Dr. Jill

Your Functional Medicine Expert®

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#66: Dr. Jill interviews Dr. Lauren Tessier on Mold and Mycotoxins

Text:

Dr. Jill 0:12

Hey everybody! Good afternoon. I am so excited to have as my guest today the president of ISEAI, Dr. Lauren Tessier. How do you say your last name, Lauren? I'm sorry, I should have asked that before.

Dr. Tessier 0:24

It's fine—I really don't care—any way. I grew up in Massachusetts, so I'm used to hearing it with the a-h or the i-e-r now that I'm up in Vermont. So I answer to everything—no preference.

Dr. Jill 0:38

Awesome. Well, of course, our colleagues know you as the president of ISEAI, but you've been in this field for quite a while. I will formally introduce you in just a minute.

Dr. Jill 0:47

Let's do some real quick housekeeping. You guys have heard the spiel, but if you want to find any information, blogs, or other things, you can go to my website, jillcarnahan.com. All of the free content from the past 12 years is there for your perusal. And then, of course, please subscribe to the YouTube channel. It's been so fun to provide even more free content. I think we have like 65 hours of interviews there with experts like Lauren here, so you can go there and look at past interviews and enjoy those. All that content is free, and please subscribe so you get updates there. If we mention products, which I do if it's appropriate, you can find those at drjillhealth.com.

Dr. Jill 1:26

Today my guest [is] Dr. Lauren Tessier, a naturopathic doctor in Vermont. Her practice, Life After Mold, is in Waterbury, Vermont, and she is the East Coast's only formerly certified, CIRS-literate naturopathic physician. She is an expert. I always, always enjoy talking to her and learning things. And you know, guys, there's a secret: One of the best things about doing these interviews is that I'm always learning things as I'm interviewing my colleagues. So it's fun because I know we always get little tips from

each other, and it'll be no different today, I'm sure. So you're in for a treat. I was telling her before we started that she has this wonderful demeanor and presence, and she's a great leader now with ISEAI, so I know you'll enjoy her and the content. If you do like it, please share.

Dr. Jill 2:13

Back to her intro. Life After Mold services patients suffering from multi-symptom, multi-system illness complicated by comorbid conditions such as Multiple Chemical Sensitivity (MCS), MCAS, which many of you know [as] mast cell activation syndrome, chronic infections, including Lyme and co-infections, Epstein-Barr, CMV, etc. Dr. Tessier also provides clinical and corporate consults to physicians and corporations looking to improve upon their respective clinical and productivity outcomes. She has served ISEAI, the International Society for Environmental Acquired Illness. We'll be talking a little bit about that today because she's the president, I'm on the board, and it's a non-profit organization that gets great information out.

Dr. Jill 2:59

A lot of patients ask me, "Hey, Dr. Jill, how do I find a physician like you who knows how to treat mold." That's a place to go; that's a resource, and it's iseai.org. You will find that—wherever you're watching this video—in the links. Again, we'll be talking a little bit about the upcoming conference and other things that are happening. She has served [in the] roles of secretary, vice president, and now president. She also has a free ebook called Mold Prevention 101, [which] you can download. We'll be sure to give links to her website and all her social media platforms at the end of the show. So, welcome! I'm so glad to have you here, Dr. Lauren.

Dr. Tessier 3:45

It's such an honor. Thank you so much.

Dr. Jill 3:47

You are welcome. I always love to start with a story, so tell us a little bit about: How did you get into naturopathic medicine? And then also, how did you get into mold and chronic [illness]? Because often—I don't know about you—these things don't necessarily choose us; we kind of get drawn into them. So, tell us more about your story.

Dr. Tessier 4:04

Yes. So, it can be very long and very short. So, I was always driven to the service field. In my undergraduate, I actually got a dual degree in health psychology and pre-med.

Then, the time came when I was applying to medical schools, and there was a little bit of an itch, "Am I going to go DO, ND, or MD?" Actually, I found out about ND, and I was like, 'Yes!' It hit all the marks, especially where I was coming from—a pharmacy school in Massachusetts, the College of Pharmacy. There's a time and place for everything, but there was definitely that resonant energy. I think I had one herbs and nutraceuticals class with this amazing professor—Lana Dvorkin; I believe she's still out there somewhere—and that was one of the things that really flipped the switch for me. So I applied to a naturopathic school, and I decided on Bastyr University out in Seattle. I went through all the hoops there, graduated, returned back to New England, and hung my shingle in my own private independent practice.

Dr. Tessier 5:16

Originally, I was set up as primary care, accepting insurance. What really moved me towards that mold space was that my town—also known as Waterbury; buried by water, quite literally—had a flood in 2011 with Hurricane Irene, and I was showing up a year and a half or so later and still seeing clients that were having really bad brain fog and fatigue. Then, we'd come to find out that none of the naturopathic stuff was working and that they had [mold in] their offices and their basements. And then one thing led to another, and mold opened up in front of me.

Dr. Tessier 6:00

At the time, I came to find out I was also living in a space that had mold issues, and so the brain fog, fatigue, hormonal disruption, autoimmunity, all those things—you name it—I've been through firsthand. So that was really, I think, what solidified it for me and is really able to keep me in check when I'm interacting with clients. Because, you know, having that firsthand experience, it's amazing what it does to be able to connect with people and also be able to stand by people and hold their hands through the process and be there for them. It's like a trial by fire.

Dr. Tessier 6:44

Then, one of the other reasons why I think: A) I fell in love with mold, but then B) I had a family member whom when I was much younger, I lost to a very rare autoimmune disease called Wagner's granulomatosis. At the time, it took them about 16 weeks in a Boston Regional Hospital to diagnose them correctly. I remember going into their home with my mom and helping them clean up their space and get them set to receive them back in the hospital. It always stuck in the back of my mind that there was mold in the apartment. And there was always a dialogue [between] my family and me about it. I think that there's a little bit of an emotional component too to having suffered a loss, and who knows if the autoimmune condition was, in fact, due to mold or worsened by it. But, for me, there has always been that thing. And if I can help people get better and

get beyond their living situation into a better health situation, then that's really what I'm here for. That's how I got here and why I keep doing what I do.

Dr. Jill 8:02

Wow! [There are] so many interesting things I want to comment on. First of all, it's so funny because I always resonate so well with my naturopathic friends. I have such respect [for you all] because I feel like I've learned so much from you all that we didn't get trained in, whether it's colonics or castor oil packs or herbals. So much richness has come into my practice from what you have learned and [what] all my colleagues in naturopathic medicine have learned. So I really respect that greatly.

Dr. Jill 8:27

I always say I have the heart of a naturopath because I did the same. I applied to a traditional Chinese medical school, then [to an] acupuncture [school], and then [to a] naturopathic [school]. I actually applied to all those; I could have easily gone. But the little trick was, I was like, "I'm going to infiltrate the conventional system." It was funny because I was like, "I'm this secret infiltrator because my heart is really not all that bought into the whole paradigm." There are some good pieces, but... So I always love and resonate with that training that you had, and I have such great respect for it.

Dr. Jill 8:59

It's interesting that when you had your experience, and of course, the town [also], like you said, when we've lived it, no textbook, no lecture, no class could really teach you on that level. I'm sure you've noticed this, but when I hear the stories, I start to just pick up these little clues that are very subtle, like, "Oh, yes." I remember at the beginning I would try to be really careful because I didn't want to take any of my experience and filter my patients' experiences or assume that there was anything like mine. But I'm sure you noticed too that it was shocking, whether it was autoimmunity, multiple sclerosis, or gut disorders like inflammatory bowel; all of a sudden, they present like a normal case that we'd see and you'd be like, "Oh my gosh, mold is underlying this," kind of like your family member who had Wagner's [granulomatosis]. Again, you don't know for sure, but there is a high likelihood it was related.

Dr. Jill 9:50

Don't you even find news stories or these incidents? Or [with] certain government institutions, prisons, or schools, you start to hear these stories about [how], all of a sudden, a lot of [people have] mood disorders, learning disorders, or behavioral disorders. Now that we know what we know about mold, I wonder how much this is affecting so many areas. When you have that filter, like you and I do, don't you see things? You have this thought in your mind; you're like, "Yes, mold is involved in that."

Dr. Tessier 10:16

Right. You know [by] watching the filter that you're looking through. I always tell people, "Yes, I have a hammer, [but] I promise everything's not a nail. However, I'm going to try my best." I do more than mold; I'm a traditionally trained naturopath. But if I don't feel like I am equipped or it's a problem outside of my scope, I always tell people, "I'm going to get you to where you need to be." I'm okay with being a step on the path.

Dr. Jill 10:45

Absolutely. Well, let's talk a little bit about autoimmunity. This is absolutely huge; it's the fourth leading cause of mortality. So right now, it's very siloed. We have rheumatology, [which] sees rheumatoid arthritis; we have neurology, [which] sees multiple sclerosis; and we have gastroenterology, [which] sees Crohn's and colitis. So we have these silos and this brokenness of autoimmunity into its silo, depending on the organ system. However, the mechanisms are the same, and I would say mold may be the number one, if not one of the most common drivers [behind some of those illnesses]. Let's talk just a little bit about that. First of all, how does mold affect the immune system? And then, how does that drive autoimmunity? And then, what do we do about it? Let's have this discussion a little bit, for those of you who are listening and have autoimmunity or know someone who does.

Dr. Tessier 11:32

So maybe forgive me if people already know these things so maybe like a [inaudible].

Dr. Jill 11:38

Oh yes, let's start there, because that way, everyone listening can relate.

Dr. Tessier 11:43

So autoimmunity is when your body loses track of what is truly yourself and what is truly something that should exist on the outside of the body. Your body has a few checkpoints that it goes through to make sure that when you're training your immune system cells, [in essence] they go: Oh no, that's my kidney; I'm going to leave that alone—X, Y, Z. We have a few different points—'checkpoints,' we call them. So what ends up happening with autoimmunity is that some of these cells slip through the cracks and beat the checkpoints. Then, they get into the systemic periphery, and instead of knowing to leave these parts of our body alone, they actually will go and attack them.

Dr. Tessier 12:24

Some of the thoughts about autoimmunity are that it's partly genetic, partly environmental, and partly infectious. When you step back and you look at the fact that mold and fungi can be two out of those three, it can be an environmental toxin that can also be an infective agent, you're looking at [things] like, "This is potentially bigger than just heavy metals alone, where it's just one factor." You almost have this autoimmunity double whammy.

Dr. Tessier 12:58

Mycotoxins, from my perspective, seem to be probably one of the bigger initiators of autoimmunity. I think of mold maybe a little bit differently than some of my other CIRS-trained counterparts; I believe you were also CIRS-trained. I actually think of them as two separate entities but with some overlapping. I think that there's some immune system confusion that can happen in the CIRS global inflammation realm.

Dr. Tessier 13:28

And then, we actually see some direct autoimmunity-causing issues with mycotoxins themselves, aside from CIRS. In the literature, we see that certain mycotoxins can flip on the genes—in animal studies—that correspond with type 1 diabetes and also Hashimoto's thyroiditis. If we're seeing that in the animals where we study and develop our drugs and all these things, we have to tread a little bit more cautiously before we throw the baby out with the bath water when it comes to mold and autoimmunity. But I know I'm preaching to the choir when I'm saying that at the moment.

Dr. Jill 14:07

No, that's a great explanation, and it's so good to get the framework. I talk a lot about my history and what I've been through, but something I've mentioned [a little bit] but not a lot is that right after my mold exposure in 2015, I was diagnosed with type 1 diabetes. I don't know if you even knew that, but it's so interesting that you mentioned that literature. First of all, I had a very strong family history of diabetes, but it was more type 2. It was [my] family history, and I had lived a really clean lifestyle as far as eating, [consuming] low glycemic [index foods], and exercising, so that way I should not have any risk. But what happened is that there's no doubt in my mind that mold triggered that. I had positive GAD antibodies. I went to an endocrinologist; he said, "Yes, this is type 1." My A1C was rising.

Dr. Jill 14:49

But here's the really neat thing, because once again, just like my Crohn's disease, that's considered incurable. Now, had my pancreas been attacked for years, it probably would have been permanent. But I am no longer technically diabetic. That's like another miracle because what happened was that detox from mold and then really working for

a while—I had to go completely low carb, low sugar; I never had to do insulin; and I did a few peptides and things—I literally feel like I reversed type 1 [diabetes].

Dr. Jill 15:19

But back to your original point, I wonder how many people are genetically predisposed—whether they're children or [adults]. Mine was considered adult-onset—latent-onset type 1—because it was autoimmune in nature, but it wasn't until I was in my early 40s that it manifested. But it's very relevant because, number one, we consider that incurable. Number two, there's no doubt in my mind that mine was absolutely triggered by mold exposure. So thanks for sharing that. I want to just give hope; if you are a new-onset late-[onset] adult type, check for mold as a trigger because I'm a poster child for it being reversible.

Dr. Jill 15:57

So let's talk more about autoimmunity. I love how you divide the mycotoxins from colonization, infections, and even fungal infections, and also mold itself. I think you gave a lecture that was talking about that as well because we got the spores, the fragments, [etc.]. Do you want to talk just a little bit about how the mycotoxins affect the immune system—you mentioned that briefly but—where that lies in the autoimmune spectrum?

Dr. Tessier 16:22

Yes, so that's another thing, and again, I really cross my t's and dot my i's when it comes to any claims that I make. I will be very clear with people: A lot of the information that we have is coming from the animal literature, both in the biomedical field and also in our agricultural and veterinary fields. Again, these are the animals that we're testing our drugs on, going through these drug developments and things like that. So we really need to consider the animal literature rather than poo-pooing it.

Dr. Tessier 16:55

When you dive into the animal literature about the interactions with mycotoxins and autoimmunity, you start to see these patterns where mycotoxin exposure in animals is correlated with increases in IL-6, which can be a precursor for another cytokine called IL-17. These two cytokines are a core component of autoimmunity, more specifically the IL-17 being the big picture one with the IL-6 moving and rolling the stone down the hill to get things going. So, not only do we see that IL-17 will go up with mycotoxin exposure, but we also see a drop in something called our Tregs and an increase in something called Th17.

Dr. Tessier 17:44

All of this alphabet soup, you guys can put it aside for a second. In our immune system, we have different white [blood] cells that are responsible for different actions, and this is a very, very super-distilled description of what they are. But we have Th; when I say Th, they're T helper cells, so that's what it stands for. There are Th1s, which kind of walk the line of autoimmunity. There are Th2s, which are kind of the allergy picture. Then there are Th17s. Originally, we thought that if someone had more Th1s, they tended to lean a little bit more [toward] autoimmunity, but as some of the research has developed, we've actually seen that a bigger predominance of Th17 cells seems to be much more correlated with autoimmunity.

Dr. Tessier 18:36

Our Th17 cells are not only involved in our infection defense process but they're also involved in the development and exacerbation of autoimmunity. And what do they produce? That cytokine, IL-17, that I mentioned before. So we have seen that mycotoxins will drive up that IL-17, leading to more autoimmune issues, and drive up the Th17, those T helper cells that make that stuff. Then, what they do, on the flip side, is they will actually suppress your T regulatory cells. And your T regulatory cells are like the referee of the immune system; they will go in and keep everything in balance, making sure all the T helper cells are behaving themselves.

Dr. Tessier 19:22

So, we also see that in conjunction with Th17 and IL-17, the Tregs drop off or stop being as efficacious. We also see some of that in both human cell studies and also the living animal studies too. Those findings definitely have a hand in both worlds, which is interesting to see.

Dr. Jill 19:49

Yes. Thank you for breaking that down. Again, guys, this may sound like a really complex immune lecture, but there are some really simple ideas here that are really important. Of course, with COVID and the pandemic that we had last year, a lot of people have heard about cytokines, and they understand some of this more than they ever used to. We can actually have a conversation that includes IL-6, and people are like, "I've heard of that!" [or] "At least I've heard of it."

Dr. Jill 20:11

You mentioned this control of Treg cells, and I always like to talk about them like the bouncers at the bar. They're like, "Hey guys, calm down." I love that. If you're thinking about this, you've kind of got the police or the bouncers or the people that are keeping the order. And those diminish in mold too, and the infection or inflammation drives the Th17 that Dr. Tessier talked about, and then it's kind of this out-of-control brawl at the

bar. Again, it's good because it's trying to fight infection, but it overdoes it and then accidentally attacks yourself. So I think that makes perfect sense. Even if you don't have an immunology degree, you probably understood what we've been saying. This is the driver of autoimmunity.

Dr. Tessier 20:51

And if you keep the bar metaphor going, ultimately that fight is going to pull in innocent bystanders. So those Treg cells are really just there to make sure that the fight doesn't happen and everyone stays out of trouble.

Dr. Jill 21:07

So, say someone comes in—you and I both see this—with MS, or they come in with Crohn's or Colitis, or you name any autoimmune disease, Hashimoto's, type 1 diabetes, how would you do a workout to check if mold would be involved? And then how do you treat [it]? Let's talk a little bit about someone who might have autoimmunity and what you would do for a workup.

Dr. Tessier 21:28

Sure. Let me take a step back and collect my thoughts about that. A lot of my clients end up coming to me as I'm sure they have you, Dr. Carnahan, where they've seen many, many doctors. They've been to the neurologist, they've gone through their PCP—I mean, heck, some of them have even had the psych[iatric] workup for depression and all these things. My practice is called Life After Mold, so it very much self-selects for mold issues. I have that setup, which is a saving grace, a little bit, in the dialogue with some of my clients. Mold is really never too much of a question in our dialogue.

Dr. Tessier 22:03

But when people come in because of their extensive held-back history, they've usually already seen their neurologist and gone to a pulmonologist. So all the important rollouts have typically been done, or if they haven't yet, I will send someone to make sure they go back and dialogue with their PCP about getting appropriate referrals for where they need to go. With that being said, always for me, rolling out the worst-case scenario as with any responsible physician like yourself [is important]. After that, we do a really thorough history of current and past mold exposure. Again, a lot of times, it's people who have had a historical issue, and that's when we start to think of bioaccumulation in any of the fatty tissues in the body. Or, they might have a current one that they know of that they're working on getting out of.

Dr. Tessier 22:53

When I do my mold workups, a lot of it really starts with just doing a simple mycotoxin evaluation. If any of you on here are familiar with mold, which I'm sure many of you are, I'm sure you've heard that mycotoxin testing isn't perfect yet, and it's true, it's not. But how I use it with people is also understanding that their environment is a core component already. So rather than using it from a diagnostic perspective, I'm using it more from a screening perspective, and also from a tracking perspective. I usually do a good amount of prep work before I even get people to take that urine mycotoxin test because that initial prep work is required for people who are really sensitive to glutathione, which we use, or at least I use, for provoking people for that first initial test. So sometimes, testing for me doesn't happen for maybe even one or two months out for a lot of folks. And if you're chemically sensitive, it might even be upwards of three months, to be frank.

Dr. Jill 23:59

Oh, I couldn't agree more. I love that, and this is a great time to talk briefly about the ISEAI. As clinicians, there are three main labs out there that do urinary mycotoxin testing. I'm sure, like you, you've used every one of them. Maybe you can talk about, just briefly, who they are and then also what ISEAI is doing to help us discern what might be our best method of testing. We've all been like, "Which one's best?" Can you share just a little bit about the study?

Dr. Tessier 24:22

Sure. There are three major urine mycotoxin tests. Each has its own separate methodology, or how they run the test, which also means that they have a slightly different ability to define what is in the urine. There's one company, RealTime Labs, that uses an ELISA methodology, for all the science nerds out there. There's another one called Great Plains Laboratory that uses liquid chromatography. Then, the third one is Vibrant, which uses microchip assay. Because of my clinical setting and how I've seen it correlate with my clients and how I really know it as a tool for my practice, I tend to lean more towards RealTime Labs, but they can all offer us something. If you come up positive, then there's something to work on there. It's helpful. That tends to be the major urinary ones. There is, I believe, Mymicrolab, which does IgG and IgM serology, looking at the antibodies to these mycotoxins. I've seen that come through the office a few times. I have not yet quite implemented it in my practice just because I really feel comfortable with RealTime Labs and my clinical assessment.

Dr. Tessier 25:38

The nice part about ISEAI—actually, it's more than a nice part. A huge blessing that occurred for ISEAI back in November during Giving Tuesday, right after Thanksgiving, was that we did a fundraiser to raise research money to check on the validity of these tests. So ISEAI will be doing one of the first split urine sample testing research studies

with these different companies. So we will even get to see if the results are reliable within one specific specimen. We're very excited about that. Unfortunately, testing and research like this take time and [cost] a lot more money than, I think, people realize. We're excited to at least start there. We know that so many people have other, bigger clinical questions with regard to the application of these tests, and we will get there; we will get there. So, this is the first step. So, we can say, "Hey, look! We're on the path, guys. This is what we found out!" So it'll be an integral part, I think, for a lot of people.

Dr. Jill 26:50

I'm excited. Again, the US presidents have been driving some of these initiatives, and it's so exciting because we all have similar clinical questions. We're all in our little holes, doing our thing in our silos. It's so [much] fun to collaborate because we can get across the country in different cases. We all have slightly different opinions, yet I'm always surprised at how aligned we are. Often, when we really go into that clinical experience, it's more similar than different between all of us who are using it. So that's great. I will make sure in the links that I share the testing. This will be through your doctor; this is not something you can order on your own. So you'd have to work with your doctor. I'll be sure and link to iseai.org as well; if you need to find a physician, you can look there for certified doctors as well.

Dr. Jill 27:34

Briefly, just a little tangent: We're in the midst of the certification process, but is that the thing you'd recommend for patients who are looking for mold doctors? Tell a little bit about where they'd go. There's the 'find the practitioner' [tab] on the website, correct?

Dr. Tessier 27:47

Sure. There's a 'get help' page on the website that auto-populates a map for folks who have worked in our field for a while, who are mold literate, or who have gone through other extensive mold training elsewhere. I've been really happy with everyone listed on the website. It's a great community, and they seem to do well—

Dr. Jill 28:11

Me too, because of course, you and I... I mean, at least for me, I can't help everybody. We get a lot of questions, as you probably [do]; you are known for mold—the same for me. So there are a lot of people who can't see me, and it's so nice to know that we have a group like this that can help. And then we can trust that most of the people on there, or all of them, have the training and all of that. Quickly, another tangent, but let's talk

about IEPs. What are IEPs? And how can I see how to help with IEPs as well?—because that's a critical component of getting well.

Dr. Tessier 28:39

IEPs are indoor environmental professionals. These are folks who have been in the field for quite some time, I believe. Forgive me because I'm not overseeing the IEP branch of ISEAI, but I believe they need ten-plus years of working in the field. So any IEPs that are listed on your website are not Joe Schmoe who's had a water remediation place for one year or something like that. The other part of our checking them out is that they really need to be endorsed by an environmental-illness literate physician. So, it's someone who has worked with these doctors before and really knows the ins and outs. Each IEP is going to be different; their backgrounds are going to be different. Some of them are going to have very advanced degrees in building sciences. A lot of them will have a lesser advancement but they'll have the experience of the boots on the ground. I think the really important thing to drive home is that we are really working to protect the people who are coming to seek help through the ISEAI listings.

Dr. Jill 29:51

Oh, so good. Really, as you well know, this is the number one thing that I need help with. Same with you, probably, because we can know there's mold in someone's environment, but I'm not the expert to tell them exactly where it is or how to fix it. We have to know a lot. I end up knowing a lot about the environment, but I'm always like, "We need to make sure."

Dr. Jill 30:07

What I've seen over and over, and I'm sure you have too, is that if you get the wrong inspector or the wrong mediator, it can make a bad situation much worse. Either someone's been told two or three times, "There's no problem; you're fine," and they think they're going crazy because they know their environment is not okay but they can't find the problem. Honestly, that is the critical component to getting someone well: That they have a safe environment from exposure for the most part, at least, in order to heal.

Dr. Tessier 30:34

I think the three things that I want to take home from just that one statement alone are to look for an IEP who is willing to drill a hole in your wall and take an in-wall sample. If they're not going to do it, they have a huge potential to miss something big. This is coming from first-hand experience, not just from being a physician; this was an issue that I had at home. The other thing is—ooh it's gone! Just like that, it's gone! It'll come back to me, and we'll double back to it for sure. But also making sure that your IEP is

willing to answer your questions [is important]. Oh, and it's back. And if you can, work with a third independent party, separate from your homeowner's insurance. If I could say that a million times over, I would. I have had firsthand [experience with] a mold inspector from an insurance company versus the person that I rely on for my clients, and the results were night and day. So always be aware of the biases of the people who are coming in to do your work for you.

Dr. Jill 31:54

Yes. I can't even tell you the number of patients who've had one, two, three, four, or even up to five inspections that have come back negative. Now, literally, if someone comes in, we see the clinical picture, whatever that looks like, and I have a suspicion that mold might be involved, [which] I'm doing the testing to prove, [but] if they just say, "I had an inspection, everything's fine," I never trust that until I know more details. And I will say that I am not the expert to comment on this, but I've seen enough [to know] that air sampling alone may not be enough. Now, that's one amazing tool in the toolbox, but I find that what happens typically is that there are really nasty, sticky wet molds like Stachybotrys chaetomium, [which] need a water source. They tend to be hidden, they tend to have a water source, and they can be stuck behind a wall or under a floor somewhere. Unless it's past a hurricane and it's massively covering all the walls, actually, they typically don't get into the air. If they are in the air, it's a very bad situation. So, you can have very significant, toxic, sticky, dark, black molds in the house and the air sampling looks pretty good or even perfect.

Dr. Tessier 32:56

Absolutely. And taking it a step further, there was a piece of research that showed that there is a significant amount of force that you need to [apply] on a wall in order to get the sticky, heavy spores of Stachybotrys to be airborne. So all the perturbing in the world isn't going to do it unless it's in the right space. So, I 100% agree with that. From the other perspective too, I think a lot of people put a lot of investment, especially from the service camp, about [how] "your ERMI must be less than two," without the discussion of how this is something where you're taking one number minus the second number to get a result. If you play around with one number being bigger than the other and all this, you can get what looks like a really safe ERMI, but it's dangerous as it'll get out. I saw an ERMI that had something like a 500,000 spore count in group one, and the ERMI didn't look horrible, but the ERMI was an eight. So you really need to make sure that you aren't just depending on numbers because there are so many people who are looking for safe homes and they pull this ERMI and they're like, "I can't live here." Unless you sit down with someone who vaguely gets it, you're going to miss many opportunities for potentially finding a safer living [environment]. So, yes, mold testing, both in the environmental realm and in the medical realm, is difficult.

Dr. Jill 34:26

It's very difficult, isn't it? Again, this is where the science and the intuition, the right and left brains, come together, because you and I have [both] experienced—I love the science; I'm like you, I really base things on great science—and as we don't have answers, I continue to try to help, seek, add data to the pool, or whatever. However, there's an intuition to this, and intuition actually comes from great science. Some of the studies on gut instinct are right on the money for accuracy, maybe more so than a scientific study on data points. The reason for that is that, as you and I have these 5/10/20 years of experience, we add this pattern recognition system to our brains, and our subconscious can analyze, in a split second, millions of pieces of data versus our conscious mind analyzing hundreds or thousands of pieces of data. So there's this really complex system that we all have in medicine that we've honed, and it's actually very accurate. Now, what I always do is, if I have a hunch or an intuition, I prove it with science. But, there are times when I'm listening to the story and I'm like, "I am pretty darn sure there's mold involved." My office staff jokes because I'm about 100% accurate with that. So far, I don't think I've had a case where I had a suspicion that we didn't find later.

Dr. Jill 35:36

Back to ERMI. If you heard that word, you're like, "What's an ERMI?" I just want to briefly define [it]. So there are two main companies; you might have another one, but the two that I use, I think, are Envirobiomics and Mycometrics.com, and you can order their dust samples. They basically give you a dust cloth, you check the dust in your home, and they look for DNA—in that dust—of mold. So it's kind of a historical snapshot. Again, just like anything, it's not perfect.

Dr. Jill 36:04

I do find it a useful tool, number one, because patients have access to it without an inspector. If they need a pre-screen or they're looking for rentals, it's something that patients can get easily. Number two, like you said, I never even look at the ERMI score. It doesn't mean it doesn't have validity, but I feel like it has a lot less validity than looking at the numbers and understanding what we're looking at.

Dr. Jill 36:25

Again, I'm not the expert, but like you, I can see patterns. I always look for Stachybotrys chaetomium, some of the really nasty ones. If they're even like five or ten, even though that number sounds really low, that could be very concerning because they're so nasty and they're so toxic; they're the most toxic to the kidneys, the lungs, and the immune system. So you can get that yourself; you can order it yourself. Then, find a doctor who can work with you or an inspector. Inspectors can look at those too, and then they can

bring their own data, their infrared cameras, their drills in the wall, their moisture meters, all the things that they have.

Dr. Jill 36:59

Let's talk a little bit about pediatrics because you mentioned that you have a lot of experience there. Kids are not little adults, but they do experience some of this toxicity. What have you seen kids present with and how would you address a child who had mold exposure?

Dr. Tessier 37:13

Sure. So in pediatrics, it depends on the age bracket and what the child is capable of conveying and sharing. Little nuggets [of clues]—like really small little baby nuggets—we're probably dealing more so with skin issues, colic, those things that present obviously for the caretaker. As we get [into treating children who are] a little bit older, elementary school age, we're seeing vision changes. I see vision changes so often for kids where they'll almost get double vision, but their vision will be completely normal; situational headaches where the kid goes to school, they have a headache, and they come home; behavioral differences depending on location versus mom's house, dad's house, school. It's not always the social environment they're in. Then, [another thing I see is] GI stuff; food intolerances. Then, we also see some of the breathing issues; we'll get the allergic shiners, we'll get the nose salute—is it the allergic salute? You get the little crease there. I think once kids get a little bit older and they get into their teens and they have a little bit more self-awareness, it's easier to get conveyance of time and curiosity and stuff. But those symptoms are typically what I see with the younger kiddos.

Dr. Jill 38:34

And then, with them, what would be the difference? Say you have an eight-year-old. Let's just take that as an example: How might you start the detox or treatment of an eight-year-old?

Dr. Tessier 38:43

Sure. [An] eight-year-old—again, I would probably go very gently with on-ramping them. I do provoke with my testing. Usually, to start with provoking, I do some biotherapeutic drainage, or to prep for provoking, I'll work with phospholipids, phosphocholine, phosphoserine, and maybe a little bit of melatonin. Depending on if they tend to lean more GI or neurocognitive, there might actually be some lymphatic neck work that I'm working on with them.

Dr. Tessier 39:21

Then, after I get a concept of what is happening for the test, that's when I bring on a binder. Usually with kiddos, for binders, we're talking charcoal. I think a lot of people get really excited about the sexy concepts of: "Oh, clay for this!" "Zeolite for this!" It's all based on animal literature, and if someone hasn't studied adding folic acid to a five-ton mound of grain and seeing how the horse reacts, it's not going to be suggested. I have seen charcoal drive down all the numbers across the board.

Dr. Jill 39:59

I Love, love that you say that because what people don't know... Like you said, "it is so sexy" or whatever. I personally, in my journey, used only charcoal—period—and I'm completely healed from mold. I'd never use cholestyramine. Even [with] glutathione, I wasn't able to take it for two years. So [for] the main part of my detox, I use precursors. And people are surprised to hear that. In fact, don't you hear a lot of people [saying]: "Oh, I can't take that; I'm not going to get well." They hear that you must take cholestyramine, glutathione, or some sort of protocol. I love that you said that because, again, in my own history, literally, charcoal has been the it factor. That's it. Even now.

Dr. Tessier 40:40

There are even studies out there about how okra does 1/16th the job of cholestyramine. So fiber is not a horrible thing. If there's one thing that I really push on for people, it's making sure that they have the right and correct phospholipids because if you don't get the toxin onto the bile, then it backs up in the liver, kicks into systemic [circulation], is redeposited, hits the kidneys, and causes all types of issues. If there's one [important] thing, in addition to whatever binder you want to use, it's making sure that those phospholipids are [inaudible].

Dr. Jill 41:19

Let's talk a little about that because I totally agree. People are already asking questions and stuff. What does that mean for therapy? Phospholipids first. And then let's talk about the enterohepatic recirculation of bile. What can we do to stimulate it?—because that's an unsexy thing too. There are bitters or castor oil. I want to know, from your perspective: What else would you do for that bile secretion? So, first phospholipids, then bile.

Dr. Tessier 41:44

Yes. So phospholipids absolutely have to be brought on, in my opinion, before you even start pushing on or modifying bile. I think of it as a roller coaster metaphor: You're at a park, you have a roller coaster, and the roller coaster goes through the line [before] coming back around and going to pick people up. So the roller coaster is the bile, the queue of people are the toxins, and it takes phospholipids, phosphatidylcholine, to get

the people out of the line and into the roller coaster cart. If you don't have that rate-limiting stuff there, those people are going to back up that line, and it's going to go all the way out of the park to the parking lot, etc. So, the phosphatidylcholine I use for a couple of different reasons. Sure, it's liver-loving; it's actually a super duper antioxidant for the bile canaliculi, all the hollow parts of the liver and the gallbladder, but it's also needed to get those toxins into the bile. It's also protective to the nervous system too.

Dr. Tessier 42:47

There are a few different reasons why I usually just hone in on the bio talk when I talk about it. The phospholipids would be a core component. And with choline, I usually use two forms; I use this CDB precursor for people, which tends to cross the blood-brain barrier. Then, I use that kind of final form, heavy, full-out phosphocholine, which, from what I understand, tends not to cross the blood-brain barrier as well. So I think of that as more of a liver-heavy phosphocholine. When it comes to bile and bile production, I'm sure every naturopath who might be listening to this is going to be like, 'Ah!' But I don't use bitters that often. Mostly because it's: What is the bandwidth that my client has? Is my client going to remember to sit down and take the bitters? Then, we're timing the binder with the bitters and all these things.

Dr. Tessier 43:47

I usually just trust in cholecystokinin to do its job. So, I just ask people, "Make sure that you're having a fat-containing meal, and make sure that's a good fat." Because of you, I know not to push hard on coconut oil because of endotoxemia, so I've always carried that with me since I heard you speak about it. So I tend to go more on grass-fed butters and beans and meats. Anything that is high fat for when we're timing those binders. So, no herbs, but if someone's like, "I really want to use herbs and I want to make..." I'm like: "Okay, sure, let's do it. Let's try it." But it tends not to be a core part of what I do with people.

Dr. Jill 44:36

No, I agree because, really, it's like the perfect is the enemy of the good. That's why, with these supplement regimens, we could go crazy and have hundreds of things every hour of the day. I'm like, "Yes, you could take that, but what's going to be doable?" How do we make this a doable protocol?" So, that's great. Do you recommend castor oil or coffee enemas, either one of those things, or just rarely? Or how often are you using those things?

Dr. Tessier 45:00

Depending on the person and depending on the case. I like castor oil; I appreciate it topically for some folks. I wish it did a little bit more than I would expect or want it to

do. But for coffee enemas, specifically for folks, when you start doing the digging, it's green coffee or lightly roasted. There are specific coffees that correlate with these enema kits. But those can be amazing for people because the caffeic acids in those don't stimulate people. They don't make people feel jittery, which is really cool to see. Then, they help boost glutathione production in the liver through—there's no pun intended; I don't need to put this any other way—the back door because you're actually accessing the back door of the liver through a separate circulation. So, sorry for the 'back door.'

Dr. Jill 45:50

No, honestly, it's so funny because, again, I always joke because I'm an MD, and MDs don't talk about coffee enemas. But it's so powerful, [from] what I saw. You've probably heard me talk before [about] Switzerland; I was there two different years and [did a] total detox. I saw these people who were in their 80s. They were not super healthy overall, and they were just flying through these detox protocols. My question, clinically, was, "What is so different?" First of all, no EMF; clean food. There were all kinds of things that were different. But what happened was that everybody in the program was able to do coffee enemas nightly in their rooms. And I was like, "Wow!" We actually import coffee enema kits from Switzerland because they're so easy to use. It's German coffee, green coffee that has charcoal in it, so it's a unique product. You just mix it in the bottle, and it's so simple. So I'm a huge fan of that as well. This is so much fun. We have to do this again, but we're just about out of time. So I want to—

Dr. Tessier 46:43

Oh my gosh!

Dr. Jill 46:45

I know, right? Let's talk just briefly—any final words? I know a lot of people who are in the chat today that have had questions, experiences, and that [type of stuff]. Any words—like someone who's maybe feeling overwhelmed or hopeless—that you would want to leave with people? And then we'll ask about where to find you.

Dr. Tessier 47:03

Yes. Stop, breathe, and find your support. One of the hardest things is approaching mold without social support, and I know how mold can really shift your social relations with the people in your life and cause a lot of undue stress. If you have someone in your life who is there and supporting you, move toward them. If you have people who are unsupportive and doubting, really reconsider your relationship with them as you move forward. If you know what's right for you and your health, you really need to trust yourself and move in the direction that's right for you. There are plenty of mold-literate

physicians out there. I'm not going to be everyone's cup of tea. Jill, you might not be everyone's cup of tea—or X, Y, Z person. So, always find a physician that you resonate with. If you go in and you meet for the first time, you're like, "Oh, this isn't it," that's okay. It's okay to shop around and find something that's a match.

Dr. Tessier 48:11

The other thing that I implore people to do is move cautiously in some of these bigger online support groups. Susie Bees needs to throw everything away in her house, [which] is not necessarily your situation. So, while I'm not saying "stay in mold," or "live in mold and you can recover," I'm not saying that by any means. But I have seen many cases where people don't have to throw away every piece and personal thing in their life, which is a trauma in and of itself. So always get a second opinion too for the home and how you can clean your items. And it's okay to ask for handholding in that process with your IEPs or whoever's doing your remediation. But just because mold is there does not mean it's horrible and everything's going to end for you. Really work to find your center.

Dr. Tessier 49:12

We are at a really great point in time right now, under unfortunate circumstances, that you have the ability to access teletherapy. I think everyone who's going through this should really be working with some type of counselor, because the trauma of the illness and then the trauma in relation to the home and then to your social connections can really keep you stuck, keep you feeling really sick, and prevent you from recovery. So, that's my spiel.

Dr. Jill 49:43

I echo that. I really believe that 100% of people who've had mold toxicity have to deal with the trauma. Now, some people can do the work on their own, but I often recommend professionals. And there are so many resources. We will have to do another talk on the limbic system because that's the real key. Even in my own journey, what happens is that mold is a physiological trigger. It's not like an emotional trigger, per se, but it triggers the same trauma response as another abusive situation or some sort of trauma. Until you unlink that, you're going to be stuck in this limbic loop where your limbic system is like, "Ahh! Everything's dangerous; everything's bad." So that's part of healing, and it can be done in many, many different ways.

Dr. Jill 50:26

Where can people find you? I know you've got an ebook; we'll be sure to share the link and information. But where can people find your information?

Dr. Tessier 50:33

Sure. Life After Mold—that's the name of the website (lifeaftermold.com); that's the Facebook handle; that's the Instagram handle (@lifeaftermold); that's the YouTube handle. There's a Pinterest in the works, still. So you can find me there. And, I go in and out of ways of engaging my social media and stepping back from it. I do have some videos lined up in the queue. Hopefully, they're released soon.

Dr. Jill 50:59

I would just encourage you all listening to follow us on Instagram. That's where I put a ton of the new [content]—I'm really putting a lot of focus on that. So, Life After Mold, and mine is @drjillcarnahan. Come find us; hit 'follow' there because you'll see all kinds of fun stuff. In fact, we just both posted today on this talk, so I just put it on my story today. Thank you, thank you for this great, jam-packed information! It's always a joy to talk to you. I'll be sure to link up here. We'll see you guys all next time. Thanks again!

Dr. Tessier 51:28

Thank you so much!