Inspecting Mold inside and outside the body

Eric Gordon, M.D. interviewing
Matthew Pratt-Hyatt, PhD

Eric Gordon, M.D.
Hello everyone, welcome to Mycotoxins and Chronic Illness. 2.0. Last year, we started with our first summit and mycotoxins and their contribution to people who have chronic illness continues to be an unfolding area. And today, it's my pleasure to talk to Dr. Matt Pryatt. Matt Hyatt-Pratt. I always wanna put your name in a different order. And what's really exciting is, you have been at the forefront of this. I mean, you're one of the people who helped really bring the science to looking for mold and now treating mold, and treating the mycotoxins which is really, really the important issue. So many, so many, so many people think they've treated their homes and are still having problems. And so what we're gonna talk about today is ways to be certain that you have cleaned up the mycotoxins. And just a little more background on Dr. Pratt-Hyatt, he has a PhD in molecular biology, and he's someone who really brought the mass spec to help us into the world of looking at the levels that patients are excreting of mycotoxins, and one of the few people who worked with both of the major companies that do the measurements, both Great Plains and Realtime, and is now working with The Mold Pros and helping clean up the environment. It's one thing to find the problem, but it's another thing to know what to do. And what hopefully you're gonna hear by the end, throughout our conversation is what molds to be worried about and what to do about them if they're still in your house, and how to know if they're still there. So first of all, Matt, if you could give a little background

just on how, what you feel are the strong suits of the testing that people can do, both on themselves and in their homes?

Matthew Pratt-Hyatt, PhD
Yeah, so there's definitely a progression that I often write about in my blogs about starting from being the sick individual to pulling off the layers of what's causing and getting down to the underlying layers of what's actually leading into the illness, which has really led me into the mold field pretty heavily of finding all these patients that are dealing with chronic illnesses, and then pulling the layers away and then finding mold at the bottom, at the root for a lot of these patients, which was really surprising to me. I was expecting maybe like three to 6% of patients would be this. It was more like 33 to 40% of patients were really the root cause of their chronic illnesses was mold exposure. So I find that part of the early test is doing a urine test. And there's definitely pluses and minuses for both of the major companies out there for both of their test, both ELISA and mass spec have pluses and minuses that we've talked about numerous times about what those pluses and minuses are. And I've also wrote about the pluses and minuses for both of those tests.

Eric Gordon, M.D.
Yeah, and I think one of the things, we'll make sure there are links so people can read some of your blogs, because that'll give them some real background. I think that would be great.

Matthew Pratt-Hyatt, PhD
Yeah, I would really appreciate that. 'Cause I think I've wrote a quite a bit, and actually, I have a new article coming out or I have an article in "Townsend", talking about these things too. It'll already be out when this gets published.

Eric Gordon, M.D.
Right. Right. Okay, that's great. That's the "Townsend Letter", which you can all find online.

Matthew Pratt-Hyatt, PhD
So yeah, doing a urine test is the next step 'cause that'll tell you whether or not, 'cause a lot of different things could be causing illnesses, you very well know and a lot of people know. I mean, you got genetic problems, you got mold, you got environmental toxins, you got heavy metals. I mean, the list goes on and on.

Eric Gordon, M.D.
And just as an aside, I mean, one of the things that I believe, that many of the chronic infections are what unmask or produce the sensitivity to the mycotoxins. Because I feel most of us, most people, mycotoxins are ubiquitous in the environment. I mean, correct me if I'm wrong, but that's always been my feeling is that they're out there.

Matthew Pratt-Hyatt, PhD
Well, they are and in small amounts. As Paracelsus says, the poison is in the dose.

Eric Gordon, M.D.
Yes.

Matthew Pratt-Hyatt, PhD
So the dose makes a poison and so it really depends on levels. Like you said, everybody's getting exposed to some mycotoxins every day. But it's always about how much and how well each individual's, their cup is different sizes. Some people might have like a big gallon cup and the other people might have a nice little teaspoon cup. It really depends on how much mycotoxins their body can hold and get rid of. So that's the next level and the level after that, once you figure out, they're like, oh, I'm excreting really high amounts of mycotoxins. Or that might not even be it. Sometimes I can look at different tests and I can say, like, your mitochondria levels are really high or your glutathione is getting extremely used up or you're showing a lot of inflammation. Those are kind of warning signs that mycotoxins might be a problem and you're not excreting it. Sometimes, if you're a really good practitioner, they'll be able to see some of these warning signs and say, okay, well, we don't see this but it might still be this. 'Cause mycotoxins, I'd say probably about 20% or 25% of the clients that I've helped consult with with practitioners, in our initial test, they

aren't excreting a very high amount of mycotoxins, but after we start treating them, three months down the line, the mycotoxins are what we call through the roof, are extremely high. So sometimes in your initial test, it doesn't always say that. But then after that, I recommend people go into having a really good inspector come into their home, look for water, look for bacterial problems and they'll look for mold problems and VOCs. Those are like the big four that I really worry about, water, bacteria, mold, and VOCs.

Eric Gordon, M.D.
Right, and that's something, I wonder, if you could touch on? Dr. Shoemaker has been feeling very strongly that the Actinomyces and some of the other bacteria are producing chemicals that are just as toxic as the mycotoxins.

Matthew Pratt-Hyatt, PhD
Yeah, I'm very familiar with Dr. Shoemaker's work and that's the reason why our company over the last year started bringing in Actinomyces and endotoxin testing and treatment into homes. And I would definitely say that's a significant part of our work that we do, and we do that across the country. And we work with a lot of different practitioners, trying to make sure that we are doing the right test and doing the right treatment to make sure that we're not just getting rid of the problem one time, but making sure that it's staying gone.

Eric Gordon, M.D.
Right. Right. Right. That is so important because I think one of the most difficult things for people with chronic illness is to realize that it's rarely one thing, one exposure, one bug, and one genetic issue. I mean, usually it's a multitude of, sometimes each issue can be small. As you said, the ability to have enough glutathione to be able to, or just either glucuronidation, sulfation, all these different detox pathways that many people are familiar with, they all can be stressed by different things in the environment.

Matthew Pratt-Hyatt, PhD
That's correct. One thing I wanna touch on that you kinda talked about before, but and then just to talk about now is other diseases, comorbidities that are coming along. And through my research at Great Plains, I have published showing that about 60% of patients with mycotoxins had candida along with it. And then about 80% of them had Clostridia. And I think that I didn't have the proper tests to look at this, but I would say that you would probably see a very similar thing with Lyme patients as well, of patients that are really expressing a lot of symptoms of Lyme disease probably have, a lot of them have high mold toxin exposures as well.

Eric Gordon, M.D.
Yeah, I mean, as I said, I never was a 100% sure of the science, but it just looks like that after Lyme, especially Lyme that has either stayed in your body a long time, like many bacteria and parasites, they change your immune system in order to make it a little better for them. And one of the things it seems to do is it increases some of the cytokines that will diminish your body's ability to deal with the mold. At least, I've often thought this, and correct me if I'm mistaken, that you have the metabolic pathways that deal with the mycotoxin but you also have immune system that combine some of the mycotoxins.

Matthew Pratt-Hyatt, PhD
That's very correct. And yeah, I mean, especially people with my work have been starting to be aware of the mycophenolic acid that these mold toxins or mold species produce. And that is actually used, like it's a brand name pharmaceutical called CellCept that they use in organ transplants and lupus. And so, yeah, I mean, molds are very good at docking out the immune system for their benefit as well as benefits of other organisms as well such as that.

Eric Gordon, M.D.
Yeah. So, I mean, we're gonna talk in some detail about what you can do for your home to clean it up, but I just think it's important to remember that if you're still having symptoms, it's usually a multi-layered process.

Matthew Pratt-Hyatt, PhD
Exactly, definitely. Yeah.

Eric Gordon, M.D.
And I think that's why you'll find that you may be ill, and significantly ill, and you're living in a household where there are three or four other people who are at the moment, asymptomatic, 'cause it just depends on how many things are putting weight on that detox pathway and on the immune system.

Matthew Pratt-Hyatt, PhD
Right.

Eric Gordon, M.D.
So while we're talking about the different mycotoxins that we currently are able to measure, and hopefully that number will increase and we'll get to the level of where the veterinarians are. They, I think have access to even more information about their patients than we often do taking care of people. So you mentioned the mycophenolic acid, that's very important. What are the other mold toxins that you think cause the most, well, it's two things, cause the most immune issues, and which ones do you think cause the most direct, if you will, neurologic toxic effects?

Matthew Pratt-Hyatt, PhD
Yeah, well it's two different questions that I think that you're asking here. It's like, which ones are the most toxic and which ones are the most prevalent? So the ones that are the most toxic are your trichothecenes. So you're looking at Roridin E, Roridin A, B, anything that's produced by Stachybotrys is extremely toxic and extremely toxic towards both the immune system as well as the nervous system. But then the ones that are the most prevalent, you're looking at your ochratoxin and your aflatoxin are probably your most prevalent, and probably gliotoxin as well. Those three are probably your most prevalent toxins that you're gonna see. And you're gonna see those in higher quantities in people, but people can deal with those a little bit more, the body is able to process them and remove them easier.

Eric Gordon, M.D.
Right, and you just mentioned, so things like the ochratoxin and the aflatoxin, these are often also very prevalent in foods?

Matthew Pratt-Hyatt, PhD
That's correct in small amounts, small amounts.

Eric Gordon, M.D.
Right, and I think that really is, I think, an important issue that you've noted, that if these levels are found in low levels, they may not be signaling. For a lot of people they can just be background, they can just be food exposure. It's just as those numbers get higher that we start leaving the food exposure and start feeling it's more environmental?

Matthew Pratt-Hyatt, PhD
That's correct, and that's been my experience in research it shows so far of looking at your end results and then pairing those with environmental mycotoxins. For most of the time when they're high, you see a very high correlation between the two of them. The only time they're not correlated is on those initial values that you get at 0.0 which I call it. We call it like the baseline. Sometimes those don't match very well, but then once we get to the three-month and six-month time points, then they match up a lot better.

Eric Gordon, M.D.
So you mean as people are having some support in their ability to detox, you start to see those numbers go up?

Matthew Pratt-Hyatt, PhD
Yeah, I mean, glutathione, sauna, binders, things that are going to pull out the toxins, yeah, you're gonna start getting numbers that represent what's actually going on inside their body.

Eric Gordon, M.D.
Right.

Matthew Pratt-Hyatt, PhD
One thing I frequently talk about when I'm dealing with mold toxins is the iceberg effect. Anytime you're doing your first reading, always they're very peak of the iceberg. Maybe I'll figure out what's underneath it, this sometimes takes some work.

Eric Gordon, M.D.
Okay, yeah. That I think is important because I know when I first started doing this, we would make the error of thinking, if there was nothing there initially, it was very low, not realizing how important it is to repeat the test after you've given support to the detoxing.

Matthew Pratt-Hyatt, PhD
Yes, definitely. Very true. And I've luckily worked with a lot of practitioners that do a lot of repeat testing over time, so I've been able to look through the process. You see a nice bell curve for a lot of patients where it starts at one point, it goes up and then after some point it starts going down. So it's very nice. I've worked with a lot of them where I can see a lot of time points in the progression in their patient's treatment.

Eric Gordon, M.D.
Right, that is so important. And just, do you find, I mean, the gliotoxin, that's something that we often see in people who are maybe a little less symptomatic. What's your feeling about the gliotoxin levels, anything in particular that stands out?

Matthew Pratt-Hyatt, PhD
The gliotoxin's probably the least toxic. I mean, I'm not gonna say that it's not toxic, but least toxic of all the mycotoxins. That's not 100% true. Mycophenolic acid is the least toxic of all the mycotoxins because it doesn't really have any toxic effects at all. All it does is impair the immune system which is not entirely great for most people, 'cause then it leads to those other diseases that come in after it like the bacterials and the other fungal infections and so on and so on.

Eric Gordon, M.D.
As far as direct neurotoxicity, that's gonna be your least, okay.

Matthew Pratt-Hyatt, PhD
Yeah. Mychophenolic acid, yeah.

Eric Gordon, M.D.
Right. Right. And the trichothecenes are on the kind of other extreme or a little bit more directly toxic.

Matthew Pratt-Hyatt, PhD
The other one that we're not even talking about here is Zearolone which is toxic in its own way 'cause it's one of the biggest estrogen mimickers that you're going to see produced in nature. So it causes a lot of problems in patients, especially women with the right menstrual cycles and ovulation cycles. I've worked with a lot of OB-GYNs and fertility specialists to try to pull Zearolone out of their male and female patients. 'Cause the men, it causes low sperm count, and in women, it affects their ability to get pregnant.

Eric Gordon, M.D.
Yeah, this is something I hadn't thought of because one of the things we see quite a bit is in young men, people in their 30s and 40s where their aromatase seem, well, we always thought it was always the aromatase enzyme that was increasing the estrogens and lowering their testosterone, and so we could have some mimicry here and having more of an estrogen effect?

Matthew Pratt-Hyatt, PhD
Oh definitely, yeah. No, if you're having a patient with low T values, I would definitely measure their urinary mycotoxins to rule out Zearolone exposure.

Eric Gordon, M.D.
Okay, that I think is really, I mean, it's always interesting that in medicine, we often start with the, I don't wanna say the obvious but the big effect, and then as we unpack and we realize that there's more and more subtle effects that have a cascade on just well-being.

Matthew Pratt-Hyatt, PhD
Yes.

Eric Gordon, M.D.
That is really interesting. Since most of the exposure that people are gonna have are either in their home or their work that are significant, and over the years what's frustrated many, many people is they spent a fortune on a home renovation, cleaning up after mold exposure, and yet they're still symptomatic. And I think something that you've spoken about is how important it is to make sure that the mycotoxins are gone, not just the mold that produce them.

Matthew Pratt-Hyatt, PhD
Exactly. Exactly.

Eric Gordon, M.D.
Tell us, walk us through how your company looks, evaluates this?

Matthew Pratt-Hyatt, PhD
Yeah, that's a great question. So yeah, so we start, I mean, our company started about 2009 and we really saw that people were spending 30, 40, $50,000 and pretty much just tearing out everything in their home, throwing everything away, pretty much just starting from scratch which was pretty detrimental to them. And so a lot of times people can't even do that. They're like, I can't afford to throw all of my stuff away. So we saw some papers showing, and you talked about the animal industry and their ability to test. Well, one thing they are starting to do for animal feed is putting these enzymes on the food and the enzymes degrade the mycotoxins. So these are enzymes, they are purified from bacterial sources, are completely safe to all

mammalian organisms, so humans, cows, it's safe for everybody, so there's no toxic effects to them. So they sprayed these on the crops and the crops were completely gone of mycotoxins. So we started to say, well, we can utilize that in a home environment. So that's where we started at. And so for our inspections, where we come in is we do what we call an MMT, which is mold, microbes. Sorry, no, it's moisture, microbes and toxins. So you're looking for moisture. So all the things that we're looking for here, moisture is going to be the base of it. If you're looking for mold, if you're looking for actinomycetes, it's always moisture. Where is the microbe getting moisture from? Is it getting it from a water leak such as the roof or from a faucet or plumbing that's having problems? Is it coming from condensation from the HVAC system? Places like Arizona they'll say, there's no mold in Arizona 'cause it's so dry. Well, it's always hot there too and the ACs are always running, and those ACs can produce a lot of condensation which could then lead to water. Water inside the home leads to mold. So I'd say that I've dealt with so many homes in Arizona that have mold to it. So no part of the country is immune to mold.

Eric Gordon, M.D.
Yes, we've found that a lot of people have moved in search of the drier climate. But they forget, it's usually hot and dry.

Matthew Pratt-Hyatt, PhD
Yeah.

Eric Gordon, M.D.
Yeah. Yeah, I know. So when you find this, what's different about your approach?

Matthew Pratt-Hyatt, PhD
So our approach is, we do as little amount of pull-out or tear-out as possible. So because we do three different things. We do some tear-out. We try and do as much abrasion which like a sanding, connected to a ULPA vac. So we use ULPA vacs instead of HEPA, 'cause ULPA is three times better. It's ultra filtration instead of high filtration. So instead of 0.3 microns, we pull out 0.1 microns. So it's really good. A lot of times we're trying and get those spores or get into what's called the hyphal

fragments. And hyphal fragments are like, when mold is growing on wood it kind of forms what you call the roots of the mold system. And the hyphal fragments start growing into the wood and if you don't want the mold to come back, you need to sand the wood down about 1/16th of an inch and that's the reason why we do that. So we do a lot of sanding to get those hyphal fragments out. We use a ULPA filtration to get all the hyphal fragment dust away so it's not floating around the home. And then lastly we do what we call, we do a enzymatic sandwich where the enzymes are the bread. We fog and wipe down all the surfaces with our enzymatic blend that is completely no-toxic. And then we ULPA vacuum the whole house and then we do a second layer of our enzymatic blend on the whole house. And usually within an hour or two, then we show them through test results worked through third-party labs. In about an hour you have complete degradation of the mycotoxins. We usually ask the clients to stay out of the house overnight, just to allow everything not to be disturbed while the enzymes are degrading all the mycotoxins. And the other great thing about our house is, like, I've dealt with so many patients that have SIRS, which is a chronic inflammatory response syndrome. They are so sensitive to all types of perfumes, anything that produces a VOC. We don't introduce any VOCs into the homes. So we can degrade all the mycotoxins, make it as safe as we can, and not introduce any additional chemicals into the home.

Eric Gordon, M.D.
Yeah, that's so important. Because what we talk about a lot is the immune system, once it gets really activated, everything begins to feel like danger, anything. And so that's why people start reacting to things and they think they have allergies, and it's not allergy, it's just noise. It's like when people are very sensitive to sound or sensitive to visuals, well, your sense of smell is probably the most primitive chemical sensory system we have. And it really can be unregulated terribly and it's all just there to protect you. But it gets so overprotective that it doesn't let anybody in. It's like a frightened baby, he doesn't want anybody but mamma.

Matthew Pratt-Hyatt, PhD
That's very true. Yeah, it's exactly right.

Eric Gordon, M.D.
So that's so important because that's one of the things that we're always concerned about is any introduction of a new chemical to supposedly clean things up.

Matthew Pratt-Hyatt, PhD
Yeah, so we don't use any chemicals besides our enzymatic blend to treat mold and mycotoxins. We actually have a guarantee. We do a complete treatment to a home and we'll do post-testing. We'll do environmental mycotoxins and do a PCR for spores and if we see elevated levels in either of those, we come back and retreat the house for no additional cost. That's up to them. We're very confident in our work.

Eric Gordon, M.D.
Okay, and you mentioned, so one of the things when you're looking, what testing do you use to look for the VOCs and other kind of things that aren't just the molds?

Matthew Pratt-Hyatt, PhD
Yeah, that's another great question. So the first thing we're looking for is moisture and the way that we do that is we use moisture meters and we use infrared cameras throughout the house, looking for moisture. Therefore, the microbes, we do PCR test for mold and we can do it for, we can do it for Actinomyces as well. We'll run like an ERMI test. And then for the mycotoxins, we run what is an EMMA test, E-M-M-A, and that looks for environmental mycotoxins. And I've really liked doing that one because I'd say that a third of the time where there is high mold in the home, we don't see it through the ERMI because the mold is trapped behind some type of structure, trapped behind a wall, especially like stachybotrys. Stachybotrys is so sticky, so big, it doesn't float through the home. So it only really stays in one spot in the house which is good for treatment. Once you find it, it's easy to treat it. But sometimes it's hard to find it because it's stuck inside a wall but it's releasing all these toxins that are moving throughout the house that's hurting the occupants but they don't even know it because they can't smell it. So they're not smelling the toxin, they're not seeing the toxin but they're sick. But then we run an EMMA and we see high trichos or there's stachy somewhere in this house. So then we'll start sticking cameras into the walls. We usually like doing a borescope. It's kind of like those things that you do

for a colonoscopy. You'll stick it in there and it's got fiber optics in it, so you can look behind corners. You can try figure out where the mold is at in the home.

Eric Gordon, M.D.
Yeah. So what's really interesting, so that EMMA test can help explain for people, who, their ERMI looks pretty good, but they're still having problems?

Matthew Pratt-Hyatt, PhD
Exactly, yeah. And that's the reason why I consult with a lot of our clients is 'cause they'll see an ERMI that they had done which showed normal environmental amounts, but then we do an EMMA test and we see huge amounts of either gliotoxin, ochratoxin or trichos and you're like, why did this not match up? And I had to explain to them the differences between mycotoxins and mold spores and why you can see one without the other sometimes. And usually like I said, it's about 30% of the time that occurs.

Eric Gordon, M.D.
Yeah, I think that's an important point just to reemphasize for folks is that mold is what produces the mycotoxins, but the mycotoxins can persist when the mold is gone.

Matthew Pratt-Hyatt, PhD
Exactly, and that's like 20% of our business is, somebody comes in, does a really cheap pull-out. They'll rip out some walls. They'll take out the drywall and then the patients actually get worse after that occurs because what they did is they pulled out all the spores and they pulled out the mold but then the mycotoxins which were somewhat stuck behind that structure are now completely in the living space and nothing was done to treat them.

Eric Gordon, M.D.
To clean that up, yeah. And you mentioned, one other thing that I thought was very interesting, so if you pull the drywall off and you treat, let's say, with some chemical

or a fungicide, the wood, but you might not get the deep roots of the fungus, is that possible?

Matthew Pratt-Hyatt, PhD
Yeah, that's totally possible too. I mean, yeah, if the company comes in and doesn't abrade the wood underneath, especially like the two by fours and the structure of the home.

Eric Gordon, M.D.
Yeah, that's what I'm talking about.

Matthew Pratt-Hyatt, PhD
Then you could be like, then when you put new drywall up, which also happens occasionally. We're like, okay, so you put new drywall up but didn't abrade. We pulled all of the new drywall down like six months later and there's spots all over the wood because the mold just came back.

Eric Gordon, M.D.
Wow. Unfortunately, I think this is, I think, maybe not common, but not an uncommon story. And it's just so upsetting 'cause people spend so much money because they know once you say it's a mold problem in many states, the renovation gets very expensive.

Matthew Pratt-Hyatt, PhD
Yeah. That's like the hardest part of my job is I'll come in and talk to clients that have already spent like 3,000, 8,000, 12,000 on a project, didn't really get it done right. Luckily for us, what we try to do is we try to right-size the project. We try to do as minimal amount as possible to make their home safer and so that they can move back. That means that we do limited tear-out. We make it so that people don't really have to throw out as much, as little as they can. Sometimes books will have to be thrown out. Those are probably like the biggest issue that we have is paper products because our treatment is liquid-based. But any type of cloth or carpeting, we're really

good with those type of things. So pillows, clothing, people don't really need to throw out their clothes.

Eric Gordon, M.D.
Books and papers, yeah, that's so classic. I have so many patients that have boxed everything up and put them in storage, and then a year later they decide, oh, I need that. And they open that box and they are sick really quick.

Matthew Pratt-Hyatt, PhD
I really recommend, if people really need it. That's one of the biggest questions I get is, okay, I'll put it into a Tupperware box and then take it out into your backyard and open it up there, somewhere that has really good ventilation. Maybe wear a mask while you're doing it.

Eric Gordon, M.D.
'Yes. Yes.

Matthew Pratt-Hyatt, PhD
But only if you really need it. I mean, like tax documents, family photos, whatever it is. Just try to minimize your exposure as much as they can.

Eric Gordon, M.D.
Right. Right. Is there any treatment that you know of that can work on papers and photos that doesn't degrade them?

Matthew Pratt-Hyatt, PhD
I don't know for sure. This is a complete guess 'cause I don't have any data to back it up, but maybe Ozone could work on something. 'Cause some people use Ozone to kill mold.

Eric Gordon, M.D.
Yeah.

Matthew Pratt-Hyatt, PhD
Well, Ozone's not gonna work if it's mycotoxins. What's gonna work against mycotoxins? Ozones might work against mycotoxins that have very small areas at high concentration. So maybe Ozone might work. I wouldn't use it for a whole house 'cause you could never get it concentrated enough to be functional in a whole house. But if you have it somewhere in a two by two box that you can put some papers into, flood it with 80 to 90% Ozone and that might work. But I don't know.

Eric Gordon, M.D.
Because you have to be careful 'cause a long, long time ago we used to use Ozone, and the problem with Ozone is that it is so reactive that if you get high enough concentrations, you can affect materials, some leathers and things. So yeah, it's tricky. It's best to be avoided.

Matthew Pratt-Hyatt, PhD
Definitely.

Eric Gordon, M.D.
Yeah, okay but it's just nice to know that people shouldn't give up. 'Cause as I said, I have so many folks who feel hopeless because they had their homes renovated and either immediately, or often, six months later, a year later they're back to being symptomatic again. And I think you've explained a lot of the reasons behind it, is lots of times it gets renovated and people just wipe down the wood.

Matthew Pratt-Hyatt, PhD
Yeah.

Eric Gordon, M.D.
You know. I mean, the two by fours. Lots of times, I've seen lots of places where people have shown me pictures of their renovations where they've just ripped off the plywood, the drywall, and literally just touched up places where they thought they saw something on the wood and then just put the drywall back up.

Matthew Pratt-Hyatt, PhD
Yeah, it happens so often unfortunately.

Eric Gordon, M.D.
Yeah, this is important and I wish we could get it out to more contractors 'cause most of them are trying to do a really good job.

Matthew Pratt-Hyatt, PhD
I believe so. Instead, the education is so minimal. That's something like no matter who, no matter where, we hire a lot of people from other mold companies and we really have to retrain all of them to our techniques when they come on board 'cause our techniques are different than other company's techniques.

Eric Gordon, M.D.
I think, 'cause the emphasis is that you folks are emphasizing on the mycotoxins, okay. So many companies, and again, and it's not because they're looking to rip people off, it's just the knowledge base isn't there. They're just focused on the mold.

Matthew Pratt-Hyatt, PhD
Exactly.

Eric Gordon, M.D.
They think if they got the mold done, they've done their job. And they just don't realize that mycotoxins are not molds, they're the byproducts.

Matthew Pratt-Hyatt, PhD
Yeah, they're not alive, they're just the byproducts.

Eric Gordon, M.D.
Yeah.

Matthew Pratt-Hyatt, PhD
You can't kill them.

Eric Gordon, M.D.
You can't kill them. But you can dissolve, well, not quite dissolve, degrade them.

Matthew Pratt-Hyatt, PhD
Yes, degrade them into parts that are not toxic any longer.

Eric Gordon, M.D.
Right. Right. Right, you need the whole molecule. Okay, that is it. So just going through, now, as far as that EMMA test, I mean, is that something people can, if they wanna just look on their own first? Lots of people are in that place where they're not sure, they're kind of overwhelmed with the idea that they're gonna have to treat their house. Are there tests that you feel that people can at least get an idea if they're in the right pew?

Matthew Pratt-Hyatt, PhD
Yeah, they can order an ERMI or an EMMA. I know you get, like, it's E-M-M-A. If you just Google that, you're gonna be able to find a lab that sells that test and you'll be able to purchase it anywhere in the country. They'll mail it to you. You can run it in your own home. Generally, I would recommend collecting dust from the baseboards around your house. You're gonna want to run it, try two to three rooms and run it along the baseboards of your home. Another thing that you can do is collect dust from your HVAC filter. Most of the air throughout your home goes through your HVAC filter so it's a good representation of the air quality of your house.

Eric Gordon, M.D.
I think one of the reasons why it's always nice to have professionals is because what we often forget is that different mycotoxins may precipitate at different levels in the house, different surfaces. We often just think about, like you said, the baseboards or a surface here and there and you can easily miss it if you're not aware of the airflow in your home. Something that we should be paying more attention in these days of COVID is airflow really matters.

Matthew Pratt-Hyatt, PhD
It does so much.

Eric Gordon, M.D.
That's one of the complaints I think a lot of people who use air filter, air filtration units in their house don't realize is that when you keep an air filter in one spot, even if it has a fan, you set up a flow but you can be cleaning the air, but if you're not disturbing the air in the whole room, lots of things have settled out in places. And so when you walk around you'll start moving them again and it might not get into your airflow. Especially some of the portable units, they just sit in one spot.

Matthew Pratt-Hyatt, PhD
That's exactly right. That's good insight.

Eric Gordon, M.D.
No, it's hard. We have to go to open air living again. That's it. I mean, over the last 50 years, I think that's the thing, as we've tightened up our homes so much, we've made this problem, I think, significantly worse.

Matthew Pratt-Hyatt, PhD
Hey, especially VOCs. We have so many things that we buy from stores nowadays that it's great VOCs. And that's one thing that we do measure. Sometimes we find a home does not have high mycotoxins or endotoxins, but some item they've purchased or they've fixed up their grandma's cabinet and they sent it somewhere and it got revarnished or something like that or they bought a new car, a rug. And so we'll come in and we'll take VOC readings throughout the house and say, okay, this room has this amount. This other room has this other amount. And these amounts are safe. This amount is problematic. That helps us identify where the source is of the high VOCs. So I'd say maybe 5% of the homes that we look at don't have any mold or bacterial problems at all, it's some other issue.

Eric Gordon, M.D.
Right. Right. Yeah, going back to the tight home, the VOCs are probably, especially with all the synthetic materials we're using and all the pressed wood materials. Yeah, they might be cheap but they might cost you your health.

Matthew Pratt-Hyatt, PhD
Exactly. Definitely.

Eric Gordon, M.D.
We have that problem quite a bit. Okay. So The Mold Pros, so you are in most states, you said almost every state in America?

Matthew Pratt-Hyatt, PhD
We're in 49 different states. We're not licensed in New York. But we have a website and it'll help you find the branch that is closest to your home.

Eric Gordon, M.D.
Okay, and it's nice to know that. And you train the folks who are doing the work? So people, they're all not gonna have your knowledge base but you've imparted quite a bit?

Matthew Pratt-Hyatt, PhD
Actually, so we have something called TMPU through our company. It's only open for our employees. But actually, I worked with our team to build that training for all of our employees.

Eric Gordon, M.D.
Oh, excellent.

Matthew Pratt-Hyatt, PhD
And I talk to every single employee personally. So all the inspectors, all the remediators, all the branch managers, all of them are communicating with me,

especially on something that they're not familiar with. So as being a scientific advisor for the whole company, I have nationwide touch with everything.

Eric Gordon, M.D.
That is so important because I just think the longer I am treating people with mold illnesses, how do you say, just, the more impressed I am at how different the presentations can be and how many different systems they can affect. There are so many molds out there. I mean, just learning about them as we discover which ones are causing us problems, and the fact that you're training people and thinking about mold and mycotoxins. I have to emphasize that again, mold and mycotoxins, I think we have to publicize that more. I can't say it enough times 'cause I have so many people, I went in and I didn't smell any mold. How come I'm still sick? Yeah. Not all molds produce VOCs that are detectable by our sinuses. So not all of them produce smells that you're gonna be able to identify. Actually, a very few number of them do. So, I mean, just 'cause you're not smelling a musty smell in your home does not mean that it's safe.

Matthew Pratt-Hyatt, PhD
Yeah, I think that's so important. You have to remind people, just like you can't smell carbon monoxide. Yeah, and the only reason you smell the gas is because they put stuff in it to make it smell.

Eric Gordon, M.D.
Exactly. That's right.

Matthew Pratt-Hyatt, PhD
We have to teach all molds to make smelly stuff. I wish. I wish they did, they would make our lives a lot easier.

Eric Gordon, M.D.
Okay, so once again, it's high level of suspicion if you at any place where there's any hint of water damage. And I think the important thing is the air conditioning units

and the refrigerators, we forget they all produce moisture. That's how they work. I mean, when they work they get condensation.

Matthew Pratt-Hyatt, PhD
In the blog post at our website, I produced one as the 10 most common places to find in your home. So you're looking at attics, crawlspaces, basements, bathrooms, kitchens, behind walls, HVACs, ducts. There's two more that I'm missing.

Eric Gordon, M.D.
Actually, I had a last very important question and it just slipped my mind. I'll have to come back to it. Before we go I want to see if it'll come back. Come back little idea. Oh no, it's gone. Too bad, 'cause it was, gone. 'Cause mold, just the suspicion of mold is what we have to keep in mind, I think, for all patients. I go, if you have symptoms that whacks in a way, I think my simplest thing is that if you leave, if you get to take a vacation someplace else and you feel a lot better after a week or so, think about mold and mycotoxins.

Matthew Pratt-Hyatt, PhD
Definitely.

Eric Gordon, M.D.
Yeah, if you can just get to a beach and just sit near the water where the wind is coming in off the ocean, there's a good chance you're gonna be in a fairly mold-free environment for a while and mycotoxin-free and see what happens.

Matthew Pratt-Hyatt, PhD
There's a long list of symptoms and sometimes it's hard to identify it as mold, 'cause it mimics so many other problems.

Eric Gordon, M.D.
Yeah. Yeah, just because it affects the immune system and the nervous system and sometimes it can just aggravate whatever underlying conditions you have, chronic conditions. And so you have to keep a very high level of suspicion, I think that is the

most important thing to remember. Oh, and just before we go, one little pearl, 'cause I know in your previous incarnations you did a bit of work at looking at how many mycotoxins are we getting, just background, from food? So if you could just say a few words about that? I know that's something that's interested you in the past and it's hard to nail down with an absolute.

Matthew Pratt-Hyatt, PhD
It's always hard. I mean, I'll tell you that both, at least the two companies I've worked with have tried to, they make limits on their reports of what is normal amounts versus high amounts. And so you got to take those into account when you're looking at these reports that everybody's gonna have some small amounts of mycotoxins, especially ochratoxin, aflatoxin, and maybe some Citrinin. Those are the ones that you're gonna see in food sources most commonly. Trichos, not so much. You're not gonna see background amounts of trichos very regularly 'cause those are more of environmental, stachy is more of an environmental mold than a food mold. Well yeah, just realize that there is small amounts, but generally, with my work with Neil Nathan is that when we tried different diets, we really could not get the levels higher than what we saw in those established parameters.

Eric Gordon, M.D.
Right. Right. Right, I think that's important for people to realize 'cause I think that's a subject for another one of our talks, is I hate to see people avoiding foods because I think the issue is often the difference between toxic responses and allergic responses.

Matthew Pratt-Hyatt, PhD
Yeah. Yeah.

Eric Gordon, M.D.
And that's, as I said, we'll have another one of the interviews in this series we'll be talking about that 'cause I think that's really, really important. Many people can have significant responses but they're mostly allergic, and unfortunately it's only if it's IGE is it a true allergy.

Matthew Pratt-Hyatt, PhD
That's true.

Eric Gordon, M.D.
But that's matter of definition. The thing is, your body's response is still, it's telling you and it's causing inflammation and making you not feel well, but it might not be anything to do with mycotoxins. You just might be one of those people who are really sensitive to molds. Anyway, another topic entirely. I thank you so much, Dr. Pryatt. I just so appreciate the depth of your knowledge and experience in this field because it's one of these things that, those of us who have been treating it, we have our patient base and it's so nice to have someone who has a much broader experience and has had a chance to look at thousands, or tens of thousands of these tests over the years. So thank you for sharing your experience and your knowledge. I really appreciate it.

Matthew Pratt-Hyatt, PhD
I'm always happy.

Eric Gordon, M.D.
And we will make sure people can link to your blog posts 'cause I think there's a lot of in-depth information that's gonna allow them to make the right choices for cleaning up their environment and their homes. So once again, thank you so much.

Matthew Pratt-Hyatt, PhD
Thank you.