begin? You know, we have a lot of free information on our YouTube channel. I always think that's great.

And as you know I do run the Lyme disease practitioner certification and mentorship program, which is a year long, you, know highly intense training program.

But we give you the support so that when you're pushing your comfort level up, We try to keep you in the 20 to 30% rather than what happened to me. Like I was like, Oh shit.

And I'm like, I need some help. So that's a great way to do that. And anyone interested can check us out at limetraining.org. I think that that is some of the best stuff.

Also check our YouTube. There's lots of free stuff there. Because I just want to make sure that people have what they need. Just because there's too many people out there suffering.

We'll definitely put your information in the show notes for people who are interested. And then what's one piece of advice you wish every patient with a chronic illness understood?

My number one usually is what we just all talked about. So I guess the other part is that there are other people out there like you. You're not alone.

No one's going to look exactly like and no one is going have your exact healing journey. But there's a lot of people who have very parallel experiences.

Training Practitioners and Final Takeaways

And when they come see someone like yourself, myself, you know, other people in our group and other amazing people out there doing this work, we've seen folks like you and we're not in this to give up on you easily.

And we are here to work with you. There is hope to heal. When people say you can't get better from these things, I'm living proof. I was treated for 10 days for Lyme disease.

At the same time, ended up having Babesia that was never treated. Had heavy metals before, during and after. And it was eight years later that I got diagnosed with the Babesia and like 10 years that we figured out the heavy metals.

And despite it being like 12 and a half years, right now I'm about 13, 13 and half without a symptom attributable to any one of those three. So I know I am living proof you can get better.

It was a long shitty journey. But the bottom line is you can get better. And there are people out there, so don't give up on yourself and don' t give on your practitioner, you know, I think is that.

So you don t deserve this and you do deserve to heal. You have a lot more healing power than you think. Love yourself, love your Practitioner, and just be open to the possibility that what you've heard out their online and what have you heard in support groups may not be the whole truth.

I know you could get it better, have helped hundreds if not thousands of people at this point. get completely better. And I'm completely, and that's the thing, my litmus test, I wanna treat people like a loved family member, like I would myself, My daughter, mom, wife, brothers, et cetera.

So I am telling you what I know from my heart and from experience both personally and professionally. Don't feel like you're alone. Reach out to those who can help and really engage with it.

Because you deserve to get better, you can get and I just really excited to be able to share that. Thanks for the opportunity. Awesome. Dr. Moorcraft, thank you so much for sharing your insights and experience.

Your work reminds us that healing is both a science and an art and that true recovery happens when we address mind, body, and spirit together. So for listeners wanting to learn more, you can find Dr Moercraft at

tommoorcroft.com or through his educational programs that we'll put the notes in the show notes.

And to everyone listening, remember that the body has an incredible capacity to heal when we remove the obstacles and give it what it needs. So thanks for tuning into the Functional Edge, and until next time, stay curious and stay well.

Thank you for joining me on the Functional Edge. I hope today's episode gave you fresh insights and practical tools to level up your life. If you found value in what you heard, don't forget to hit subscribe, share the podcast with someone who needs it, and leave a review.

It's the best way to support our mission of bringing powerful health solutions to more people. For more resources, updates, and behind-the-scenes content, visit drjuliaward.com.

Until next time, stay strong, Stay healthy, And keep living on the functional edge.