Introduction and Doctor Background

And what I learned from my patients, you know, I was trained in all of those mushrooms, and I found that when I added the mushrooms, if they were still being exposed to mold, it made them worse.

They had more neurological symptoms and more problems. When I stepped back to think about, I was like, well, that kind of makes sense, actually, because if you are, if mold is already winning, so if it's colonizing your respiratory passages, if it's making mycotoxins inside your body, It's sending a message that fungus is coming to move in, and it's winning.

And if we add more fungus, more beta-glucans, those kind of things, I think that it just reinforces the message of fungal burden. I love to use the mushrooms at the tail end, but in the beginning, I try to use plants that boost the immune system that are not in the fungus family.

This is Doctor Talks, real talk from real doctors on the issues that matter to you most. Hi, everybody. Welcome to another episode of the Recharged Biomedical Podcast.

I'm your host, Ed Park, and we're here with Dr. Jill Christa. Jill, thanks for joining. Thanks for having me on. Awesome. Fate had us introduced at Alisa Song's A4MP's conference, and I was captivated by your talk on chronic illness and natural remedies.

So tell us what kind of doctor you are exactly. Yeah, I'm a naturopathic doctor, so medically trained naturopathic doctor. I went to school to learn how to be a, basically a primary care doctor that integrates medicines.

So we, when possible, tried to use the most natural thing, the thing that is supporting the body and doing its magical healing, because we are wired to heal if we just help get the morbid influences out of the way.

Sometimes we need medications. And so I was trained in the not just the use of medications, but the safe combining of nutrients with medications, herbs with medications, homeop medications.

So yeah, so I have a very unique training that I can kind of blend all of it in a blender. do it safely. Yeah, so that's so fascinating. You know, there's all these great theories about the medical complex or whatever, but so you've studied different settings.

You got your ND at the University of Natural Medicine in Portland, and then you did some extra training in cancer and fertility, ethnobotany also, and have an interest in Native American and in South American pharmacopoeia.

You know, I have a friend who They study all these herbs and she's an energetic shaman, but yeah, I mean, I don't really make a distinction between drugs and herbs because a lot of the great bestsellers were from, you know, whatever herbs, but I do know that there's an entourage effect.

And you know, there's different strains and I loved how you presented the things that will go into for antibiotics from nature. Like there is a cognizance you need for dosing, right?

And so they are medicines too, you know, so. Let's talk about your two books that you've done, or at least two. One is Mold, and the other one is about Pan's Pen.

And I'll be talking to Nancy O'Hara. So tell us about those two books and what they meant. Yeah, so I was not, I did not consider myself an author. I was, you know, just a, I'm a doctor.

And I had some success with mold and it was kind of getting talked about in my little realm of naturopathic doctors. And a lot of doctors said, you know, I don't have time to come study with you.

Would you just create an online course? So I was like, okay, I'll try and figure out how to do that. You know, so I was creating an online course while my house was being infested by mold and the online course was how to treat mold.

Mold Exposure and Why It Makes Patients Worse

So talk about irony. And when we found the, when the leak revealed itself to us in our house, I realized that I had been missing mold in my own self and my family, and I was the mold lady.

Once I realized it was mold, I knew the protocol I wanted to go on for myself. I knew the protocol to put my family on. I knew the inspector to call and what to ask for.

I knew the remediators I would call because I was already doing this in my practice. And I thought, I felt very duty bound to write a book because I thought, you know, I'm not rare case.

This is happening everywhere. It's all very. DIY doable if you can catch it early enough and then there's a lot of like little tips on the building side that I'm not a building expert but I've learned a lot by following my patients around.

I was one of the docs that would actually go to the patient's house and be there for their remediation to see how it was done because I was so curious about this new learning I was doing.

So I knew enough to be dangerous on the building side, but I learned a lot about, you know, things that are kind of standard in remediation that aren't actually good for a mold sensitive person.

They're just not going to get better if we just fog. Yeah. No, I mean, everybody has these horror stories, right? Or a lot of people do. I just talked to a couple that they were in that really moldy house.

And it took them six months. So actually this week's podcast is Dr. Greg Govett, who was head of the environmental medicine. And, you know, he, even he had his own, you know, come to Jesus moment when he realized, you know.

He was not treating this right. So let's backpedal a little and talk about that. Cause mold is ubiquitous. Like I came back from an apartment fire, like six weeks later, there was mold in my coffee and you know, Asprey talks about mold in my coffee, but there's mold everywhere, especially in the humid environments.

And I just got hit with $160,000 bill for the fire that happened because it went down five stories into the drywall. So they have to remediate all the drywall because it's no longer dry and it's a home for what?

Black mold. So I know there's people that can smell it when they go into a hotel. I can't smell it, but. Given that an immune-competent person fights mold and fungus all the time, is it just a dose-dependent thing?

Do some people just laugh it off? Or once you get that black mold and the stacreboites and all the ochratoxins, is it just there's only one way to go and that's take out all the drywall and replace?

Well, there's a misconception you mentioned about some people smell mold. The part of mold that makes us the sickest, the mycotoxins, don't have an odor, actually.

Oh, okay. You can have a rampant mold problem if it's trapped behind building material and the other chemicals, the VOCs, those are what stink. But the mycotoxins, which are the part that makes most of my patients, the majority of the symptoms in my patients, those have no odor.

So you can have a moldy building and not know it. Is that what they call like okra toxin A and B and aflatoxin? Are

those common offenders? Yep. Those are common.

There's, there's a whole host of them that can happen in a, in an indoor environment. So I kind of like, if we go through the alphabet, you know, aflatoxin, citrinin, chudaglobacin, gliotoxin, you know, there's a number of them that can hit.

The trichothicin, so that's from toxic black mold. Those are the most potent and it takes a very, very tiny bit of those to make you as sick as a lot of aflatoxin would make you sick.

Wow. So this stuff is always in our environment, but when you have, let's say, rotten drywall, then they just kind of grow and you've seen these horror stories where they remove the wall and it's just black mold everywhere.

Is that typically what we're talking about? Yeah, this problem is really an indoor living environment problem. There's mold everywhere in nature. We need mold.

We need it to decompose things in our environment. If we didn't have mold, we would have leaves stacked to miles high because that's what it does is break down previously living organic material, make it into a nice little nutrient so the forest floor can absorb it and nourish.

But on the inside, when we bring it into our home, it doesn't have all the other forces of nature to control it. So indoor mold is always a problem. And it's just a matter of susceptibility and time and dose before everybody in the environment is sick.

So you were asking like, aren't there just people who can live with mold? None of us should be living with a mold problem. So if there's a mold colony that is able to grow, a one inch square of mold, just a single layer of it, not even a thick layer of it, can have a million spores.

You don't need that. Yeah. No, it's, I mean, I used to hang my bathing suit in the kitchen and the baseboard has some black mold. I think I'm just kind of like not doing that anymore.

But, but someone told me that like 5g or electromagnetic can cause the mold to sporulate too.

Testing for Mold Illness and Environmental Exposure

Is that true? Or is that a myth? Well, this is based on some research that Dr. Klinghardt has done. I don't know that there's any published research, but they exposed it to Wi-Fi in general.

I don't know if it was 5G in particular, but Wi-Fi in general will stress the mold and just like it stresses our bodies and causes it to secrete more mycotoxins, I think was the finding.

Oh, I see. Oh, wow. Yeah, none of us should live with this. I mean, the the militaries around the world are using these mycotoxins as bio warfare. So, you know, they wouldn't use it unless…

Well, and you know, this is where we're kind of going with the talk because like I had a gentleman who had terrible toe fungus and he ended up getting pulmonary fibrosis.

And for some reason, the cookbook was like, well, we got to give you this mycotoxin to suppress your immune system. And I just thought that was so backwards because the mycotoxin we use is to prevent organ rejection.

So it's a profound immune suppressant. And so my intuition just says, well, part of the reason people get mold infestation and problems is because their immune system is suppressed.

And then we often have these comorbid like Lyme and Bartonella and it's like gut dysbiosis. It's like, there's many ways onto the cycle, but once you're immune deranged, I feel like the mold does even better with you.

What do you think? That's right. Yeah. I mean, I want to assess every single person at the beach with toenail fungus. I want to assess their home. Cause we should not be, I mean, that's how you find a sick tree in the forest.

They're the trees with the fungus problem. So it's like that, that tree is on its way out because the fungus is able to take root. That's the same thing with toenail fungus.

It's like they're either their diet is very sugary or they're an alcoholic or something like that. Or, and, or it can be both. they're in a moldy environment and that we should never have fungus in our toes, you know, our toenails.

That's basically the fungus has now taken root just like us. It's not interesting. Yeah. No, I definitely think it's a circulation thing. It's an immune thing, but yeah, I know if I have wet socks, sometimes I'll get a little athlete's foot, but that's why wherever I travel, I always have, you know, just in case a little fungal crane just to nip it in the bud.

But yeah, all this thing that you mentioned, like it needs to be dry. Everything's got to be dry. Yeah. So when you do measurement, I know there's a lot of debates over, you know, real time or whatever, great planes, blah, blah, blah, testing.

Like, let's be a little clear because a lot of people are like, well, the environmental inspector came and did an air sample. There wasn't anything or there was something.

Help me understand in a real simple way what the correlation between actual toxin measured, antibodies against the toxin, how reliable it is in terms of predictive value and environmental error testing.

Like how come people get so confused by these three things? Because the testing is wanting. That's the problem. We can test urine mycotoxins. That relies on the person being an adequate excreter.

That also relies on the person not having eaten mycotoxins. So if anybody's listening and they want, I have a handout that is a urine mycotoxin test prep.

So I put people on a three-day low mycotoxin diet before I run an urine mycotoxin testing, because we know that it can come through. What you eat can be excreted through the kidneys to the urine.

Most mycotoxins actually preferentially will choose the kidneys for excretion, not the liver. So if you're eating them, we're going to see them in your urine.

Most mycotoxins have a 48-hour washout period. So I'd shoot for three days. urine testing be provoked? Like there's something you have to take to make excretion higher or not?

No, we can get to that. So I have a 45-minute segment of this on my doctor course because I've done more split sample testing than anybody that I know.

But the main thing is if you're going to do a urine test, make sure your diet is low mycotoxin. Otherwise, what we're seeing in your urine could have been from your diet and not your home or your body.

We can also test allergies to mold. Really, nobody should be allergic to mold because it is a fact of nature. So if people are allergic to mold, their immune system is either primed to mold, and why is that?

Or their cup is too full. So these are people who are… Now, if it's a Frank and Boldy building, nobody should be in that building. But you should be able to deal with the excess fungus in the air in the spring and the fall and not fall apart.

We might get a little more. Okay. So what does that mean about antibody testing, serology, IgM, ITG? Is that of any benefit or? Yeah. So this all paints the picture.

There's no single test that tells us you have mold illness. That's the problem. That's the problem. Yeah. So usually

I'm doing a cluster, but if somebody's allergic to mold, I'm thinking, okay, that's a little more concerning.

If they're allergic to mold type foods. So if they do an allergy test and they're allergic to yeast, I'm like, okay. You know pointing more arrows to the fact that they might have environmental exposure and I'll go back to the provoking of the urine But I just want to give the picture of like all the different ways we could take we could look to get a cluster Because we're also asking our patients to spend money on an inspection.

So we want to be pretty secure as a doc So I'm rarely am I ever using one test only to answer this question So I might run a mold allergy test, that's a spore test, and the mold makes you sick with spores, the mold chemicals like you mentioned, the celcept, mycotoxins, and there can be bacteria.

So we can test mold allergy to the spores, then we can test an antibody test to mycotoxins. That's through my micro lab. That one, diet can affect it, but it's not as highly correlated to diet as a urine test is, because that's an excretion test.

And then we can test their visual contrast sensitivity. This is what the military tests to see if people have been exposed to biotoxins. So we know that if somebody is exposed to the mycotoxins, it will affect their vision.

Some people more than others. And that might be another way that we can catch it. And then back to the urine test. Again, I've done more split sample testing than anyone I know, and I have twins and my friend has identical twins.

And we ended up doing an accidental control group with my twins. And I found that if someone's using the mass spect method, which is what is used with Vibrant and with Mosaic, the glutathione will change the molecules so significantly that the camera can't catch it anymore.

It's moved it too far down the metabolic pathway. So I do not recommend glutathione. And besides glutathione, while a kidney does use some glutathione, if we're testing a urine test, we want to do something that's helping with urine clearance.

And that is bioflavonoids, not glutathione. So glutathione is working through the liver pathway. So if we were to test it. So if people think, you know, okay, I found some mold and we took care of it and my air filter is clean, but now I need to know, am I sick with mold?

Are there certain labs to avoid certain ones that you recommend? Yeah, you asked about a positive predictive value. The study that Dr. Neal Nathan and I are conducting right now at moldiq.org, we're finding that actually my clinical questionnaire does give a positive predictive value of mold-related illness.

You could run a lab or you could fill out a questionnaire. So if you're scoring a 10 or above on that questionnaire, we are validating that against lab testing of all kinds.

So it's clinical signs and symptoms. It's just as good as lab testing.

Immune Dysfunction, Mast Cells, and Mold Recovery

And what we found in our test is that our study is exactly what we are experiencing, which is there is no single cardinal symptom for mold-related illness.

That's what's missed all the time. I think so, you know, and you mentioned in your talk that about 31% of kids have some form of chronic illness and we could talk about the different entry points to that, whether it be the adjuvants and vaccines or the frequency of the vaccines or the gut dysbiosis was a big common theme during our conference.

But I guess the question is. For me, there's so many people that come to me in my referral network who are just struggling with brain fog, fatigue, autoimmune stuff, skin manifestations, which is like gut dysbiosis.

I guess the thing that keeps on coming up is there has been some history of mold and they get into this immune dysfunction. Is that also what you're seeing?

Yeah. Yeah. Then the immune system, I mean, mycotoxins are immune toxic. They're nerve toxic. They're immune toxic. They're toxic to the entire GI tract.

They actually cause death of those cells. So the body's constantly having to replace those cells. And that's where we can get leaky gut. You get a lot of inflammation.

They're very inflammatory. You know, spores are very inflammatory. They induce mast cells. We see a lot of mast cell activation after mold exposure. The body starts to preferentially, because the immune system is getting wiped out, it starts to preferentially choose mast cells over the normal, what we would call blastopression T cells.

Yeah. Because that branch of the immune system gets hit so hard for mold. And I can't help but think that it's this form of aging and chronic illness production, because once you start grinding up your T-cell system, you know, you're susceptible to everything and part and parcel of aging and chronic disease and even cancers, the deterioration of your immune system, right?

So I guess, are there, you know, quick fixes? I know people talk about mushroom cocktails like lion's mane and reishi and turkey tail. As a naturopathic physician, are there some kinds of things that can help boost our immune system?

Yeah, and what I learned from my patients, you know, I was trained in all of those mushrooms, and I found that when I added the mushrooms, if they were still being exposed to mold, it made them worse.

They had more neurological symptoms and more problems. When I stepped back to think about, I was like, well, that kind of makes sense, actually, because if you are, if mold is already winning, so if it's colonizing your respiratory passages, if it's making mycotoxins inside your body, It's sending a message that fungus is coming to move in, and it's winning.

And if we add more fungus, more beta-glucans, those kind of things, I think that it just reinforces the message of fungal burden. I love to use the mushrooms at the tail end, but in the beginning, I try to use plants that boost the immune system that are not in the fungus family.

And there are three that are kind of my go-tos that help to boost the innate immune system, the innate side. Because that is the side that mold hits the most with microtoxins and the mast cells.

And the champion of that is aloe. The reason I love aloe is it does so many different things. First of all, it's a soother to the mucosal linings. We know that mold causes a lot of inflammation.

People get SIRS, chronic inflammatory response syndrome. So aloe is a soother to those passages. It also is an immune modulator of the innate immune system preferentially, and it is a potent mast cell stabilizer.

And it's been studied to be on par with things that we use every day in pharmacy, like ketotapin, chromalin, and even some steroids. Okay, so mass self-stabilization, immune and mucosal boosting, aloe.

Oh, good. So it's good that I'm giving you the aloe juice. Okay. Yeah. Well, let's talk about the fact that there are things in nature that we use that can help.

And I was fascinated by your list. Just going down, we have the Nettles, the Perilla, the Oregon. Grape? Well, I guess I broke it in my mind. It's the ones that have strong antimicrobial, antiviral, antibacterial activity.

What are your greatest hits? Because I know there's thyme, echinacea, black elderberry, olive leaf. What are some natural things that people can take that will boost their physical ability to fight these critters?

Yeah, so what you're dealing with is the bug and its toxins. So we kind of have to think about both of those aspects. And I tend to do things, like the talk that you attended, it was just to talk about all of the herbal options for the many childhood illnesses that can happen.

With mold, I really focus on the things that are specific to detoxing the mold type toxins and things that are antifungal. So we want to make sure that we're preparing the body for the fact that when we start to come after mold with antifungals, it will increase its mycotoxin production to protect itself.

So we know that the body's going to get more toxic as we try and kill things. Almost like an oxymoron reaction. Yeah. Yeah. A mold Herxheimer reaction is a toxic reaction.

Um, whereas the other Herxheimer reaction, the like Lyme Herxheimer reaction, you're actually getting the spillage of the contents. But in a mold one, you're getting the reaction of fungus fighting back.

We know that we're going to get more mycotoxins. This has been established in studies. So what I do is I, I wait to do the antifungals until I know that we have helped the detoxification systems to get going again.

Yeah, that's so artful. You have to be prepared. Do you use binders? Well, I have a couple of mnemonics that I go with. One is bioflavonoids before binders.

Explain that. If more than half of the mycotoxins preferentially want to leave out through the kidneys, we want to support the kidney clearance, because you have two of those and only one liver.

So we can actually double your detoxification power if we use bioflavonoids. And there are a lot of bioflavonoids that have been studied that show that.

to pull the mycotoxin off the blood protein so the kidneys can just flush, flush, flush, flush. So what are some common bioflavonoids? Yeah. One of the best that's been studied for ochratoxin is astaxanthin and zeaxanthin.

You can use things in the yellow family, so like quercetin, rutin, lodiolin, resveratrol, lycopene. So I like a product formulated. This is why I like it, because it's called Color Guard by Alight Health.

And what I did was I found all the research for all of the mycotoxins and found where they were similar and put them all into one capsule. And I use this as a provoker as well as a detoxifier.

Okay, so that's prepping the kidneys. So you don't go to charcoal, zeolite, bentonite. That's not your jam before you do the bioflavonoids, right? Bioflavonoids before binders because we want to maximize kidney clearance.

And then you can take the pressure off the liver. And then as far as binders for trying to bind in the gut, we think about if we're breathing in a mycotoxin that's going from our nose to our bloodstream to our liver, and the liver gets conjugated or packaged in bio, and that's what gets sent to the intestines.

So the other things like a clay, a charcoal, and those kind of things are adsorbent types of binders. That's another thing that aloe does. I forgot to mention it.

It's an adsorbent binder that actually gives back. It works just like charcoal and clay, but it's been shown to actually maximize nutrient absorption across the intestinal wall.

So it's not just taking, it's giving back. We age because our telomeres shorten and our stem cells deplete.

Herbal Support, Antifungals, and Detox Strategy

But what if we could support both? I've been taking TA65 for 17 years. It's the only supplement I trust to support better mood, better sleep, and exercise recovery.

And at age 57, I don't have any gray hair and I don't need reading glasses. TA65 is available now. Go to rechargebiomedical.com slash TA-65 and enter promo code RECHARGE10 to save 10% off.

But if we're breathing in a toxin that's getting conjugated into bile, really what we're binding with mold is bile. We're not binding the mycotoxin unless you're eating it.

And in most westernized countries, we're not eating all that much mycotoxin. We're eating some. That's why I take people off, you know, mycotoxin high foods.

But really what we're binding is bile. And when we're doing studies of that, insoluble fiber is a very effective bile binder. Insoluble fiber, just like roughage, like.

Yeah, psyllium. Or like psyllium husk. Okay. You know, Greg Govett, who was an ENT and the president of the Environmental American Academy. He said that he wasn't really even aware of how much the nasal sinuses are chronic site of carriage, which was surprising.

But I started, because I have a CPAP machine, I think it probably gets a little colonized up in my sinuses. So I started taking Beggy spray, like Basis Tracen, Gentomice, and whatever.

I don't know. You're not against the idea of Azoles or antifungals, like Capsules. Okay. Yeah. Yeah, yeah. But you're just saying like, you got to be careful because they can simulate a defense and a release, right?

You have to have the protective nutrients on board. We know that fish oil is cellularly protective. I think of it like sitting at the cell membrane like a guard, like, no, you can't come through.

And that'll be very protective of the mitochondria. You were talking about aging and cancer and those kinds of things. DHA is blocking absorption into the cell.

And once mycotoxins get in the cell, that's where they change mitochondria. That's where they change the genes. Duke has genetic changes, not just epigenetic.

So DHA, you get that on board. You get the vitamin D, which is helping to, I mean, we could talk all day long what vitamin D does for us, but we know that mycotoxins block, they down-regulate vitamin D receptors.

And that acts as a lung protectant, a nucleosol surface protectant, so you don't need to use as much of the anti stuff. There are other things you can have on board before you go into the antis, the antifungals, and that'll protect the body from getting more toxic as we're killing off the fungus.

So, I mean, you're never going to get to like 0% mole, but you're saying like when you reach this brain fog, you know, CIRS, mast cell, leaky gut, you need to decrease the burden of the toxicity and the actual live carriage.

And so what, what's the role of friendly bacteria in that? Can we use them to help mitigate and push away some of the bad stuff? You bet. I have a handout that's called Nasal Options for Mold.

And one of the things is we start with the pro-terrain things first. So in the nose, we have lactobacillus, saccii, and caseci. That's the preferred probiotics in those areas.

And often we can do a nasal swab and sniff, snort basically, old-timey snuffs, you know. And that sometimes can normalize those areas, but it really is what you just said is really important.

I really like how you said that, that we're never going to get rid of the mold. And you're right, like there's a study that Dr. Burr did in 2013, which completely revolutionized my practice.

I mean, I was using systemic antifungals, but I was not addressing the sinuses. And in his study, what they found is that when you test normal controls and people with chronic fatigue syndrome that had been made sick from a water

damage building, turns out everybody has fungus in their sinuses.

We can find aspergillus spores in healthy people. There is a key difference. And that's when I was like, oh, this is colonization. The key difference is the sick people had mycotoxins.

The healthy people didn't. So the way that I understood that was that because it's natural and it's in our air, we're all breathing in and breathing out these things all the time.

But it's sick people, when they breathe them in, they become residents. Yeah, you get like chronic biofilm and it kicks out the good bacteria. And then you get immune suppressed and they just, yeah, biofilm in the inner ear, in the sinuses, in the lungs, you know, the finger beds.

Yeah, it seems like a lot to deal with, but I guess people should be encouraged. Their immune system is recoverable in many cases. So you did some great work on talking about the naturopathic tradition.

So one of your faves is perilla. I know Koreans love eating these leaves. Perilla is a good one to inhibit mast cell. What about like the great antibiotics of nature?

What are those? Yeah, since we're talking about mold, probably the best is thyme and oregano, those two, and cloves. A lot of people say, well, I took the stuff for Candida, so it must not be mold.

And I say, well, Things that can kill yeast can't necessarily kill mold. Mold is multicellular. It's harder to get at. And so there are only certain plants that can kind of take care of that.

And that's, you know, those are some of my favorites that thyme, oregano, clove, neem, powder arco. These are all lovely plants that are very, very safe to take and can be used long-term.

That's the key with fungus is they're very tenacious. So once they've moved in and become a resident, taking it for a week is not gonna do it. Well now, it's like, say there's somebody out there that, you know, has access to well-sourced organic herbs and stuff, you know, and they want to make smoothies for their eight-year-old.

And I know you talked about lozenges, popsicles, different ways of delivery, you know, even talk about frying an onion, all this stuff. Is this way above people's ability to do?

Is there some easy amazon.com solution that they can just order? Or is this kind of like witchcraft possible for the average person at home? It's so possible.

This is just like cooking, you know? And even if you don't know how to cook, you can do it. When I wrote my book, Break the Mold, I took great pains to give specific instructions in a simple way.

I mean, I remembered when I was sick from mold, My brain did not work. My eyes could not read. I would get so tired reading. So I kept it very simple.

Dr. Neil Nathan's book is toxic. He's also a wonderful book. It's a lot more information. It's more dense. Mine is like mold light. You know, like this is the place if you're actively brain fogged.

And if you just need simple, like, what do I take? In what order? How much? And for how long? I go through all of that. I love it. Yeah, it's like a physician's desk reference.

Present it. Yeah, it's very clear. Yeah, I mean, I used to be friendly with Suzanne Summers and she had terrible mold. And I remember they even like couldn't diagnose, I think she had coccytoidomycosis and it thought she had lung cancer meds.

So yeah, it's under a lot of people's radar. So I think that they only get there because they don't feel well and they're just looking on the internet for why do I have brain fog and all these things.

And then all of a sudden they kind of get locked into though, I have SIRS, you know, I have this, I have that. And it becomes their identity too. But I like to see people, you know, who are kind of backing out of it.

Sometimes the exosomes that we do can help with gut dysbiosis and leaky gut as they can help with. But, you know, I'm always very cautious when someone says, Hey doc, I got lime, I got mold, blah, blah, blah.

I'm like, your immune system is going to go quiet a little bit. So you got to be careful. And I'm very skeptical of people who have never even tried a Doxycycline with mold.

I had one lady, it was 30 years chronic Lyme. I'm like, you ever tried Doxy? She's like, no, all the online groups say it doesn't work. I'm like, well, you know, your immune system and 70% of people say, no, you can get rid of Lyme.

But you gotta be careful because the quality of information in these support groups, because they're all like orphans, aren't they? So they're sharing a lot of stuff that may be true, semi-true, and untrue.

Right. They are the zebras. You know, if you're not getting better with the standard medical care, you're more of a zebra. But that doesn't mean that there aren't herds and herds and herds of horses out there that do get better with standard medical care.

Let's start there. You know, like that's a big thing for me with mold is that when I added the nasals to the systemic treatment that I was doing, my patients got better like exponentially faster.

So now I just do it with almost every mold patient. I don't know that I have one that I'm not doing something for the Yeah, I mean, so good. And that's what like this gentleman who's the ENT is like, I had to, you know, change my practice.

So we're all kind of learning and pivoting as we go, but it's very refreshing to hear. It's not like, oh, pharma is bad. Like, you know, it's your condos all bad.

You just need to know how to balance it in the context of that patient's current situation. Right. Yep. And I never bring in a drug without the herbs.

I use them in tandem because I feel like the herbs are doing all of the other homework. They're the wisdom. They're doing anti-inflammatory. They're doing garbage cleanup.

They're keeping the patient less reactive.

PANS/PANDAS, Gut Health, and Closing Thoughts

They're managing resistance. The reason why I brought up thyme, oregano, and clove, and garlic is also on this list, they have been shown in studies when you combine them with the drug, it reduces drug resistance.

So we have a huge problem. I think it's amazing. And when I was going through your presentation, I'm like, wow, it's really interesting that these things are both anti, you know, gram positive or whatever, but also viral.

It's almost like you look at like some of these great anti-parasitic drugs. that have come along, like, you know, ivermectin. They must be working with the immune system in some original manner so as to co-regulate and make it more functional, right?

Because how could you be working against viruses, bacteria, and, you know, mold? Like, has to be immune modulates for you, don't you think? Yep. Yep. And you know, my teachers, the great Paul Anderson, you know, I have a lot of teachers that when we have a cancer patient, if we haven't ruled out mold and fungus, I should say, and parasites, like we need to clean that house and also a dental infection.

Like those houses, it is amazing what can happen. And the way that we're doing it often are these things that have

multiple activity. Like neem, I use it for fungus, but it has anti-parasitic activity.

Aldoarco antifungal, it also has anti-cancer properties. So there are all these, they actually call it the cancer tree when I went and did ethnobotany studies.

So I'm in the Peruvian jungle and this plant, along with cat's claw, these are very I mean, that's where taxol comes from. Yeah. Yeah. But anyway, I mean, it's like, it's so amazing that people can use these synergistic herbs.

And so I'm just very grateful that you know the Western science and the big pharma model, but you don't have to be one or the other. They can be in tandem.

And they actually like to work together. They prefer to work together, you know? So it's actually, you know, it's almost like I can feel I have all my plants back here.

Sometimes when I'm thinking about, you know, sometimes I'll choose amphotericin over itchoconazole because it doesn't tax the glucuronidation pathway, which is just doctors speak between you and I.

For a regular person, they're like, what? But if you have salicylate sensitivity, your glucuronidation pathway is nuked. So we want to use something that's not using that pathway.

So sometimes I'm, you know, when I'm kind of getting ready and I'm like, okay, I think I'm use the drug. I can almost hear the plants in my ear saying, I want to play with that.

I like that. You know, they got me. Well, that's amazing. I mean, to have that kind of deep granular knowledge about biochemical pathways is really commendable.

And do you ever play with fecal transplant or do you, what do you think about that? Especially in pandas and pans. It's not an approved indication for that.

However, there are mouse studies that show in MS, which is a neurodegenerative versus a neuro autoimmune, but in MS studies, you know, it has some autoimmune properties.

You can take a sterile mouse and they've taken twin studies. So one twin has MS, one twin doesn't. You take sterile mice, you put fecal transplant into the mouse from the healthy kid, fecal transplant into the mouse, another sterile mouse from the sick kid.

The mouse that received the sick kid's stool develops MS. When they take the mouse from the healthy kid does not develop MS. When they take stool from the healthy mouse and they put it into the sick mouse, that sick mouse that developed MS recovers.

Yeah, no, I think it's a lot of extracellular vesicle stuff that people really don't understand yet. Yeah, that kind of stuff is very interesting. So just finally on the pans panda, I'm going to be going deeper with Nancy O'Hara, who wrote that wonderful book, but you also have your book.

So just for people who don't really understand. I guess there is a flavor of autism that has features that can be inflamed when exposed to strep toxins.

And how would a parent know that their kid has got some kind of Pan's Pandas? Is it triggered by an infection that they can see or detect? It's typically what, like social anxiety and rage?

Describe the typical presentation for someone to think, oh, this is not just autism, but it's Pan's Pandas. Yeah. And actually, pandas pandas is more commonly happening in, in neurotypical kids than in all.

Okay. Okay. Yep, so when you have an autistic kid who also develops pandas or pans, it gets a little more tricky to identify because they didn't start neurotypical.

So you don't get this overnight change and rapid change in a kid who was able to go to school, functioning, social, all those things. And then this overnight change that a kid who has the symptoms of pandas pants.

And so I just wanted to make sure people were realizing that, There are autistic kids who develop pandas and pans, but the majority are actually neurotypical kids.

It's in health. It presents as some weird aggressive isolation or how does it typically… Anxiety. Anxiety is a big one. So is that after a strep throat or doesn't have to be?

Pandas has to be after a strep infection. It could be strep throat, but the sneaker there is perianal strep. So they might have a perfectly normal throat culture, but have a fulminant strep infection of their bottom.

So pandas, the classic is it has to have been a strep infection and they get through the infection and then it can be weeks to months later they develop pandas.

PANS, they had to open it up to, it's not always strep, because we had all these kids that fit the PANDAS criteria, but we couldn't find a strep infection.

Now, some kids are seronegative anyway, even if it is strep, but there are a lot of kids who developed PANS from other types of things, and that's where they had to open up the criteria to say, well, it can be other things.

Of course, in conventional medicine, it's hyper-focused on infection. but in my practice, that's why I wrote about pandas and pans, there's a mold correlation.

In my practice, and I've talked to lots of other, even before I was mold-focused, talked to lots of other doctors who work with kids with pans, and they're saying that there's an over 90% prevalence of mold exposure in these pans kids.

It can be lots of other things. It can be influenza. COVID started some hands cases. It can be mycoplasma pneumonia, Coxsackie B. The classic one is a mom who's, oh, and it can be Lyme, of course, Lyme and co-infections.

So often it's like a worn out mother who has like chronic Coxsackie who keeps flaring their kid. Oh my God. Wow. Okay, mom, we got to treat you too. You know, we got to take care of your immune system too, because Yeah.

No, I remember. Yeah. She was talking about the fact that somebody in the house with strip care, it's like repeated re-infection. All right. Well, amazing.

So if people want to get good herbs in their diet, just eat Korean and Italian foods, that's the main thing I'm taking from you. And are you a fermented food person or not so much?

Yeah, for sure. If tolerated. I mean, fermented foods are higher in histamine. So a lot of mold sick people end up histamine sensitive until we can get their biomes reset.

You know, my whole goal with an antifungal is not to kill all fungus. You know, it's just to get the biome reset so the immune system can catch up, those tissues can heal, and then they can manage a natural microbiome rather than being a pathogenic biofilm.

But yeah, in case you add it to your cooking, you can take them as cordials, you know, like little tinctures that people can take, and just do capsules.

You know, it doesn't have to be hard. Yeah, no, I just, I think it's so interesting and I was so glad that I decided to go to that conference because, you know, you talked about the gut biome, the pants pandas, there's a great talk about ticks.

But I think that it's shocking how many young people do have these neurological things and basically talk about why. But it's just been so normalized, you know?

And so we have to fight back and say, no, there's stuff in the diet, there's stuff in the whatever, electro smog, there's stuff. in our lifestyles that's creating these imbalances and then we can take back the power with these herbs and with people like you that understand both the biomedicine and the energetic sort of naturopathic way to prevent.

Yep. So jillcrista.com or where are we? Dr. Crista. Dr. Crista. Drcrista.com. Yeah. I am on a mission to educate. I feel like the more empowered people are, the more hope they have, first of all, but also like tools in their own hands.

And then when they need exosomes and things like that, they work better because we have… Yeah, absolutely. I mean, that's what I think… is why I'm doing this podcast.

Cause we, there's not that much I have more to teach about exosomes cause I don't really know that much, but you can bring something. And I think that's the best role as a physician, a doctor is to educate.

I never get threatened by somebody with a good question that I don't know the answer to. So much of the traditional Marcus Welby is like, oh, no question.

What the guy really has no idea what you're talking about. And they used to talk about Dr. Google and my web search, but nowadays even with the large language models, like the answers are really good.

And so yeah, I think doctors should be much more inviting to learn because then they can educate. That's really the mission because we don't have time to be there.

spoon feeding or managing that people need to be the quarterback of their own health, right? 100%. Yeah, you got it. And that's what our books are about, you know, years off.

And yeah, right. All right. Well, Doc, thanks so much for sharing your wisdom. And they can connect with you at DrKrista.com. You have multiple acupuncture and physicians there.

So it's really great. Good resource. And the books are called break the mold and a light in the dark for pandas and pans. And I actually do not do brick and mortar anymore, but people can come and take, I have master classes where you can come and engage with me live.

I'm doing all the like hyper-focused classes. So mold and oxalates, nasal treatments for mold, you know, all of these things so that if someone wants to really drill down on one aspect of mold, I'll have a whole library of master classes Awesome.

So it's really very empowering. So you don't have to reinvent the wheel, a lot for providers, but also for people who want to take control of their own health.

Yep. And I have training for providers. I've trained now over a thousand doctors on mold literate training and very passionate about that for mold, pandas pants, and we'll just keep going.

I'll share whatever I can share. Fantastic. Great work. Thank you so much. Thank you for tuning in to Doctor Talks. We hope today's episode has enlightened and inspired you on your path to optimal health.

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