Introduction and Guest Welcome

Hi. Welcome to the freedom from Fibromyalgia summit. I'm doctor Roger Murphy, your host, and I'd like to welcome Cort Johnson here. He is the founder of Health Rising, a blog and website devoted to research on fibromyalgia and gravity syndrome.

IMA Myalgic Encephalomyelitis. And now I'll give it a research starting to show up on his blog on long hauler syndrome. So I'm really excited to get a chance to spend some time with court.

Pick his brain here. What his readers are sharing with him, which is always interesting to get kind of a pulse of what's happening. And then we're going to talk a little bit, you know, what's coming down the pike.

Are we seeing any kind of new therapies, any kind of new research that's hopefully going to shed some more light on this complicated illness that we that we're discussing day fibromyalgia.

So welcome, welcome to the summit. So glad to have you here. Well thank you. Thank you very much. Thank you very much for the opportunity. I really appreciate it.

Oh, listen, I'm such a big fan of yours and your work. It's, you know, you're you're one of my go to sites that I go to to keep up to date on the newest research, and I really appreciate it.

Share your site with my colleagues who ask about fibromyalgia, what they can learn. And, you know, which race is kind of a, a point about fibromyalgia.

There's still a lot of misconception and misunderstanding about fibromyalgia. And we I pulled up one of your blogs. It's one of my favorites. And this was a couple years ago.

You wrote it and it's and it's entitled ten Ways to Prove That Fibromyalgia is a Real and Serious Disease. Why in the world are we still having to have this conversation in 2023, that the fibromyalgia is real?

It just blows my mind. But it blows my mind too. Because there's been a lot of research done on fibromyalgia and they've identified many different, you know, things that have gone wrong in fibromyalgia.

And it's clearly a serious disorder. But still, there's this lingering.

Fibromyalgia Stigma and Lack of Funding

Still, we have this lingering kind of, I don't know what you'd say, disrespect or a lack of appreciation of just how serious fibromyalgia is. I was I was just in, I was just in, Wall Street Journal, comment section.

I wrote about long Covid and somebody said somebody made a joke. They said, oh, the bad news is, I got long covet the good news is I got rid of my fibromyalgia.

Ha ha ha ha. You know, so there's this, you know, and we see it. We see it in the funding for fibromyalgia. Fibromyalgia still gets terrible funding. You know, from the National Institutes of Health, it's the biggest, medical research funder in the world by far.

It's extremely important to get funding for the National Institutes of Health. And they they still provide they provide $17 million a year for fibromyalgia.

And that might that might sound like a lot of money to some people, but it's actually very, very low compared to

what diseases like fibromyalgia gets, you know, and with 10 million people with fibromyalgia and, you know, and, and all the different systems affected, it's just it's just pitiful, really.

So fibromyalgia, fibromyalgia is still not getting the respect either in the, in the funding arena or amongst doctors and really amongst, the, you know, and most of the population at large.

Yeah. It's in this kind of real suite of diseases that, that are characterized by, lots of pain and fatigue. But they don't kill people. They're largely invisible.

You can't really can't readily see them. And they may. And the attacks affect women. And it's, you know, it's fibromyalgia, it's fatigue syndrome, it's irritable bowel syndrome, it's Gulf War illness.

That's a more male centered thing, but it's similar there. And even migraine, migraine is likely to affects a lot of people, but it mainly affects mostly affects women.

And it's invisible and it doesn't get that much funding. So yeah. So I, I, you know, I was I wrote that piece trying to, trying to really, you know, get across the fact that fibromyalgia is really a very serious condition.

And, I came up with ten ways to, to show that. Well, so in, in the blog, you cite some of the medical journals and you cite that the years. But I think there's one that was 2016 and then 2017, and in the scientific journal, it was, you know, fibromyalgia is basically was asking, should we consider it a, a legitimate illness?

And, you know, I think, you know, and you go on to, to to show that. Yeah, absolutely. We should so this was the medical news today, sort of that, that the number one fibromyalgia myth in the public arena was that it's somehow not real.

And then the Cleveland Clinic kind of picked up on that and talked about. We're not sure that fibromyalgia is real. And we're at the point right now we're, I think you quoted in that blog 30 maybe.

No, I think it's 50% of rheumatologists in Canada don't even acknowledge that fibromyalgia is real. So we've got a real uphill battle to get to get the word out and get people to understand about this thing.

Yes, yes, yes, they won't. They will not. Even that survey indicated that they would not even, see a fibromyalgia patient. That fibromyalgia patient came to them.

They refused to see them. Yeah. So and that in rheumatology is the that is that's the specialty that fibromyalgia is centered. It you know, I mean anybody should see fibromyalgia patients.

It should be rheumatologists. But that fibromyalgia, it's not as you know, fibromyalgia is not an easy condition to treat. And as you know, the drugs that that are available for it are, you know, pretty poor and, you know, they don't have access to the, you know, the, the variety of treatments that, that you can provide.

So I imagine it's just, you know, it's it actually is a more difficult situation for them because, you know, you do have things that can help, but they don't really have much they can help. So, that doesn't really excuse them, but it it just demonstrates what a difficult situation it is, both for a patient and for provider.

And I was reading, this morning, a book by Phil Stutz. I don't know if you ever heard or he's a psychiatrist out in California who wrote a book called The Tools.

I highly recommend it. It's really good book. But in there he had this illness and no one really could explain. And he kept going to really, close friend of his who was a physician and was very caring and concerned and, and did test after test and eventually he'd go went to his friend who at one point was very caring, and he got the look, you know, the look that and the people who are watching this, they know the look, you know, that you get when you're fiber, imagination, where they start to doubt the, you know, the legitimacy of your complaint.

But who would make this stuff up, right? I mean, right, yeah.

Treatment Limits and Current Drug Research

I think that you, you cite in here some number, I mean, 30% or 50%, are either on disability or out of work with fibromyalgia. I mean, this is an illness that takes your career, your job, your marriage.

Sometimes your family dynamics change. Your social network is is destroyed because no one, no one knows whether you're going to be able to make that function or you don't know if you're going to, you know, it's just going to be a good day or a bad day, you know, and it's an illness that why would anybody want to make this stuff up?

I don't know, I, I can't, I can't imagine I mean, it's I myself I yeah I was going to say, you know with fibromyalgia and people you don't know, I didn't hear a story, but what had caught was in, USC or UCLA.

I said somewhere in California. Yeah, yeah, I was at, University of Santa Cruz, at University of California at Syracuse. I the known as otherwise known as Uncle Charlie Summer camp.

But, yeah, it's a great it's great experience until I got health. Yeah, yeah, yeah, yeah. So he became ill with chronic fatigue syndrome and fibromyalgia.

And this kind of led to your, your mission to really first learn everything you could and then to share it. Thank goodness you you do. Right. Where do you think you know where where are we going with fibromyalgia in the conventional medical world?

Do you see any breakthroughs or you feel like that is kind of we're where we're going to stay, that there's going to be, a significant population of physicians that are just going to ignore it.

And, you know, and I think they've come to the false conclusion that the only treatment is to live with it, and that maybe is that it's going to go with with that, with the conventional world.

I don't think so. I don't think so. There are, so, in the conventional world, the, the main, pathways for relief they've been focusing on are, have been the, this neuron and Lyrica pathway, which has just been tapped out.

There's also this antidepressant and a depressants that's also reduced pain pathway. Yeah. And that's pretty much tapped out. But over the past, and it's been ten years since a drug that's been approved for fibromyalgia.

Yeah. And that ought to tell us something, right? I mean, that was not little interest. Yeah. Yeah. And and it's also it's also very pain is just very complex.

It, you know, it it it, you know it several systems of the body are involved in producing pain. It has mind body elements. It's just a very complex phenomenon.

Yeah. On the other hand, with with all the pain problems in our society, it's a very lucrative, potentially a very lucrative market. So people are still drug companies, and researchers are still looking for better ways to produce, to reduce pain.

And they're looking at some look in some really unusual areas now. So and with regard to fibromyalgia now I'm going to assert that fibromyalgia is not it's not necessarily the place that we should we we should look to for a breakthrough.

But there are potential. There are some potential, things that are, that are, underway. So there's, there's like, you know, ketamine is a is an anesthetic that, that has anti pain and has anti depressant properties.

And that's been studied in fibromyalgia. Now of course there's skip antivirals protocol and you know pathogens have never really been associated with this fibromyalgia before.

But long Covid is opening up some really interesting things about pathogenesis. Yeah. For instance, we we know that people who didn't even know they had the kind that had the coronavirus can later come down with, long Covid.

So you could you could have an infection, and not know it and then come and then potentially come down with fibromyalgia. There was a, there's an interesting Norwegian study that found people with Giardia, over who had been exposed to TRT over ten years.

And that study found that the risk of fibromyalgia went way up, over the next ten years. So we know that that pathogens can, can trigger, fibromyalgia.

So presents presents antiviral. And as regards in that respect, for instance, antiviral trial is kind of interesting. You know, it's a little more interesting right now.

So there are there's there's the antiviral, aspect there. Also researchers are also combining supplements and drugs. An interesting combination. There's there's memantine.

And nasal out and a seasonal cysteine, drug trial underway in fibromyalgia. And memantine is, it's been used as a neuro and inflammatory, there is, drug trial and chronic fatigue syndrome, a Gulf War illness that was quite successful in both world.

Yes, I had a problem with placebo with a high placebo result in chronic fatigue syndrome, but otherwise it looked good. And that, that, that that trial combined, a, a stimulant, I think it was Adderall, with, mitochondrial enhancing drugs.

So there's, there's that. So and then and then there are several there are several drug trials underway that, that, that purport to help with, both sleep and change.

You know, we know we know that sleep, that poor sleep really ramps up pain sensitivity. Just simply getting poor sleep will ramp up your pain. And so these, these, these two drug trials are, trying to trying to hit that both.

So there there are a lot of, so there are some, some real opportunities in there for my fibromyalgia seen for pain relief. We'll see how they turn out.

But there's some opportunities for some real breakthroughs there. Certainly hope so. You know, I'm, I'm always like, to be an optimist, but I'm not very optimistic about, finding the magic bullet or, you know, or combination of several, you know, polypharmacy because I think if you look at the surveys, most people have fibromyalgia, they don't tolerate a lot of these medications.

And that's, you know, one of the challenges, if you're just treating the symptoms, you oftentimes create more symptoms. Having said that, I think we need to be we need to be funding research.

We need to be looking at everything we can. And if someone needs to get relief for a period of time until we figure out this whole cell dangerous theory or whatever else we're looking at, more so in functional medicine and probably in traditional medicine.

You know, I certainly welcome that. But I'm I'm not real optimistic that we're going to find that ketamine and some of these other things long term would be the answer for remaining, because I think the only way really to overcome it is to get healthy.

And and I know that sounds so simplistic and I know, I know, but really, you know, for 22 years, that's really the only honest work for my patients is really kind of figure out what are some of the underlying biochemical issues, fix those hopefully naturally.

Not always but but you know, normal naturally. But but it is. I'm excited to hear that. You seem to have a little optimism that we're, you know, as we're exploring some of these different underlying causes or triggers like the

mitochondria dysfunction and some of these other things that's opening up some other doors that whether that's going to be prescription or, or maybe a combination of prescription and natural, I think that's pretty exciting.

Yeah. Yeah. I think, you know, it's, you know, it's the average fibromyalgia patient is going to get health.

Infections, Viruses, and Possible Triggers

It's probably going to come from it's probably going to involve a drug, simply because, you know, the alternative health field really doesn't have the resources to put out, put on these big trials that will convince your average that we can convince your average, doctor to to give it a shot.

Yeah. And, and but there are, there are also some, trials. There's an interesting, multi supplement trial that includes green tea extract and, and, and a bunch of other things, you know, I mean, I'm sure these are things that you use, but but the but the notable thing is that there are actually being exposed to clinical trials and, and, you know, if those are successful, then they, they may feed down to the, your average, you know, your traditional medical doctor, so, so, so with regard to fibromyalgia, the problem is that the field is still quite small.

And, it's just not getting the funding. But there are some diseases that are that are similar to fibromyalgia that are getting quite a bit of funding.

And that's where that's where I think the real breakthroughs will come from. Yeah. And, they may take a little while to translate to the fibromyalgia field, but, there is a ton of money.

There's a ton of money being poured into long-covid, for instance. And I think that's, maybe a ray of hope right there that from that research, which is going on pretty strong right now there.

We're going to get some benefit from that in the fibro community and of course, in the, in the community. Yes, yes, yes. Well, most of the most of the, discussion around, long Covid and another disease, is around chronic fatigue syndrome.

There's been a lot you know, that's well recognized that chronic fatigue syndrome is very similar to long Covid, but not so much about fibromyalgia. And I'm not I'm not sure why that is.

You know, fibromyalgia is very similar to a chronic fatigue syndrome. If you were to reduce the pain a bit and, and up to fatigue, and post exertion malaise, you'd have chronic fatigue syndrome.

Likewise with coccyx syndrome, if you were to up the we up the pain and reduce the fatigue and post exertional malaise a little bit, you'd have you'd have fibromyalgia.

Yeah. Yeah. I really think that the results from long Covid is they're going to translate into fatigue syndrome. They're also going to translate into, fibromyalgia.

Yeah. Yeah. I think, you know, they're they're different sides to the same coin. You know the the yeah. Fibro. And oftentimes I have patients who are diagnosed with both.

And then I have to really kind of zero in and try to figure out is that really accurate. And most of the time it's just physicians that really don't understand the differences between the two.

So lump them together. I think there's some differences which you kind of shared, one being more pain oriented and one being more fatigue warning. But I, I kind of look at them, they're on a, a clothesline and a one.

And true fibro is obviously the main complaint is diffuse achy sometimes disabling pain. That's number one. And then from there the they definitely have the fatigue and poor sleep and all the other things that go irritable.

And so I mean, brain fog, so many other things. But on this end of the scale, chronic fatigue syndrome, they

definitely have pain. But their main thing is that fatigue.

But they may or may not have trouble with their sleep. In fact, a lot of times it's not that they can't fall asleep or stay asleep is that they want to sleep all the time.

Fibro. They all have trouble with their sleep. They just, you know, either can't fall asleep or can't stay asleep. But you could be somewhere in the middle, right?

I mean, but I think, I mean, what is separate that's true is that with any gravity syndrome, it's an immune system. Breakdown where they typically not always but typically are vulnerable to any kind of bugs.

They, you know, always have some kind of infection going on. Oftentimes they get swollen glands and they get random sore throats, things that we would associate with some type of infection.

Whereas fibro, we don't see that. Although I'm coming around, I've been kind of down on pigeons. Work is 45 minutes, east of here, west of me. I'm sorry, but you know what?

Maybe now, maybe, maybe, you know, virus or some other bug that we've not been able to isolate. And either one of these is one, that I think it could easily be more than one trigger, but maybe that's a big piece of the puzzle.

Do you feel like that? A virus may be, a part of fibromyalgia. Oh, I think it's entirely possible. Yeah, it's a it's entirely. I mean, presents herpes.

I think it's herpes zoster. Yeah, he he looked at it in the gut, but that also it also infects the trigeminal nerve, which, you know, which is, which can, which is implicated in migraine and can cause all sorts of different problems.

Yeah. And these, these herpes viruses, you know, they hang out in the dorsal root ganglia, which is next to the spinal cord. And that's the that's the funnel through which all the, the sensory and pain signals go.

And they love the dorsal root guide guy. So an infection there could, could, could conceivably affect all the pain signals going to the target, going to the body.

So, yeah, you know, it's hard to it's hard to get at these things, but I think I think the potential is there. And now with Long-Covid, you know, we're seeing they're seeing, you know, these big studies.

It's really massive, complex, really, really well done studies. They're consistently showing, Epstein-Barr virus reactivation. Right. So I don't really think we really know what's going on with the viruses.

I don't I don't know that it's that they're actually that they're I don't know if they're causing it or not, but I, I, I think the possibility is there and, there's going to be a lot of work done in the, in the viral field, in the, in the, in learning how viruses actually affect the body and, and hopefully in better antivirals because we don't really have good antivirals against the herpes virus, you know, against viruses like Epstein-Barr virus.

They were not they were not developed to to treat Epstein-Barr virus. That's that's what they're using to treat Epstein-Barr virus. But they're not they're not particularly good at.

So we really don't we don't really have good antivirals. And you know, there's there's a huge effort in long-covid that's that's trying to determine if, viral persistence is the cause if there if there are pieces of it, just pieces of the virus or the viruses themselves are buried deep in the tissues.

And what's what's going on with that? Could they speak, sparking an autoimmune reaction which is another possibility for fibromyalgia? Well I think yeah, that's going to be my next question.

Do you think there's an autoimmune component to any of these diseases that you do research on. Do you think there's a we don't see it. But you know, we keep looking, we keep looking and you know, but it and it's like

inflammation.

I remember ten years ago I used to say, well, I don't think it has anything to, And I admit this, I don't think it has anything to do with inflammation.

I never see it on bloodwork. But we know that inflammation and and stress are the two drivers of everything. Now we know that. So. Right, because we can't see it in a lab test doesn't mean it's not going on.

Yes. Yes. I think the the whole field of inflammation is is undergoing a change as well.

Autoimmunity, Inflammation, and Central Sensitization

And there and researchers are slowly recognizing our finding that there are different measures of inflammation and, then, then then we've had and that there are also there are also I, I just listened to a talk, with Amy Prall and, Timothy Heinrich at the University of California, Santa Cruz, and he said they're going to start using novel and anti-inflammatory and, long Covid.

So, I think that that field is really, is really due for a change. And I think we will be seeing we'll be viewing inflammation in a different light. There is a there is one interesting study, case in point, where, they were able to if I get this right.

The inflammation that they identified in fibromyalgia was clustered around the nerves. Small nerves. So there was small pockets of inflammation focused on the nerves, and that, in fact, that type of inflammation will not show up in blood tests.

It's not the systemic inflammation you see in rheumatoid arthritis or something. Yeah. It just won't show up. But it's there. And it makes perfect sense.

The idea that these, these these, you know, these these nerves are being sensitized. And then they found how there was a cytokines and they found and attracted that was, that was bringing the, immune cells to the nerves.

I was very it's really very promising. Yeah. So that's inflammation. That's kind of invisible inflammation. So, yeah, we'll see what happens with that.

With regard to autoimmunity. Audio immunity has been a kind of an open question and chronic fatigue syndrome for years and hasn't really been looked at much with regard to fibromyalgia, although the possibility that some autoimmune reaction is attacking the nerves or attacking the mitochondria and, you know, poor mitochondrial output can be associated, has been associated with increased pain or is attacking the autonomic nervous system.

Certainly. That's, that's an active area of study and car fatigue syndrome. And now we have long-covid, which is which, you know, several studies, several really nice studies have shown really abundant levels of autoantibodies that are that are present.

And they're it's interesting. They're showing like this wide range of autoantibodies, that are being, evoked by the, by the virus. So autoimmunity is really is, you know, that's a big area of research and long Covid and, you know, that shows up in long Covid.

Then it may translate to chronic fatigue syndrome. Then it may translate to fibromyalgia. And in fact and in fact there actually studying monoclonal antibodies in long Covid.

Now those those are really powerful drugs. They can have severe they can have severe side effects. But they are but they are effective. They can be effective in rheumatoid arthritis.

You know, people used to used to you know, have not really nothing except steroids to treat rheumatoid arthritis. And, you know, there's an immune doctor in, Miami.

That's you climate who has been, you know, studying her and McPherson for patients for years. And she's she's been raring to go with monoclonal antibody tests for years.

But, you know, she can't get them. She can't get anybody to fund them or get them passed. You know, she can't get anybody to fund them. But now they're being studied and, long Covid and in some big trials, so huge. So.

And that that's the that's a really interesting about long Covid is that we've got some really we got some big well done clinical trials that are underway.

Quite a few of them. And we just we just don't really we don't tend to have that and chronic fatigue syndrome and fibromyalgia, you know. So there's just a lot of possibilities get explored.

And, that's what I'm most, interested in and hopeful for. That's something. Well, some things will pop and those and that disease and it'll get translated to, you know, fibromyalgia and drive fatigue sometimes.

Yeah. But could it be I mean, it's kind of my feeling is it could be with central sensitization syndrome where the nervous system has overreacted. Something's triggered that could it be more than one trigger?

I mean, could it be a virus for one person? Could it be autoimmunity reaction for another? I mean, with the excess of substance P and glutamate that, that drive this whole thing and make it make any kind of sensation, tactile sensation, register as pain, where the, where the pain centers are overreactive.

Maybe it's more than one thing, you know, maybe maybe we're going to find that there's these different triggers. And then it comes down to, okay, how do we how do we solve that piece of the puzzle?

How do we solve this central sensitization and get that? So turn that around. Yes. And this and it's really interesting Paul Heydrich Henrik. Interview.

They said even in long Covid, they believe it's going to be there are going to be different forms of long Covid. Now there's, you know, that there's long Covid that causes lung problems.

There's long Covid, you know, long Covid lung problems. There's there's other things. And then there's the MSCs form portion of long Covid. And then I think even within that portion, there's going to be different forms of it that some people that may be viral viral persistence, some people it may be autoimmune, some people and there may be a lot of blood vessel issues.

Yeah. Of course blood vessel issues are shown up in fibromyalgia as well. And that's another that's another new area, you know, of, you know, blood, anticoagulants, antiplatelet, you know, supplements or drugs.

That's just it's just another new treatment possibility that we hadn't really considered in, in Crawford Teague syndrome. There have been some studies a decade or so ago.

And they say that. And I've never seen I've never seen studies. Regarding coagulant, I don't believe I've ever seen studies regarding coagulation in fibromyalgia, but there are certainly numerous studies that's showing blood vessel problems in fibromyalgia. Yeah. Yeah.

So this it's another this is another new treat. We'll see how it turns out. Yeah. You know but you know at least it's been explored and you know and we'll see.

Yeah. And again I think it's the silver lining and long Covid it that we're starting to see witnesses. But now we got a big pool of money coming in to see if we can figure this out.

I think, you know, that's going to be and I see it with my patients. I see patients that I hadn't seen cohort in 2 or 3 years that were doing great, had gone into remission with their fibro.

I get an email from a Doctor Murphy, I've got I had Covid or even that they didn't have Covid, I didn't have symptoms, I didn't know they had it. And then now they've developed, they've been diagnosed with long, long Covid and they're having all the the fatigue and the pain.

And so these things come back or as you mentioned, it's triggered their autoimmune disease, which was kind of in the background. Yes. Two patients with lupus who we're doing great for 3 or 4 years and seeing them in a while, they had fibro and and lupus.

But the long Covid triggered the lupus, which then contribute for one of them, contributed to their developing, kidney disease. Can they tell her we don't have anything we can before we eventually you're gonna have to go on dialysis.

But fortunately, there was you know, there were some things in functional medicine we could do when we turned that around. And she's got a clean bill of health.

But this long Covid, I think, again, saying this is silver lining, I think it's a terrible thing. But I think for the fibromyalgia community and the Crotty, community, I think it's really going to offer some therapies and things that are going to come out of that.

They're going to be really beneficial. Yes, yes, yes, yes. I mean, the, there's the NIH, you probably know of the NIH recover initiative. Yeah.

Long COVID, Gut Health, and Vagus Nerve Therapies

And I don't know if I mentioned, but so did I mention the NIH is spending $300 million a year on long Covid and didn't you didn't, but yeah, it's it's a good it's a substantial number.

Thank goodness. Yeah. No. Yeah. And these are these, you know, they're they've they've started one. They're taking a while to get going has to be said, but you know, they started they started a Paxlovid trial to see us, you know, that can get at the virus.

But that but, you know, we're going to see some really, really nicely funded, very rigorously put together, which is a problem and private exam. And it's a problem in all disease.

It's really, you know, the fact that clinical trials are often not well put together. And at the end of the day, when they're done, whether they're positive or not, people, some people say, well, I don't know what that proves, but, you know, at least we know these studies are going to be these studies are going to be well done.

And if they're successful and they're going to there's there should be quite a few of them. If they're successful, they will follow up on them and they'll replicate them.

And, we should have some really solid, solid evidence about, you know, what's what's what's helping with, long Covid or what's not helping as well. Yeah.

So there's a lot of interest in the, gut now, you know, and you know, that the idea that, the, the effect on the body, the, the, the, the many different effects it can have is it's just staggering, really.

It is this whole mind, this whole gut brain connection. Yes, yes. So there's actually microbes as communication that if that is alter, can create or contribute to depression.

I mean, who would ever stop that that would have some, you know, would have the communicating to the cells in your brain and back, you know, back and forth.

It's it is really, really interesting, really interesting. And functional medicine was kind of based on the whole thing of get your gut right, everything else will follow.

And I've kind of I'm I'm guilty. I've met for a number of years kind of getting jaded to that, to that, because every time you interview somebody a functional medicine, it's like you got this and you get that, but you know, it has come full circle.

Now we see that the research is showing what the the pioneers of functional medicine have been saying for the past 15 years. They have been they go down to the gut really early.

You know, and studies showing that if you have inflammation in the gut, this can be associated with inflammation in the brain and made that inflammation in the brain could even be an influencing inflammation in the gut.

And then you have the vagus nerve that's transmitting all these different symptoms, all these different signals. And we know the vagus nerve is not doing well in fibromyalgia or chronic fatigue syndrome or long Covid.

We know that, you know, it controls the sympathetic nervous system, the fight or flight system, and that's jacked up and and all these diseases and it it's failing.

It should be it should be inhibiting that system and allowing our bodies to rest and digest. And you know, God knows how much rest and digesting we're getting.

But, so and, you know, and that opens up, the possibility of, not only really interesting, gut interventions, but also things like vagus nerve stimulation, which in its current form, I feel very vagus nerve can stimulation in its current form is really crude compared to what it's going to be.

And hopefully, you know, say 5 or 10 years. There's a lot of research going into that. There's a NIH initiative called the Spark initiative, which is mapping out these different pathways.

It's a very complex nerve and where to where to hit it and how hard to hit it and things like that. And I was very encouraged by, Lauren Stiles. She's the founder of, decided I'll be international.

And, so, of course, there's a lot of decided. Yeah. And fibromyalgia and chronic fatigue syndrome. There's a lot of this autonomy out in Long-Covid. Yeah.

And, she's very excited about the potential for vagus nerve stimulation and, and, you know, her organization is funding trials, and there's trials going on and long Covid as well.

So this is another area, that's potentially very safe and potentially effective. I think it's just going to get better over time. I remember interviewing ever Deco, who's, kind of a expert on vagus nerve.

And I remember this probably four years ago, I made my first fibro summit, and I remember listening to her, and she was in a van, and she was in Poland.

Traveling. You're traveling across the United States, and I'm a little. I'm envious. And amazing. You can turn out this incredible work that you turn out and you're, you know, you're living in a van.

But I remember interviewing her, and she's sharing all this stuff about vagus nerve and me thinking, you know, I learned so much about the cranial nerves or anything, and, and, medical school and chiropractic school, but what you're sharing and just thinking, you share anything, what you're sharing is revolutionary.

And it's not well known. It's not in enough books. It's not being talked about. Now, 4 or 5 years later, we're we're hearing much more about it. And there's exercises you can do.

There's machines, Alpha Stam and some of these others that are targeting the vagus nerve. So we're getting there. But I would agree with you. It's very crude right where we're at now compared to where we where we're going.

I think it's going to be a, it could be, I think, a game changer for a lot of people with fibro. Yeah yeah yeah yeah

yeah yeah. I think the potential is really there.

You know, and I think of things like, I don't know if you tried fecal matter transplants, but, you know, I've had a couple patients overseas. I had two patients in Australia.

And for whatever reason, that was an interest they had. And and I, you know, gave my blessing. And I didn't see any positive results, unfortunately. But that's not saying that it can't be helpful.

I mean, there's quite a bit of research for other conditions. I've seen it be helpful. Right, right. I know some people, it's it's been it's been quite helpful.

And I think that's what we need. That's what you expect kind of expected as doctor with this population that some things are going to be helpful for. Some people are not going to be helpful for others.

Right. And, and who knows whether, well, they'll turn out. But the good news is that they're actually mean. They're also actually being studied in long Covid.

And there's, there's, there's also, chronic fatigue syndrome, fake fecal matter transplant, study going on, you know, and the really the important thing is that they're, they're actually being studied.

And time will tell. And if they do work, boy, with that would why wouldn't that be a great, you know, at least partial solution. I don't think anything it's going to be I don't think anything is going to be the solution.

I think be the multi probably several. Yeah probably several. Yeah. Yeah yeah yeah I mean HIV wasn't cured by one drug. It took three drugs to, to to stop HIV.

So yeah unfortunately the FDA you know likes to test one drug at a time. So that really gets in the way too. It gets the way of things that, you know, you know, outside of medicine doing, doing their trials and all that. But, hopefully that will change over time because, you know, I don't think Long-Covid is going to be solved.

You're not going to get a magic bullet. I don't think any of these diseases. You're going to get a magic bullet. No. But I do want to point out that, that a vendor analysis, the, National Institute of National Neurological Disease and Stroke, he's the leader of the, the, their effort at the big NIH intramural hospital.

He believes that if you solve one of these diseases, you're going to solve all of them. So. Interesting. Yeah, yeah. And he's, you know, he's he's a he's not a, he's not a Google researcher.

He's, you know, he's embedded in this very conservative medical tradition. You know, he's right there in the middle of the NIH. Yeah. Yeah. He's been studying, you know, fatigue syndrome.

And he's he's all on board. And he really thinks, you know, cough cheeks and, fibromyalgia, turtle bowel syndrome, chemical sensitivities, all these things.

If you solve one, you will solve you you'll be able to solve them all, which is very encouraging considering how much money is going into Long-Covid. Yeah. So yeah, this has been fantastic as usual.

And again, I'm want to mention Health Rising board is the blog. That's the website you go to. I'm getting courage everybody to check out Cork's work and and support his work.

And that we have had several people in my, my circle that are now starting to talk more about quartz work as I'm starting to share, know in my emails and some of my talks that I'm giving, please check out his site and check out his blogs and and support this his efforts.

So that's right though Health rising.org is where they would go to learn more about you and in your work. Right. Yes, yes. And if you want if you're having trouble getting people, to understand that fibromyalgia is a serious, real

and serious condition, you can go to ten ways to prove that fibromyalgia is a real and serious diseases disease.

That's the blog we mentioned earlier, and I, I mentioned that yeah, print that off. And, you do a really wonderful job of the step by step by step outlining that this is very much a real condition with the research and the clinical, material behind it.

I mean, it's there, it's legit.

Future Research and Closing Remarks

Yeah. That blog was very easy to write, by the way. I feel I was very easy to write. It's very easy to show that fibromyalgia is indeed a very. Yeah, very real and, impactful and impactful, you know, not just with regard to symptoms, but to regard economics.

That's regard to finding a good doctor with regard to finding a doctor who is, you know, is, if anything, at least just not dismissive. And, so it's all there, including, you know, patient, we did this, do this wild survey and ask people to explain what their pain was like.

Oh, it broke my heart to read some of those comments. Oh, it's just know, you know, like, you know, my glass bead shoved into my blood vessels and, you know, and just, just just just incredible.

Just incredible. Yeah. Well, this is, it's a wonderful blog. I said that you had to write it. I wrote one for several years ago. You may have a stupid doctor if, And it's all about.

It's all about just the the challenge of getting first. You get the, you know, you have all these symptoms get passed from one doctor to the next. It may take years and multiple doctors, you finally get, you know, the rubber stamp on your forehead. This is fibro.

And you think, oh, I've arrived. I'm not crazy, crazy or depressed. I've got an it. And then they tell you, well, you got fibromyalgia. You know, here's a couple, here's a couple of pills and come back, see me in six months.

We're really just going to have to learn to live with it. It's really the beginning of the journey, you know, it's not. And but you hear so many times they'll say, well, you know, with fibromyalgia you just need to exercise more.

I mean, you know, I'm up a lot of my patients can get out of bed. Or you need to lose weight. And, you know, not everybody needs to, but most people with that with the metabolism is so shot they can't lose weight no matter what they eat or donate or rest, you know, or you just need to go on vacation.

Or it's mind boggling that we could even mention that. And I wrote, just as I said, a few years ago, but that's still true today. They were the patients are still hearing this garbage when they go to ask, ask, plead for help.

They're still hearing this garbage. It's it's partially the result of the research emphasis and fibromyalgia. It's astounding how much how many exercise studies have been done in fibromyalgia.

Yeah. I mean, it's just it's like from from aerobic to strength training to tai chi to just all these different combinations. Millions of dollars have been poured.

It's like they latched on to one thing that showed that that exercise can have, you know, a moderate effect on some people with fibromyalgia, moderate positive effect.

And they just went crazy with it. Oh yeah. Yeah. It that's we talked about exercise or cholesterol. Okay. So I'm thinking as you're describing this, we all this money and it's all, you know, when I get these lab tests I, you know, patients, can show me recent lab work.

And what do I get? A CBC and cholesterol level. Right, right. That's what they're interested in. Right? So, yes,

that's the same thing, right? Yeah. Yeah yeah yeah, yeah.

They're stuck. They're stuck in this kind of narrow academic niche. Yeah. Yeah. No. That relies entirely on on the published research. And they won't they won't go elsewhere either.

Well, speaking of cholesterol, it's interesting there. And I don't know about statins. I've heard that I think I heard that they could be really problematic.

But that that's another that's actually another area. Here's a huge long Covid statin study going underway because statins can, I think it's inflammation there and it's a potent anti-inflammatory.

Really. What we what the thinking really is that behind the scenes, it's not so much lowering the cholesterol. It's lowering the inflammation. I wrote I wrote an article.

It's not what was it's not inflammation. Stupid. Clinton's thing. It's not the. But that's the economy. Yeah. And it's all about it's not really to do with the cholesterol.

It's inflammation, which, you know, now we're learning that inflammation is part of long-covid and fibro and in me and Alzheimer's and so many things that we didn't realize it, it's inflammation that's really driving these things.

So yeah yeah yeah that and you know what I learned is that they also enhance butyrate production in the, gut. Yeah. And you know, they found low butyrate and fibromyalgia to tease them long Covid.

And that opens the door to the old leaky gut syndrome. And, you know, so I, you know, it's just it's just really interesting, all these different, all these different avenues that are being explored that I never I certainly never.

Yeah. Kind of. Yeah. There's a drug called toxic fail failing, which, it's an old, I don't know, I never heard of it before. It's an old drug. It's reportedly safe, it's inexpensive, and it's able to.

It's it's used to treat muscle pain, and it's used to increase blood flows to the muscle. And, you know, I, you know, and I thought, my God, why haven't why hasn't this popped up before.

Muscle pain, blood flow to the muscles. You know those are both those are both potentially problems and fatigue syndrome and and long Covid. Yeah. And so now Canada is starting this long Covid Kentucky Kentucky filing study.

So you know it's really it's just I think it's just a very, there's just lots of possibilities, more possibilities that were present, a couple years ago.

Yeah. Well, as you can see, this man is very, very much on a mission, and he's got his pulse on so much research that's out there. So I would encourage everybody to check out Health rising.org and check out quartz work.

I would encourage you to if you feel comfortable, you know resonates with you make a donation help with this. This is his, demanding and very much needed work.

So court, thanks so much for being on here today. As always. It's really fun to hang out, talk to you. Likewise. Likewise. Yes. Thank you again for inviting me once again.

Yeah.