

# Episode 24: Mold Remediation & Lyme Co-Infections

## Evan H. Hirsch, MD 0:00

Hey everybody, welcome to another episode of the fix your fatigue podcast. I'm so happy that you're joining me here today, because we're going to be chatting with my good friend Evan brand. Evan brand is a podcast hosts certified functional medicine practitioner, and nutritional therapist. He is passionate about healing the chronic fatigue, obesity and depression epidemics after solving his own IBS and depression issues he uses at home lab testing and customized supplement programs to find and fix the root cause of a wide range of health symptoms. His Evan brand podcast has over 12 million downloads and counting. He is the author of stress solutions, REM rehab, and the everything guide to no tropics. He offers free 15 minute functional medicine, phone consultations to discuss your health symptoms and goals at his site, Evan brand.com, that's evanbn.com You should go there right now check them out. We'll actually listen to this and then go there. So Evan, thanks so much for hanging out with me today.

## Evan Brand, CFMP, FNTP 0:59

Dr. Evan, thanks for having me.

#### Evan H. Hirsch, MD 1:01

So we're going to be talking about fatigue. And as you know, that's kind of my bag. And I know that you've struggled with it, and you've had great improvements in your fatigue. So if you can just tell us a little bit about your fatigue story.

#### Evan Brand, CFMP, FNTP 1:12

Yeah, and I'm tired today cuz my eyes killing me if people are looking on video, I was out riding my bike last night, I've got an electric bike. So it just kind of helps you get up big hills. And I was going back and forth down the country roads. And fortunately, we have bugs because most of the insects are dying, but we still have insects in the country here. And I was writing and I was almost about to pull into my driveway and then boom, a bug hit me in the eye, which is not unusual. But then I had the most intense stinging burning ever. So I think I got stung literally in my eyeball my physical eyeball. So if I look crazy on camera, that's why it's because my eyeball is still recovering from the sting. But that out of the way. Yeah, it's my fatigue journey. I mean, honestly, the more I tell stories, and you may do the same thing to as a clinician and as a podcaster. But I really started to say like, oh, it started in my 20s in college. And I'm like, well wait a second. If

I think about it, I was pretty tired as a teenager and kind of depressed. And then if I think about it, I remember being a kid and needing naps all the time. Like I remember the further. The longer I tell the story, it seems like the further the story goes back, I'm like, whoa. And then I think about how when I was a young child, I would go to the lake, and one of the lakes in Kentucky and it was beautiful. But we had to hike maybe I don't know, quarter mile or something down the down the wooded trail to the boat dock. And every summer I had tick bites as a kid. So you and I on the podcast we just did for my show. You and I talked about your potential vertical transmission from your mother to you with bartonella. I think the same thing may have happened to me, I think my mother could have definitely, you know, potentially had Lyme, spyera, Keats, and maybe co infections, but I'm sure I got my own infections too, over the years. So I think that was one of the big smoking guns for my fatigue. And then I also had mold exposure. I remember as a kid, my grandmother, she had water leaks in her basement, oh, my God, that basement would flood. And it would take two weeks to dry out. I remember they put a couple box fans down there and there was carpet in the basement. And it would take two weeks to dry out. And we now know all the podcast I've done on mold. And I did a whole a whole course on this called healthy home course all about mold and all of that and in Building Science and 48 hours is all it takes for water damage to turn into mold. So I guarantee that childhood mold exposure was a big one. And then I have my own adult mold exposures over the years. Many children are in moldy schools and moldy daycares throughout their life moldy colleges, I have countless college students that are working and and living on campus, and they're getting exposed to mold there. So I think my journey may sound unique, but it's really not you and I talked about how this is really an epidemic problem. That is it's really taken society down. I think this is one of the biggest problems. In fact, I polled my audience many times on what's their biggest problem in fatigue always comes back in is number one, gut issues are a close second. And third issues are you know, mood, mood, probably number two or three depending on what you know segment of the population you've asked. And I've slowly gradually gotten better and better and better. I'm not out of the woods yet. And I really appreciate some of the advice you've given me for brain and detox and limb support. And hopefully that that takes me to the next level. But I've gotten probably depending on the day 70 to 80% better than where I started. And that's huge because when you look at the conventional treatment, I think it's a good time to compare and contrast that you've got Adderall, you've got vyvanse you've got any type of like methamphetamine derivative, some may say it's molecularly different but these are nervous system stimulant, and they're not root cause. So when you compare the options on the table for conventional medicine, and you look at what we can do a functional matter Listen, you have so much more in your toolbox. But most importantly, you're getting to the root cause, which, I don't know why that has to be so revolutionary. But for now, it is a revolutionary thing to do.

# Evan H. Hirsch, MD 5:11

Right? Absolutely. So then how did you know that you had fatigue? I would imagine it kind of crept up on you what, what was that moment where you're like, Oh, my gosh, there's a problem.

## Evan Brand, CFMP, FNTP 5:20

You know, I think it was probably related to my post, exercise fatigue. It wasn't so much fatigue during the day, but I would notice that it would take me two to three days to recover. When before I'd be fine. The next day, sometimes even three, four days, I'd have this extreme soreness, and I think part of it was due to my bacterial overgrowth and how I had a lactic acid problem, maybe spitting off from the bacteria, I think there was a gut component to it. But it was really when my gains in the gym either slowed down or stopped. And then I started losing muscle mass. So I actually lost about 25 pounds, when this all really went down with my gut. And I didn't know what was going on at first because I hadn't done any testing yet. But man, I was freaking out for a while. I thought okay, do I have cancer? Why am I losing 25 pounds? This is nuts. Luckily, at the time, no cancer. So it was h pylori. That was my big thing. So I think looking back trying to help people understand where should they be looking? I think the gut is a big source, not the biggest but a big and once I treated the H pylori, I'd say my energy probably improved 50% if not 60% just by treating the H. pylori alone. And I think there's multiple mechanisms to it. But I think one mechanism is probably the low stomach acid creating this malabsorption. So even though I was eating paleo at the time, good meats, good fats, good veggies and fruits, nuts, seeds, whatever, it was pretty good. I think I was just having so much malabsorption that no matter how good I ate, it didn't really add up to anything. So how did you know you had h pylori? I ran a GI map stool test, or Actually, no, I apologize. I did that later. I don't think the GI map was out back then I ran the biohealth, which they're out of business. Now. I believe for the testing component. I think they still sell supplements. But I think their lab testing department is gone. But back then that was like the bee's knees of the test. It was a three day stool test. And now we have one day stool tests that are in my opinion better so

#### Evan H. Hirsch, MD 7:19

And so. And what sort of symptoms Did you have that that made you think about H pylori

## Evan Brand, CFMP, FNTP 7:27

I had quite a bit of burping. I had major nausea, I think nausea was probably the biggest tip off. And to be honest, I didn't know I didn't know I was actually looking for H pylori until I found it, I just thought I've got to have some kind of gut infection. So what was interesting is I actually showed up with Giardia and Cryptosporidium, which, for those listening are to waterborne parasites that probably came from all my time swimming and lakes and creeks and rivers and streams and doing all fun things that I should have been doing as a kid and not sitting on a tablet like most kids in the modern world. And I don't regret it. But man, I tell you, those parasites can really wreck your gut. And so actually solve those first and then once I treated the parasite infections and got those to disappear on the retest, then the H pylori surface and I was like, Whoa, so was that there originally, it got missed that it come out of hiding. You and I talked about this phenomenon a little bit, you've said you've seen the same thing clinically where some infections disappear and new ones occur. So that's certainly what happened. And then once I treated the H pylori, then I had all these bacterial overgrowth problems, and then all the Candida problems. So sometimes it is a little bit like whack a mole, which may be a little bit. I don't want to say overwhelming, because I wouldn't say it's

overwhelming once you have protocols, but I would say it's a little bit challenging. And for clients, they want to get better yesterday. So to tell them, Hey, you got to do another round, because this surface is a little frustrating right?

# Evan H. Hirsch, MD 8:51

Well, I think setting up good expectations, you know, being like, hey, oftentimes this, this is what ends up happening. And our goal is to you know, get rid of all this. And then you don't have to deal with it later. Sometimes that can help I had somebody recently, it was like, Oh my gosh, this is taking forever. And it was really frustrating for them. And it was like yes, and I totally get that. And by dealing with this. Now you don't have to deal with later because a lot of these issues and these infections are going to cause things like Alzheimer's and increase inflammation in the body and other diseases of longevity. Would you agree?

## Evan Brand, CFMP, FNTP 9:27

And yeah, and you're saying the mechanism is why just nutrient absorption over 40 years being deprived is leading to it or you're saying the actual toxins from the infections are what are you hinting at?

## Evan H. Hirsch, MD 9:36

It's a combination. I mean, we know that like with, with lime, some of the studies that have been done where they've looked at, they've done pathology of the brain postmortem. So after people die 80% of brains who had Alzheimer's in this One study found that they also had Lyme. So whether that's causal or whether that's not you know, we don't know whether that actually caused it or whether or not it's related to it. But I think the same can be said for a lot. A lot of different infections, they were just looking at Lyme. If it can get into the brain, you're gonna get inflammation.

#### Evan Brand, CFMP, FNTP 10:05

I saw that study, it's terribly frightening. Do you think you have Lyme or have dealt with Lyme before? Because you and I talked about bartonella. But you never said anything about Lyme?

#### Evan H. Hirsch, MD 10:14

Well, it's a good question. I mean, I think that Lyme is actually is this conglomeration, or it's this combination of a number of different infections. So do I actually have borrelia? Or have I had it in the past? Maybe, but I think that the CO infections oftentimes are more important, and they're the ones that really need to be treated, where people will say, Oh, this was Lyme that was causing the symptoms, when I think actually, it might have been bartonella or wbcs.

#### Evan Brand, CFMP, FNTP 10:38

Yeah, yeah, co infections are a beast, and we could talk about that you want to dive into co infections for a minute?

#### Evan H. Hirsch, MD 10:44

Let Yeah, let's do that. Oh, I do want to come back to parasites and the H. pylori, but

let's go into co infections right now. What sort of CO infections Do you feel like you've had?

# Evan Brand, CFMP, FNTP 10:53

Yeah, so I tested using DNA sample urine sample, I did show for babesia. And there's a few different common strains that we see there's a lot of strains, but there's a few that we know that really affect people. And bartonella showed up too. So I know that I've had those on paper. But more importantly, because testing is obviously a bit controversial. And some argue it's not very good, and all of that, and there's false negatives, I don't see much of a false positive issue, I see more of like a false negative issue. A false positive would actually be a bad thing, because I'd rather look at it and then try to go after it and then someone not have a response or reaction to it, I'd be okay with that, as opposed to missing it and not going down that rabbit hole. You know, some clients you get they're a little bit stubborn, and they want to see things on paper, and I'm all about them. My whole philosophy is test, don't guess. But sometimes the false negatives get you in trouble. Because then a client's like, what doesn't it says I don't have bartonella? Why do you want to treat me for bartonella? It's like, well, because it still could be there. And but it says it's not there. So then you get in this little bit of a debate with people. So I think that's where looking at symptoms, and then, you know, hoping that the person will trust the practitioner, which in my case, most people have a very high trust because like you and I, they've listened to summits and podcasts and many things I've done. So they know that I walk the walk and talk the talk. But so for me personally, I do think it was probably tick borne. But maybe mosquitoes to me, mosquitoes are super bad here in Kentucky. So I probably picked up bartonella along the way, I had cats as a kid a couple cats, and I wrestle them and you know, tickle them, and they would scratch me and that you know, they call it cat Scratch Fever for a reason a lot of cats are infected, specifically, cats that go outdoors are highly, highly contaminated with bartonella. So don't let your cat scratch you. It's, it's a really bad thing to do. And it's a good way to get bartonella. And for me, we were talking before we hit record about it. I think I'm still battling some of the CO infections. And I would agree with what you kind of hinted at and alluded to, which is the CO infections could be a bigger beast than Lyme itself. Lyme was not really a big deal I did show for the Spyro kids, I had a negative Western blot. But I had some indeterminate samples in other ways. And so when I did some matobo bark, and some other things to kind of poke the beehive. I did have a reaction to it. So that tells me that limes probably in my deck of cards, but man, I'll tell you the CO infections, they are a beast, and just the name alone makes them sound less bad. Because it's like, oh, it's a co infection like limes, The Big Daddy, and these are not big daddies. Wow, I will tell you bibbia is no joke. And so I think it's important for people to kind of check this off the list. Because if you are suffering from fatigue, this could be one of your smoking guns.

#### Evan H. Hirsch, MD 13:32

Yeah, I absolutely agree. So what sort of symptoms were you having that were indicating bartonella babesia.

#### Evan Brand, CFMP, FNTP 13:38

So my wife really was to me the canary in the coal mine for the bartonella. Because when I if I look at a list of bartonella symptoms, I didn't have much I would have some mood

swings and some depressive tendencies in the winter. But it was my wife that tipped me off because she was having these random panic attacks. We will be driving in the car or we would just be hanging out nothing was wrong. And all of a sudden, her palms would start sweating. And she would go into almost full blown panic attack. And I was like, Huh, like, I've heard that that's part nella wonder if you've got bartonella. So then we started treating her and all of a sudden the panic attacks went away, and I go, oh my god. It's a miracle. Think of all these people on medications for anxiety and panic attacks on Klonopin and Xanax and all these other things. And it was just bartonella Why aren't the psychiatry treating people for bartonella This is insane. And so then when I pursued bartonella, myself, I started to get better. I started to realize, wow, I was actually more tired than I thought I was actually more depressed than I thought and I had all these mood changes. I don't know what your opinion is, but bartonella for me, really affected my brain. And I've read some people that say babesia is more of a head brain neurological issue, but I think they both can be very, very brain involved.

## Evan H. Hirsch, MD 14:53

Yeah, I absolutely agree. And what's interesting too, is that sometimes the bug and its characteristics Are flipped depending on where you are in the world. So some people on the east coast where I know your your Middle Eastern Kentucky may experience bartonella. But they their symptoms may look a lot like babesia, interestingly enough, and they may be flipped on the west coast. So sometimes if I'm not having success, and I'm like, this looks like the visa, or maybe it's kind of flipped. And sometimes there's also swapping of the different DNA between the bugs, you know, and so you're getting combinations of bugs. But that's really interesting. My wife had a similar situation where last year, she took a biofilm disrupter at somebody else's recommendation. And she had panic attacks for the next couple of months. It was only when we figured out that it was bbcor that it ended up calming down. But it was interesting, too, is that she couldn't, there was a point in which there she could tell the difference between bartonella anxiety and bbca anxiety and panic where she was like, she could feel the difference. And she would know how much to take of, of the different tinctures.

#### Evan Brand, CFMP, FNTP 16:00

Whoa, well, your your wife sounds really cool. I hope to meet her one day, and I'm sure my wife and her would get along. And that's, that's awesome. So you know, she probably learns a lot through osmosis being around you all the time, right? Because she's not a clinician is she?

#### Evan H. Hirsch, MD 16:15

She's not. She's a mindfulness coach, meditation teacher, your trauma informed. But she she's also quite intuitive. And one of the things that's actually been really helpful for us is, is actually doing some applied kinesiology. So I got her a pendulum. And that's been really helpful for determining especially during that acute crisis, we could figure out like, what how much dye off support she needed, and how much of those tinctures she needed as well. The antimicrobial ones.

#### Evan Brand, CFMP, FNTP 16:43

Whoa, I know I'm supposed to be getting interviewed for your show. But I'm going to

flip the script here. So the pendulum I've heard about these, do you have to be trained on them, though? Or is it something where if you just don't put your bias in and swing your hand a certain way or some I mean, can can it truly untrained person use one of those with with success?

#### Evan H. Hirsch, MD 17:01

of Yes, I think so. I mean, you have to, it's it, a lot of it is about asking the right questions. So that helps. But yeah, being unbiased and holding it steady. Sometimes you have to give it a little bit of momentum. But oftentimes, we're asking, Is it in my best interest without distraction to take this particular supplement? And if you get a yes, it's like, Okay, what should the dosing be? And you move up and you figure out what the dosing be? Am I going to feel worse from taking it? Am I going to have die off from taking it? Okay, yes. Okay. So then is is, should I take berbere and panella? Whatever it is, in order to mitigate the die off? Yes. Okay. How much should I take this much? Is that going to do? Is that going to mitigate it? 100%? No, 50%? Okay, is there something else that I could take gi detox plus, okay, so then you're kind of, you're building that protocol, and then sometimes it works. 100%, sometimes it doesn't. And sometimes you have to test every day. So it's just another way to get data. But it can be really potent, and really powerful. on a day to day basis. It really helps people be empowered in being able to make their own decisions.

#### Evan Brand, CFMP, FNTP 18:06

That's awesome. Okay, sorry. I had to flip the script for a minute, because that was really cool.

#### Evan H. Hirsch, MD 18:11

No worries. Are you gonna go get one now?

#### Evan Brand, CFMP, FNTP 18:13

I should I've seen them on Amazon. I mean, does it matter what kind of pendulum you get? or it doesn't

## Evan H. Hirsch, MD 18:17

really you can get in with a string with like a weight at the end. You know, so cool. Yeah. So that one, there's one on Amazon that's like 15 bucks. I have it on my recommended page on my website. And it's fine. It's a crystal and it gets lots of good reviews. So that Yeah, there's different ways of doing it.

## Evan Brand, CFMP, FNTP 18:33

I'm gonna check it out.

#### Evan H. Hirsch, MD 18:34

Cool. So let's see, we were talking about bartonella bbca. You were talking about your wife and those symptoms. And so what's what's been helpful for you? What sort of tinctures Are you taking that are especially helpful.

## Evan Brand, CFMP, FNTP 18:46

So it's interesting because her and I have different responses to the same things. So she's done better with some of the beyond balance products, which, though that's a professional brand for those listening, and I'm glad it's a professional brand, and they try really hard to keep it out of random Joe Schmo hands, you have to get it through practitioners because I don't want people listening to this and going and buying this and that and trying to necessarily go after it making themselves worse. And there's some herbalist that disagree with that. And they say, this isn't complex, everyone should be able to treat themselves but man I tried and getting professional guidance from people like you and other practitioners, it's a very important thing to do. And it's helped me a lot. So I don't want to say people are dumb. They're not dumb people are smart. And that was one of the herbalist who actually has written some great books online. He, he said that people who are practitioners, they try to make other people feel dumb, like they can't treat themselves and that's not it's just that I've been in the rabbit hole, and I've pursued stuff. And if the protocols not complete, you make yourself worse. So that's just a disclaimer, when I'm talking through this, I don't want people to go by this and that and try it and then they email you and say, Evan, I listen this podcast with the other oven, and I felt like crap. So so you need the other pieces like the lymphatics, like you mentioned, the neurological detox support and the binders and all that, but Specifically for the infections, we've done really good with her for using the beyond balanced products. So we'll use like the bar one, which can help with bartonella, or the bar two, we've used the Bab B, A, B One, two and three for babesia. And we've kind of rotated through based on some of her testing and her symptoms. But for me, I feel really good with doing the more traditional, older, a little bit more old school treatments, which are like the anti malarial herbs. And that's the CSA, which is the crypto lepus, sida, acuta, and Al cornea. And those are three anti malarial herbs that have been used. And I think it was gone, where that treatment originated for malaria. And it's very babesia, as far as I know, is very similar to malaria and the way it infects the cells. And so that's why those herbs work, and I've done great with it. I mean, it's been a game changer. I'm not a medical doctor, and so I don't treat people period. But when I do coach people, I don't use drugs, and I can't prescribe. And even if I could, I probably wouldn't, I'm a little bit stubborn, but I just like the profile of the herbs better. So I know there are there are all sorts of different antiprotozoal oils and other pharmaceuticals, but I've seen some bad side effects. And if you can get a very similar success rate with a very, very, very, very much enhanced safety profile, then I'm going to push people towards that.

## Evan H. Hirsch, MD 21:22

Yeah, there's actually good research on herbs being better than the antibiotics and the the prescriptions were oftentimes the you take away the antibiotic, or the prescription and then the symptoms come back and the herbs they get deeper.

# Evan Brand, CFMP, FNTP 21:37

Yeah, I mean, I'm You and I are in the same boat. So we love it. And I think herbs are very powerful. And we didn't have those before Big Pharma. So society figured a lot out. I mean, some of these Amazon type plants from Brazil and the rain forest, the magical, absolutely magical. And who knows there's there's so many that we're losing probably due to deforestation right now, which is just crazy. You know, you hear about, they're

losing, I can't even keep up with the numbers, something like a football field every second. And a lot of it's to graze cattle. So when you buy that Brazil grass fed beef, you know, you're contributing to that. So get your beef, local folks, grass fed beef, get it local, I bought mine 15 minutes down the road where one of my farmers He's like, I don't wanna see my best friend. I'm not that close with her. But I can call her my favorite farmer. And she loves it. And it's a great system, and they'll deliver a freezer full of meat to my door, cheaper than what you can buy at Whole Foods, right and better quality.

## Evan H. Hirsch, MD 22:34

Mm hmm. Brilliant. That's, that's such a great reminder. And so the CSA is part of the buehner protocol. Right?

## Evan Brand, CFMP, FNTP 22:41

It is. Yeah. And he's buehner is awesome. And unfortunately, he's dying, read a lot of bad stuff about his situation. I think he's got like COPD type issues. I don't know if what was related to but we have been has been amazing. And I hope to interview him one day, because he's done so much for me personally. And clinically. He's from Kentucky here, actually. And he's in New Mexico now. But beauty protocols and amazing starting place for people if they want to dive in. He's also done a lot of great work on the you know what virus and creating protocols for that, and kind of the post, you know, what syndrome and all of that. So, in terms of Japanese knotweed and red sage, I use a lot of red Sage personally, and clinically, goes by three different names salvia, red sage, or danshen. That's an amazing herb which can help the lymphatics and actually protect the organs from some of the cytokine storms. So I personally do red Sage every day. And when I had an active infection, I was doing that. And I swear it helped me because we know that babesia can affect the spleen, and I was having some spleen pain, like it felt swollen and tender. But when I'm on the red stage, I have no issue. So I know this stuff works.

#### Evan H. Hirsch, MD 23:48

Excellent. And so let's talk about mold. I know that that's in your fatigue clients. I know that that's a lot of what you see. And I know that you've experienced that as well. Tell us a little bit about your approach to mold.

#### Evan Brand, CFMP, FNTP 24:05

Yeah, well, first, you got to try to find the source. But the problem is the sources 2030 4050 years ago, so you don't find the source. But there are a few cases where we'll test people. We like to use the immunomedics petri dishes. And that's a great product, great company. And so we'll scatter the petri dishes around people's homes, we'll sell them a kit, and bedroom, crawlspace basement, attic, wherever there's, they'll send those back to the lab, we'll get a health score. And we'll look at the colonies growing and we'll try to determine, hey, if they're colonized for Aspergillus on their own test, can we also find Aspergillus growing in their home, and sometimes we can find the match. Other times we can say the majority of time we cannot find the match meaning it was previous exposure. But if they're colonized, that's really important to address because if you're just doing binders like your clays and zeolites and charcoals and silicas you don't really fix the root cause right because they're colonized. So you have to come in and work on

the sinuses a bit using antifungals. Like maybe silver or some excellent rescue with essential oils, we really like that one. And then we'll come in and use antifungals in the gut. So that could be Paul, the arco French tarragon, caprylic acid, maybe some Hemi cellulase. enzymes to help break down biofilms also, because we found that if we just use the antifungals, like Paul, the arco or olive or oregano, I found that people would get good. And I want your clinical experience on this too. We found that people would have results for a few months and then two, three months later, they're back in the same situation again, and I think it's because we didn't go deep enough with the bow film support.

# Evan H. Hirsch, MD 25:42

Yeah, I definitely think that's part of it. And I think I find that it's really hard on people who have mold, to start killing mold with some of the antifungals until you've removed a lot of it out of the body.

## Evan Brand, CFMP, FNTP 25:56

So you're thinking that the you're thinking the body burden of the mycotoxins are weakening the immune system preventing the colonization from going away? Yeah. Yeah, it makes total sense. So I mean, that's really step two, right. And I want to hear your feedback on this too, because this is a fun interview for me, and I get to poke your brain too. You know, I go after that, simultaneously, I will use binders simultaneously, while I'm using antifungals. Obviously, not at the same time, like we might do antifungals, five o'clock, but then binders before bed, but we're still going to do those together. Because like you're mentioning, you can't really fix one issue without fixing the other.\

### Evan H. Hirsch, MD 26:33

Yeah, yeah. And I think that's good. What I found is that sometimes when we're and maybe I'm, maybe the antimicrobials that I'm using are too potent. I think that there's a little bit of that. I'm using the Byron white formula, the A Fung oftentimes, that can be a little bit too strong for folks. But it seems like the die off that's caused by that is, is a lot more than people can tolerate. And so that's why I feel like I have to wait until they're there. You know, they've got the mold removed out of the home, and they've been binding and opening up pathways for several months before we can actually use the antifungals.

#### Evan Brand, CFMP, FNTP 27:07

Hmm, yeah, see, I don't use that one. I use some that maybe are more gentle. So usually people are pretty good. But of course, it depends on the patient population, right? This where this thing becomes an art because how someone's sleeping, what's their stress levels, that they just get divorced, that they just get fired, or they just lose a family member, you know, what, what's going on? So I think a lot of this stuff is an art but in general, yeah, the antifungals are really important. We talked about the sinuses, we talked about the binders, we talked about testing the environment, and then treating the environment. So I actually have a whole line that's called Oasis, and their candles, which I have right here. on my desk, I burned this it's a triple wick, it used to be single wick, but we switch to a triple wick because I had a candlemaker as a client, she said, your

candles don't burn efficiently enough, you need a triple. So we switched it to a triple and now it burns better. But this is a candle that has an essential oil blend in it that we've seen to treat mold. And it sounds crazy. Not there are some guys in our health space that are like so into essential oils, you would think they take a bath and essential oils or something. I'm not that into essential oils, but I do know they work for the environment significantly. And there are other blends that we experimented with and some essential oil blends actually made mold go up, which made no sense this particular blend made the the mold go down. So the candles are like super low level treatment. And then it goes all the way up to a dry fog machine. And it's a game changer. I mean, we took our house from 40 colonies, which is very bad on the health scoring, you want less than four. Nine is getting into trouble 40s crazy trouble with the fog treatment, which literally fills I did a video in my home course about this. I did like a demo video. It literally has to be so thick, you can't see your hand in front of your face. That's how thick the fog gets. And it treats the mold though. And the mechanism we're not 100% sure on the mechanism we think that what's happening is it's essentially just degrading it, it's just eating it up. So we do recommend like a wet mop afterwards because it's probably eating it out of the air and then collapsing it to the floor. But on the retest where we put the petri dishes on the floor. We've seen people go from dozens of colonies to zero colonies growing so that's to me that's one of the big final pieces because we had a woman in Oregon who she was doing a really amazing protocol but she never addressed her home she had a leak her kitchen island the sink was dripping down below on that would you know where you store your your cleaners and stuff under your sink? It's dumb that we make stuff out of wood like that. I mean make it out of metal like we need to be using like metal. You know stainless steel cabinetry like a commercial kitchen or something because, you know, think about when you pull your dishes out of the dishwasher. If they're not fully dry, you still got water dripping off your plate, you put it back in the cabinet that water over time can catch Repeat the mold. But this particular female, she had a sink leaking. And the problem was we were treating her but we didn't treat the home. So she would get a little better. And then every time she would be in that area of the home, she flares up, she gets stuffy, the head pressure, the dizziness, the blood pressure, the mast cell problem, the scan reaction. So you really do have to try to find and fix the source if there is one.

#### Evan H. Hirsch, MD 30:24

Yeah, that's, you know, that is so key. When people ask me, if there's one test that you would recommend, it's making sure that you're testing your home. So generally, I'm recommending the ermi. I'll also do immunomedics, if we're looking for the actual site, because Urmi just kind of tells you DNA of the space, but the total space, it doesn't tell you specifically where it is. Do you ever use the army? Do you see any utility for it?

#### Evan Brand, CFMP, FNTP 30:47

I see a lot of people that send me Urmi test results, but admittedly JW from me analytics I got the Army's not good for these reasons. You just want to use mine. And I'm like, Okay, fine. That's a good enough reason. So I've seen that, that it works. But yeah, I have looked at many, many armies. The problem is, man, I think the army is really scary, though. Because you listen to Shoemaker and some of these mold Doc's that are training people. And I think they want the army less than two, something like that. And I rarely

see that. It's like, Good Lord, I'm never gonna get these people to the level that they want. But we've still had success with people getting better with their health. And I just found that the army in the strict numbers, I think it was freaking people out. So that's why I haven't read too many.

# Evan H. Hirsch, MD 31:30

You know, clinically, I love the fogging idea. And something that I recommend as well, because a lot of people think that, oh, gosh, I don't want to go down the mold path, because it means I'm gonna have to remediate my home. What do you think about them.

## Evan Brand, CFMP, FNTP 31:43

So I, before I knew about some of these essential oil products, we actually did an enzyme based solution, because we know we wanted to go natural. So there's a competitor product, that's an enzyme, supposed to be a natural enzyme supposed to eat the mold, and there's this whole marketing pitch to it anyway, it cost us around \$10,000. And this was a relatively small home at the time, we're in a bigger home now. But it was 10 grand. And, honestly, because of some issues with the HV AC, it re contaminated the environment very quickly, and it would have been another 10 grand to fix it. So it possibly worked, but still probably not as good and 10 times the price. So now with the essential oils that we're using, we can treat a 4000 square foot home, which is a big home, we can treat a 4000 square foot home for less than \$1,000.

## Evan H. Hirsch, MD 32:30

Wow, that's great. So these are where can people find these products?

# Evan Brand, CFMP, FNTP 32:34

Yeah, it's called oasis. So if they check out my aura roots store, au ra roots.com. And they can just go into the categories in this click mold. And you'll see we have a Mr. Which is a water based solution that you can just spray and you don't have to leave the home, the foggs more hardcore, but you want to do the testing first. Or if you know you have a problem, you can just treat it. And just to throw this out. Now before I get an email of a customer complaining, no, this will not fix the moldy drywall. If you've got crazy water spots, you had a roof leak and that kind of stuff that is not this is the polishing, okay, so if you've had water damage, you've got to cut out and replace those water damage materials, this is not going to fix that moldy cabinet, you got to cut that cabinet out and replace that with a non moldy cabinet. So this is just once you have stirred everything up and all of that then this is the final thing. But it won't just like replace mold growing on your Windows. So that's not the goal for topical stuff like that, whether it's a let's see a stud in your attic. Or if you've got an unfinished basement, you're seeing wood, like surface mold on the lumber, window sill, that kind of stuff, you're going to want to use a diluted hydrogen peroxide. And so there are some sources that you can get that but typically it's going to be around a 12% hydrogen peroxide that can be put into like one of those herbicide sprayers with the long handle that way you're not getting close because it will burn your skin and it will like bleach your skin. It's not fun. So you that's typically what we're doing for topical treatment of mold, and then we'll polish it with the fog solution or the candles. So it's like hotels like hotels too. So if we go to hotels, I'll travel with these candles and Burnham there.

## Evan H. Hirsch, MD 34:13

Oh, that's brilliant. So then it sounds like your process is you're testing with the immune Olympics. And so you're putting out these petri dishes that are all over the house. And then the place that you find this highest. That's where you're going to look behind the wall and maybe try to what would you do at that point to determine Okay, well, what's the cause? Why is this room 40? And it's supposed to be five?

## Evan Brand, CFMP, FNTP 34:37

Yeah, exactly. Right. Good question. So that's when it all boots on the ground type mold inspector may want to come in and maybe we'll try to sell you on their solution, like some other expensive stuff remediation, but really, we want them there to come in and possibly do a probe of the wall or do some other type of air sampling or do moisture meters or thermal imaging cameras to try to investigate where the source Could be coming from I have a little portable thermal imaging camera and water leaks water is colder than air, so or will get cold with an air. So like if you're looking and all of a sudden you see this blue line coming down that's probably a water line. If you see like a blue splotch on the wall that's the water line with a pinhole leak spitting out water against the back of your drywall. We've seen that before for people's master showers, where they took the thermal imaging camera in and they saw like a little splotch on the wall, and it was a pinhole leak in the piping. And I was no good because that whole drywall behind the tile was just filled with Stacie Batra. So we've seen some really crazy stuff.

# Evan H. Hirsch, MD 35:39

That's really important. I'm glad you mentioned that. So then somebody goes in, and then you're looking at removing the cause figuring out exactly where the leak is patching that up replacing the drywall and any other places that the water goes. And then it's time to fog.

#### Evan Brand, CFMP, FNTP 35:54

That's right now it could get expensive when you get into removing damaged materials and replacing those and all that but I just don't want people to freak out and immediately think it's going to go to that level. It does not require a leak to have a mold problem. So high humidity alone Pacific Northwest, you know, Mideast, the South northeast, I mean everywhere except for basically Arizona, New Mexico, Nevada, almost every other US state is moldy. And so therefore high humidity can create a mold problem. And so one of the houses that we had on a crawlspace, we were routinely measuring using a hygrometer, which is easily purchased on Amazon for 1015 bucks, you can measure your humidity in your house, I have one that sits on my dinner table to monitor make sure my whole house dehumidifiers are working. But we had consistently levels of 55 to 60% humidity in the summertime. And that's enough to create mold. And especially like it is now it's beautiful outside, it's high 60s, low 70s, very high humidity, sometimes 7080 90% humidity, your air conditioner is not running often, and neither is your heater. And so that means you're not really working your air so to speak, when you turn on your heater, your air conditioner, you're naturally going to pull moisture out of it and dry it out. But when on those beautiful days where maybe you have windows open or you don't have to run your system that humidity builds up. And high humidity alone

can create a mold problem. And so that's the thing people have to realize they kind of downplay mold and they'll say I never had a leak. It's a new construction. It doesn't matter. I've seen brand new I had a woman in Washington State actually, relatively new client of mine, she's got a 1.2 or \$1.3 million house and it's completely filled with mold and it's brand new. So this is a woman in Oregon, actually with a two and a half million dollar house. And she fired me as a practitioner actually, her husband did because I had her do the testing. Her levels in her urine were off the chart extremely high levels of mycotoxins her petri dishes were absolutely terrible. But her husband's like, no, this guy's crazy, you know, I'm not doing this mold is not the issue. These, these tests are bunk, and I don't even Honestly, I don't even remember what his excuse was, but she just stopped working. She's like, my husband's not willing to move forward. I'm like, move forward with what getting the mycotoxins out of your body, getting the mold out of your home that's killing you and affecting all of your children and raising your cancer risk. What part do you not want to move forward with? And I don't think they ever responded. But this is a very kind of controversial issue, especially when it comes to skeptical spouses and or expensive homes, the people that I've seen that have the nicest most expensive houses, they're the ones that are the least receptive of this idea of their home being a contributing factor to their health. If it's somebody with the 2000 square foot home, like Yes, let's do it, let's fix it. But if they've got a, like this lady her she had like an 11 12,000 square foot mansion. I guess she was too overwhelmed with the thought of having to mitigate and, you know, remediate that.

## Evan H. Hirsch, MD 38:51

Yeah, you know, I have a section in my book that says why husbands don't believe their wives when it comes to mold. Because oftentimes, we have this disparity where one person is affected and the other person isn't. Why do you think that is?

## Evan Brand, CFMP, FNTP 39:04

Oh, man, you're not joking. Well, I think men just in general are very conventionally minded. I think obviously, you and I are unique. We're our names are Evan, which is cool. But more importantly, the issue with mainstream brainwashing I think a lot of men just kind of fall for that mainstream thing that when you're sick, you go to the doctor. But if you have some of these sub pathological problems, meaning you're not diseased with cancer, or diabetes or something, you don't have something commonly diagnoseable then to the men, it's fake, or it's not as real but when you're having these random panic attacks and depression and all that, for some reason, I think men are just a little more cold to that idea of it being a deeper root cause I think it's emotional based and so they blow it off. So So to answer that in, in one word, it's ignorance. They're ignorant they you don't know what you don't know. Right?

# Evan H. Hirsch, MD 39:58

But what and what but what about the symptoms? Sometimes it's because the man doesn't believe it, because he doesn't have symptoms. The wife has symptoms, right or one problem, and sometimes it can be I mean, I've had mold issues before, you know. So what do you think it is? Why do you think one person may be sick in the home and other people might not be?

## Evan Brand, CFMP, FNTP 40:15

Oh, yeah, yeah, that's a great question. And great, great follow up. So it all depends on the immune system. It depends on their stress response, their childhood, do they have more childhood trauma than the other partner? And what's their mindset on life? Are they a half empty, you know, half glass empty person where everything is negative and terrible, or are they very optimistic? I've seen stuff that's blown me away people that are off the charts with mycotoxins, people that have mitochondrial damage, people that have adrenal problems and thyroid problems and autoimmune diseases and parasite infections. And the only complaint is like I want to lose 10 pounds. I'm like, that's all that's wrong with you. Like, are you sure you're not tired? Are you sure your joints don't hurt? Are you sure you're not gassy, bloated? heartburn, indigestion, insomnia, skin issues? Like, are you sure? And like, No, no, I just wanna lose 10 pounds. I'm like, oh my god. So I guess your mindset is counteracted, or something's counteracted all of these issues and deficiencies that you have, where is, you know, Joe Blow over here. He's negative, he, you know, hate society and people. And he's just a grump. And he feels terrible. And all I can find with him is he's got a few bacterial overgrowth, right. So I think there's this huge spectrum of on paper, sometimes we see clients were like, wow, this person's got to be miserable, and they're fine. And other times we see the boy that Cried Wolf, where it's just like a couple of things. I'm like, I've got 100 clients like you, and they're not complaining as bad as you are. So it's pretty interesting to tease that apart.

# Evan H. Hirsch, MD 41:40

You raise a really good point about the paper. So paper is referring to labs. Yes. And so then how accurate are our labs? If you know, you're kind of seeing this picture? You're like, well, this lab doesn't correlate at all with this person symptoms.

#### Evan Brand, CFMP, FNTP 41:57

Yeah, yeah. Good call. So I mean, there are some issues with labs, right? I think you and I use very good labs, but I don't think all labs are perfect. So I think once again, that's where the art comes in of practitioner training and or personal experience. You may say different because you you're an MD, but for me, the training I had, I've learned more working with people clinically than what my training taught me. The training was great, but the hands on clinical stuff when I do this, and I go five to six drops here and seven day drops there. That's been more beneficial. I forget what the original question was. All the labs.

## Evan H. Hirsch, MD 42:34

Yeah, our labs are labs accurate?

#### Evan Brand, CFMP, FNTP 42:36

Well, I think the labs that you and I use, we use more DNA based labs, and we're using things that are tried and true and tested. So yeah, I would argue that the success rate and the accuracy is very high. Do I still believe there are some false negatives with some of like the Lyme and co infection testing, definitely. And so that's where we'll come in. And we'll say if it walks like a duck and quacks like a duck, we think it's a duck. Let's try to treat it like a duck and see what happens. Meaning, we think it's bartonella. She's got

panic attacks and mood issues and cold hands, cold feet and circulatory issues and brain fog, then we'll try to give some drops for bartonella. And if someone reacts positive, or negatively, then we assume we're on to something if we quote poke the beehive, I call it you know, if you poke the beehive and you get stung, okay, well, then something's there. If you read these formulas, and there's no reaction, then I'm less likely to, to think that's going on.

## Evan H. Hirsch, MD 43:27

Yeah, I think that's a really important point. You know, I mean, that's, that's what I found as well is that 75% of the causes can be determined by symptoms alone, and that when you get good as a clinician, that the labs are an adjunct to what you're seeing, right. But I, you know, I often say all labs, all labs are imperfect, you know, yeah, you just have to take them for what they're providing.

# Evan Brand, CFMP, FNTP 43:49

And I know you and I talked about how you don't really test adrenals anymore. And to be honest, I don't either unless someone really asked and begs for it, we'll do it. But I did find the same thing as you as a clinically it wasn't very useful and protocol wasn't much different, based on those adrenal results. So in that case, I'm not a huge fan of the labs, but for God and mycotoxins and organic acids, I'm a huge fan. And I would consider it as close to mandatory as possible, because it provides so much data. And then that data allows me to create the perfect protocol, or as close to perfect as you can get. And then also the compliance perspective, because I've had a few clients where due to budget or other issues, we just said, Now, we're not going to do testing symptoms alone. Like you said, symptoms alone are enough 75% of time, fine. Sounds like this, let's do this protocol. And then when it came to three months later, some things were better. Some things were a little worse, some things no change, and we're like, Well, what do we do next? Because we don't even know what we're up against. And so then you're kind of shooting blind. So I do think the labs can really help clarify and solidify the protocol but also, they'll provide a good baseline for clients because they want to see there's so use of that conventional treatment of Test, and then get the numbers and then do something and then test again. A lot of people really resonate with that. And it makes them feel more confident that the protocol did something as opposed to them sitting and checking in with yourself. Am I am I better is my gut better? I find a lot of people lose track quickly of where they come from. And that's why I take really good notes because we'll go back to Jane who Jane's like, you know what, I've been pretty tired lately. And I maybe 5% better since last time, I talked with you with energy. And I'm like, Yeah, but on our last follow up, you were 80% better than before we started anything. So now you're at 85%. That's amazing. Great job. And then they go, Oh, yeah, I am. 85% better. You're right. I thought I kind of forgot. I thought it was only 5% better. But that was only in the last couple months. So I don't know where I'm going with that. But I think it's important to point that out. Yeah,

#### Evan H. Hirsch, MD 45:52

yeah, that's really important to point out. So. Thank you so much. This has been great, Evan, I really appreciate you taking the time and, and sharing your knowledge with us today.

Evan Brand, CFMP, FNTP 46:02
Thanks for having me. It's always a pleasure to be with you.