## Introduction and guest background

Everyone. Dr. Tom Moorcroft, back here with you for this episode of The Healing from Lyme Disease Summit. And today is a real treat. We're going to be hanging out with Dr.

Jessica montalvo. And Jess is one of my favorite people. She has basically, kind of like me, started her career at a bit of conventional medicine. And then really as she started seeing people suffering and didn't have the answers really branched out into dysfunctional medicine place.

But one of the things that I love about Jess, since she studied with Dr. Bredeson and his record program, she studied a lot of in-depth cannabis work so that just like everybody else, we're talking to her.

Bring it to the science that allows you to explore new therapeutic potentials. And so one of the things in her background is she started seeing a bunch of Lyme and other things coming through her practice and was like, Hey, I got to get some research or some more training.

And so she joined our Lyme Disease Practitioner Certification and mentorship program. She's one of the OGs, one of the first people through it, and then we decided to start working together.

And so she's actually one of the practitioners. She was with us at Origins of Health. So today, though, we're going to really be focusing on sort of this relationship between cannabis and Lyme disease.

Talk about the emerging research and the potential therapeutic applications that are science based. So, Jess, welcome and thanks for joining us. Thank you, Tom. So glad to be here.

Thank you for having me. And you are also one of my favorite people. Thank you. Thank you. Yeah, it's fun. It's like, you know, it's funny, I was talking to Dr.

Darren Engels was one of our, you know, who's our co-host here. And it's like so funny. A lot of times, like when you start a summit interview, you're like everyday, Oh, this is my best friend and this is my, you know, my favorite people.

But legitimately, like everybody that's coming on this are people who I have a very close relationship with. And there's a couple of people who I you know, I recently interviewed someone who I just developed a relationship with.

But, you know, at the time of our recording here, we bet you've been training with us and we've been exchanging stories and working together for the better part of just shy of two years now. So.

And that's right. Right. Two years already. Intense mentorship. Right. So like, I mean, you got stuck with me for like hours and hours a week for seven months now it's been like hours every other week and now we're working together.

So anyway, it's like, it's just so nice to work with people who are close to me. And this is what's so beautiful about this community is that we all come together because it's not like me or you by ourselves or Dr.

Bredeson or Dr. Nathan or whomever. I want to throw out names. It's together, we can do this. And one of the things that, like so many of the people focus on is like the how of getting the bug killed.

Right? But then the other part that seems to be a little harder to get to and a lot of people don't want to dove right in too, because it's complicated as how can we actually heal the immune dysregulation?

How do we heal the emotional dysregulation that comes when people are doing all the right things, but they're not working? And in today's age, I feel like there's this emerging field of going back and looking at medicinals that have been around forever.

Yep. That can really unlock it. So in my my emerging ancient therapies. Yes, I loved it. Yeah, exactly. So. So what's the scoop? I mean, like, you know, I usually ask people like, how did you get into functional medicine? What's your whole story?

But when we're going to be talking about cannabis, like, what got you interested in cannabis? Because I mean, the first thing people think about is there's a little bit of medical out there, there's some emerging recreational availability, but for the most part, there's a big stigma behind it.

So what would make a doctor who's been trained in sort of all these things go, hey, I'm really going to put my neck on the chopping block for my patients and maybe even myself to learn about this.

Like, what got you so interested in it? You know, I think that where I found cannabis initially was in my sort of previous conventional life in the palliative care space.

You know, we obviously come up against a lot of hard symptoms to manage. And there's, of course, many, many pharmaceuticals out there. And sometimes they work well, sometimes they don't.

## Why cannabis interested Dr. Montalvo

Many of them, even when they are working well, there's a price to be paid. You know, there's a side effect. Yeah, there's a lot, you know, unfortunately, that can happen, especially when you've been on them long term.

Opioids are a great example of this. You may have hormone dysregulation when you've been on it long term as a example, you know, men's testosterone just plummets.

So I started looking for other ways that I might help people just feel better in terms of, you know, whatever their symptom was predominantly pain at that time.

And I was really intrigued by what I was reading about cannabis. I know that there's kind of this idea that, Oh, we need more research, we need more research.

The reality is that certainly in terms of biology and mechanism, animal data, etc., we have a good amount of research and we do have a lot of experience is right.

There was a time, of course, where cannabis use was just sort of this big thing that you did in your teens and twenties. It was sort of an expected rite of passage in the sixties and seventies before this whole war on drugs came up.

And what I when I started looking at what what cannabis might offer people who were struggling with with various symptoms, especially a pain, I felt that, you know, here is a really intelligent plant.

It's not acting on just one pathway. It's acting on so many pathways that, you know, to date, I don't even know how many we've elucidated, but in my take on the research, I mean, you're talking like I mean, we're talking 20, 30, like 40.

It's it's insane when you think about how it behaves and why. And I just started thinking, well, why not try using something like this that can impact so many things?

See if I can make some progress with some of my more, more difficult management, you know, pain management patients. And I was seeing really good impact.

I was able to add it sometimes to an already complicated regimen. I saw that I was able to have people not take quite as many of their opioids, which helped them feel better in some other ways.

They were less constipated, they were less out of it, so to speak, during the day. And I and I also saw that a lot of those people had kind of like a little bit of just an improvement in well-being.

There was less anxiety. They were sleeping a little bit better. So so that was really what got me convinced that I needed to look into it more, start learning more.

And then as time has gone on here and we've had just more progress on the legal front, we've had more availability of products. And I have been trying to work with different things and trial people on things.

I often see that people do well with cannabis and I think that they the cannabis just has far less downsides than a lot of pharmaceuticals that we might use to treat some of these symptoms.

Now, it's so interesting that you're like, hey, like somebody took some cannabis and they were more with it during the day than otherwise. I think most people think of like the stoner movement, you know, and it.

Exactly has. To be that way, right? If you do it. Well, exactly. Exactly. Yeah. And I think that we all think that THC, which is, of course, the most abundant cannabinoid in cannabis, that the THC impact is all cannabis can do.

If you take THC by itself, of course, you're going to have a lot of those typical sort of stoner type symptoms. And the trick is to understand that this is a plant and it's its own little ecosystem and all of the components have a role to play.

And so so this is, you know, when we start thinking about like, what's a good product and how do you choose, well, that's really an important thing to be to be thinking about.

No one should really be using THC all by itself. Yeah, I find that actually really intriguing because I know enough to be dangerous with this, right? I mean, I know the general concept that you just suggested, but one of the things that frustrate me in medical cannabis is not everywhere, but most places I can be a physician, like in Connecticut who's fully licensed.

I do the extra steps to be registered, to be at a you know, to recommend as it is medical cannabis. Then I say, okay, great, go to the dispensary. Talk to a pharmacist who may or may not have a great amount of experience, but they've at least been able to invest enough that they can open a medical cannabis dispensary.

And then you go and you just try a whole bunch of stuff and they may be to help guide you, but there's not it just it doesn't seem like there's a lot of really good information easily available to a lot of people.

I know there are some smaller programs is some people have done some really great you know I can think of you and one of your partners and then like two other people who do a really, really good job of educating on cannabis.

And I know there's more that I don't know personally, but you go in and it's like a crapshoot. It's almost like you just keep trying stuff. And then when we've sat down with patients and I'm like, Okay, I see this thing that I don't know enough about and you're like, Oh, just if you look at this ratio and you get this thing to do that symptom, and I'm like, It's brilliant.

Like you can actually manage people so and their symptoms. One of the things I think that's really interesting though, to think about is one, working with an expert in this, you can optimize symptom control potentially and side effect minimization. But one of the things I think is so interesting about cannabis is some of these immune modulatory properties, because this is a word that comes out of my mouth all day long, every day I want to modulate your immune system.

So can you kind of tell us a little bit more about this, you know, the properties of cannabis and how it can impact the

immune system. Oh, yeah. Now. Oh, yeah.

And this is one of my this is one of my favorite things.

## Cannabis and immune modulation in Lyme

I and I can geek out on this for a while because this is actually for me where I see a huge potential contribution to line because just as we were just talking about earlier, that sometimes the problem with line is not that there's a bunch of bacteria still alive, it's that the immune system has now become so poorly programed that that people can't truly heal.

Right? They they can't actually move on from their joint pain, from their their brain fog, etc.. And I choose those two symptoms specifically because when I think about the immunomodulatory properties of cannabis in LA, I'm, I think that these are two areas that are, that are really exciting and we have actually some nice data, you know, at the cellular level.

One of my favorite studies that looked at this was back in 2019, they actually took some cultured micro glia cells from a from a mouse and, you know, microglia for for those who may not know, these are some of the immune cells of your brain.

So when you think about brain symptoms that can come up from various insults like Lyme, often what's happening is that the microglia have essentially gotten triggered and they've moved from this really nice resting state where they kind of like hang out and sort of monitor to this, you know, kind of like a killing state, which sounds like it should be a good thing when you've got an infection.

Unfortunately, what often tends to happen is these cells get stuck in that response. And this is now where you start to see brain cells are now being destroyed, connections are destroyed, etc..

And what they did in the study was they looked at what happens if we pre treat these cells with cannabis. Specifically in this case, they were only looking at CBD and THC and then they put them together.

And what you saw was that when these cells, let's say, were introduced to some sort of a trigger, that would normally get them really, really agitated when the cannabis was in play and it was best when it was CBD, not THC by itself, the mix of CBD and THC or CBD alone, what they thought was that these cells were less likely to overreact.

They were more easily get back into that resting state that that we kind of really want the microglia to be in most of the time. And it seems like this happens at the level of of RNA, which is really exciting.

You know, we sort of think about everyone's wondering, well, how do cannabinoids do all of this? They're impacting how our genes are being translated.

Right? But that's that's kind of what our RNA does. It comes along and it decides, right. What it's going to what pieces of DNA does it want to amplify and kind of move into action?

And that whole process, you know, there's a lot more science to this, but that process, you know, gets actually impacted by by many cannabinoids. And when you when you do it that way, when you see it that way, you can say, well, wow, this is so not only is it potentially going to help the microglia kind of calm down, you know, as an example, this also is impactful for our joints because those same types of what I call it, micro RNAs, in this case, these little micro RNAs, when they're overly present in the joint tissue fluid, what we call our synovial tissue fluid, they will set up an ongoing inflammatory reaction that does not quiet itself.

It just keeps amplifying. And this can happen even if there's no live bacteria in that joint, which is, again, really fascinating. So, again, animal models, but what seems to be true is that the CBD, THC, especially in combination, can help decrease the expression of these micro RNAs that are driving this this like really poor inflammatory

reaction.

And that's a good thing because then maybe the body has a chance to heal that soft tissue. Maybe, you know, now the joints are getting completely destroyed and people aren't ending up with like this really debilitating arthritis for years and years.

So so these would be just sort of two of the big ones that are on my mind right now. As far as immune immune modulation. It's interesting to to me because, you know, things like the microglia are things that come up in our conversations very commonly, like people are talking about bartonella infections and its impact on the brain.

Well, you know, the microglia in the brain are supposed to, if they're acting properly, are supposed to, you know, address, you know, go after Bartonella.

But then a lot of times Bartonella will go and hide intracellular early in these microglia. So for me, like right away I'm like, Oh, bartonella. Then I'm like, Oh, wait, pens and other autoimmunity.

And like the more things where we have strep in the nose or in the throat, mycotoxins in the nose, which so many of our patients have, these things are actually leading to our own immune cells, going back up into the brain through the nasal lymphatics, and creating this overreactive microglial, you know, expression.

And so for us to be able to have a therapy that could potentially minimize this, you know, during our treatment process or, hey, we're getting somebody ready, we're doing the work on the terrain, we're getting the foundation, and we're about to hit Bartonella harder or really dove in the mold, so to speak.

Maybe some of this pre treatment before we go after these infections could potentially make a huge difference on your outcome. I mean, this is brilliant stuff.

Yeah. No, I mean, that's I mean, that's what I think and that's what I would love to see us all. That's why I want us all to really jump in more with with this new therapy, because I feel like there is this biologic plausibility for for cannabis even especially if we maybe if we, for example, for the people where we're lucky enough to catch Lyme and Bartonella earlier in course I have this idea that well, I wonder if, you know, they had kind of a can of this layer to the treatment plan.

Would they end up with less sequelae down the line, you know, for example, autoimmune, maybe we're talking about the brain and such. We all know that autoimmunity is a huge factor for anyone, right.

Who who's gotten some either tick borne infection, mold. You know, how many people now have, of course, a positive and how many of them go on to end up with maybe rheumatoid arthritis, even inflammatory bowel disease?

There's we've all seen that where we have these people with these autoimmune conditions and they've got some kind of a tick borne infection. We work on treating the Tickborne infection, the mold piece, and it feels like the autoimmune condition gets better for them.

Maybe not all the time, but first we get a group of people. And so if we were to be bringing candidates in earlier, because it does have this ability to interfere generally with very excessive interferon responses, for example, it's good at interfering with what we call those chemokine signals.

Those are the signals that say, hey, inflammatory cells like come on in, come on in. And like, you know, really get going. And so particularly for the joints, right, when you think about how what's going on with people's joints, when we're talking about line bartonella, etc., I mean, there are basically these signals that are that are going on that are, you know, whether or not there's any initially there's maybe an active organism there eventually it just becomes this perpetuating cycle.

And now we have just the you know, the signals are just kind of an overload. Well, would we perhaps have less of

a chance of that being the case if we were to be adding in a cannabis layer a little sooner?

You know, so, so, you know, but then you start to think about, well, maybe this isn't really just all about symptom management. Maybe there's a potential for it to actually impact the course of somebody's illness.

You know, when used early, when used consistently and appropriately. Of course. You know, it's interesting as you're talking about that, I think about, you know, another sort of drug that we use, ketamine.

And it's like very interesting that like the more we dove into it, we have all these positive effects sort of temporarily on symptoms, but then we also have these long reaching effects.

And then I delve deeper and I'm like, Oh, wait a second, there's actually anti Lyme proteins that this medication has. And I think a lot of these things, we just think of it as, oh, the psychiatric or the symptom minimization or Hey, if I get high, like, you know, maybe my muscles will relax.

I've actually seen one person who was had such severe Lyme that and bladder symptoms that they had were unable to urinate and actually went to the urologist.

They were basically had them catheter rising themselves in order to urinate every single day, which is a great way to, you know, torture your anatomy and also get yourself infected with even more sight, a little bit of cannabis.

And they were able to urinate fine because they're the nervous system.

## Antimicrobial potential and Lyme research

Input to these muscles was relaxed. And I didn't you know, it was never really the bladder. It was this dysfunctional nervous system. So then I think I mean, are you aware of any like direct sort of, you know, anti-microbial properties of cannabis for Lyme or for anything for that matter?

Cause I think we all just think of it as like, you know, again, back to what I learned in college. Yeah, yeah. It's like it's exactly. It's like it's not it is not just the the stoner stoner drug, so to speak.

And yes, I think that that's another very rich, active area of research because, you know, anybody who's spent time working in a hospital knows that one of the biggest killers is resistant infections, you know, infections we don't have antibiotics for.

And so there's been a real interest in looking at cannabis for its antimicrobial properties specifically. And we can see it actually is a real powerhouse against something like a MRSA, a resistant staph infection.

It seems to actually improve antibiotic activity against certain bacteria, particularly out of the Syrian enterococcus. Those are the ones we we know that pretty strongly.

It has a very strong anti fungal effect. So Candida and Aspergillus, which obviously come up a lot in our patients, you know, who may have Lyme or tick borne infection, mold, you know that these are these are these are things that come up frequently.

And it seems that, you know, even whether it's on its own or alongside pharmaceuticals, there seems to be improvement in breaking down cell walls for these organisms.

And that's probably one of the reasons why why the cannabis, you know, could have a role as far as, you know, the more complicated gram negative bacteria.

You know, of course. And we know Borrelia is a is a spiral key. So really, it does actually belong to which is what causes Lyme belongs to a type of, you know, back in biology, we all learned about Kingdom Phyla.

We had all those, like things that we learned about, right? So it's actually in the same phyla as pseudomonas and the same phyla as E Coli. And both Souter Morris and E Coli have some definite improvement.

You can limit their growth. You know, if you're there being if it's being treated, you know, with it with the cannabis sativa oil and as far as, you know, Borrelia and cannabis, you know, specifically a study you're quite familiar with actually the Zhang study.

Right, that we talk about a lot, you know, in our in our mentorship, you know, where we kind of demonstrated some of the power of herbs like Cryptococcus and Japanese knotweed and whatnot, like in a dish they did look at cannabis in in that study.

It did have, you know, a more modest, you know, impact on the growth of the Borrelia. But there was like about a 23% reduction after like that three day period in growth.

So it was definitely exhibiting some some growth inhibition, which is an interesting finding. And then though, you have to look at, well, what were they you were using, at least the way it's stated in the table, a cannabis extract?

This is really important because an extract is probably mostly THC. And I already had mentioned a little bit ago that the power of the plant is not in just singular cannabinoids being used.

It's in all of these things interacting cannabinoids, terrapins, bio flavonoids, etc.. And so I have this idea that if we were to kind of redo that part of the study with a more full spectrum kind of product, we we may end up getting perhaps a different answer or even a more impactful answer.

Maybe the growth is even more the growth inhibition is more impressive. You know, if we were to be using something that actually had more cannabinoids represented.

That's so interesting because I am going to have an opportunity to talk with one of the authors of that study and tell you about today. But we're actually going to be out to propose that.

But it's really interesting because one of the things I've learned is like if you want to create more side effects when you're using an herb extract, you know, a part of it, right?

So I think there's a difference between a whole herb extract and extracting like THC from everything else, whether this is a psychoactive herb or not.

We find that generally nature has put together these amazing healing herbs and fungi to I mean, these things are here. It's so interesting. It's like penicillin.

While that comes from a fungus, you know, it's like, oh, we learn so much from Mother Nature, so much of these other plants, and you're like, Oh, this one is an Anti-Parasitic.

Well, actually it kills a whole bunch of crap, but it doesn't really kill the host a lot. It's really interesting, you know? So and then we talk about I remember we're talking with Jo Kristin.

She's so well known for saying, hey, what's mold here to do? It's here to decompose something old so that we can liberate nutrients and create something new.

So to me, what I'm you just really like it's so interesting to me because I say this like in many of my interviews, I don't prep people for what we're doing, like, what do you want to talk about?

And then we're going to just come together because you're the right person to be here and talk about it. And in our in our summit, the goal is not just to give everyone information here.

It's really to give people the opportunity to experience a new opportunity for healing. Right. And they have that

opportunity 16 times in the last 2 seconds.

But one of the things that comes up is Lyme and mold and Bartonella Babesia pens and pandas autoimmunity. Yet none of us want it for you. But what are we going at?

What is it going to give you the opportunity to evaluate and move to the next level? Maybe it will just open you up to some of the things that you just immediately in the past, like cannabis may have thought weren't, you know, therapeutic options just because of the way a lot of people use them.

And I'm just thinking, like, as you talk about this, like, I want people to emerge on the other side of their healing with a more open heart feeling more powerful and just sharing their light with the world.

And it's like, Hey, part of this is why don't we get into a better relationship with nature and all these full spectrum plants we have because which is really funny.

That's how I got into all of this is like I was trying to teach people and I was talking to adults and I wanted them to save the environment. So all we wanted to do was talk and do more research.

I'm like, You guys aren't making progress, so what do I do? Oh, I'm going to go teach kids, because if you get kids excited about nature, they're just going to they're going to want to protect it.

And then I get Lyme disease and here I am. So it's like. I know what a series of events to bring you do to this place where you know you're meant to be.

But but you had to decide, right, that you were going to take the opportunity and maybe you walk through some some doors and open some windows that you weren't necessarily even conscious of before.

Exactly. And that's what I'm like. I'm feeling for me like this, you know, because it is it's the healing power of this plant is not just now I'm not saying you can't pull some parts out and find something really good, but typically it's when we put it all together and do the whole thing, you know, and then if we do research, we find if we give you a little bit more of this in combination with that, maybe it can be more directed.

But most of the time it's like, you know, Mother Nature has even provided different strains and, you know, of this so that we can get this. I mean, so there's just so many different things.

I guess the question is what's you know, when we're thinking about the relationship between like Lyme and immune dysfunction, how does how does a patient even start to wrap their head around this?

Is there is there kind of like a I mean, do you have the step by step process in your mind? You know, like how do we how do you know? Are there basic tips for people to get started with cannabis other than just going to the place and, you know.

Right there? So so yeah. So I'm randomly picking this stuff off the shelf. Exactly. Because I unfortunately, as you alluded to earlier, I mean, really by law, most of the people working at dispensaries, what you call them, bud tenders are not actually supposed to be dispensing advice about what product to buy.

Now they do all the time.

## How to start using cannabis safely

That's a somewhat unenforceable law. But the reality is that legally, you know, they're not obviously sitting there and asking, so to speak, oh, what other meds are you taking?

What other conditions do you have? Because, you know, certainly cannabis like all like all things should ideally be used by someone where they at least have some support, you know, for how they are going to implement this and

do it well and safely.

So I'm going to kind of give like a two part answer so that assuming that some people may want to try to get started on their own and just really try it on their own, and then I'll talk about what I think maybe an alternative, you know, situation to that could be so.

So certainly I think that if you're really interested in trying cannabis, I would recommend starting with either a tincture or an edible. And if you want to be really conservative, a tincture, you know, vaping and smoking, not the best for the lungs.

And it certainly has a place for certain kinds of symptom management. I mean, I you have a person with torrid nausea from a chemotherapeutic agent and nothing is going to help them faster than a vape or smoke cannabis.

Absolutely. There's situations where it applies. However, I wouldn't recommend that people start there. It's hard to kind of understand the dosing. It's much more variable depends, as you can imagine, on a lot of like little physics, things like how much do you inhale, how long do you hold it?

Just all these sort of intangibles that are too hard to kind of teach people about, like, you know. How many minutes or half hour increments are you coughing afterwards?

It Exactly. Exactly. So I think a tincture is really the best way to get started. And ideally, you want to go with something that is full spectrum or broad spectrum, and I'll explain the difference there.

So a full spectrum is exactly what it sounds like. They have essentially taken the whole plant. They have not removed any of the constituents, none of the chirping, none of the flavonoids, none of the minor cannabinoids.

It's all in there. And that product is probably going to be more impactful. And for a majority of symptoms, for people who are really, really nervous about the THC part, particularly, they really want to try something with minimal to no THC.

That's what a broad spectrum would be, where most of the THC has been removed. What's if it's there, it's going to be less than 0.3%. You know, and this is what most people when they talk about, oh, a CBD oil or something, that's that's kind of like really what they're talking about.

It's a it's a broad spectrum product. Ideally, it should be because I think that, again, that whole entourage effect of the plant, you're going to get more impact.

So and I would recommend, if you're getting started on your own, look for a product that is not a 1 to 1 ratio of CBD and THC. So what that means is that when we talk about we all remember learning ratios, fractions, etc.

Back in we were probably ten years old, so when these products are made and companies will often work with the amount of CBD relative to THC, and the reason for that is because some of those more unpleasant psychoactive effects that people might have with THC are generally going to be attenuated or completely removed if they have CBD at the same time.

And that's what a lot of the studies in both kind of animals have shown this certainly are people experiences. Our human data has shown that too. So I would say if you're a newbie, you look for something where you have more CBD than maybe the bottle looks something like 2 to 1 CBD to THC, 3 to 1 CBD to THC, but something that has a little more CBD relative to that THC.

And this is again, if you're planning on you want to kind of go it alone and just see what how much progress you can make on your own. Those would be the things I would be thinking about in that situation.

And then, you know, if we're talking about you want to get deeper, fancy some guidance with this. So this is where you can certainly, of course, seek out a practitioner who is trained in this.

There's a great website called the Society of Cannabis Clinicians. They have a find a practitioner section. And it's nice because what you know is that everybody on that website has completed some foundational training around using cannabis.

So it gives you a little bit of assurance, you know, that that you're working with somebody who has some experience and has spent a little time, you know, trying to really become good at it.

The other option is to work with a cannabis nurse. Many people don't know that this is a thing, but it is a thing. You know, we now have certificate programs for nurses to become really specialized in learning and helping people use cannabis.

I have a good friend and business partner, Rebecca Abraham, who who has started a wonderful company that that does this acute on chronic and I send people there all the time because I want them to if they're they may be working with me and I may be managing a plan for them, but sometimes I really want someone to come in and manage, micromanage that cannabis part of the plan and also communicate with me about that.

And that's essentially what they do and they're quite good at it. Well, I think that that's really one of the most important pieces because, you know, some people will feel comfortable doing this and a lot of people are going to say, hey, I really want to get that guidance because it's so interesting.

Like when we talk about this with our patients that we're sharing at Origins of Health, it's one of these things where I'm like, you know, this is the important.

Like, it's because one of the things I say and so many people in the summit have brought up is it's not only just about knowing what to do, but a lot of times it's what order to do it.

And so it's like, hey, do I know what order to, you know, take these things in when in the day to take it, should I pre treat before my bartonella therapy or afterwards.

But, and then also it's like you get together and you're like, okay, when, you know, like you were just talking about what's the best ratio potentially to get started with.

Well, that I know that that's a we were talking about a basic tip, a general place, maybe start if you're doing it on your own, but your unique medical history puts you at a place where, you know, maybe that's a good place to start, but you might not get all the benefit, like you said, like depending upon what drug, what are your other things going on.

So I'm, I'm always a big fan of like the DIY is great but you know, it's funny, it's like some friends of ours is like how many programs have I got? And vert DIY versus mentorship and hand-holding and helping and really someone to talk to you and work with you through the process.

And I have a gazillion DIY programs that I've pretty much done a half hour, an hour out of the 24 hours. And I and it's, it's over, you know, because I get frustrated and I want so much of what it is, is I want to get the shortcut to the end result because the longer I, I DIY my health, the longer it takes me to get better.

And the more time I missed out from the things they love to do, like my family and all the things I love to do outside. So for me it's like, hey, if you're DIY are definitely all these these tidbits and put it together.

But you know, looking at something like, you know, the acute on chronic program or working with Dr. Jess is so important. If you really want to work with an expert that can shortcut you to the result you want.

Because I've talked to so many people, I've tried cannabis and like I'll talk to Jess because you're going to have different outcomes. And how did you do it? Yeah.

What did you exactly use. Right. Where did you get it? And there's I mean and there's so many layers to this and

it's exciting that we're, you know, we're finally starting to see that, you know, for example, products are starting to put down what minor and cannabis or excuse me, minor cannabinoids in the bottle, how much CBD is there, how much CBD, how much, you know, CBD, all of that might impact what that product is going to be best for.

Right. And same thing with like the tour patterns, you know, we're starting to see some products. You know, we'll start to list some of those major terpenes limonene and a little mercy.

All of these things can impact the effect of that cannabis and may impact is it is this a good one to help people who don't have a great appetite is what's a good one to help people who've got a more nerve related pain versus an inflamed joint kind of pain.

Right. All of that. Those are the answers to all of that really lies in the profile of that particular variety. And so, yes, this is where working with people who have a sense of how to think about this and how to do this will help you.

I will add one more note, though, for the DIY or just to make it also a little more fair if you want to if you're a DIY ear and you want to try to maybe get more information under your belt before you DIY, consider picking up Dr.

Mikhail Kogan's book. You know, his last name is Kaye Hogan. He did write a book that came out in the last couple of years. I want to say it's called medical marijuana.

## Resources and closing remarks

And it's really he co-wrote it with an anthropologist. And it's really gives a nice history of just kind of cannabis and what's it's what it's been, what it's kind of turning into.

And he does provide a good amount of information in there for the layperson as to how you might try to do some of this selection and work for yourself with cannabis.

Nice. Jess. I love it. And one of the things I love to remind everyone is all these little books and links and everything that Jess has mentioned. I'm going to we're going to put those up on the Summit Resource page.

So what we'll do is just, you know, acute on chronic and all that is pretty easy to remember. But some of these other ones, maybe you can send them over to us.

We'll put them up there. Yeah, absolutely. You know, because this is just the tip of the iceberg and what the purpose of our conversation in my mind today is, I just wanted people to understand that it's not just about getting high.

It's really there are so much research going on, more we need to do. But the potential therapeutic applications in Lyme other co-infections, more toxins are so, so broad and we're just starting to understand it.

So for anyone who wants to kind of follow you and get, you know, dove in a little bit deeper, how can they reach out to you and learn more about what you're doing?

Sure. So I have a personal professional website as just Montalbano, M. D. dot com. So certainly any little things that I might be writing or videos that I make would be on that website.

We also have a Facebook, you know, Doctor Jess, I have a Facebook page where I'm frequently posting videos and other other kinds of information and also Instagram.

Yeah, I'm at just Montalvo, M. D. So and we're actually, I think launching Tik Tok soon. So so there should be some good stuff coming. I do a lot of content production on brain brain health and obviously now getting more into this production of content around cannabis, especially as it may relate to entities like Lyme Co-infections, all these kind of more things that have been hard for people to understand over the years and the kinds of patients that we like to see, you know, try to try to kind of really piece through these like difficult situations with them and get them get

them back to really whatever their best version of of life is going to be.

Cool. Love it. And you know everybody also reach out to us that origins of help out always we can always get in touch with Dr. Jess and I really love that.

Like we have this opportunity like I said, to talk about these possibilities and you're doing all this amazing work out in the world. So, you know, we'll make sure that we get all these links put over on the Summit Resource page because, you know like me, like I hear it, I get all excited.

I'm like, Wait, what was that website? So we'll have it all written out for you. So check that out. Dr. Jess Montalvo, thanks so much for joining us today.

All right. Take care, everybody. Thanks again, Tom. Hey and everyone, thanks so much for joining us for this episode of The Healing from Lyme Disease Summit.

We hope that you've taken away this past new possibly ease today. And, you know, we'll see you on our next episode. Thanks again for joining us, Dr. Tom Moorcroft. Until next time.

Here's to your health.