Introduction to Heather Sanderson

Welcome to this episode of the Mycotoxins and Chronic Illness Summit. I'm so excited today to have doctor Heather Sanderson with me. She's the founder and medical director of North County Natural Medicine and founder of Maremma.

Doctor Sanderson specializes in neurocognitive medicine and neuro hacking. She's been trained to specifically address imbalances that affect the brain, including autism, A. D. D., ADHD, depression, anxiety, and Alzheimer's.

She's trained with doctor Dale Bredesen, Doctor Neil Nathan, doctor Bill Walsh, and Doctor Richie Shoemaker, in addition to regularly attending and speaking at integrative medicine conferences throughout the year.

Her healing philosophy centers around treating the cause of imbalances in the body, including toxins, nutrients, stress, structure, and infections. She believes in the power of the body to heal itself.

Doctor Sanderson's passion is to guide and support patients as they co-create strong foundations for optimal health through sustainable lifestyle changes and the best medical interventions to support balance in the body.

She's dedicated to learning all there is to know about brain health, and considers her amazing patients at CNM and residence at Marama. Some of her very best teachers.

Doctor Sanderson has been awarded a research grant to study the effects of individualized interventions on patients struggling with cognitive decline and CNM.

She earned her naturopathy doctorate at best year University in Seattle. She currently serves on the Medical Advisory board of Neuro Hacker Collective, and is a regular host of the Collective Inside Podcasts.

Welcome, Heather. Thank you so much. It is a pleasure to be here. So great to have you here. So today we're going to talk about, cognitive function. And Michael talks.

And so Heather, tell us about how mycotoxins get into the brain. Yeah. So there's a couple different ways that mycotoxins affect the brain. And one is that they can actually get into the physical brain.

And one of the things that people don't realize about cognitive decline and Alzheimer's in particular, is that the beta amyloid plaques and the tau proteins that we think of as being the pathophysiology, the reason that cognitive decline or dementia happens.

They're actually a mechanism that your body and your brain uses to protect you from things like mycotoxins. And also these can form to protect us from viruses from bacteria.

And so really the these, tangles and these changes to the, the brain, they happen in response to something like a toxin that invades the brain. So how do they get there?

One of the common pathways is through the nose. And a lot of these mycotoxins are very, very, very small. And they can be aerosolized. They can be in the air that we're breathing in our homes or work environments that may have mold growing.

And so as those are breathe in through the nose, they can go through the crib of the the anatomy in the brain and excuse me, in the head.

How Mycotoxins Affect the Brain

Allows for these very small toxins to travel up into the brain directly. Mycotoxins also affect the brain and our cognitive function because of what they do systemically.

So they can affect gut health. They can affect hormonal health. And all of these things have an impact on how well we think, how clearly we think, and how our cognitive, function, what our cognitive capacity is.

Day to day. Thank you, doctor Heather. I love that. One of the biggest treatment protocols I have for my patients is to treat the sinuses. They turn a huge corner when we do that.

And they can. The mycotoxins also can translocated via. And I know you already know this, but for the people watching, they can also translate via the olfactory nerve.

And also by the vagus nerve, from the gut all the way up to the brain. So I actually treat the sinuses still, I'm treating the gut. So I'm going to, use different methods by which to kill off the infections, repopulate the sinuses, and, with beneficial bacteria and, bring anti-inflammatory properties in there as well.

I'd love to hear about, about the way that you treat the sinuses and and sharing that with our audience today. Yeah, absolutely. I definitely echo that, what we don't always realize or if we're thinking about mold coming from outside the body.

For some of our patients, that the mold can get inside at fungus Candida, other types of molds can be growing in the the nasal passages. And as you mentioned, just like in the gut, there are good and bad microbes that can exist or colonize in the in the sinuses.

So this might not be the sinus infection that you would go see. Provider for, you know, urgent care visit to get antibiotics to treat yourself infection here.

I don't quite that but one of these more chronic things like maybe there's trouble with the snore at night, or maybe there's an early sniffle, an early morning sniffle or something that goes away throughout the day.

But there's some chronic imbalance. There's some symptom that suggests that there might be something a little off in the sinuses. They tend to get inflamed quickly.

This manifests differently for different people. I do tend to use the mark ones testing. And so yeah, the nasal swab and I, I like to see it also. I do check the box for, for mark times for the fungus and for the biofilms so that we can see what all is going on up there.

And often if there is fungus, growing, whether it's Candida or something else, if, if we're treating it or if it feels threatened, then it's even more likely that it's going to produce toxicity and that toxicity, like you mentioned.

Right? Just through the olfactory nerve, through the crypt before they are so small they can attach to those nerves physically and travel up into the brain.

So really, really important to treat. Yeah. Thank you. I do the same test as you. A lot of times people think it's just mark ons and it's not. It's amazing.

The fungus is bacterias and the amount of biofilm I find in there, and people's people's cognition improves so greatly once we treat the sinuses. It's really quite amazing.

It certainly has a ton to affect cognitive function. And then also, of course, those sinus symptoms, those annoying sinus symptoms I that test does take a while to come back.

It can take 4 to 6 weeks particularly the fungus because they grow it out on on plates on petri dishes. So it can take a while to come back. So as I'm waiting on that, I will get patients started on a neti pot, and sometimes in the neti pot will add a little bit of silver, colloidal silver or some biocide.

And I like to use biocide and, and just stick dropper to making sure it's not too caustic or irritating to the sinuses. And doing that once a day. I usually suggest doing it in the shower.

You're already wet. And it can just be like brushing your teeth, something that you start doing regularly that can really move the needle on symptoms.

It also, as you mentioned, we need to replace the good microbiome.

Treating the Sinuses and Nasal Microbiome

And so I will just recommend go to the grocery store and get a thing of kimchi. Not too spicy because you're going to put it up your nose to take a Q-Tip.

Put a just dab a little bit of that into the juice and apply that. No double dipping into this. I into that. Right. The nasal passages, on both sides.

And typically people within a couple of weeks, if that's going to work, they'll see a big difference. And I've had patients I'm in San Diego, so I've had patients who are surfers, you know, getting chronic sinus infections when they when they surf.

And this has really changed how their winters essentially how often they can get in the water and, how long they can go without getting an infection. Right.

Very nice. I've had patients use a nasal probiotic by nasal biotech's is actually from kimchi. That helps a lot of people. Just comes in a tiny little scoop. You just need a little bit.

And then I have them put it in the Neil med, sinus spray bottle. Also have them put coconut oil just a little bit on the inside of their nostrils because, it's hard to kill the infections when it's dry in there.

So just a little bit of coconut oil for its anti pump anti-inflammatory properties and also for the property of keeping it nice and moist. And then actually, while I'm waiting for the mark test to come back, I'm often giving people nebulizer glutathione to to bring the inflammation down.

I love how we're thinking along the same lines. And then you have a little bit of, of, of our own differences. So that's really cool. So many good tips.

I hope these are actionable. And, you know, our listeners are going to go out and get started right away because very safe, very safe and also very effective.

Yes, exactly. Excuse me. So tell me what you expect to see clinically when we reduce the micro toxin load. Yeah. So this is a process. And I always want patients to know that if they are diagnosed with mycotoxins, if we see this on their labs, and then I prepare them for, like a two year minimum journey with me, this is not going to happen overnight.

However, usually by about three months, they can look back and say that they feel better. Maybe not compared to yesterday, but compared to the day we met compared to three months ago, they are turning a corner.

Things are getting better. Some patients, you know, this is really clear. They get out of a moldy environment and within a few days they're better for other patients, especially if it's been going on for a long time.

This is a long process. They didn't get sick overnight and they're unfortunately, I wish there was a magic pill that made it all go away overnight. But when we, when we go down this path, I have a lot of confidence in it.

But it does require some work. So on the lab testing, what I typically expect is a little bit it looks like a stock market graph. Right. Like overall we are going well actually your symptoms look like this stock market graph.

Overall we're going up with some you know there's some dips. And but overall the good days are better and the bad days are less bad. Now the the mycotoxins testing is kind of the inverse of that.

Typically it will start with with the test. And I don't put too much emphasis on that initial test. The second test is often higher because as we start the the process of uncovering the toxic burden, getting things moving by opening the among arteries, the liver, the lungs, the bowels, the skin and lymph and then the kidneys.

As we support those organs that help us eliminate, we start to eliminate better and eliminate more. And so those mycotoxins tests, they we test the urine.

And that urine is part of how we're getting rid of this. So when I see an increase I don't always think that's a bad thing. It doesn't always reflect that there's a new exposure, but more that we're doing a better job getting rid of them after that.

First those first couple tests. Now we start to see what we're hoping for typically, which is a reduction over time. And I'm repeating these urinary mycotoxins tests every ideally every 12 weeks, sometimes a little more.

Sometimes if there's a change in symptoms or a change in where they're living, then we'll do it a little bit more frequently. But for the most part, an average of every 12 weeks.

And then watching after usually the third one, it's starting to come down, but we have a true reflection of the actual body burden. Then. Thank you for saying that.

I fully agree with you for that. Not only with Michael talks. I'm mycotoxins. To take a little right turn here, but when I'm measuring metals as well, somebody has high mercury, high lead, arsenic.

I'm seeing a lot of arsenic these days in California after the. Are you to have fires unprovoked in a way that I never did before? I'm really associating that with the fires, around here.

But anyhow, so as we're detoxifying those metals and we're retesting people, we'll see those metals rise and then they freak out a little bit sometimes. What?

What's happening? Why are these so high? I don't have a new exposure to the metals or the mycotoxins. And the truth is most probably not. Maybe if you've been around the fires or you've had something acute, usually not, it's a factor as actually pulling the toxins out.

And then and then people can have some peace and understanding that. Yeah, yeah, it's not always linear. And I think that, that I try to set patients up with that understanding from the beginning because the it's an art, right?

It's an art and a science. We want to follow your symptoms but not be too attached to the day to day, because that can lead us astray as well. And we want to follow the labs, but not be too attached to the exact numbers.

Every time. We want to look at trends over time over three, six, 12 months. And I know that this can require some patience. However, you know, I think you and I both, we see very complex, very challenging patients to to treat.

And by and large, we get positive results if we commit to the process.

Tracking Mycotoxin Reduction Over Time

Exactly. And you're so right, Heather, about the length of time it takes. It's true. It's usually at least two years. And a lot of the times these patients have tick borne illness as well.

That or they have parasites as well, or they have other environmental toxicants. So we're doing so much at the same time and rotating between protocols.

And this is why it's so lengthy. So our patients are such an inspiration to us. They're well and well worth it. And I when I say two years, you know, we want you to be I typically want my patient to be engaged in treatment for two years.

But they can start going back to work. They can get their life. They can function more normally in in those two years, of course, there's, there's reward in there.

There's sure is. Yes. How do you measure? Go talk to. Sorry. How do you measure mycotoxins and cognitive function clinically? You know, I'm pretty attached to this point, to the real time mycotoxins.

They do a really good job. I, I am in the camp that provokes. So I like to, if possible, to an IV of glutathione. We'll do a push of glutathione and then have patients collect their urine for six hours after.

And you know it. That's just the way I've been doing it for the past five, six years. And so that's the way I continue to do it, because so many of my patients have done it that way.

And I want to compare apples to apples I do have. I'm sure you do as well. I have a lot of very, very sensitive patients, and I'm sure a lot of your listeners on this summit are extremely sensitive.

That comes hand in hand with my good talks and illness. And so not everyone can do a glutathione push by IB that would just wreck their world. So we have alternatives to that.

And if someone has done an either oral glutathione zone or they've done a hot bath or rebounding or some kind of exercise to generate sweating, if they've done that instead of an IV push, then we tend to do the same thing again, so we can compare apples to apples on the repeat testing.

So I do use the real time labs and that is my favorite one. I think they've been the most consistent. They've been around the longest. And and I their their results match my patients experience most often.

And then when it comes to measuring cognitive function, we have a kind of a I look at a few things. We certainly look at a Moca score. We also will do, brain imaging.

So neuro quant that doesn't directly measure cognitive function, but can give us a sense of what's going on. And if our treatments are effective. And then we also do a YV.

We do a wet EEG that gives us a sense of, it's only P300, which is a react reaction time. And then also to the different brain waves and their ratios to each other.

And then we can see those change over time. That's very exciting. I love that you're including that new technology in, is your treatment for cognitive decline.

Is it also using technology as well, like biofeedback or something like that? Question. Yeah. So I, I personally, you know, in my office we do a approach that is very similar to Doctor Bredesen.

So in my clinic we use Doctor Benson's medical approach. So this is a lot of the testing looking very comprehensively about all of the factors that can influence our ability to think, our ability to remember.

And then at Marama. Marama is a residential care facility for the elderly. And the reason I, founded Marama created Marama is because I saw such great benefits in the clinic when it came to dementia.

And like you, we both went to Bastia. We had very well-meaning, professors who were telling us, you know, don't give patients or their families false hope.

Don't tell them you can reverse dementia. You just can't. And neurology still says that. You know, here's some namenda good luck. It doesn't work very well.

Get your affairs in order. Make sure your trust is up to date. And I'm sorry, there's not really much we can do for you. And I went to Doctor Peterson's training kind of.

With that in the back of my mind, a little bit of skepticism. And then when I returned to the clinic and saw incredible results. Absolutely incredible.

I mean, I couldn't I was in disbelief, that we had we had patients. But my first patient, whose name is Linda, she had a Moca of two, and she came back three weeks later.

After getting out of the environment, she started ballroom dancing. She changed her diet to ketogenic. She got on hormones. She had her amalgams removed from her mouth.

She did what? Her and her husband were very dedicated. Her husband in particular. And she came back. It was only three weeks and she had a moca of seven.

She was bickering with her husband about something that had happened the night before. The time. That was the first day I saw her. She could not remember the question I had asked long enough to answer it.

She I mean her transformation and her engagement with her husband, her relationships, her engagement with the world had transformed so completely that, I mean, I was in tears, I was in disbelief.

And from that moment on, as a provider, I was like, I need. Everyone told me this wasn't possible and here I am watching it.

Measuring Cognitive Function and Brain Health

How can I not dedicate my life to sharing this with as many people as possible, so that they can avoid being in Linda's position, unable to remember questions and long enough to answer the.

I mean, it's just a heartbreaking way to say goodbye to your loved ones very slowly and losing your mind. And it's optional. It doesn't have to happen.

So what I saw clinically was possible, was possible only for the people who were able to implement. So Linda had the support of her husband and that's why it happened.

Other people came in and they were supported by, you know, a child who was in their 40s or 50 who was juggling raising their own kids and a full time career, who had a parent who was struggling with cognitive decline and they didn't have the capacity to fully implement for them.

So I started getting questions from patients and friends of patients and people who knew I was treating dementia. And they said, hey, where can I send my loved one?

I'm really excited about the Bredesen protocol. We're really excited about what you're doing, but I just can't do it all. So where can we send them? And I looked around and there was nowhere there was nothing.

I couldn't believe it. And so, you know, there's lots and lots of great minds that have gone into this, but my job was just putting the best protocol into the place where people who suffer with dementia live.

And putting those two things together. So at Marana, in answer to your question around the technology, we use a lot more of the tech there because the tech is it's pretty expensive.

And so if you're using like the violate the red light therapies or, levo to a contrast oxygen therapy, if you're using these kinds of things regularly, then just having it for one person is a big investment.

But when we can kind of share it and 6 or 8 people can use it a day, 12 people can use it a day, then it makes a

little bit more sense. And it's also really exciting for us because we get to see the benefits and the change.

So certainly for, for dementia, we are using some of the tech both in measurement. So looking at the MRI is I'm really excited about retinal imaging coming online.

That's not available clinically yet only for research. But there's a lot more, that we're learning through the science about diagnosis, diagnosing early because it's much, much easier to prevent than to reverse.

And then also in terms of using technology to help to, to reverse and to gain cognition. This is so exciting. Tell me more about Marama. Tell us where is it? How do patients go there rather than San Diego?

It's eight minutes from my house because I spent a lot of time there. And about 20 minutes from the clinic. So, it is, in San Diego right now. We're we're I'm hopeful will be expanding because we have, residents coming from all over the country.

We've had a resident come from Hawaii, from South Carolina recently, from New York, from Ohio. So we have, you know, we're the only place in the world right now doing this.

And my goal is that we will influence the entire senior care industry, because really, the we can do better. I don't know if you've seen some of the just absolutely horrifying, headlines around how our seniors have been treated, certainly during Covid, but I know before and I know after Covid that will likely continue.

And I just I'm I believe, you know, that the world needs solutions right now. And if we are not engaged, if we don't have our seniors engaging and helping us find those solutions, create the solutions, we're squandering a resource, a very, very valuable resource.

Our seniors are at the height of their wisdom and experience, and they have so much to give. And them losing cognitive capacity is completely optional.

We have the tools we know what to do to prevent and reverse that. And so we we need them. We can't afford to put them in homes, park them in front of TVs and feed them cake and ice cream and absolutely not watch them decline.

No, we need them on our team. I love the you have taken them protocols. You've put them in a clinic. So is Marama a part of, of a private clinic or is it part of a university?

The president's doctors. Yeah. Great question. So Marama is by definition, and through state, California state licensure, we are a residential care facility for the elderly.

So the way that we work is when a doctor like you or myself, doctors that are trained by Doctor Brita and other other doctors who are excited about functional medicine and integrative medicine, when they create a protocol for a patient who's struggling to implement it, they come to Marama and we implement for you.

So we take kind of the hard work out of it. We serve, a 100% organic and a diet, and our best diet is a ketogenic diet, Akito flex diet. So it's not 100% keto, but it's keto 4 to 5 days a week, and then, with a fast before bed, at least 3 to 4 hours before bed.

We also have a completely nontoxic environment, so we aggressively look for mold. We've had a couple of leaks. You know, there's one under the dishwasher.

It went out of a shower at one point, and within 24 hours we had, somebody out there testing. We cut out the drywall, you know, aggressively making sure that there is absolutely no mold in that building.

Because it is we know it is so toxic for the brain. So it's a nontoxic environment. We use fragrance free, cleaning products. Excuse me? Nontoxic cleaning products, mold free environment.

We have an IQ air going because, as you mentioned, you know, sometimes we can't avoid there's a fire, you know, miles away, and we don't want anyone being exposed to that air.

We have organic mattresses, organic linens.

Marama Residential Brain Rehab Model

So I really try to think through all of the things that we can be exposed to day to day that we don't really think about all the time. Personal care products, water, all of that is nontoxic.

And then so there's kind of three pillars of the Marama experience in my mind. 1 or 4 rather. One is the nontoxic environment. This is a passive. You just move into Marama and you don't have to think about it again, as you well know, treating patients who are exposed to make a toxins sometimes this is the biggest challenge.

Telling someone they have to move. They have to get out of that environment, right. Cognitive function is poor when they're they're fatigued. They're very emotional.

I mean, it's such a challenging position to be in that sometimes it just causes paralysis. They can't leave that toxic environment. So coming to Marama, you don't have to think about it anymore.

You can rest assured your family members can. Rest assured it is a nontoxic environment. And then there's the diet organic keto, flax. We also have a big gardens on the property that we, we use, and eat lots of that food.

And then the next piece is, the, the activities. So some of these technologies that you were, we were discussing. So we use red light therapies, we use that UV light.

And as of late there's a lot of great literature. There's a doctor Michael Hamblin, out of, from Harvard who's published a ton on the effects of red light therapy.

Yeah. The way this is working, there's several proposed mechanisms, but the most common mechanism that gets cited is that the red lights at the red light is at 680 nanometers, and then at 850 is this near infrared light.

And that penetrates the brain a little bit more. So what happens when this this light hits your mitochondria. Is that it? Actually it affects the cyclooxygenase enzyme.

And that helps us to produce more ATP per glucose molecule. Three. You and I often think about adding mitochondrial support in terms of nutrient supplements, things like ribose and carnitine and CoQ10 and the, you know, there's a laundry list of things that go into a lot of these mitochondrial support supplements.

Well, weight is great because I'm sure you have a lot of patients, too, where the gut is sensitive. But we don't have to use the gut as much. We can actually use light to structurally change, how this these enzymes are behaving.

And that gets us more ATP, more efficiency. And so then we have more energy and our brains work better. So really a fun intervention because it's low risk, almost zero risk, you know, some light like UV light of course has risk.

If you get too much of that, you end up with skin cancer. Blue lights. Can, you know, if any, any one who's listening, who spent too much time in front of a phone or computer before going to bed?

Blue light can interrupt the circadian rhythm. While red light in this spectrum is really beneficial with no downside, now we tend to use it in just about 20 minutes a day.

Sometimes we'll do two doses of the daylight or the daylight and the UV light. So 20 to 40 minutes a day, you probably can't get too much of a good thing.

But we we limit it to that and see really remarkable, benefits. You can see it particularly in people with the most

severe disease process that even just in 20 minutes of exposure to the red light, things will shift.

We had a resident, who came to us, and she would wake up some mornings and be speaking like a four year old, you know, saying, mommy, daddy. And she's in her 60s.

And, you know, you could tell her her state of consciousness was completely altered and we would use the violet for the violet on. And within 20 minutes, she was, you know, not 100% cognitively cured, but certainly back to a baseline that was a bit more normal, where she could engage with caregivers, where she could engage, kind of basically explain, you know, what?

If she was happy or sad or hungry and, and communicate effectively. So definitely changed her day to day experience when we were able to use that light.

So really exciting and fun stuff. Going on at Marama. So basically this is where I started talking about the activities and got carried away by how excited I get about red light that it's so important.

I'm happy you're here telling us all about this. People need to know Rama. I mean, the thing's amazing. How many people, how many residents do you let in at a time?

Yeah, we're licensed for 12. And, you know, typically because we only have 12 spots, we expect that someone will come for 6 to 12 months. And in an ideal world rate, the our goal is that basically it's brain rehab and they return to independent living.

I love it now. Yeah. So excited about it. That's not going to happen every single time. Kind of depending on the severity of the disease. How early we catch it, however we intervene.

However, I know that it's possible. I've watched it. So, it's exciting. And, you know, my goal is that we have more and more capacity, more beds available, and then we'll have, people who, if they choose to stay long term, they absolutely are welcome.

And if they, you know, can come in and get out quicker because their cognitive capacity is better, that would hopefully encourage people to come sooner rather than waiting for pretty severe disease.

This is wonderful. And so now what happens if someone isn't reversing their dementia? Great question. So I believe it's possible in every scenario. Now, I know there's lots of people that will push back and say that I'm overly optimistic.

But, I would based on what I've seen clinically, I think it's possible almost every single time, and that if someone is not reversing their dementia, we're missing something.

And the most common things are a toxic exposure, like mold. Another common thing is they're not actually getting into ketosis. So measuring blood, ketones, urine is helpful at the beginning, but it's not always, a great indicator.

So going ahead and looking at blood ketones consistently can be a much better indicator. There are breath meters, but I haven't found one that I'm really excited about or I think is consistent with the blood levels.

So checking for ketosis is really important. Checking micro toxins and checking the environment for mold really important exercise. I cannot overemphasize how important exercises.

And if you're someone who's been walking for an hour a day for the last 15 years and that is your exercise and you haven't changed it up, then add strength training, add add, ballroom dancing or yoga or Pilates, something that engages your brain as you do it.

Add add different types of exercise. There's, a woman who developed genius gyms, and that basically is combining the best exercise for people who are looking to improve cognitive capacity.

So you input a little bit of information and then the app will help you design the best exercise program for your brain. And it's super interesting and really fascinating that a lot of the literature is pointing to.

Basically, you get the best cognitive benefit from exercise if you are also challenging your brain when you're getting the exercise. So if you're on a treadmill, you need to be able to talk.

You know, it can't be, mile 26 of a marathon. But if you are, you know, walking on a treadmill and doing arithmetic in your brain or walking on a treadmill and, thinking about complex, like, complex ideas and trying to solve problems and stuff that will be helpful.

You will actually improve your cognition more than if you're sitting on a couch or just, you know, if you're being, more sedentary while you engage your brain.

Very nice. Do do people, who show up to Marama also have other infections, or is it typically, mold and mycotoxins that they're dealing with? Yeah. Great question.

So a comprehensive approach to dementia.

Comprehensive Dementia Care and Recovery Factors

What I find is based on Doctor Edison's work. So we are absolutely looking for infections and treating them, looking for toxins and treating them. And I think of toxins in three flavors of mycotoxins.

Heavy metals like you mentioned, and then chemical toxins, things like glyphosate, parabens, PCBs. Right. All of the petrochemicals, and certainly the things that you'd be exposed to if you're around the fires.

So we want to address, of course, the infections, the toxicity hormone levels are really important. Those need to be balanced. Both send useful signals to the brain and then structure.

So understanding if someone has had a traumatic brain injury. Also knowing you know is a lot of us are hunched forward or a kyphosis is the medical terminology for that rounded back that many elderly folks will get after sitting or, not getting, you know, a good postural therapy.

And so really bringing the head back over the shoulders so that we're getting blood flow and nervous system conduction from the brain to the rest of the body is so important.

It also is how we're going to get toxins out of the brain. And this is happening a lot at night. So assessment around sleep, sleep apnea are people able to get that detoxification happening at night.

Are they able to get good restful sleep. And then are they getting enough oxygen at night. So so so important. Infections you mentioned. So infections like Lyme, of course.

The spider keeps themselves really objectified. The spider keeps end up in those beta amyloid plaques and proteins in the brain. So really directly connected to the development of Alzheimer's dementia also.

And so the, the, microbes that are found in our mouths, there's also a, data out of Taiwan that shows that aggressively treating her pet outbreaks herpes, simplex one and two, both genital and oral herpes.

It will is protective against developing Alzheimer's later in life. So I, really having gone to naturopathic school, you know, I was focused on lemon balm and, glycine and, excuse me.

Lysine. More lysine than arginine. Are kind of natural approaches to treating herpes. And now I've kind of changed my tune and I'm like, no, no, you don't want to treat that aggressively.

Absolutely. It's so interesting when I'm listening to you talk about the way you treat dementia. It's actually literally

the same approach I take when I'm treating people with tick borne illness.

That's my my, my specialization. And these people. The reason I ask the question about, other infections is because when we're treating patients for tick borne illness of course they've got cognitive decline.

So as as I'm treating their infections, they're environmental toxicants. All the ones you mentioned, the gland, the seat, the mycotoxins, the other chemicals.

And I'm working with structural integrity. A lot of those people have cranial cervical instability or EDS, Ehlers-Danlos syndrome or lax ligaments. And that's a that's a major issue.

And and so I'm working with the exact same pieces you are, except the focus is on the tick borne illness. But noticing that so much changes for these people, with their brain, with their cognition.

So as we're speaking fact, I've been using violet as well in different light therapies. We have a practitioner on board. His name is Doctor Sanjay Chandra actually.

And so we're sending patients to him for this kind of light therapy. So it's it's really quite amazing that that you and I are doing such similar work, except it's just got a different label on it, you know, so you love it.

I think that what we're doing is applying complex system science to a complex system, maybe a human body, and it's really unfortunately, it's common sense but uncommon practice because we're socialized in this, this idea of conventional medicine that if I have a symptom, a symptom, I need to treat that symptom, not typically your body and not treat the entire complex system.

And when we go back to that, that's what attracted me to Doctor Peterson's work was well, when there was a challenge in it. Right. Like they told me, I couldn't treat Alzheimer's.

And now there's a lot I can't do. But yes, I can. Well, you know, how can if you can treat the hardest thing, then you can. It's easy to treat the rest of it.

Right? Right. The other thing that attracted me to Doctor Peterson was how comprehensive he was and how he was looking at a complex system science model that it wasn't about reducing the body to just the brain, or just neurotransmitters, or just vascular dementia or whatever it was.

It was about putting all those pieces back together and looking at the human. And that is where we get, I think, really great benefit. And it doesn't matter what complex chronic illness you're treating, you can take this approach to all of them and be pretty confident you're going to get good results.

Yeah, exactly. So I really love that. It's I'm thinking for this conversation, it's probably pretty clear to a lot of the listeners that that that this approach we're taking does help the entire system.

And then you've got methods that you're doing that you're using to focus particularly on the brain. And once you've got the whole system flowing and and out of a bit of a loop that they're stuck in, then you can focus on on the different, particular areas that you want to and see.

Amazing results. Yeah. One of the best technologies is an ancient technology.

Meditation, Mindfulness, and Closing Thoughts

Meditation, right, is something that we get I get good benefits with, whether we're talking about Marama residents or clinical patients that are children.

Meditation and and mindfulness have a huge impact on the nervous system and on regulating that autonomic balance, that fight flight, freeze balance with the rest, digest and heal.

And as we can can balance that and reduce hypervigilance, anxiety, we get better sleep. We get better outcomes with everything. So that's another piece of a comprehensive approach.

Anxiety and depression come, especially depression come hand-in-hand with dementia. And so treating them simultaneously is really important. And certainly diet, health, exercise helps and meditation is is the best medicine.

Absolutely. Thank you so much. You were so welcome and I really enjoyed this interview. Thank you for having me. You know, before you go, was there anything else about Marama that you want to tell our listeners?

If anybody wants to get in, how do they get in? Where do they apply? Yeah, yeah. So Marama it's Marama experience.com. And there is an application on the website.

So we of course want to make sure it's a good fit. And we only have this 12 slots and we have, I think three of them left right now. So, but if people are coming and going and, and we do hope to be expanding in the near future.

So, I would love to hear from anyone who wants more information. We can also sometimes help guide them to places that are a little bit more similar. And please remember that any time, if you are in need of that kind of facility or a residential care facility for a senior, please ask.

Ask the questions. Do you offer an organic diet? Do you offer a ketogenic diet? Do you have a nontoxic environment? What are the activities that you're doing to stimulate the brain, and how often are you doing them?

Those kinds of questions are going to be what really does shift the industry so that we can get really, really quality care to our seniors? We know this information.

We don't need more research to tell us these things are good for our loved ones. We just need the facilities showing up and doing the right thing. And, creating environments that are healthy and good for for our loved ones.

Well, thank you Heather, so much. Thank you for having me. It's always a pleasure to connect with you. That's a pleasure. Take care.