Introduction and Guest Background

Welcome to Mold, Mycotoxin, and Chronic Illness. I'm your host, Dr. Ann Shippy. And today we got to talk with Dr. Matthew Pratt-Hyatt. He's got a PhD and cellular and molecular biology.

And his focus is really on gaining the tools so we can have the insights we need to look at how genes and toxicants interact to cause disease. Thank you so much for joining us.

Well, I'm really happy to be here and I really appreciate you being on here and I mean, you've done it. You've done so many things for a real time, like speaking and, you know, and then for the community at large, I mean, you do have as being a practitioner and being a psych a host and disseminating information.

I really appreciate you inviting me to be here. Oh, thank you so much. Yeah, we're on a similar mission, aren't we, With really helping people to get the information that they need to be healthy.

So thanks for being on this mission with me. No worries. I'm happy to do without you. You give me so much the data that I need to really understand what's going on with my patients and to be able to track our progress and all of that.

So I really am truly grateful that you love to do what you do. I really do. I mean, I mean, being a I mean, I was in academia for so long before doing clinical work.

I mean, I did it and I completely I still have the itch for that. So I love doing I like doing research and pulling out data. But I really came into clinical work because I felt like I would I really needed like help more people and I wanted to make sure that my work was making more of a difference than just like showing up in a text book.

So but so I'm happy. I can kind of do both now. Yes. Yeah, that's a you're in a perfect place for you and for us, too. So let's dig in mycotoxin testing. When should we do it?

That's a great question. And it's definitely something I hear a lot from, like, new practitioners, especially like ones that I've been hearing about all but don't really, like, know, like if my patient is a good candidate.

I mean, fatigue, brain fog, gut issues, rashes, reoccurring like sinusitis. Those are like some of the like I mean, more common issues that come across, which can definitely be like caused by other things.

But a lot of times there's like the the underlying cause is mold exposure. Yeah, over and over and over again. So when would you not tech for my perspective is kind of where I've gotten to.

It's like I'm like I'm like, well, are there other things I should look at root cause first and there are sometimes times. Sometimes it's. Explore the gut first.

But then I find, you know, yeast, then I'm like, Oh, there's finally mold. Yeah. I mean, I. I mean, I obviously have like. I mean, I try not to, like, tell people like to test for molds.

I feel like I have a biased.

Who Should Be Tested for Mycotoxins

I don't want to, like, say like, oh, you should definitely be testing for mold because, I mean, obviously that's what I do. I mean, it's one of the big things, but it's definitely avid.

When I first started doing this, I was expecting like maybe like 5% of the patients to have elevated amounts, maybe three, three to was like 3 to 10. Maybe ten would be like the best.

And like it was like 35%, 40% of patients with chronic illness had elevated mycotoxins And it wasn't just like it was like just like a correlation and didn't really have like a causation.

It was like we got rid of the mycotoxins and they got better. So it definitely like showed that the key was the maker. Like the mycotoxins on a lot of patients.

No, honestly, I'm seeing it associated with so many different diseases that I wish we could just make itpart of the annual screening, you know, patients that are going in for preventive medicine that actually check their my toxin levels so they can find out if it's something they need to address before they get sick or if they think it's just part of the aging process that.

Kind of like cholesterol or other things. I mean, yes, I mean, look, we. Have to. Realize that they have like mold in their house because they're like, oh, my house doesn't smell moldy.

It's like really it's only a small subset of molds that actually produce that, like, musty smell. And a lot of them like stachybotrys or Aspergillus don't produce any smell at all and you're still getting the trichothecenes.

And then like, Oh, well, I have a new house and like that doesn't really matter. And actually buying a new house makes you more susceptible to having mold.

So. Yeah, it's, it's, it's problematic. Yeah. All right. So hopefully you listening are hearing like, okay, I want to test for mycotoxins if you haven't already and you'd like to know a little bit more about the testing.

So there are a few different testing modalities out there. Could you explain what they are and what the pros and cons are of each of them? Yeah, and I've used both of them and there are pluses and minuses for, for, for, for a bull are the two main ones are a technology called Elisa which is uses like antibodies to bind directly to the mycotoxins and the other one is called LC-MS, which is liquid chromatography mass spec the benefits for Elisa.

So you can measure both modified and unmodified mycotoxins and the why it's a appeal. Elisa are important for mycotoxins mycotoxins more than like a lot of other toxins are actually modified greatly when they come after they come into the body.

There's a lot of different enzymes that will like add things on to them like sulfur transfer, sulfur transfer as well, and a sulfur group, Lutetium Transferase that's glutathione Ubiquitination add ubiquitin to it.

So there's a lot of like different like markers to these Mycotoxins So it's important. Part of their normal metabolism. So yeah. Because I lose my appetite for yeah, they're lipophilic, so that means that they like to bind to tissues so they don't like to be in liquid and so they don't come out in urine or in feces very easily without modifications.

So when you're measuring them, you have to make sure that you can measure both the modified and unmodified. So, that's way if sometimes if you run two tests side by side, you're thinking that you're going to get the same results.

Then you get actually get different results because the mass spec tests can't pick up the all the toxins because your body might have actually already started to modify them to be able to try to do exactly.

Yeah, yeah, yeah. So if you're running an all lies test in a mass spec test side by side, very rarely that you're going to get the same results. And then any time for the mass spec one, you might actually get like a lot of like negatives where you see positives on the allies.

Testing Methods: ELISA vs LC-MS

That's the I mean but the benefits for LC-MS you can develop a test a lot quicker than Elisa, Elisa it takes a long time to develop those antibodies and sometimes for some mycotoxins it's really difficult to make an antibody that is specific to that particular mycotoxin because some of these toxins mimic other compounds.

So when you make an antibody, you want to make sure that it is. So it's very like for specific to that particular mycotoxin, it also like gives you a good like readout.

So it's very sensitive. So sometimes you need to like use both tasks together because you have mycotoxins that test for you. You can test for Elisa, but then there's other ones that you can't test for Elisa.

You want to use the LC-MS because that's really the only one available now. And that's actually what I do with most of my patients, unless, you know, the finances really aren't there.

And then, you know, we'll have to look at which which mycotoxin we're most concerned about. Would you like to talk a little bit about them? But so and we haven't made this clear that the company that you work for is real time laboratory and that and that would be the Elisa testing which is going to pick up.

That's correct. We we currently use Elisa testing we are actually in the process of developing an LC-MS test as well because. There's good news. There are mycotoxins that we're not measuring on that that we feel are important.

So we're hoping. Development time would just be too long to get. Cards like this out. It's just like we tried it. We can't get an antibody that is specific enough to the particular make a toxin.

And we I mean, part of our lab is like we are very like, I mean, producing accurate results is the most important thing for us now. I mean, profit is always nice, but producing accurate results they're helping people is in our mission statement for our company.

So I want to talk a little bit about interpreting the test results, because this is where it's a little tricky for for patients and often for practitioners.

So, for example, one of my patients that was the sickest when we initially did his mycotoxins test, he tested zero. Yeah. And so then we that's actually when I but I was like, I could tell from his symptoms he was in mold.

He was living in an old farmhouse. He was so neurotoxic. I was like, Let's try. And I and I looked at his glutathione, his glutathione genes I was like, Let's give you some glutathione and and see what happens.

And then he dumped. The. The mycotoxins out. So. So I just want to be cautionary about people getting a negative test server looks acceptable and interpreting it.

They don't have a mold test. And I know you talked to so many different practitioners and probably have some books about this that you'd want to share.

I, you know, I do, yeah. So I've done a lot of research I've worked with law practitioners on and I found through my research that of maybe about 20% of patients that have like a false negative will help with like lupus.

I mean are 20% of negatives are really false negatives And the way that we've like tried to like avoid that is doing like glorify provocation. Now this can be tricky.

I mean, some patients, when they start taking glue with them, get really sick. So you had to I mean, obviously be like working on this with your practitioner.

I try to think is I actually find when I do a really high challenge, I do eight teaspoons of it like this over going to sets, you know, and my normal dose of doing the patients would be like 1 to 2, maybe three teaspoons at that. Yeah.

But what I find is that those patients tolerate that pretty well. Whereas if when I come and do the like just one

teaspoon or half a teaspoon, I'm actually more likely to have people react to it first.

I'm very curious about that. And that that is interesting. It is interesting and you know it. Back when I started doing this, I had it was early in my understanding about using good at I own and treating people.

But I my theory is it just gives people so much such a high antioxidant load that whatever increase inflammation they get from doing that additional detox just kind of gets with the kind of thing I own.

That's I mean, that's very possible. I don't Yeah, I mean it's interesting by overall response there but so back to the provocation. I like I say like to 50 milligrams fire for five days and then I collect on the sixth day generally on the fifth day I recommend like putting in like a soda exercise, hot shower to something like really like it blood flowing through the like the adipose tissue or the muscles to try to, like, make sure that the glass diet has enough chances to, like, bind up any toxins so that we can release like it doesn't really matter.

Like when you're like, doing that first test, I like to get like a complete accurate account of whether or not how much mycotoxin do you have really anything like see of like whether or not your elevated or not?

Because I'll say that like no matter how well we do it, 60% of patients go up at like and I didn't really recommend retesting at three months and at three my time point I see like 60% of patients go from like what I call time zero. So it really doesn't matter how well you propagate Once you start, once you start working for a practitioner and they start getting the like excretion pathways opened up and get things moving, the the values will all frequently go up for like the first, like three to maybe sometimes sometimes up to six months.

How to Interpret Mycotoxin Results

It really it really depends on the patient. But I also like make feel like a lot of patients I like I'll be doing a console of a patient and their doctor and they're like the new or the doctor's new and he doesn't know how.

He doesn't know, like warn his patient all this. And they're like both of are like freaked out that the values are higher but the patient feels a lot better like, oh, I feel so much better, but my values are like, higher.

It's like, that's fine. It's not it's not abnormal. I have I've been doing this for like a decade. I see this all the time. Yeah, it was interesting because I had a patient that I followed up with today that her levels went up quite a bit and, and I and, and so it was, you know, it was actually good news.

Yeah. That, that she's actually able to excrete it better but there can be that I think it's important to get the serial markers to really make sure. What time frame do you think it's important to actually start to see them come down to know that there's not.

You know, like after six months, if they're not coming down, then you have to really, like ask like, am I still early being? I mean, obviously when you a time zero, you really need to be.

I mean if those who get elevated, you need to start addressing your living environment too, right. So so I mean testing your house, testing in your workplace wherever you're spending a lot of time out, if that shows up negative in a six month, you're still like either like plateauing or still going up there.

Obviously, you need to be like, worried about like colonization. That means that like, you've like, breathed in the spore and the spores of like star forming some type of biofilm internal to the body.

If I'm research indicates that like biofilm either like is 40 forming in the sinuses or in the gut, those are the most two, most common areas. And I mean in there like bio botanical as well as farmer, beautiful ways of like treating those two populations of mold.

Yeah. And really that's like. Commonly with the immunosuppression that happens from the mycotoxins. So it is an important thing. Immunosuppression is a is a, is a big thing.

So yeah I mean you it's really hard for the body to fight these mold. Like once it gets colonized, the body really can't fight it because of the immune suppression.

And then also you get to like co-infections with like Clostridia and Candida as well. So yeah, it's, it's, it's, it's tough to like figure out if the gut issues are being caused by mold.

Candida Clostridia I mean, that's the reason why I normally run and note along with the micro talks to try and like better guess of like what the complete picture is.

Yeah, that's great. Yeah. And real time has the test now too, so that's great. Yeah, it is. But I mean there's a big push by me of like, say like, I mean in order for me to like it a big to be able to, like, consult with a doctor on their patient, I need to be able to like, see those results like, say like okay, how are the mitochondria doing, How are what, what is the power of glutamate?

Like, what's the glorified levels? What are neurotransmitters doing? I mean, I really need to like get a more complete picture to see like how do we like support this patient, not just like point out their toxins but support other aspects because the mycotoxins affect so many aspect of health.

It's not just like pulling the toxins out and the patient's better. There's times you have to do other other things as well. Absolutely. It's great to have all these tools working together.

Do you want to talk about is there like when we're looking at these test levels and interpreting them like, what are you what are we shooting for? Where do you think of safe level is?

And it really depends on the person, to be honest with you. I mean, some people are safer than it really depends on how much they make out, how much glue with iron they're making.

So that's one reason why I look at the power of glutamic acid marker, and I really see that in a bimodal state. And you either have your patients that if they have mycotoxins, they're like really high that in a lot of like recycling of glucose iron or they're like close to zero, which means that they either don't make a lot of glue with iron or they are they've like used up all stars, a glorious iron.

So that happens commonly with these toxic exposures, is. That it does. True too through what they have. And then I'll also like do like an environmental polluter profile.

And a lot of times if I see like the glue with iron like the particle tarmac, I could zero I'll see like other other toxins building up as well. Inside the body.

So trying to that the results. Right? That's the question. Ray. And what are we shooting for? Yeah, we're we're shooting for. When we get to be happy.

Generally I try to shoot for no present. Not like not present or recall on all the on all the, on all the results. That's generally I mean, you're going to hit zero.

It's not with, with Mycotoxins being in the food supply, with the toxins being it's small amounts in most homes, you're not going to hit zero. But I mean, it's a fair I mean, over 50%.

I mean, 50% of our patients are below the present level. So I'd say it's definitely like a achievable aspect to hit. I put for you to explain a little bit about why with the trick author's genes, we're looking for like a.07 and others, we're looking for 1.02 so that people understand the potency of the different.

That's the other great point there. So yeah, I mean, it's right, I mean all different Mycotoxins have different levels and it really depends on like how, how much of those mycotoxins are normally seen in patients.

So like all of our present on our present in our presence are kind of like hit at the 50th percentile. But two things are

kind of like that, like outlier where I mean, in our.07 is the 50th percentile, but mold don't produce a lot of triclosan.

Things are bigger, molecules are more complicated. It takes a lot more energy for those molds to make those micro things, but they're also a lot more potent.

That means that they're all more toxic. So it takes a little bit, goes a long way for Tyco's to things. Like I'd describe it, like the Ghost or Ghost Peppers is very much to turn you out.

Yeah, I mean, it's definitely like there's a lot of like analogies and cooking that you don't really need to look at a lot to cause. They cause problems, unfortunately.

So charcoal things are also like hard to like diagnose because like sometimes the patients there are definitely like the ones I see that come out the last when.

So that's the other thing that worries some patients is like, like all the rest of the mycotoxins are going down, but the triclosan scenes start going up because they're too like the most lipophilic of all the mycotoxins.

So a lot of times they're the last ones to start come coming out of the tissues. So like the good the glucose IO binds to okra toxins like the glia toxin, the aflatoxin first in it.

Tracking Progress and Detox Response

But the, the tyco's are like dug in deeper and it's, it's it's there in the last ones die like they're like really holding on tight and it takes them a little it takes the body a little bit longer to get them out.

And that's interesting too. When you're doing a glutathione challenge, you don't get as much of a response. A lot of times with the check out the scenes as you do with some of the other you don't. You don't.

Okay, Well, this is really great information. So anything else you want to say about testing the body and, you know, tracking progress and and really what to look for, those are great, great tips.

So, yeah. I mean testing time zero supported in every like three months, like nine months, 6 to 9 months. If you're not seeing problems of it, start like looking into like doing some type of anti like think about antifungal treatments at that point and then like I guess like the next stage is like also like making sure that we're looking at the house.

Yeah. So let's talk about the house. Yes that's one of the most important things because it's hard to get better if you don't know and I. I was lucky and lucky that I got the idea of a year and a half sabbatical doing home testing and being the scientific advisor for a home, testing the remediation company.

And so I did. I went through a lot of houses and I dug, I went to crawl spaces, I dug through attics. I looked at, I can't see you doing that. I seeing you in your suit and tie and yeah.

I know it was, it was interesting I putting on the like all the, like suit and like all the, like the hood and like this North. Pole. Thank goodness to do that because so many into.

Myself, into some of those attics, some of those that were a tight squeeze for a six foot three individual. Yeah, that's the other reason. Well thank you for putting the protection on because a lot of inspectors don't wear the protective garb.

Yeah, but yeah, so I won't. But I also I thought it was important to me to like, be able to like, learn how to, like, tell people like, what they should be looking for in a like, in a home and like, okay, so you need to be like there's like different like testing modalities.

You got your air testing that's important. I'd be able to like it's cheap. You can do it at multiple spots in the house, kind of give you like an idea of like what is occurring in different parts, like where the, like the biggest concentration

of mold that in the house you can also like do an outside assessment. So you can like to kind of like a comparison of like the outside versus the inside.

The new you I on like do like a test which will I give you like kind of like a DNA that gives you a DNA assessment of like how much like mold is in the house, Like either like dead or not or living mold.

We do something similar to an army where it's called the fungal fungal count defects. It looks at 13 different mold species. They're the most pathogenic.

Then the third thing is doing mycotoxins, which is actually, I think probably the most important, because a lot of times you get these molds, these molds are going to like find themselves like in an architect or in a crawlspace or inside a wall, and they're like reducing mycotoxins because that's like kind of like breathing to them and these mycotoxins are like a thousand times smaller than the spores.

They're less sticky than the spores. So they're going to, like, flow freely through the house. So there's a lot of times where I like I come in, I'm like digging through out the whole house.

I mean, I've like, spent like an hour and a half, 2 hours in the house. I don't really see a whole lot. I know the I know the like, inhabitants are sick.

So I'm like, I'm getting frustrated because I'm not like, seeing anything. I do some air testing. They are testing shows a negative. I do like an army that comes up negative and I get the mycotoxin results back like the next day.

And those are like sky high. That indicates to me that I need to go back into the house. And I'm like, okay, we're going to like, start like looking for like we're going to, like, cut out some like, like three by three, like holes in the wall so I can start, like sticking in cameras and say, like, there's, there's I need we need to dig a little bit deeper now.

This is such great information. I'd love to hear a couple of your stories about where you found the hidden mold from doing this. Like because if you hadn't done the Micro Texan test, you might have just said, Hey, it's not in the house, it must be someplace else.

But by doing the mycotoxin testing, you actually identified that there was a problem there so that you felt willing to cut the holes and that kind of thing.

So if you could share some of that's the success stories with that, that would be amazing. Yeah. I mean, one of these was like it was like a 1980s house family of four little girl is like pretty sick, went through out the house and I knew that she had done testing through real time and I knew that she had like high triclosan scenes in her in our system.

So I was like, okay, I'm looking for Starkey Stark. He's not going to show up in an air test because it's sticky, it's big.

Finding Hidden Mold in the Home

So I'm like looking under her bed. I'm like, looking in the closet. I'm like, look in the attic above her room. I mean, throughout the whole house. And I just, like, didn't see it anywhere.

But then we like, did the mycotoxins and the, like, the toxins were like, really like it was like, pointless. Like we said, like put survey and it was like.27.

So it was like almost like for it was like almost four times higher than what the cutoff was. I was like, okay, this is somewhere this is somewhere else.

And so I was like, okay, well, let me like dig cut a little a couple of holes in there. So she had like a bathroom against one of her. And usually I'll do I always do like an infrared throughout the house.

But the, the infrared didn't show anything because they didn't like oh they weren't like they had like run water for like several days on that bathroom.

So there was it was dry. So I figured out that there was like a leak. There was a leaky pipe in there, but you had to be like running the like when I had gone there last, they had it like, run that sink for like several days.

So there wasn't any like moisture on the outside of the wall. So they were like, I like saw this sink. I saw the micro, the mold growth all around the, the, the back of that wall there and had it like saw it coming through. Yet it was like a very small leak.

I could see like pin by pinprick leak. So like it's just like little bitty drops, but enough like the increased humidity gets the mold going in there.

And I like, took like, I took like a tape sample of it so I could send that to the lab. Like, look at the like, look at, like, what species it was, because there's always a lot of things look like.

I mean, it could be kind of spoiled, which is not toxic at all. So one, I confirm like what it was. Yeah, it was like hundreds maybe. It's like there's unmeasurable amount of my like stack you mattress that was like on the, on that tape sample.

So yeah, I mean we were all like we had to pretty much like remove that almost and that entire wall and then we like, I mean got rid of like all the toxins afterwards.

But yeah, I mean that's one of the like instances that was like I was really thankful for them. The environmental Mycotoxins test. That's such a great story, and especially with Jackie, since it can be such a toxic producer.

Yeah. Okay. Well, and, and I love that you gave this example too, because for those of you listening, it helps you to know who to work with. It's got to be somebody that's willing to do this additional thoughtfulness investigation until they've actually found my answer.

Yes. I mean, yeah. Do you want to, like, make sure that somebody is not going to just come in there and do like three or four air samples and then leave?

I mean, that's unfortunately, I see that so often. And they'll come in like, I'm sorry, cause it's like just in your head. There's no mycotoxins here, there's no mold here.

And yeah, you really need like somebody that is willing to, like, spend the time and the effort because, I mean, is, I mean, it's your fear, it's your health is your family's health.

And that's how I looked at it, too. I mean, I was always like, these are be my kids. This could be my wife. Yeah, this could be my mom. So just like making sure that we were going an extra mile, That's great.

I love it that you had this experience, too, because it really ties together all the pieces of what you're up to now. Yeah, I mean, it allows me to, like, kind of, like, see, like, I, like, I understand, like when, like, I talked to, like, inspectors and remediation.

I can, like, say, like, hey, these are like the things that you need you should be looking for. Or they like, talk to me. It's like, Hey, could you help us, like with our collection methods or so.

I mean, it gives me a little bit of I like better, like I understand the, like the industry a little bit more because I've worked at a lot of doctors, but I hadn't like done like inspection or remediation side of things.

So I really wanted to like understand that that side as well. So when you walked away from that, what did you, what was your impression of the building industry?

Oh yeah. I mean, it's I mean, it's problematic on multiple different areas. I mean, a problem I and one of the things that frustrated me the most is like coming into a situation where there are people that are spent several thousand dollars on remediation house and they did the people before us didn't do a good job and I that always like I really don't want to like take any more of the money but we have we also have bills to pay as well.

So I was like, okay, yeah, we're going to try to like help you out as much as I can. But then like, see also like this, like all the I dealt with a lot of houses that were like one or two years old and I see.

And all the like shortcuts that Bill builders make. I deal with a lot of like homeowners like, oh, we can't have mold. Our house is like one year old.

It's like, it doesn't matter. It does not matter. I. I are the worst. I've been in so many houses that were like six months. One year, two years old, three years old, and huge amount of mold growth.

I mean, either like they didn't like flash things properly or they didn't put it up like they didn't like seal up things or they like built a house while it was raining.

And there were like all the like drywall got where they didn't allow the time to, like, dry out. I mean, so many different like things that could occur in the building of the house that could cause problems later.

And I know, you know, real time Lab is really trying to offer a lot of help with a lot of different things. And one of them is to help people that are doing the testing and need to find a practitioner to work with stuff.

A few sure about that. And then any other things that real time is doing to really help people too. Yeah, I think those are all great. Yeah. So I mean we are on our website, you can under the patients tab, you can find both a practitioner finder as well as an inspector remedied or finder.

Now these are all like the practitioners and inspectors that utilize our testing. So they kind of like understand the mycotoxins are an important part because sometimes you're like, talk to a practitioner and they don't understand how mold and mycotoxin could like relate to chronic illnesses or you're dealing with a mold person.

They don't are they like will like cut things out, but they won't do anything that I treat the mycotoxins afterwards. And is that really like something that they're like worried about?

So you want to but also like take an account that we are like, we are we're doing our best to like check these, these private practitioners, mediators, but also do your own due diligence, like make sure that these people are that they're other like people are giving them good advice because somebody is like, we hear a lot of complaints by somebody or move them, but sometimes it takes a while for us to hear those. So other things that would take.

Place to start interviewing people. Yeah. Yeah. Other thing that we're doing a lot of borrow like we're doing a lot of research with practitioners is work as well as other academics.

Real Time Lab Resources and Closing

It's important for us to like to figure out what the best treatment modalities are, as well as getting out more research of how mycotoxins could affect different illnesses.

So that's the other like aspect of that we're trying to do of like giving cheap tests to practitioners and researchers that are doing clinical research.

That's so important because those studies just don't get funded other places. So doing that collaboration, I'm super grateful. Yeah, well we, we did we do what we can to help.

I mean, so yeah, those are like the biggest things that we're doing. I try to like help the community as well, but besides, like giving the test that we feel are the most useful, I mean, obviously we're trying to like expand as much

as possible because we know that there's a lot of tests that can give insight into chronic illness.

So yeah, but we had our like a toxin test for like 15 years, but now we're doing organic assets, we're doing our environmental pollutants, we're doing glyphosate, we're trying to like add more tests because we know that other like piece to the puzzle and that mold isn't the only driver of chronic illness.

And so true, those of us that don't detoxify that great or have had big mold exposures, often we've had exposures to other things that have built up our barrel and then the molds, just the tipping point.

Yeah. And it's fun too, as we're working on the mold to see these other things come down to. Yes, definitely. I mean, it all comes down to it. Sometimes it's not mold, sometimes it's like I mean, sometimes it's benzene exposure or sometimes it's glyphosate exposure or sometimes it's like phthalates.

I mean, we want to like, make sure that we're like covering a lot of the like different like checkmarks out there. Like what are we seeing in the community that's causing like lots of, like lots of people to like, show up to the doctor or especially they're like traditional doctor.

They've been like, go into this person for like two or three years, not get any better. Now they come to their integrative, functional practitioner and now we can like try to like saw like solve the underlying causes, which I think is like kind of like the hallmark of our industry.

Well said. Well said. And then I think you have something special for our listeners that want to do a urine mycotoxin test. Yes, I mean, we are we have a discount here for for your patients.

It's going to be DRT50 be able to like utilize that to get a discount for $50 off a clinical mycotoxin test. That's really helpful. That's great. So if people have been hesitant to go ahead and invest in that, that's a great place to start.

Yeah. So I mean, generally our test is 399so that you can get for 349, we don't offer a lot discounts. So this is like one of the like few, a few ways that practitioner or a patient can like order our test and get a discount.

That's very much appreciated. Thank you so much on that. It's just such a delight to see all these things that you're bringing together with real time lab to really help people get better, get to the root cause and get better and and follow their treatment progress.

So thanks so much for bringing your your brilliance and your big heart and all your experience to really special place. Well, thank you very much. I was happy to be here and and I really appreciate your time.

I appreciate yours. Thanks so much. And I look forward to more collaborations and really helping you with the research, too. Oh, definitely know. I look forward to it.

Thank you so much.