Introduction to Dr. Jill Carnahan

Welcome to another episode of Mycotoxin, Mold, and Chronic Illness Summit. I'm your host Dr. Ann Shippy. And today we get to talk to Dr. Jill Carnahan.

She is just one of the most incredible clinicians and also one of my favorite people on the planet. She is a functional medicine expert. She's board certified in family practice and also integrative holistic medicine.

She's the founder of Flatiron Functional Medicine Clinic. She teaches. She speaks. She writes. She is on a mission to help humanity. And she has been very, very productive this last year.

It's just mind boggling how much she's gotten done on top of all the incredible things she's doing all the time. She's finished a book and she's also accomplished a documentary. So thank you so much for joining us.

Is there anything else you want to add to that? Did I miss anything important? No, thank you. Ann, it is absolutely a pleasure to be with you. You are one of my favorite people.

It is kind of like a great to have coffee publicly with everyone talking about mold today. Right? Mold has been such an important part of our journey.

And you've had, you know, some pretty big run ins with health issues with breast cancer and Crohn's.

Early Mold Exposure on the Farm

And I just thought maybe we could start out with letting people know how molds impacted you and so that people can really get a flavor for. This is personal, right?

Yeah. No, I always love to share stories because we all have a story. And those listening out there, I'm sure some of you are listening because you have a story or someone you love is dealing with mold.

So I'm going to tell you briefly where I've been because I think it'll frame my passion and purpose and some of the stuff I've learned. So I grew up on a farm in central Illinois.

You would think it's the most idyllic. Norman Rockwell-esque kind of environment. I was one of five children. My mother was a nurse and retired to raise the five children.

We had organic food and, you know, lots of like a half acre garden. We'd freeze vegetables and fruits and all kinds of things. So lots of wonderful, nourishing, holistic principles.

But unbeknownst to me, this beautiful, idyllic farm was slowly poisoning me. I was born with some difficult genetics. I always talk about toxic load as the idea of a bucket.

And when that bucket starts to fill up over a lifetime and spill over the top, it typically presents with autoimmunity, cancer and neurodegenerative things like Parkinson's, ALS, Alzheimer's, or just cognitive dysfunction.

Now, in that bucket, one of the things which is the main topic of your summit is mold and mycotoxins. I am sure I don't know because I can't go back there in tests when I was a child, but I'm sure we had a basement that was partially Earth.

We start a lot of food there. I'm sure there was mold on the farm and then grains. I don't know if people know about this, but many grains are stored in bins.

And so you take the grain out of the field and then you have these big huge green bins on the farm where they store the grain until it's sold to whoever is taking that grain to use it for feed for animals or making corn chips or whatever else.

And that grain in the storage often has a little moisture content. In fact, they actually would look at the moisture content and it's very, very, very, very commonly contaminated with mold.

Now, the dust off that grain I was horrendously allergic to as a child, I don't think it would be. It was actually the mold. Right. Bingo. And I really look back and like, oh, I thought I was severely allergic to corn and soybeans.

But if we know about grains and this is one of the reasons I believe that people want a paleo diet, which is a grain for your diet, actually do better when they have autoimmune is one of the reasons is because grains are the most highly contaminated food source in the U. S., at least with molds.

So I'm framing that because I think my story with mold actually began from birth on the farm with these highly contaminated grains because I was so, so deathly allergic to those grains.

And when the summer would come in, the they call this red dog, it was like dust and debris that would float around and get all over the grass, get over everything we owned.

I'm sure it was loaded with more than Mycotoxins and I would just sneeze and sneeze and sneeze, take a Benadryl, fall asleep for 6 hours, and I was miserable.

So I think it began back then. And we also know now part of my story is in medical school, 25 years old, they find a lump. And and I was diagnosed in my third year of medical school at the age of 25 with a very aggressive breast cancer.

Now, once again, I don't think necessarily that the mold caused the cancer, but it's very possible that mold exposure and pesticides, organophosphate chemicals, which are endocrine disruptors, that means they have a hormone like effect on the body in conjunction with a mold that could have weakened immune system, might have been the perfect storm for me getting cancer at 25.

So I think mold was involved will. Definitely make sense that it's kind of the perfect storm because it's so unusual to get breast cancer that young and especially to get such an aggressive form.

Yeah. In fact, sadly now many people have heard of 20 somethings, even like 16 or 18 getting breast cancer, which is crazy early of. But at the time I was diagnosed about 20 years ago, I was the youngest one at my medical center to ever be diagnosed at 25.

So even at that time it was incredibly rare. So I get cancer. I go through incredibly aggressive three drug chemotherapy, lost all my hair got really sick.

And as we know, the chemotherapy can be damaging to the gut. And so six months after I get through the chemo, get through the radiation, get through the surgeries, I'm like, okay, I'm through a breast cancer, I'm bald, I'm malnourished, I'm pretty sick.

Cancer, Crohn's, and the Flood That Changed Everything

Back in two rotations and six months into rotations, I literally passed out one day as I was taking a patient's blood pressure, I end up in the ER myself and that night I had emergency surgery for an abscess and the next morning I wake up and the surgeon's like, Jill, you have Crohn's disease and Crohn's is autoimmune attack of the gut.

So that was my first battle with autoimmunity and I really got through that by learning the microbiome and learning how the gut interacts with that and changing my diet.

I took out gluten and all inflammatory foods and within a couple of years I was back to feeling really great and feeling like complete remission and really that Crohn's was a thing of the past.

So then I went, moved to Colorado, started my practice, was doing great. I was hiking, I was skiing, I was enjoying life, feeling really like all the medical stuff.

All the history of the illness was behind me and we had a massive flood in Boulder 2013. And nowadays, sadly, you look at the news and there's floods everywhere.

And I bet and like me, when you see those things on the news, as in your first thought, like, oh my gosh, those poor people, they're going to deal with mold, right?

Absolutely. Because most people don't know how to get things dried out and how to look for the hidden way. So it's yeah, I mean, it's really become quite an epidemic is.

And more and more with the weather changes and stuff, I just see these floods I'm like, Oh no, that whole community is going to be like really moldy in a year.

So that's what happened in Boulder. We had this massive flood, everything got wet. We had, you know, almost $1,000,000,000 of damage and the next year I started having symptoms.

My eyes would get red and irritated. My immune system crashed and I got sick with everything that came by. My brain started having trouble with word finding.

So I couldn't remember names. Just pretty scary. Doctors, nurses at work. You must have been petrified. You know. And I was. And it's funny because this is one thing I give to patients dealing with mold that I just have such compassion.

I'm sure you understand, too. There's a bit of denial, and I think it's part of survival because mold affects a safe place we call home. It can be workplace, too, so it can be other things.

But some environment that you spend a lot of time in. And so there's a real trauma safety component about mold. And so it was no different with me because I knew if it was an environmental toxin like mold, it was in work or home.

Eventually what happened is I tested my urine. It was very high with trickiest of things, which is from the nasty black Stachybotrys chartarum And then we went in the basement of my office and found box samples of Stachybotrys So it was really clear there was a connection.

Literally, the day I got my urine sample and found out what was in the basement, I never set foot again in the office. I just literally I left. I had 20 years of medical school textbooks in my library there, all my office furniture, and I just literally walked away.

The only thing I took was patient records. I started over. I took a temporary office not far from where I'm at now. But, you know, it's funny because this is relevant to your listeners.

We know that you cannot get well if you have ongoing massive exposures. There's just no way that's the foundation. And yet you and I know talking to patients, that's the hardest thing.

The hardest thing. It's so hard and so hard for me to sit across a patient and say, I think your house is moldy, You have to leave, you have to remediate, you have to do something because we know it costs money.

If you're sick enough, you may not be able to keep anything that doesn't go on the dishwasher. Yes, exactly. So there's like this there is a spectrum of what you have to do.

Not everybody has to leave and walk away like I did. But what I realized is health is that the resource we that we can't buy health. And so it's that limited resource that, you know, we can replace all those other things.

And it may not be fun, it may be expensive, it may be very inconvenient, but ultimately our health is so valuable. And I had learned that lesson for my twenties, early twenties, because of the cancer, because I realized, you know what?

That day I got told I had breast cancer. Now I'm vibrant 20 years later and healthy overall. But I didn't know at that moment. I got diagnosed with cancer.

I'd have six weeks or six months or six years. And when you face that mortality, anyone who's had that, it really changes perspective on living and showing up.

And then when I came a decade later with mold, I realized I've got to do whatever it takes to protect my health. Yes. And things become less important and used and you just deal with it, do what it takes.

And and yeah, if you don't have your health that you have money and you have relationships, and it puts all of that at risk, right? If you have this set up as your pass off. So and I think you're like me where it's those hard lessons that we've had that have been the most valuable for us to really learn how to treat our patients.

So I'm sure during that, those following months, other than getting out of the mold and not returning, you learned a lot about how to help your body get healthy and stay healthy.

What were the key things that helped you to get well other than leaving the office? Yeah. So I'm going to talk about some of the struggles too, because what so often happens So when think about toxic overdose, the bucket analogy, and I'm sure other people have talked about this as well, I definitely like to talk about that because it's such a visual of like when we're born and we know now that the cord blood of infants, this was 20, 20 years ago in 2001, they were testing in Canada.

They did a study on the cord blood of infants and they found infants born out of the womb, had over 200 chemicals in their blood already from mother's placenta, which means now, 20 years later, it's only gotten worse.

And I say that we need to repeat that study. Honestly. I doubt anybody's going to fund it, but I really wish we would. I know because I can't imagine it's not double, triple or worse.

Right. Only ten acts based on, you know, doing functional medicine almost 20 years. What a difference. Yes. And same. Thing. It's it's pretty alarming.

I would totally agree. So this idea of bloat is that we're all swimming in toxic soup. The air that we breathe, the water that we drink, the food that we eat, the buildings we're in.

And it can be pretty depressing, right? But if we are if we are aware of that, if you're conscious of that as a patient or just a consumer and you're trying to not put more water in the bucket, so you're choosing clean air.

I would say clean air, clean water, clean food, that's where it starts. And it can be so overwhelming. Supplements, IVs, what do I do? Start with the basics.

And anyone can do this. Even if you don't have a functional doctor, you're not sure where to start. Clean air.

Leaving the Moldy Office and Starting Over

Make sure you have a good air filter right beside me here. Boom. Austin are right in the corner there and I have five of those in my office and I have three at home and I don't have that large of a house.

So it's like I make sure that that the the clean the and you can do another brand. I'm not brand loyal but any you

want a good HEPA filter with a B or C filter because that B or C volatile organic compounds is the fumes, the smoke, the benzene from your off gassing.

We just read a study on if you have a gas stove at your house, which I still do nothing wrong with that, but it will leak in off gas benzene. And they've actually detected benzene levels in the air even if it's not turned on.

So that's one more Bossie that we're not thinking about. And then the mole produces these mycotoxins that are 2.5 microns or smaller, which means they're smarter than a virus particle, and those will not be filtered by a HEPA filter.

So if you have a furnace built, you're like, My house is fine, you're not filtering those viruses. So you need a filter that has a charcoal or zeolite internal mechanism to actually pull out those volatile organic compounds.

So that's a clean air, clean water. Make sure we're drinking clean source water. Last year in Colorado, they did a study of the water supplies here, 100% tested, had too high of levels of space, which is California.

Who did that study? That's a good one to look up. You know, I. Can get it from. You know, I don't know who did it, but I. Don't think that many communities are actually doing the first testing.

So you are right. I think that's a really important point, because that is. And when I saw it was like every Yeah, yeah. So and so if you don't want PFOA is are this is basically polychlorinated they are called forever chemicals and scientists cannot even calculate the half life which means for generations and generations we're going to have this this is going to be there forever.

Like we don't have a way to get rid of it and we don't have a way to even know how long it last in the environment. And this is your Teflon, your Gore-Tex, those products, and they're in like the coatings on your take out food.

They are in your all your camping and hiking gear that's waterproofed there. So they get absorbed into our skin. They're in our food supply there. And some of the cans are coated with this and it is filtered by reverse osmosis or most carbon filters.

You can filter water, but if you're drinking tap water, even city water, it's in your water. It is in your water. So you need to be drinking water. Going through the skin with the showers and things.

Yes. Yes. So it's like everywhere. Really need a whole house filter. Yeah. Yeah. Whole households are 100% so clean air, clean water, clean food. And I'm going here and I'll tell you in a minute where we went with the mold.

But it this foundation is so important because it's accessible to the people listening. Again, not everybody has a function as an expert or can afford the specialty or the Ivies.

So there's so many things you can do that are expensive. But I want to be very practical here and get at least a few things that everybody can do and think about clean air, clean water, clean food. And when you put good inputs in the bucket, you're keeping the water level at bay.

And then in a moment, we'll talk about how do we actually bring the water level down because there's our buckets filling. If we aren't consciously choosing every day to practice detox, we're behind the game and we're going to fill that bucket up.

So you literally have to be aware of this. Don't be afraid. But if you're not practicing so clean air, clean water, clean food, clean food, farm salmon, one of the most toxic things in the world.

So if you're going out to eat and getting salmon twice a week, you're not doing yourself a favor unless it's wild caught, usually that's sockeye. Coca-Cola, Coho, sorry. And King.

Those are the top three for wild. And it has to be wild because farmed is a whole nother issue, because it contains PCBs, it contains all kinds of toxins and then just local grown, if possible, organic as much as possible.

If you can't afford it. Look at the Dirty Dozen from Environmental Working Group and try to at least avoid those. They're the most top sprayed, for example, bell peppers of strawberries.

Some of these things that celery and those at the very least make sure you're buying organic and then do what you can to support your local farmers. Go to the farmer's markets, get it fresh grown if possible, maybe grow some herbs on your balcony, if that's all you have.

Whatever you can do to incorporate clean foods into your diet. And I say that foundation because that's where it starts. Now, with me with Mold, it took me about 18 months to really start to see the difference.

And the one thing I most want to talk about here was I got worse before I got better. And I think people need to be prepared for that because it's when your bucket is totally over your head, you're drowning in water and all of a sudden you start to mobilize toxins and move them.

That mobilization of toxins out of your tissues that's been accumulating into your bloodstream where the liver and the kidneys can start to filter causes reactions because you're actually getting them mobilized into your blood so your body can filter them and if you mobilize too fast, for example, you do 45 minutes a day at 140 degrees in the sun.

You're going to feel horrendous. You're going to get like, I got rashes and hives and you can't mobilize quicker than you can excrete. So it's really important that if you feel like you're getting worse, it doesn't mean something's wrong.

It doesn't mean you have to. Right? It's like. You got to kind of reassess, pause, reassess. And look at your patients. What you do shouldn't feel worse if you feel worse, you know, significantly worse.

It just means there needs to be an adjustment to the plan. Right? Exactly. Yeah. And I'm sure you're checking in with patients, too, because if they're like, like, I'll tell you my examples, I was like, Oh, I'm going to get this chart or just like I do with everything, which is to my detriment sometimes.

So I threw like for charcoal twice a day, like huge doses of binders and some prescription binders.

Foundations of Detox: Air, Water, and Food

And, and I started getting hives and from my neck down, my gut, my whole body was covered with rashes and hives. And. And the skin is a detox organ, Right?

So your body's trying to enlist the skin to help. And I was so in I was so sick from that. Like looking back, like when you should have been more gentle.

But that's how we've learned, like, you and I, both of have done the things that kind of made sense at the time. And our bodies are like, Oh. That is so.

And we didn't know is the piece that again, many mold sensitive I talk about in my book, but it's the highly sensitive thing. Right. A lot of our patients and both you and I, it's this gift we always thought, or at least for me, I thought it was a curse.

Like, why am I so sensitive environmentally, emotionally? Everything where it turns out is those of us who are highly sensitive. It's actually a gift because we see details that other people missed and we're able to sit with a patient and maybe come up with solutions that other people would miss.

But on the other side, as far as environmental toxin, mold, exposure to chemicals, you and I and probably half of our patient population and many of the listeners of the segment here are that you are the sensitive person, you're the canary.

And it feels like maybe a curse. There's beauty there. But when you're dealing with detox, when you're dealing with mold, you're going to be more sensitive.

You might have to go more slowly. And what I really encourage you do, which I didn't do, is listen to your body. Like if I would just listen, my body was like screaming out, This is way too much.

And I was just ignoring it and pushing through. Right. I think it's really a blessing because our bodies are telling us. They're informing us how to you know, it might be a really narrow path, but it's really helping us to find that narrow path.

Whereas some people that don't have the sensitivities might be off the path, but they don't their body is not able to let them know. So I think it's actually really good.

I agree. And just at that conference that we were at recently, I wake up, I, I all my cold symptoms were started screaming at me with the in 24 hours of being in this hotel.

And I'm like, okay, I need to go home. And I remember we're walking together, right? I remember I told you someone had told me, a friend of ours that also detects mold.

And she said the certain area of the hotel is really bad. Be careful. And we were walking towards that. And you look down, used to look at my hands, right?

You were like actually showing me physical, like, wow, it's okay for me to share. But like I said, same thing. Like some of my symptoms. It was literally as we're walking down the hall, we were seeing symptoms that manifest right before our eyes of the exposure.

And so it's the blessing is that rather than just sitting there and letting the barrel fill up, our bodies were like and we were able to not spend time in that part of the meeting.

And for me it was just, you know, go home early. Yeah. And I'll tell you, you know, I had my liver enzymes, rays after that, and it was great. Yeah. I literally had I looked at lactate labs every three or four weeks and my liver was up in a like button gel mold.

Yeah. So it was I had objective data of the exposure, just like you. Okay. Okay. I want to come back to this resilience because I think at let's go let's go back to your story of, you know, what you felt, I think things were that really helped you.

But even we just have to keep building resilience. And so I want to come back. To I love that because that's really where we'll come back to that. And I'll just put a little teaser here.

The key is any of you who either are just now getting into mold, you're like, why does this is so overwhelming? Maybe someone's right in the midst of detoxing.

Like, I don't feel well, this is so hard. Maybe someone's just like, starting to get better, or maybe it's like you and I and which we've been through a lot, and I'm functioning fairly well.

One of the keys that we want to leave you with is how do you get to the place where you might always be sensitive to mold? And and I still we could tell anywhere we go, there's more. We know it.

We're like mold dogs. But what I know now is I don't have fear around it. I can go in there and I know exactly what to do. I know what my threshold is.

I know when do I need to go home, if it's going to be too much. And I know, listen to my body and let it be the guide. And then I also know which we can talk about next is what do you do with exposure to actually reduce that bucket level so that for me, I can usually within 24 hours or less turn myself around and go back to normal.

I didn't used to have that ability. So now I'm very confident in the fact that, yes, I will feel mold, I will be sensitive to mold, but it's not going to take me out for months.

I like it clean. And that's resilience, right? That is resilience that we can be faced with something pretty significant and bounce right back rather than get and getting taken out.

Yeah. So what did we do? Well, for me, interestingly, when you have a lot of oxidative stress, there's something called in sick. It's upregulated. The Knox enzyme when there's glyphosate, mold, metals, gluten and any other toxin you can imagine.

And when this gets upregulated, you take all the good things like any age that makes your energy, which helps you restore and recover and you take things, all these things become oxidized.

And this oxidation is almost like your rusting inside your body. So like a car that gets oxidized, it literally starts to rust. That same kind of proxy process called the reaction happens in our bodies and it's just this reactive oxygen.

So what happens is if we start to take things that are oxidized and need recycling, like too much need or good around, these are all wonderful antioxidants and they're powerhouses for many people.

But if you put them in the midst of a body that is full of oxidative stress, they'll actually oxidize and do more harm than good. Same as like even hyperbaric. That's extra oxygen.

It's amazing for so many people, but it does create oxidative stress If someone is already super oxidized. So all these beautiful, wonderful things, if you're like, I don't tolerate them.

Part of the reason might be this was for me in the beginning, I was so oxidized and so reactive, making reactive oxygen. All of these things made me worse.

Even good found. It was two years before I could take a dose of good with them. I would get worse. And it didn't matter which form of glutathione I tried any type.

Now, now I can take it all day long because I'm not as sick and oxidized. But I mention that because we have these formulas and we think you and I both do them and they're perfectly appropriate glutathione for everybody buying just for everybody.

But there's never one size fits all. And I know you're like visually treating, but I'm really respectful for this. People are like, I can't tolerate that because that gives me a clue.

And if you're out there listening, like, yeah, everybody I listen to says Take me to town, but I feel worse with it. Listen to your body because there might be some oxidative stress that's actually you're, you're not able to, you're reducing air, oxidizing it and you're not able to reduce it.

And so then you're creating more inflammatory mediators, Right. What happened to you when you were taking the glue to iron? I would feel I would just feel worse.

I'd feel more tired, more foggy. So people kind of feel like they wake up that right before you had a patient in the office, a young man who had some mold exposure, and I gave him a sample. Good of them to try.

He's kind of come in kind of grumpy, kind of irritable, kind of like soon as he took this, he's like, It's the liquid stuff, right? And he just like, right before my eyes lit up, he's like, Mom, I feel so much better.

I saw him like a light bulb turn on fun. Okay, that's awesome. This is going to totally work for you because I witnessed it and that's how it should be.

You should literally like, Oh, my brain just turned on. I feel better, more energy because good, it helps you mobilize

and get rid of these toxins and it works for the whole bucket.

That's a great thing. Google now is a master antioxidant, so it works with almost every pathway.

Mobilizing Toxins and Supporting Excretion

The other caveat there is I would say your liver, gallbladder, we talk a lot about that, but if your kidneys aren't working, if your skin is so all these other organs need to work and bile is huge in this process.

So basically liver takes the nasty mycotoxins and converts them into form of lipophilic or fat soluble substances stuck in your tissues into a water soluble substance so it can be excreted and it gets excreted through the bile.

But many people in number one don't produce enough bile and symptoms of that would be trouble with fatty foods, maybe indigestion, maybe like diarrhea with fatty foods, maybe SIBO or CFO, small intestinal fungal or bacterial overgrowth because there are signs of not a clean small bowel and I could name a dozen others.

That mold would make your bile kind of sticky. And so often colleagues, which are like bitters, can be really helpful for making that bile flow better.

We actually use bile acid binders by prescription like, well, call a coaster. I mean, in some people because we're pulling that by allowance and things like taurine and glycine which are precursors to bile.

If someone can't tolerate binders, what we can do is start with that bile support like with glycine. ATTARI And just give them those nursing and usually people don't react.

You certainly could do anything, but those are very simple and safe ways to get someone started to flow if they're not tolerating the good one down of the binders. Beautiful.

And what do you like to do for kidney support? Kidney. There's a practical ringtone. It's a herbal that's really great. And then there's the German homeopathic pure kind of drainage remedies, and they have red Alex and I tires for the limp and then hip hat for the liver.

Those are kind of like a trio. I've learned tips from my naturopathic friends because they're so good at these more draining. I think is interesting. Okay.

And then hydration, of course, right? The clean water. Yes. And talk about that really quickly, because MOTUs is really weird things. It does a lot of really bad things, like it trashes your detox, which is, you know, making the mole worse.

One thing it does is it creates this process where you aren't regulating your volume. So typically ADHD will go down. That's your regulatory vasopressin for regulation of volume.

And so your drink in your P and your drink any and you can't keep volume in your vascular system, you might get dizzy or lightheaded when you stand up.

You might be dehydrated chronically with dry skin and your body can't maintain volume. And this is where if the kidneys get too dry, they don't do so well.

It's like running a car without any oil in the engine and you burn up the motor. If you don't have enough hydration, your kidneys just don't like it. So part of this kidney support is actually just hydration with electrolytes, which usually really helps because the it isn't able to control that.

And if you add a little salt to your water or electrolytes, you'll be able to maintain that volume better and support your kidneys. Beautiful. So those are probably just good basics for just about anybody.

And then and then you like to layer on the other binders and glitter thing on and and that kind of thing. So anything that makes good and again, we talked about if you don't tolerate taurine and glycine are great for bile but you can also use precursors of good A fan of B like any C lipoic acid, milk thistle selenium it all support that liver.

And then I'm sure you like Foster's. You know, Colleen. That's my desert island other than glutathione and stuff. Like if I going to leave a couple of things on a desert island, the positive or clean.

Would you like to explain why. Or PC is the the peace of all of our membranes or cell signaling? Our neurotransmitters are cellular membranes and they're especially important in the mitochondria.

Mitochondria are the energy powerhouses of each cell. And often when we get these toxins, including mold, all the membranes get damaged. We have leaky brain, leaky gut.

VICKI Mitochondria and leaky tissues. And when those membranes and phospholipids are damaged, you can replace them with the healthy phospholipid which is PC or busted or codeine.

You can do that orally. You can do it. I have one question about always. If you have a really damaged gut and lots of dysbiosis like bacteria and fungus and junk in your gut, PC by nature takes things across barriers.

It's a it's like a boat. And so if you put PC in before your gut is in a decently healthy state, you could transfer some of the bad guys in your gut into your bloodstream.

So I always wait to make sure the gut's in a decent spot and not super permeable. And then you can do oral PC, but you can always bypass and I'm sure do you do I VPC?

I do. I love it. I think that purposely for the sickest patients that's that seems to give them a lifeboat to get better quicker. How about you? Yes, yes.

I don't do it in my office, but I refer people because I feel like you do. It's such a powerhouse. It's one of the most. There's a German researcher who shared with see before, I can't remember his name, so forgive me for, but he talks about DNA addicts.

Basically they'll test in Germany what kinds of chemicals are affecting your DNA. And literally they test for mold and aspergillus and chemicals and metals and all this stuff that's filling our bucket.

But ultimately, the solution for all of this PC. Makes a huge difference. It's so fun to do the before and after on that test by g our tests and and say what a miraculous improvement and so much more quickly and you can do it without the IVs but it's just it just takes longer.

Mm Yeah, it's just a really quick mechanism, you know. Are there any other of your favorites that you want to add to cover before we move into resilience.

Let's see I guess. Okay, let's talk about so we talked about, I think about mold with mobilization and excretion and we briefly touched on that. We talked about all these ways to mobilize liver, kidneys, all that great stuff.

But if you mobilize too quickly and you aren't excreting, you get sick like I do, you get hives. So the excretion part, I think is a little bit more subtle and not as commonly talked about.

And this would be dry brushing stimulate lymphatic lymphatic drainage sludge and even lymphatic essential oils and things. Epsom salt baths, infrared sauna and any sort of a lot of times are manual therapies, a lot of times are more subtle, more gentle, but you want to really think about how in binders can help with excretion too.

But if you are getting sick or not doing well, usually pull back on the mobilization and you increase excretion. And again, sweating can help the medic drain into anything that would help.

Lymphatic drainage would help anything where you're actually excreting and allowing your body to catch up is really crucial. Yeah, I think the lymphatic piece is just one of those that's overlooked so often and just so important because it's just such an important way to actually get the toxins moving out of the tissues.

So thank you for really emphasizing that. Yeah. And I'll just mention because you and I both conventionally trained with this great education, but there's little pieces that we're lacking.

We didn't get a ton of nutritional training know you and I've done is sentence and so you're an expert too but. Yeah and it's so fun right because we can just there's always something we're to learn about.

Right. Right. As I mentioned, lymphatics, I mean, it was mentioned in passing, but I don't remember much at all about like I was like, what are the limbic.

Kind of seeing a diagram. Right, with. The vascular system?

Trauma, Mold, and Nervous System Resilience

Like how it how it kind of runs along the same pathways that, you know, in anatomy, you don't really even look for the. Exactly. Or the faster. Yes. Yes.

And those two are so critical. And I mentioned that because if you're going to a conventional doctor, maybe you can someone who knows mold be kind because they probably don't know a lot about lymphatics, they'll get in.

You and I have learned and we use this in our practices, but it's one of the things that conventional wisdom is not very up on understanding most of my information about true lymphatic drainage.

I forgot castor oil packs. It's another really right that I've learned from my naturopathic friends. Beautiful. All right. So yeah, let's let's keep. Let's keep bumping resilience because I, I, I know trauma is one of the things that really has peaked your interest in, you know, it you've done an amazing job of of addressing that in your book and I know it's near and dear to your heart.

So I want to make sure we have some time to talk about the role of trauma and mold. So this was something I knew intuitively and saw patients over and over.

And then as I did the research, it just confirmed and I'm not the only one out. There's a lot of other people talking about it, but we'll talk about it today and how it connects.

So first of all, so far, I will say clinically 100% of patients who I've treated for mold related illness, which is a lot of people have some form of trauma.

And what happens is even if they've done all their work, they have a therapist, they have great relationships, supportive environment, and they're really healthy in that way.

There is a traumatic component of PTSD, component of mold. And like I said, I say 100% because I've never seen this not be true, including myself, where there's some PTSD component of mold.

So as I'm writing my book, I was researching and trying to figure out what is this? And, you know, and it's actually in the research published about how chemicals literally in our olfactory system as we inhale chemicals internals knows the crypt form plate, which is just like porous plate into the axis in our brain.

There's literally evidence for the chemical trigger of noxious smells and mold into our brain, triggering the amygdala and the trauma fight or flight response.

So it's not just that we're afraid of that exposure and getting sick again. All of that can be very real for people. It's literally that inhalation and gets triggered with the amygdala response in our brain, a fight or flight response.

And it kind of makes sense, you know, from a survival mechanism that there is a noxious something happening. Our bodies need to instinctually get away from it.

Right. But yes, as with like I think from a survival mechanism, you know, hunter gatherer times like it's a quick exposure. Yes. Whereas with the mold, it's so long term.

So it really gets that amygdala poisoned at the same time, right? Yes. Yes. And so when I understood was like, oh, no wonder, because again, yeah, we all have a little bit of trauma we can deal with and work with.

And if we're aware and awake, we can get those kinds of things. We'll talk about some resilience strategies there. But the truth is, even if you're healthy and well-adjusted in great relationships, it's still traumatic to have the most exposure and especially if you get sick from it.

So what I do with the treatment is I always involve limbic, you know, loop training. I think you were the one who said Olympic loop or whatever words we use for that is this amygdala response and how do we basically neutralize that as part of the protocol?

Because what happens is when you first get exposed to mold and there's actually some mechanisms that creep more into it, I have it all. The dead in the book talked about antisocial behavior.

If I look back at right after my mold, I mean, all I could do was go to work, go home, sleep, and like I could barely function to get through that really sick time.

And I wasn't using that. You were able to keep going. It kind of is to me. I'm like, How did I do that? Because I was really, really sick. And the thing about it too, I really pulled in almost like anything, like lights sound too much stimulation was all too much for me.

Nervous system at the time of healing And so I wasn't going out to dinner with friends. I wasn't traveling that much. All the extra stuff was like, I can't deal with that.

Let me just so there's and I've seen this, especially with ketamine, there's a sense of overwhelm that comes from the micro toxin exposure that adds to the burden of the illness in the sense of everything feels overwhelming.

And it could be, I don't know the exact mechanism. I suspect it's part of literally your brain circuits are like, I can't deal with this. I like to share this new study with you that I found on she tell me when they looked at like a hundreds of different chemicals that are made by to tell me and like it went up like all the different functions that they did.

So I will probably figure out the answers the question why with this together? No way. Because I know I saw it and then I felt it. And even last summer, a neighbor's fridge leaked.

It went under my condo floor. I didn't know it was can tell me my condo. And I felt like I was almost going to have like a nervous breakdown. And I'm not that kind of person.

I'm not usually anxious. I'm pretty happy, very optimistic. And it's like, what is wrong with anger? Tell me. It was like, Oh, no wonder that Darren gets home, you know, because whenever I've had exposure to good, tell me am I have a sense of like my brain is not crossing wires correctly and I'm feeling overwhelmed and even depression anxiety, that's not me.

But certain molds will cause very bizarre like down sad, overwhelmed. So I just want to say that because if you've experienced mold and you're like, Wow, I'm so depressed or I mean, even suicidality.

Something that is so important that, yeah, any time somebody becomes suicidal, we really to look for more. Yes. And I just I have such compassion for you because even for me, who I haven't had those kinds of disorders in the past, but when I've had mold like, oh, this must be what it's like to be depressed, you know, or whatever those things are.

And what I find it also does is it sabotages our insight. So our insight is our ability to, in real time, tell that there is something wrong here. And we may kind of know, but even to this day, it's something that takes me a few hours or at least 30 to 60 minutes to realize, Oh, this is mold.

And it's because the mold sabotages that quick insight ability that I would normally have without mold. Like, Oh, this is what's wrong, I need to fix this.

It's almost like this kind of vague sense of like, Whoa, what is going on? And then. Medication. Yes, that's a perfect word. So overwhelm common disorientation, common depression, anxiety, common because it.

Is so complex situation, too. Yeah. So if you're experiencing these things, these are very real and they're very treatable. And the great news is I look back, I'm like, I wonder how much of suicide, bipolar depression, anxiety.

I wonder there's got to be a decent percentage that's related to mold. Absolutely. Especially since we have this epidemic going on where so many buildings have pretty significant mold. And yeah, so.

Resilience, how do we deal with this? First of all, I always want to teach patients to connect with symptoms, with with the real time exposure in the sense of the more I can empower a patient to know, just like you and I in the hotel, we both have a very clear like this is what mold feels like to me.

I'll feel pressure, my sinuses. I'll feel a little disoriented and confused, maybe some overwhelm. Like we said, I feel more tired or foggy as soon as I wake up the next day.

I'm really achy. Yeah, I was so achy at that conference. I just felt like my body had been run over by a truck. Yeah, like, Whoa, what is going on? Upload bloated.

Just like I know my body and, like, loop lots of bloating. And so for you as a patient, what you want to do is find what your signature for mold. This is part of resilience because if you can identify and the difficulty is if we look at mold and micro toxins, there's hundreds of chemicals produced.

So even for me, I have personalities and more than I can almost tell now which more than exposed to the symptoms. Yeah, Yeah. So. Right. I'm like, okay, tell me.

And whatever the overwhelm is, tell me or the stack is like dark sadness And so these things and that's just for me. But if you can find a signature for you over time of what it feels like to be exposed mold, what you can do with that is that gives you resilience.

Because this like an and I, we walk through this hotel where I grew mold multilayered. And we know, okay, I go back to my hotel room, I take good and I take binders I can her Epsom salt baths anywhere in the hotel.

I do that if I can get fresh air outside, open my windows and then if I can go home as soon as possible. That's also good, right. Or change rooms if it's in my rooms within hallways.

But if it's in a hotel room, you change your room. So if you as a patient. Can you tell us, would you say you've changed hotel rooms? Many, many. Yeah.

And you know, that's worth talking about because so many of us, especially women, we've been taught to be conscientious, be kind, be accommodating. You have to be very frickin bold about what you need.

And there's nothing wrong with that. I always say it's okay to be high maintenance if your high performance and I don't have bodies anymore for my two bags for the weekend or for my need to change room and because it's about your health.

So I want to give you permission. If you're listening, be high. It be high maintenance and high performance. If you need to be asked for a new room, ask for accommodations, etc.

windows and open, ask for a fridge in your room so you can have good clean food, whatever you need. It's appropriate and it's okay to ask for it. Why that that's so important?

And I do think that that's been one of the gifts of, you know, when we look back at these illnesses and like, what are the silver linings, that is one of the gifts, right.

Is being able to ask and search in certain situations for for what you really do need. It is. And that's can be a gift like empower us and realize that.

And then you also realize, like before, when you first get into mold, it's you get so sick and it's so scary. But as you work with this trauma, so back to that trauma piece, every single more patient I tell limbic deactivation symptom syndrome, so I can talk limbic activation, types of solutions and those could be anything from dangerous brain tap.

GUPTA Protocol, cranial psychotherapy, neuro linguistic programing, working with a somatic based therapist. And the more you understand about the somatic system, amygdala and how it correlates is is going to help you.

So I recommend reading people like Levine, Gabor Marty The latest book on Cabramatta is phenomenal. Oprah just wrote a book on Why did this happen to me?

And it's all about childhood trauma is so good. So all we can. Say now, that's a good recommendation. Really? Yeah. So all of these. Different aspects, someone like Oprah to her.

Right? Right. She shares openly and it's such a great primer. The more you understand, the more then you can start to see, Oh, I have this pattern and you have the power to change that.

None of this is permanent. It's beautiful. Yeah. I think about as you know, we get entrenched in these neural pathways is just kind of the way we've done things.

It's how we've survived, it's what we've done. And so if we can see where it that we're in the trench, then we can jump ourselves out of it and make a new pathway.

Mast Cell Activation and POTS Support

Yeah. So the great thing about neuroplasticity is we have the potential to reverse it. That's what it means as we used to think our brains were just going to be that way and we're going to age or we're going to lose our memory.

All this is going to be permanent. But the truth is, all of this we're talking about has the potential to be reversed. I have to spend a couple minutes on the on end cast because I know that that's an important part of your journey.

Yeah. So what we know is some of the great leaders, Lawrence Ephron and the authorities have been great teachers of muscle activation, and they're conventionally trained, so they weren't like trained in the mold related illness, but both of them speaking to them, have said over and over, mold is definitely the biggest trigger of muscle activation.

And if you've never heard that term, it's very, very common, especially post-COVID, because what happens is our muscles are promoting memorial cells to protect us from the environment.

So they're kind of out there scavenging and looking for things that might be harmful to us. And what's happened is, as our buckets have loaded up in our environmental, toxic load has increased, they have become more and more reactive.

So we're seeing many more patients that have muscle activation just because they're being triggered and mast cells particularly don't like mold. So that's a very, very common thing for them to be triggered by mold.

And then they'll throw out their contents, which include prostate gland and histamines and a thousand other things

that create inflammation, swelling of tissues, permeability of tissues and overall dysfunction, increased heart rate, decreased blood pressure.

And I could go on and on. So typically people will present with brain fog, rashes, hives, itching, activation of old infections in gut permeability issues.

All of a sudden increased sensitivity to foods raising heart rate symptoms, which could be as a stand up. They get dizzy, lightheaded disorder. Gnomeo where they're just autonomic nervous system, their blood pressure, their heart rate.

Nothing's working right. And some people are so sick that they're in bed they can't even get up and go anywhere because they're so disoriented, which means they can't regulate pressure when they stand up and they get really, really exhausted in the worst of it.

For me, I would rent blood pressures as low as 75 over 45. Oh, my God. So how did you function? I know. Well, you know, it's funny. This is the funny thing about tell me and I always call it the narcoleptic mode, because if I would get exposed, I'm like, I got to go lay down now.

I'm so tired. Well, I realized it was dropping my blood pressure. No wonder I lay down because I couldn't keep up. You had nowhere to go. You're already so low.

If you went lower, you can't. Yeah. No, my normal is 90 over 60. But if I get below that, then I start to be dizzy or lightheaded. So, yeah, that's a whole nother lecture on nitric oxide and basically dilation and pathway.

Yeah, but the bottom line is a lot of these massive activations will create many, many very severe symptoms. And if you think about like where to start, if you're sick with mold, you kind of have to think about limbic system right away and start to set in and at least create.

So there's a fear around it and then you do have to address mass. So right at the top, because often these patients can't tolerate herbs or supplements or binders or things until you stabilize themselves.

So what do you do? Well, natural muscle stabilizers are things like quercetin, gluteal and and nettles, tiny skullcap so often use combinations of natural things.

And then with these patients, I find they often need a layered multidrug approach for hitting all the pathways. So H1 blockers, H2 blockers, muscle stabilizers and some of the common ones are, you know, the allergy medicines like Zyrtec, Allegra, Claritin, Benadryl, XYZ, all all of those.

And then maybe adding something like brand additive for the H2 blocker and then muscle stabilizers, things like montelukast or of often are powerful chromium Crumlin can help with food sensitivities.

DAO—an enzyme can also help break down histamine. Adding methylation support can help break down histamine. So you're kind of going at it as breaking down the main blocking.

It means stabilizing the mast cells, helping DAO enzyme which will break down histamine, low histamine diet and you can kind of often need all of that to stay up too.

Especially when people are as sick as what you described with, you know, hardly getting out of bed if you just hit one or two of the mechanisms, it's not enough.

Now, once they a few that you may not have heard, I'm sure you have, but the listeners may not have heard before. Stimulants have their placeand stimulants are off label use for POTS.

So sometimes they'll use stimulants if someone has severe POTS because that that's actually a pressure. So something that will increase epinephrine, norepinephrine and raise the blood pressure in severe cases.

Methylene blue. I've been a huge fan of this microbiome that's been around for 200 years. We've used it for Bartonella and infections, but it actually can actually create some issues with the nitric oxide so people are more stable with the POTS as well.

So there are two little things that can be helpful for certain patients. Okay. So I would love to talk a little bit about your book because I think it's such a gift to to patients to, you know, really do a lot of what we're what we're all about, which is to create inspiration and hope of of recovering from these illnesses.

So I thought if you just share a little bit about your book, I have it here. I loved it. You're so awesome. Thank you. Well, it's it's really different from a lot of them out there.

Only in the sense of I was told that you can't write your story unless you're Oprah Winfrey or Brené Brown or someone really famous. But in my heart, I was following my intuition because I thought stories are connective tissue.

And even as we tell the story here today and I'm sure a lot of your guest stories, what people relate to because you can present all the facts in the world, but when you have a real person, a real journey, it actually all of a sudden we're like, Oh, I'm not alone.

Book, Documentary, and Final Resources

And part of our place in this world is to really realize we're all one and we're not alone. And even here today, I hope if there's one thing you take away, it's that there's hope and that we are here, right there with you.

You're not alone in the suffering. And what I realized is my path as a healer happened involve a lot of suffering, a lot of illness, and the power of the suffering comes in understanding the purpose and meaning and then retelling your story so that other people can relate.

So what I did in the book is I wrote my story and I shared a lot of very personal, vulnerable points of, struggling with being enough, working too hard in my addiction to work as an addiction like any other.

How do I deal with that? How do I deal with when do you be strong and resourceful but also feeling sensitive and weak on the inside? How do you deal with picking really unhealthy relationships?

And I share some of that. I'm in there. It's very telling there. You're so bright to share all those. Jill like I really, really admire your, you know, the amount of compassion that comes through and the just the integrity and the intimacy of sharing your journey.

So thank you. The hope is just that a reader might see parts of themselves and be encouraged. And then the great part is there's sidebars, tons of them, and mold is actually.

So it's actually there's a practical piece too, if you want just you just want to read the sidebars and not my story, that's okay too. And you'll just get the how to for how to take them or what to do if you're most exposed to the whole chapter called Transforming Toxicity, all about how I recovered from Old Lady Illness.

It's really well done. I think it's it's I highly recommend a read and then I think people will walk away with some really good tools and understanding and inspiration for sure.

And then your documentary, I loved getting to see that because, you know, I get to see where you grew up and where you went to med school and where you dealt with cancer and, you know, really made your story so real and so personable.

So if you could just share a little bit about the documentary to share. So that was another unexpected miracle. But we have a documentary now. It's in the film festival and it will be distributed right now.

We're going to see how that will happen. If you want to just see the trailer and just find out where it might be playing doctorpatientmovie.com is the website and the trailers on there so you can see that and I'm sure will be putting out there to the world when it's coming out And right now it's just in the in the film festivals.

It's really beautiful. Thank you. Anything else before we share where to find you and all your good amazing information that can keep people moving and inspired.

Thank you. And we'll just as always, it's such a pleasure to be here with you. And if you guys don't know the amazing powerhouse to Ann Shippy is in the world I love you so much.

So thank you for what you do. Thank you for having me today. And if there's any message I want to leave with you is this stuff can feel totally overwhelming.

And any mold more than anything else because it sabotages your brain. That's why I wanted to talk about that, because in the midst of it, you may feel hopeless.

You may feel like you'll never get out of it, but there's hope. And there is reversal and there is resilience. And so no matter where you are in your journey or where your friends or family are and you might be listening for them, there is always hope.

And I just want to encourage you don't give up. No matter how dark the times seem. Always grasp for that light and for that answer and for that wisdom, for that hope, because there is always a chance to turn things around.

Yeah. No matter how, how dark things seem, there is a light at the end of the tunnel for sure. So thank you for that. And you do such an I love your blogs and so I really recommend people get on your website and and read the blog.

So you're just constantly putting out great information on your website. So if you want to share your website and then Instagram. Sure. I think it's just my name.

So jillcarnahan.com and it's all free there. So yeah, lots of resources for mold, especially write a lot about mold and then Instagram is just drjillcarnahan.

Awesome. Well thank you so much, Jill This is just a great we covered so information and lots of great tips and tools for people and I think really covered a lot of the most important information for for people to know what they need to know to really make progress and and getting better and becoming resilient.

And thank you, Ann as always, it's a joy to talk to you. All right. Thank you so much, Jill.