184. Elevating Brain Health: A Conversation with Cody Isabel on Neuroscience, AI, Healing Trauma, and Entrepreneurship

0:00:03 - Julian Hayes II

Welcome everyone to another episode of Executive Health and Life. I'm your host, julian Hayes II where the goal is to have you maintain your edge and your status and, ultimately, become the CEO of your health and life. Today we're going to talk about the brain.

During my brief time in medical school, I remember going to the cadaver and playing with the brain. I was like, wow, all the little grooves and crests. The next thing I thought about, for some reason, is that these things look like a walnut. Then I looked up what's the walnuts are good for. I was like it's good for your brain. Then I started looking up other foods that are also shaped like different parts of the body. They connected with each other. Whether that's a coincidence, or not, I have no idea. This just came to the top of my mind as I'm making this intro. For those who don't know, my intros are totally just ad lib and I just make it up. But back to the brain here.

Something when we think about aging is that we're afraid of loosening our cognition as we take more trips around the sun. Today I'm talking with a guy who's a brain researcher and entrepreneur. He's doing some really, really fascinating stuff, very cutting edge. He is the cofounder of a company called Mind Brain Body Lab, which is utilizing neuroscience and AI to work alongside traditional therapy to help those that are healing from the effects of burnout, emotional abuse, breakups and many other different types of crisis and identity crisis that we can have. Essentially, he's here to help us rewrite and rise up. I'm speaking with none other than Cody Isabel. Cody, how's it going today?

0:01:56 - Cody Isabel

It's going good. Thanks, I love the ad lib bio. It's way more fun than the canned just read the script type thing. That was good.

0:02:06 - Julian Hayes II

Well, i appreciate that I've messed up a few times too, and you just keep rolling with it. I thought about taking an ad lib or not ad lib class, improv class, just to even get more out of my comfort zone. One of the things for me was I always told myself I was an introvert and that I couldn't do certain things because that's not what I do. I was essentially programming and wiring my brain to be this person because I kept affirming what I am. As we start here, i'm curious if we go back to eight-year-old Cody, did we know from that point on to present day that he was going to be a brain researcher and into AI and neurotech?

0:02:54 - Cody Isabel

I would say yes for sure. When I was really young I don't know what

grade eight is, i forgot what grade that is, I just know in elementary school at some point there was a fair like an exhibit I guess like a live exhibit of the human body. That came through my middle school at St John's in, i mean, kc, kansas City. Essentially what it was, was a giant blow—up human body and you could walk through it, essentially if one of those bouncy houses it was like that, except there's a bouncing. You walked through a live blow—up version of the human body and you start at the top of the head and go through the brain. So when I went through that, i noticed that the rest of the time walking through the rest of the body, there is these yellow little things going all over the place inside the body. I was like what the hell is this? I noticed those first in the brain and the head and then it went all through the body. I was like what the heck? That was the first time I learned what a neuron was or what nerves were.

I was just fascinated. We walked through this at the very beginning, but it's been with us the entire time. We've been walking through this exhibit. So what the hell is this? What is the nervous system? What are nerves? What is the brain? How does that work? And I was fascinated from that point forward, got some advanced classes in, like some advanced college classes in high school, even around the brain, around neuroscience, and then took that all the way into college, get my degree in cognitive behavioral neuroscience And then the rest is history. Work with people in their brains has been really, really fun, especially how, physiologically, what's happening upstairs and in your mind, brain and body and how that affects your behavior and emotions and things like that. So I would say, yes for sure had to do with the brain.

And then I've always been interested in technology as well, not necessarily, not always specifically like neuro technology, biotechnology, things like that, but just tech and exponential technologies in the future. I'm like extraordinarily like I love superheroes, i love the future, i love Jarvis from Iron Man, all that kind of stuff. And so once I started to take that from, like understand that the comic books and sci-fi and that kind of stuff a lot of the times are like predicting the future. I'm like, okay, so what types of technologies could lead to the things that I love about in these stories and stuff like that, and that's when I really go further into neuro technology, biotechnology, nanotechnology and really integrating machine learning, ai, deep learning, those types of things into what I'm doing.

0:05:36 - Julian Hayes II So is Iron Man your favorite superhero On the Marvel side.

0:05:43 - Cody Isabel Maybe, I also like Dr Strange On the DC side. I'm a big Superman guy. I love Superman. Everyone's like, oh, he's overpowered, but I just love that And I think he's a badass, so I've always loved Superman. 0:05:54 - Julian Hayes II I'm more of a Batman person.

0:05:56 - Cody Isabel Fair enough.

0:05:57 - Julian Hayes II

Yeah, my favorite Batman in the movies has been Affleck. That was like a dream to see on the screen.

0:06:03 - Cody Isabel Wow.

0:06:04 - Julian Hayes II

So this look, he was absolutely jacked right. This is how I wanted my Batman to be. He was a little broody and he wasn't really that funny, and so I probably sound like a downer right now, but I don't like my superheroes to be cracking jokes too much. They can throw a little joke here and there, and so just the way that Batman was portrayed was to me closer to the comic ones that I like.

So that's why I really I enjoy Batman. And also, for me, Batman's just a dude with different tech and gadgets, and when I think about health and kind of, what inspired me was that he's just a normal dude that trains really hard and leverages tools, and so I was like I can look at health like Batman and I'm going to leverage all these different vitamins, supplements, peptides, all this stuff to really enhance myself to the best of my ability. So I'm Batman.

0:06:58 - Cody Isabel I like that, so that's a good way to look at it.

0:07:00 - Julian Hayes II

Yeah, and so I was curious. that's why I asked, because you mentioned Jarvis and Iron Man and they're really big into the brain and technologies. I would say mesh in those worlds together in a very effective way. So nanotechnology for those who may not be familiar, what's nanotechnology?

0:07:20 - Cody Isabel

I mean it's just like that. I mean we're again on the very edge of like what is like real. But it's a type of biotechnology that like when people talk about having little like microscopic, almost robots that can go in your body and start to heal and change your body So like imagine being able to go in and like take a shot of nanites that are like little mini robots that could go and deliver medicine to specific pieces or parts of your body. So if you're thinking like cancer cells right, that's huge and being able to deliver chemotherapy hits all of your cell, all the cells of your body. Imagine if you

could just like, poke into a cancer cell, release whatever medicine or whatever methodology that you want to do to reduce or destroy that cancer cell into just that targeted cancer cell as opposed to affecting the whole body. That's like an example.

But nanites and nanotechnology I really feel like in the future will be just stuff that is floating around our body, in our bloodstream, That will be able to do anything from ibuprofen up to like actual like vaccines. Maybe controversial to some people but vaccines or just even antiviral, like different types of medicines and stuff that could be released into our bodies in measurement, Like what's happening? What is your blood Like? how hard is it right now to get your blood glucose Like? I partner with Nutrisense, so I have a patch that can get my blood glucose, but not everybody has that. And right now it's a patch. In the future, it will be something that's floating in our blood that will already be able to give us all of the data on our blood. We'll know our cholesterol, We'll know all of these things already, because those types of things are floating around in our body.

0:09:04 - Julian Hayes II

Kind of creepy, but I think creepy, but cool. I like that. That's some real life Marvel, DC stuff right there, Right.

0:09:10 - Cody Isabel It is Yeah, I did.

0:09:13 - Julian Hayes II

Like you know, i could use that to heal a sore foot right now so I can be at 100% when I go for my run later today. I'm a little inflamed in my elbow. These nanobots, they can go in there, work their magic. My elbow feels like new and I can go do my bench like I want to do with the barbell at the weight I want, without any elbow pain. I'm sold on that. The only thing I worry about. Okay, so like I don't know if we have the answer, that's really future tech.

0:09:41 - Cody Isabel

So I'm not working on, I'm not doing a lot with nano myself at the moment but I know about it.

0:09:47 - Julian Hayes II

The only thing I'm curious, which we probably don't even have fully to answer yet, is like who controls that? You know?

0:09:54 - Cody Isabel

Yeah, I love that question though.

0:09:56 - Julian Hayes II

You know, it's tech and everything. So like, who controls that? And because it's getting more data into us. So I think that will be the only thing I would have to say okay, who controls this and has access

to this, and can you like turn it on and off, you know, and things like that. But this is just me. I don't have a tinfoil hat. This is just me if I'm putting my tinfoil hat on. And I wanted to think about worst case scenarios because, you know, there's a great book I read. It's a great book I read. It's called only the paranoid survive.

0:10:24 - Cody Isabel Yeah.

0:10:26 - Julian Hayes II And so you have to stay a little, a little paranoid. Healthy paranoia is good for you.

0:10:30 - Cody Isabel

Yeah, man, it's a good question. Data is a big, big, big question right now. When you think about AI, which is like nanobots, nanobots, neuro technology, that like neural link that'll be in your brain, like those are years away probably, but AI is here today. And the data question is still hugely important for AI, even because, like chat GPT and all these language models or like AI models that you see, are trained on data. And that's the future, for my perspective, is data, and so data privacy, data protection for consumers. I think, will become more and more important. And right now, like individual, cody and Julian don't have much sway in what we are, how we, our data is used, because if we go, if I go to Google or I go to Facebook, as me individually, cody by himself, and I'm like, hey, i don't like this, blah, blah, like change and make this different, well, whatever, that's one and out of billions, that and Facebook's, just like I don't care.

But in the future I really think things like data unions or data dows, like decentralized, autonomous organizations, that where it's not just me or it's not just you, but now we have, what if we got a billion people in this data union I don't know a better word than union at the moment. And now, collectively, we go to Facebook with three billion of its users and we say, hey, this is what our terms are for you to be able to use our data, and that is voted on by the entire community And you can kind of pick and choose what data guild or data union whatever you want to be a part of and how your data then is used, and then companies can interact.

But it gives us more collective bargaining with these giant corporations and future ones as well, not just for AI, which is today, but nanotechnology, neuro technology, biotechnology so that we have more of a say on what's happening with our data collectively. And then I think the technology providers will need to do some cool stuff. I'm very interested in data protection, like how can, like Apple stores your data on on device in a chip on your phone that's technically yours. Still a little bit weird.

Most consumers probably don't understand that or know why that matters or anything, But I've even thought about having like a personalized blockchain that can store your memories that's encrypted. You are the one with the encryption key and you're the only one who can access something like that. I don't know. There's a lot of different ways that I've kind of thought about the data question, but it's an interesting one.

0:13:02 - Julian Hayes II

Yeah, it's a very important one as well, and you know, i think about this. We'll jump over a little bit, I'll go to the future a little bit and then we'll come back to kind of some stuff in the present. You know, i hear about all these different technologies and we even talked about this previously before, off off camera about some of the cool innovations in technology out there, and a lot of it is pretty pricey right now, so a lot of people are priced out of it, and so one thing that caught my interest was that you're, you know, one of the things that you are working on and have a vision for is to create human, affordable human machine nanotechnology devices and software tools. So I guess my question here is how is that an issue of scaling then? How do you, how do you like, how would you be able to accomplish that if it's kind of very pricey technology in there?

0:13:58 - Cody Isabel

Yeah, that's a good point. The tech nerd like hardware, the hardware side there's a lot that goes into that. I've been probably started attacking that issue or problem. Yet The software side is a little bit different. There's some cool models, like we're doing and that's why I'm way more focused right now is like software and AI side. Hardware is something that I think will come in the future And there's a lot of R&D, research and development needs to happen on college campuses and universities and things like that to actually make it possible That big picture.

If you think of something like Squarespace, or you think of something or not Squarespace sorry, Square, the little card reader, the story of how they were created is similar. And when you think of like Henry Ford, like I read a ton of autobiographies and biographies. I love them, but when you think of like Ford, you think of Microsoft, you think of these companies that got things to the mass market DTC or like direct to consumer, to the consumer market. They are figuring out ways to keep it cheap and effective. And something even Henry Ford said is that it's not an innovation if poor people can't afford it, if not everyone can afford it. it's not innovation. So how do you get to that place. Square card reader did the same thing for small business owners and, like entrepreneurs, they couldn't get business credit cards, like they couldn't get a line of credit. And so when people would cut, like your local glass blower or whatever, couldn't accept a credit card. So they were missing out on thousands and thousands of dollars of sales because people had to use cash And if you couldn't

accept a credit card then they would just walk out of your store. Square was like well, why is no one servicing that market? And so what Square realized is that these giant corporations were attacking the very top tier, like the billionaires, the multimillionaires, the millionaires, but they were missing out on the mass market, which had like 10 times the amount of people and consumers inside of that bottom layer of the pyramid. And they did not understand that if they could create a solution for the mass market, that would create like economics or they'd be able to scale that in a way, because if one person, if a billion people, pay you \$1, that's a billion dollars, where in the credit cards, companies didn't necessarily understand that or see that or they missed out on opportunities. Square didn't miss out on that, same thing with Henry Ford, same thing with Microsoft and some of these early innovators that are trying to get stuff to the mass market.

So I'm trying to follow in their footsteps and trying to use patterns and things that people have already used to take stuff to the market and trying to deliver something that's extraordinarily high quality for a lower cost, like Amazon does this to, and be able to get to a large mass market. The first way I'm doing that is content. That's an easy way to do it, so I do a lot of content where I'm teaching people stuff for free. So that's one way, and then soon we'll have a digital product, and so the specific way that we're creating, like an AI campaign, like a Jarvis, we're sticking with the superheroes from Ironman, an AI companion for between therapy sessions. They can help people regulate their nervous system, talk through traumatic things, listen, understand and validate them, and it's a little like a little companion avatar that is like your little buddy, and the goal with that is to not charge for it.

I want to do, like a pay what you can model.

We're technically incorporated as a public benefit company, meaning that I am not solely focused on shareholder value.

I am focused on serving the public and creating something of massive value to the public and helping them, and so thank you for clicking on our page. That's kind of the way that I'm focused on right now is being able to create a model that is like either pay what you can or just completely, totally free. Where I like to pay what you can model because it's like okay, if Julian can afford to pay 30 bucks a month so that he can pay for four other people's memberships or whatever on the app awesome, then four people that can't afford mental health care at the current moment could get those services for free. And I kind of like that because it kind of brings together more of a community vibe and like a joint mission and not just free. So I don't know, i'm working on that, trying to figure out how to do that, but that's. Those are some of the ways that I'm that was a long way to say some of the ways that I'm trying to solve that problem.

0:18:22 - Julian Hayes II So what, um what was the inspiration around mental health? And why that's very important to you.

0:18:30 - Cody Isabel

So for sure, mental health has been first of all, I've always loved. But uh, studying cognitive behavior, neuroscience, there's a lot of I got to understand the neuroscience of what's happening in a lot of these mental illnesses. Mental health, that kind of stuff I've had. I've started a couple companies and probably took too much on all at once and starting a company is stressful and I was struggling with anxiety myself and just like I started having panic attacks and all sorts of stuff. I was like what the hell? so it's affected me personally. And then one of my best friends struggles with, or has struggled in the past with, some mental illness type things I've had to. It's been tough to see what he's had to go through and some of that kind of stuff. So that's really where it came from. And then being able to help people with their mental and emotional health, as far as like confidence, and helping them heal some of those past wounds, has been something I've been passionate about since I was young, younger, even my high school, college. That's probably where it all started, because my own mental and emotional health, like my social skills, my confidence, like those types things were very, very bad when I was in my high school and then college, my transition to college, I, uh I created this persona called Izzy, based after my uncle, uh, who's uncle aaron is his name, but Izzy is the nickname he used. Um, it's like a family nickname.

Michael's a badass. He was in Vietnam. He was the dude that like breached first, and then when he's around my family, when he walks in the room, everybody listens, like he takes action, like he's a badass. I love him, um, and so I met with him right before I went to college and I was like this, lanky, like I'm a pretty tall guy, like, but I was lanky, no muscle, like acne, no facial hair, just an awkward phase, and I presented awkwardly and couldn't talk to people and wasn't confident necessarily.

And so, I in college, when, at the first day of college, I got there and I was like, hey, everybody's like, who are you essentially? It's orientation. I was like, hey, my name's Cody Isabel, but everybody calls me Izzy, and so I just transitioned to I'm gonna become Izzy, and that persona instantly gave me the, the bravado and the confidence of my uncle, and so Izzy allowed me and helped me do a lot of cool stuff, stuff that I would not have done as Cody, necessarily. And I grew into that. Now I have those powers, those superpowers internally. But I learned them by being someone else right.

Izzy, and so, um, that's the first moment that I was like oh my god, like this, you're having this alter ego, um having this new uh

identity can really help with mental and emotional health. I started researching that and started to look into um multiple personality, um multiple self theory, internal family systems, which is a type of psychotherapy I'm trained in, and kind of looking at sub personalities and how our identities and our personalities and our identity, like how it all meshes together and how it works together, um how they can help with behavioral change, mental, emotional health. So that's probably where a lot of it stemmed from. All of those different pieces is what I would say.

0:21:40 - Julian Hayes II That's very interesting, because I, too, created an alter ego. You know, that's one of the things I learned when I went to therapy is, um, i started to, started to create an alter ego for myself.

So, I really loved hearing that, because an alter ego is a person that you know. I say that if, if I can't do it. You know, my alter ego, can pick up the slack in this department? He's a lot more tougher than me. He provided the needed toughness and the confidence and the swagger. You know that, yeah, that my other person didn't have. Yeah, he may be a happy intellect but he didn't have that swagger and charisma and confidence and edge to himself and so, hell yeah, I definitely dig that. As we get ready to start diving into the brain, by the way, you create a lot of content. People, you gotta go to their instagram page, because they are creating consistently very, very high quality content.

It was was almost too much when I was researching you, but I found a simple article to kind of get us started, where you talked about this and you went very viral on this post as well. You talked about five activities to keep the brain healthy. Now, listeners know um, sleep, we're pretty aware of that. We might dive into that a little bit. We know meditation, we know exercise, we know limiting alcohol and um. But the fifth one was what was very interesting. You mentioned becoming more actively decisive and your quote was. Brains are made to decide things and act things and we learned through failure and in the process of act. Excess and adjust helps improve overall brain health. It's a very interesting one. Now, how'd you come up with that? was that through experience or through research?

0:23:28 - Cody Isabel

Both honestly. Research first, like understanding and learning how the brain learns, how memories are formed. Failure is literally a neuroplastic trigger. Um, like the way your brain triggers neuroplasticity is through failure and through errors. Error is the more scientific word, but error or of failure, um. And then when you look at someone who's studied science pretty deeply, i'm sure you're familiar with the scientific method. If you look at act, assess, adjust, that is the scientific method. I simplified it down a lot for the general public so people can understand it. But at its core is the

scientific method, um, which the scientific method is like.

What's my hypothesis? what do I think it's going to have? or like what? like? what's my research question? like, i have this thing, this phenomenon is happening. What's my research question? what's my hypothesis about why it's happening? how am I going to test that? Go, test it, review your results. What happened? Was my hypothesis supported or not? and then going and adjusting and shifting your hypothesis based on the results and then go and experiment again. That's the scientific method.

Act, assess, adjust is a scientific method for the average consumer, or the average person that you can use in your life, um, and so that's kind of where access just came from, and then the learning and the uh becoming more decisive. It's just a lot of what I see when I work with people is they're stuck, whether it's confidence or after trauma. Um, action is a really, really hard concept for people to understand and getting into action. Um, and I feel like it's a lot of times because they think action is one thing, um, it's not a. They just think I have to just act and that's it. Um, and they're worried about failure. When I act, i fail. If I fail, then I that sucks. It's not a fun feeling, but if you have the concept that you act, assess and adjust, that it's feedback, not failure at all times, like it's a feedback loop, and so, um, i talk about that a lot.

Um, and that's what your brain is literally made to do, like we all. I think like the most common example of this is everybody learns how to walk by falling on their ass a ton of times. Why do we stop doing that? right, like you use that process as a child.

Society then starts to and you can see this in school data society starts to guilt and shame and humiliate and things like that in relation to getting things wrong and not being right, not being perfect, and so we forget this core mechanism of learning that lives in our nervous system, which is act as I suggest, um, and stop doing it. We stop learning and we stop acting, we stop being decisive because we feel like making this decision means the end of the world, when, in reality, all's it means is that right now you're gonna act and do this thing. Then you're gonna say, oh, that did that work, shit. And then reassess, act again, adjust, and then, uh, act again, um, if that's the concept, and then action is not as scary, because you always have the ability like. I can't even think of a single example of time that I failed, that I wasn't able to assess the issue, adjust and then act again. It's never, ever, ever been something I haven't been able to do so.

0:26:36 - Julian Hayes II And so you mentioned neuroplasticity. in case for those not familiar with neuroplasticity, what's a an easy way to think about neuroplasticity?

0:26:43 - Cody Isabel

Just to get your brain's ability to learn and grow, so like you can read a book and learn something new today and remember it tomorrow. Your brain's changed. Your brain changed and the neural network of your brain changed as you learn that Even as you're listening to this podcast, your brain is changing. The neural connections are shifting and changing. That's Neuroplasticity, is just your brain's ability to adapt and grow over time.

0:27:07 - Julian Hayes II And then so I imagined in, that's where sleep comes into play as well, right?

0:27:12 - Cody Isabel

Oh, yeah, yeah, Yeah, without sleep, you could not learn. and so what happens? so what happens when you're learning is you release a whole slew of cool little chemicals that help you form that memory. So when you are learning, there's a certain set of neurons that are firing, a certain pattern of neurons that are firing in relation to the Task or the thing you're trying to learn Acetylcholine. When you start to error, when you start to guess wrong, when you start to not be able to piece things together, that error triggers, triggers acetylcholine to be released and it acts like a spotlight on those neurons that are that firing pattern Of neurons that are firing while you're learning. Acetylcholine spotlights them. Epinephrine is also in there, helps you with, like, focus and drive to keep, to keep going. And then dopamine comes in and, like, lays down its tracks on those lit up neurons and it marks those neurons for change To be reconsolidated, essentially. And so then what happens is, if you do not sleep, those connections fall apart.

But when you sleep what happens is actually kind of cool, like when you dream. A lot of the times you can see the reverse pattern in your brain fire. So if you fire ABC while you're learning it in your dreams. It's CBA, essentially that it will. You can see it in people's brains and brains can? stuff doesn't matter.

Point being is why you're sleeping. Your nerve cells come in and they find the acetylcholine that has marked the neural pathway That you just lit up while you were learning, and then it consolidates those and sears in those, like if they were like loose connections like this. Now It sears them in and locks them into an actual new neural network, a new neural pathway in your brain as you're sleeping. And so sleep is so freaking important for learning, memory and Focus and attention, because if you don't sleep, first of all you don't have enough acetylcholine or epinephrine. Dopamine to help you learn while you're awake, and so that's bad for focus and attention and learning. And then, if you don't sleep, you don't reconcile that your memory is in the same way, so then you won't remember what you learned as well.

So, yeah, sleep is huge in relation to learning, like you have to sleep to learn.

0:29:29 - Julian Hayes II

Now with with dopamine? are we? are we a lot of these devices and everything Now is that given us? Is that kind of messing with our dopamine, dopamine pathways, in terms of like just getting hits of dopamine way too much now?

0:29:42 - Cody Isabel

Oh, Yeah, yeah, i mean I, yeah. It's extraordinarily in the literature, it's like very clear that our dopamine. Doctor anna Lemke, wrote a book called dopamine nation, love her to death. She was on dr andrew huberman's podcast. She's been all over the place, but dopeamine nation, she dives like so deep into this topic, it's not even funny. She talks about something called a pleasure pain balance.

And if you think of it like a little teeter totter, every time that you release. Like let's pretend it's just ten units of dopamine, just random, whatever you mix, if you release ten units of dopamine, after that there are ten units of pain that are released as well. So when you release dopamine, you have to release a similar amount of pain. After you eat a bowl of ice cream, there's like a level of almost pain that urges you to take another bite. You take one bite of a cookie. What makes you take that next bite? Well, it's that little small amount of almost like pain or discomfort. That's like I really want that, and that is that. That's this mechanism at play, this pleasure pain balance.

And so when we are hyper-dopamine up on social media, drug, sex, porn, all sorts of stuff like that shoots up dopamine, levels up. Guess what? You have to have an equal and opposite reaction of pain in relation to dopamine. And so when you look at the United States, we are the most stressed, depressed and anxious of all countries. And we also have the most dopamine allergic type activities in our society in our food, like so much sugar in our food. On our social media, in the general media, our activities, like extreme stuff that we do and extreme things that we talk about, which shoots up our dopamine and it messes that up. It then messes up that pleasure-pain balance, and so then we're more stressed, depressed and anxious than anyone else. And it makes complete sense neurobiologically what's happening Societally, and that's the argument she makes in this book and I am a hundred percent a firm believer in that, without a doubt.

0:31:45 — Julian Hayes II Wow.

0:31:47 - Cody Isabel It's wild, it's, it's that that's wild.

0:31:50 - Julian Hayes II

That is wild, and so you know that's affecting our focus and our attention spans and and our performance across the board a lot of times, and isn't that's also desensitizing us to a lot of like nominal experiences, right? Isn't that the reason why people have to continually amp up things just to feel something throughout the months and incoming years? because their dopamine is essentially shot.

0:32:18 - Cody Isabel

Yeah, i mean literally their threshold for getting the same pleasure. They get desensitized to it. Literally, i mean It's an addiction loop.

0:32:29 - Julian Hayes II

Wow, I need to do, i think I want to do an anti dopamine diet. Is that such a thing?

0:32:38 - Cody Isabel

Oh yeah, it is Dr Hanluffy. In her book She gives a protocol. It's a 30-day dopamine detox. Reset your pleasure, pain, balance, and you can't absolutely do this 100%. There's some caveat. She gives like, for example, like benzodiazepines or alcohol. You have to be extraordinarily careful with with those. They send a lot of dopamine, but you've got to be really careful, like when you're on some of that stuff. That's not the same as like coming off of like sugar or like if you're like watching a lot of porn or something like that.

Yeah, that's different than alcohol. Alcohol can truly kill you withdrawing. So she gives some tips on how to do that in a framework literally called dopamine detox. So it's kind of cool.

0:33:23 - Julian Hayes II

Damn. So somebody's really drinking a lot and they just go cold turkey alcohol. It can. It can kill them.

0:33:30 - Cody Isabel

Oh yeah, Yeah, 100% like alcohol, withdrawal is very, very, very dangerous. To the same thing with benzos a lot of the time like strong benzodiazepines. Like I joined Peterson I don't know if you've ever heard of him, but again maybe a confidential guy but he went off some Benzodiazepines and it took years for him to get off of those. Like medically had to be Observed in a hospital to get off of some of these drugs, alcohol, similar to that. But yeah, if you're coming off something like that, absolutely Please, god, do that with a medical professional at your side.

0:34:06 - Julian Hayes II

Wow, yeah, i'm glad you, i'm glad you mentioned that, because A lot of times you hear "Hey, i'm just gonna stop." I know, i know I've heard of alcohol. you heard of alcohol, anonymous and 12-step programs and stuff, but I didn't know it was just that serious that you can lose

your life from alcohol if you have a serious dependency to it.

0:34:26 - Cody Isabel

Yeah, that's a big disclaimer. It's like if you are addicted to alcohol. It's not like the person that's like just a random college person I've been drinking. That's different. I'm talking like someone that is like dependent on it.

0:34:42 - Julian Hayes II

So yeah, you know and this is a pretty good segue to move on to other things that our brains kind of become dependent on or that really affects our brain, one of those is trauma, and, and you know, when I hear trauma, sometimes I feel like it's being overused, just the way that I Don't think. I think the way we think about trauma probably doesn't have much like aging, i think we. I think it's been too watered and just messed up. So Trauma, how do you talk about trauma with people?

0:35:19 - Cody Isabel

Yeah. So there I mean there's tons of ways to slice it. There's big term, trauma, Little trauma and big time trauma being things like neglect and childhood or abuse like verbal abuse, physical abuse, sexual abuse, like like being sexually assaulted That's like big time trauma. Can be also seeing your buddy at war blown up next to you. Big time trauma little micro trauma Is can be more like overtime It can be more Less like there's a lot of people that they grow up super religious. There's some little trauma. Sometimes it can come up in relation to like guilt and shame So that's like one way to slice it, that the easiest way that I like to explain it is with the three E's.

I talked about this a lot and The E's are event, experience and effect. Aand so if you think about What could be traumatic for you may not be for me And it can build some empathy from my perspective in Understanding what is trauma, because it's such a crazy overused word, i agree, yeah, so when you're thinking about it, let's pretend, like a house fire for example, if it's your house right, that some event of the house fire, you might experience some anxiety, some Nervousness, like some terror, some fear, because you got to go get the kids, you got to go Get all your stuff out, your stuff burning down, and then the effect of that experience in that event could be trauma, traumatic, ptsd, stress, anxiety, things like that. Afterwards, however, if you're a firefighter, the same event is experienced completely differently. If you're a firefighter, that a house fire is a very common event. And it's maybe the fourth house fire you've gone to in that night or day, right, and so you experience that house fire completely differently. For someone who is a firefighter, they might have the effect of that event experience might build resilience and might help them Learn how to navigate that more effectively, which is completely different than how the person whose house is on fire experienced it. So one could be considered trauma and the other is

building resilience.

Not to say that firefighters and things like that don't experience trauma They absolutely do. But just for benefit of kind of understanding what trauma is, that's, that's an easy way to kind of understand it.

0:37:52 - Julian Hayes II

I like that, i like that. I like that whole differentiation, segmentation there and it also the three E's and then also leads to better, more compassion.

I think some of the traumas I hear sometimes are usually the micro, micro, micro, micro traumas that you know, i think, i think my thing is like a lot of those micro, micro, micro ones tend to Overshadow some of the more serious ones, the big T's, like you mentioned, and even the small T's, and I think that's where I think my Initial thinking was from. So I like that distinction. So I'm curious. Your process, the protocol, the process, and you can't go through it all, obviously. But when you someone's coming with trauma and you're attempting to heal that, how are you combining the AI component with traditional therapy?

0:38:45 - Cody Isabel

So the way to think about it, there's a couple ways. Big picture, understanding trauma neurobiologically is important to understand how this works. And so if you think of your mind, your brain and your body as three separate things that are inseparable which is kind of a conundrum, but most people have kind of a basic understanding that your mind, your brain, your body are kind of different things. And so what happens in trauma is that there's senses, things that come in through your body, through your brain, and to your mind, and your mind is like, oh shit, this, this is intense, i can't handle this, i cannot cope with this, which is another way to define trauma like something that escapes your ability to cope, like you don't have coping mechanisms to handle what you're experiencing. And so your mind is like holy crap, i can't deal with this. And so then your mind goes back to your brain as like, hey, i can't deal with this, hold on to this memory, Hold on to this, these emotions for me. And the brain is like, well, i have nerve cells. I have no place to store this information, i can't keep this in nerve cells, so I have to send this back down to the body. And so then your brain then sends signals through your hypothalamus, through your endocrine system, through your immune system, back down and shoves that trauma into your body, And so it can be stored in your muscles, your fascia, like the interconnection, the, the, the, the matrix that connects all of your organs, muscles and cells, which is your fascia, and then it can be in your skin, things like that, and so it shoves these traumas and these traumatic memories back into our bodies. And so that's really important to understand in relation to trauma is that there's a lot

going on trauma stored in your body. It's remembered, it's stored, it's felt in your body. And that's huge to remember, because a lot of traditional therapy, cognitive behavior therapy, dialyte behavior therapy if they're not trauma informed, a lot of the times they'll have people just reliving their memories and talking about what's happening in their mind.

What's the problem with trying to talk and heal trauma, with just going to the mind? It's stored in the body, and so when you're working through the mind, there's only one type of memory in the mind which is like declarative. Like I talked with Julian, i or I got on with Julian, i talked with him and then I got off. That's declarative, like forward progress memory. I can do that in my mind and my pre frontal cortex. However, trauma stored in my body, which is non declarative meaning, i can feel it, i can sense it, emotions come up from my body, into my experience, but I can't necessarily, like talk about it always. And so when you are doing traditional types therapies and you're going top down, working just in the mind to talk through this stuff and this trauma, it's sometimes especially for trauma it's not always effective just doing talk therapy alone, working in a modality that works with the body, is super, super important, because that's how you actually release trauma. And it's how you release the grip of trauma on your psychology.

The way I like to think about it is trauma. Imagine your body like the soil for your brain and your brain like the soil for your mind. So trauma gets stored in your body and it creates a toxic environment, toxic soil. Essentially, that means your brain is planted in toxic soil. So your brain becomes inflamed, low grade brain inflammation. That low grade brain inflammation creates toxic soil in your brain which your mind is sitting in. And so then your mind, guess what? Anxiety, stress, depression, memory loss, mood swings, brain fog, all this stuff because of this bottom up process of infertil or like not healthy soil that everything's planted in. And so when you're working bottom up to heal trauma, you start to work in the body, first to refertilize the soil of your body so that your brain can start to get healthier, so that your mind can then become healthier and ready to actually process what's stored in the body. And so that's really important to understand in relation to healing trauma and that's the methodology that we use.

I use something called internal family systems is what I'm trained in, and it's a bottom up strategy or methodology. It's a type of psychotherapy that helps people process what's stored in their body and not just re-experience it but witness it and be with the part of you that experienced that trauma, so that it can then release that trauma in a non-triggered way, in a non-sympathetic, like hyper-fighter-flight type way, where it doesn't have access to beginning, middle end type memory, and so being able to re-process and witness and work with those parts that experience that trauma is huge. But I

wonder where does the AI and biometrics come in this? So all this stuff is stored in your body, and that's why I had to give all that information to help you understand why like a biometric device, like a whoop can help with this stuff, because what's happening, all this trauma, is stored in your body And so when I am measuring, like I can see, when you get anxious, your heart rate variability shifts, your heart rate changes, your blood oxygen changes, your sleep patterns change, your stress levels change.

All of these data points can be collected through biometric devices like Apple Watches or whoop and stuff, or your blood glucose changes like a nutritionist can change, detect blood glucose changes. And then that can be objectively measured, analyzed, and then there's insights that can be drawn from that type of objective measurement stuff, and so that's a humongous piece of that's how we get the data, how we use the data, those types of things, when we're working with people. So we have an objective measurement of their mental and emotional health using biometric devices. We have a behavioral measurement, like a subjective report when I'm working with someone, and then I combine the two of those things to help them improve their mental and emotional health through our programs and things, the stuff that I help people through. So that's kind of how we help people with those things, and then the AI component comes in and analyzing that by itself.

0:44:48 - Julian Hayes II

So, yeah, i just pulled up my phone to look at my whoop and to look at my data right now to see. So it has a new stress monitor on there.

And that's pretty cool, and so I'm at a medium right now while we're talking, and my heart rate is about 66 right now, so it's a little higher than normal because I'm doing activity. I'm using my brain, but the point being here is that a lot of times you don't really know if you're stressing about a particular thing, and this can be applied in even more extreme examples that you don't know if you're stressing. Just because you don't necessarily see it doesn't mean nothing is happening. There was a book, i'm pretty sure it's called the body keeps score.

0:45:40 - Cody Isabel Oh, yeah, that's it.

0:45:43 - Julian Hayes II

Yeah, the body keeps score. That's a very good book to read on this and yes, you know it's crazy to think about that. You know, if you told someone at first that you know some of your past events and and obstacles and failures and unfortunate events, it's not just in your head, it's in your back or stomach or it's your acid reflux and everything. What are you talking about? You know this is from x and x thing because this happened, as I know, a lot of times our mind can

make us sick. Our mind expresses and lead and manifest, so this manifesting can be from those types of things. So a lot of times, do you have to get buy—in or do most of people come to you know that these things are completely legit.

0:46:36 - Cody Isabel

More and more honestly, people are realizing and coming to the realization, either through by content or other things, that reading that these things are legit. That's a huge focus of my content is to help people understand this exact thing and how much science and research is behind this. Like there's a ton of neurobiological mechanisms behind This concept and I'm very, very passionate about pushing that out. So more and more people do come to me, more open to this concept And more and more people are realizing that, hey, my talk therapy wasn't working.

I mean, i get a lot of people that just come to me like talking about my trauma and talking about this wasn't working, i need to try something different.

And so, whether it's good or bad, they are coming to me with the perspective of I need to try something different. What I tried did not work And they're at a point where they do believe in it because they tried everything else, and they're at the end of the line. And they're like, okay, screw it. I need to try something different, screw it, i need to submit to this concept and when they do, it's very, very effective and therapeutic. So people come with an open perspective, other people you've got to help them experience it, which I can do. Like this stuff is true, it's not magic, it's not like, it's not okay. Like I can help them talk to a part of themselves in their body, and when they feel that and have that conversation, they're like holy shit and their eyes are kind of opened to the stuff.

0:48:06 - Julian Hayes II

So yeah, absolutely. You know, as we get around, wind this down, i want to kind of, what are a couple steps that people could do today to kind of take control of their brain more? And I'll use a broad term, in case some people, some people may have some trauma to heal, some people may have some anxiety, some depression. They're kind of related, but they're not related right. And so what are some kind of just bigger things that we can do to kind of Take control of our brains?

0:48:33 - Cody Isabel

For sure. So again, i'm a huge bottom-up guy, so the first step I take with all of my clients and people I work with is something I call the heroes body, which is a framework that I use to help people balance out and fertilize the soil of their body so that they are even ready to start doing some of this work. And so that's something for your mind every day, Sleep: maximizing and getting good sleep, exercise,

nutrition, social connection and play. So it's six areas And having a healthy habit pattern routine in each of those areas is super, super, super important. That's where research has shown if you have good habits, routines in these areas, your mental and emotional health will improve most significantly.

So I suggest people try an MVP or something I call, which is a minimum vital production for each of those six areas. Which is like an MVP, is like a laughable version of what you want to do big picture. So if you want to go on a mile run for your exercise, that could be like your, your standard or your goal or whatever, but then your MVP could be I'm gonna go walk a lap around my apartment building or, if that's too much of a, because I work people with depression sometimes. For them, sometimes, exercise literally sitting up on their elbow in their bed. So I literally or sometimes I've had people do one push-up. Somebody lose 300 pounds starting with one push-up, one sit-up in one squat.

0:49:56 - Julian Hayes II That was it.

0:49:57 - Cody Isabel

That's the first time anyone he said given him a realistic thing to achieve and I trained him, yeah, i didn't, he trained himself, i suggested it helped him. But he trained himself to show up for himself by doing one push-up set up and he's like do I, this is easy, i can do this easy. Now I was like, perfect, could you start doing three? He's like, yeah, i can do that. And I started really realistic and worked him to getting to the gym, but he couldn't start there. When you look at data Therapist and like mental health counselors actually help people lose more weight than exercise scientists. Or like Dieticians sometimes or not sometimes, statistically data-wise, they do so it's really interesting. That's an interesting data point, not trying to.

0:50:45 - Julian Hayes II

I could believe that. You know, i can believe that because a lot of times I'm guilty. You know, i think about when I first started personal training and everything, when I was working at a gym and I had a way of going about things. I was very dictatorial. You know, being involved in athletics, i treated people like that. Now I had a very like military style to go about things and I wasn't compassionate. I didn't read on books yet and everything you know, i didn't care. It's like you're here, do this thing, do it now. How don't you? It's so easy, it's so easy to do all these things like how can you not? and so You didn't have that compassion. That world of you and a lot of exercise scientists We live in a bubble, just like in the world of the anti-aging longevity performance world that I'm involved in. It's a it's a bubble. So a lot of this stuff that I think is fairly common now It's not common at all. It's. It sounds still like science fiction to people.

Oh yeah but the world you know that we exist in, this is just everyday stuff that we talk about every, every time. So I can hear this because they have therapists, they have much more compassion and empathy. And they have the ability to see the world through the lens of whoever they're talking to.

0:52:05 - Cody Isabel

For sure. Yeah, i think that's a huge piece of it. So that, though, mvp type things, or what I suggest for people in those six areas, is a really good baseline as far as starting to heal your brain and work with your brain. It's really really one of the best things that you could do. Those six things.

So something for your mind, something for getting good sleep, nutrition, exercise, social connection and play That's a really good baseline to and having MVP's and habits routine. That's where I suggest people start, and then checking in with yourself as far as are there habits, patterns, routines? Are there beliefs that you have that are in the way? Have you been in multiple crappy relationships? have you been in multiple jobs that you hate or that you burn out, or do you have this achiever that pushes you like, are you more anxious than other people? And really just kind of starting to check in on some of those things as you're healing your body? And then I suggest finding someone who's trained in internal family systems or somatic, experiencing or something like that, to help with releasing some of those things and working through some of those things That may be stuck or stored in their body.

0:53:10 - Julian Hayes II Oh, I love that. I think that's a great way to end this.

You know, we we started with nanotechnology way in the future and then we ended with some very practical steps that everyone could do, so that's a perfect way that I can't even take credit for. I think that's a perfect way to end this. Thank you so much. I really enjoyed this conversation. I'm pretty sure we'll be talking in the future again, as this stuff advances, and as the work you're doing continue to evolve and everything. So for now, though, where are some places that listeners can keep up with you?

0:53:44 - Cody Isabel

Yeah for sure. Mind brain body lab at mind brain body lab, everywhere on social media. And if they want to reach out to me, it's just Cody at mind brain body lab.com. If they want to reach out to me directly. Otherwise, social media is the best place to start getting some of our content stuff.

0:54:04 - Julian Hayes II

Perfect, and I will have all that in the show notes So you can catch that whenever you have an opportunity to. And until next time,