Dr. Michael Longyear

Therapeutic Results For Concussion Care

SUMMARY KEYWORDS

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Welcome back to the Optimal Performance Summit. I'm your host, Dr. Patrick Porter. Today I have a very special guest. He's very passionate about helping others. And it comes from his personal experience actually having gone through his own traumatic brain injury with with football left him paralyzed, actually, now he's helping doctors to learn about neurophysiology and how to improve the brain. I met him at life University, where he was heading up the neuro Life Center now, he's also has a clinic down in Jacksonville, Florida. So I want to welcome to the summit, Dr. Michael Longyear we're going to talk about therapeutic results in concussion care. Hello, Dr. Longyear.

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Hello, thank you for having me.

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Yeah. I've been fortunate enough to hear you speak many times at life's continuing education, credit, summit seminars and things like that. And I thought we really need to bring you into the summit to talk because you're doing a lot of research. You're not just doing this and then one off here went off there but you have a lot of research backing up what you do and you have the foundational principles. Because you've gone through it so you understand it from both sides of

the equation. So tell us a little bit about you know, what, what evolved out of your personal experience and it led you to going to Parker and and getting your chiropractic degree.

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Yeah, so, my personal experience when I was a sophomore in high school, I took a hit, kind of going out to catch a ball, I got hit on one shoulder by one defender and the back shoulder on the other side by the other one and they kind of twisted me down. And it you know, without going too far into the details, cause kind of inflammatory processes started in the spinal cord, and eventually choked off my spinal cord. And they originally diagnosed me with a stroke when I got to the hospital. And because I actually left the hospital without a wheelchair A month later, they kind of changed that diagnosis. The diagnosis I go with now is transverse

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myelitis. So you know, over the course of a month,

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and kind of proving the doctors wrong and standing up and walking out of there. It told me that I needed to be on the path of healthcare through my own experience. And, you know, I went through after walking out of the hospital and I didn't have much symptoms left from a motor perspective. I mean, obviously, I was weaker and I couldn't move as much. But I had I didn't have a lot of sensation or sensory. I had a lot of I couldn't feel hot and cold, I couldn't feel pain. If I would like stub my toe. Instead of feeling the pain, I would just use lose the loss of that limb completely. And it wasn't until a full year later, I went and got adjusted by a chiropractor in town. And I went home that night, and I was making a shower and I put my foot in the tub. And I was like, oh crap that's too hot. And then I was like, wait a minute. I knew that was too hot. I could feel hot and cold in my foot again. And so I took a long windy road to get to chiropractic school. But then once I got there, I was I was really still looking for answers for what happened with me. And researching and studying the brain and doing that kind of thing started to answer some of those questions. And I would say I took the blue pill, and ended up down the rabbit hole and working with the brain and that that aspect of chiropractic care and download Functional Neurology tracks, so to speak. So that kind of ignited my passion to help other people with me, because as I was, you know, even training through school and first out into practice, I saw that a lot of brain injuries, spinal cord injuries that were missing the boat on some of these things with what I knew I went through, and what I saw some of my patients suffering with too. So I was fortunate enough to end up at life University at the neuro center there and be able to work really closely with the research program and, and develop some of the studies in our field school.

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Yeah, that's great. I know you're working not only with traumatic brain injury but also dementia. Things of that nature. So maybe we can start with traumatic brain injury when when somebody comes to see you. And I know we actually sent my wife to see your group down in Atlanta because she had a traumatic brain injury. But for our listeners out there, what is the when somebody comes in? How do you evaluate them to even know that there's something to work with?

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That's a great question. So one of my mentors, Dr. Michael Hall, he helped us develop this program where we're going to look at three aspects of the patient. And those three aspects even within those, they have a bunch of breakdowns and things like that. But to keep it simple, we look at balance and coordination. We look at cognition, and then we look at ocular metrics or how the eyes move and how well the eyes move.

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And I'll start first with the ocular

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metrics. You've heard the eyes are the window to the soul. Well, they're also a direct picture of the function of your central nervous system. So depending on what kind of eye movements we're looking at, if we're looking at fast eye movements, that tells us about the front part of the brain where beta waves and things like that come from. If we look at slow sweeping eye movements, that's more of the posterior back part of the brain. And then if we're looking up and down tells us about the mesencephalon, which is the top part of the brainstem. And if we're looking side to side that gets more lower in the brainstem into the palms. So even just with eye movements, we can unlock a lot of parts of the brain. And, you know, with concussion, I often tell the story. We had a kid come to us one time, and he was a 16 year old soccer player. And he came to us because he was still having some symptoms. Now he'd been cleared to play for about six months, you've been cleared to play soccer and then football as well. But mom brought him because he just wasn't right. And it wasn't headache or dizziness or any of the things that are typically associated with concussion because he'd been cleared to play. mom brought him in because her son was a jerk, as she said, or he just wasn't acting right with his family. He was he went from being an A and B student and getting scholarship offers to play a college to being a C and D student and getting some of those offers actually pulled. So when he went to the neurologist when they cleared him to play, they said, All right, follow my thumb. And he was able to look left and he was able to look right. They said, all right now look up and down. And he was able to do that. But what we did was looked at the function of that, and he could

look left, and he could look right, but instead of his eyes moving smoothly, there was a bunch of jumps and skips along the way. And we showed him that on the video with a piece of equipment that we have to actually be able to record the eye movements, and his mom was floored. But the really cool thing was is as we saw his eye movements smooth out or become more coordinated and balanced, his mood and emotions became more coordinated and balanced too. So we look very closely at the eyes for that reason, and then balance and coordination. As I just kind of alluded to physical balance and coordination ties very closely to emotional balance and coordination. We're doing a study right now, because something that we found in our clinic was that when you came in, if you score poorly on a depression, anxiety and stress symptom score, you also couldn't do a one legged stand very well, or touch your nose, you when you went to touch your nose, your hand would kind of shake a bit like that, or you'd miss and find a different part of your face. So what we realized was though, when you could do a one legged stand, and when you could smoothly touch your nose and your eyes move smoothly, you also scored better on a depression anxiety and stress symptom score. So we started to kind of put together what we're referring to is this nutria of movement equals this nutria of thought, and that means if I had choppy or bad movements, I probably also have choppier, bad thoughts and emotions, because they travel through the same areas of the brain through the basal ganglia through the cerebellum. prefrontal cortex and some of those areas. So we first we look kind of at eyes, and balance and coordination and then cognition, obviously. And cognition isn't just how well do you do math? or How well do you remember your reading? There's a lot of different parts of cognition. And it's basically How well is your brain, taking the world around it, process all of that, and then form that reaction to it. So we we really often say we dissect your brain out into layers or parts, we look at each lobe, and each area or level of interacts us as well.

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Right? So once you've once they're diagnosed, and you know that they have something you can help or fix, give me a few ideas, maybe a few samples, like you just did of care that you've given to different patients.

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Yeah, so one of my favorite cases is a work with a Navy SEAL back a little while ago, is a few years ago now but when he came in, he was on 13 different medications for things like anxiety, pain syndromes, different, you know, symptoms that he was having along that he was. He was overseas in Afghanistan, he was actually trapped on the other side of enemy lines, and he was a POW for a little while. So you can imagine the trauma and the shock when he got back stateside and was alive and, you know, the lack of trust PTSD, a lot of those different things. And we put him I mean, first of all, he had breakdowns in each one of those areas that I was talking about. When your brain goes through that much trauma. He estimated that he had

probably 14 to 20 traumatic brain injuries on that deployment, just in that mission and being a POW and the the amount of abuse that he was put under while he was there. So he had breakdowns in each one of those aspects. And when we design a plan for them, we have to incorporate exercises for each one of those parts to so we put him through a regimen of different things and I want It's specific necessarily with the treatments here. But lots of eye movement exercises coupled with balancing coordination, coupled with adding a cognitive layer to that. So it might look like he's got to look and find targets. But targets are in numerical and letter order. So now he's got to find the targets really fast. So he's using fast eye movements. But he's also standing on just his left foot. And then he's got also got to be able to remember where the numbers are and what where he is in the letters. So we can layer different things on top of that for him. And you know, we got done with and he we let him go home after a couple of weeks. And because he stayed with us for a couple weeks for an intensive program, and when he got home, he called us up and he's like, Doc, you know, what did you do to my brain, I have blue walls. When he got home. He didn't even remember that his walls as we're blue. He wasn't seeing color, because he was so blunted from the medications. He came in on 13 or 14 meds he went home on one and that allowed his brain to just kind of open up and be able to perceive his world accurately again. And you know, with that also be able to respond appropriately when you came in. We did the exam, one doc was on one side of the room, and the other doc was on the other side of the room, or he was on the other side of the room. And it was one doc and him and that was it. When he left, he was falling asleep in the break room with people milling around and everything, he was totally that trust and that understanding he was safe, totally opened back up for him. And again, that's because you're activating that front part of the brain and, and some other areas we can get more specific.

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He was he was a fun case.

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That's great. A lot of our viewers we're gonna have a lot of doctors of course watching but there also might be someone who's just on energy medicine practitioner or somebody else. And you might be thinking, what does a chiropractor have to do with neurology? So maybe if you can just, I mean, we do have Dr. Byrol has talked a little bit but I think having your perspective would be good.

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Yeah. So for me And I think this will hit the energy medicine practitioners as well they'll understand. For me when I got to chiropractic school, like I said, it wasn't really answering all of my questions. When I got there, I kind of learned this bone on a nerve thing. And, and I'm

looking at my thing going, Well, this guy adjusted me, but it was all of the nerves in my legs from my chest down, and I couldn't feel pain and hot and cold. So which bone is it that would you move off of that and get all of those symptoms? And then, you know, listening to the chiropractic story, the original one where DD Palmer, the founder of chiropractic adjusted a guy named Harvey Lillard. And depending on what book you read, he either slapped him on the back or he adjusted them in the Atlas. And I was looking through my anatomy books and dissecting on the cadaver, and I'm trying to find the nerve that comes out of the spine that goes to the ear, and there isn't one. So you know, I'm thinking you know what's going on here and that's how I ended up with really studying the brain and mind you Standing in chiropractic school we're taught we're nervous system Doc's. And the reality is, is the adjustment is a huge afferent or sensory barrage, that can awaken parts of the brain. So when it really comes down to it, your brain only has three jobs, it has to perceive the world around it, process that information and then react to it. Well, if you have segments that are stuck or not moving, that adjustment, opens part of that up. So you allow the brain to get fed better, DD? The way that he explained what was going on with chiropractic in his time was he said, Harvey Lillard tone was down, meaning he just didn't have enough tone or enough effect in his nervous system. The term they use now in neuroscience is central integrated state. And what that means is, we'll just say the hum of Harvey's brain was low. It was blunted, because he wasn't getting fed with enough sensory information and the adjustment brought the hum of the brain up so he could perceive his world better. For Harvey, it was a restoring of hearing because he was deaf before. For other people I've had, you know, even when I was a student and had people get up off the table and go, Wow, Doc did you turn the lights up in here Everything seems brighter. for that patient that I just described, he got home and he saw blue walls. So his brain energy had been brought up. So we literally were bringing voltage into the system where we're pumping energy, we're pumping. You know what we can get into some of the weird stuff with photons and all that kind of stuff. We're filling the brain up with that which the brain needs three things to survive. It needs oxygen, glucose and activation. And it it needs activation most with that it can live longer than than with the other two by themselves. So what we're doing with chiropractic, what I found through my journey is we're activating the brain, we're turning up some of those centers, and we're allowing them to perceive and react better to their fire.

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That's great. I know you use few different tools that I like our doctors to kind of hear your viewpoint on them, because most of them do own lasers, but they don't use them for the brain. And they don't know how to do that. So maybe you can go into a little detail on that area.

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Yeah, so lasers are great. They allow us to, again, fill the area that we're focusing on with

energy. When we're doing brain rehab or concussion rehab, we really need something that allows better blood flow, better membrane stability, better mitochondrial support all of those things. Now, we can do some of that with supplementation, and we do, but the laser is really beneficial. And what we can prove with research that a laser does, because I think it does some other things. And what we can prove with research is that it increases blood flow. So when you shine a light on something, a specific frequency or a specific wavelength, it actually causes the brain and the body to pay more attention to that and when your brain does that, it responds by sending more blood more resources. So if I'm rehabbing a right frontal lobe because they can't do a left one legged stand, and they can't use their eyes really well going to the left, I might have them do those activities while I have a laser shining on their right prefrontal cortex. And what I'm doing there is I'm allowing them to have better fuel and better energy while I'm doing those exercises or while I'm doing this therapeutics, same thing is true. If you're a chiropractor, and you're delivering an adjustment, if you're delivering an adjustment on the right side, that goes to the opposite side brain and it goes to the same side cerebellum. So while I'm adjusting, I might put a laser here and a laser here while I'm doing it, because it'll allow that blood flow to help and be more beneficial, basically, supercharged my adjustment. The same thing with you know, if it's a physical therapist, or, you know, if it's a psychotherapist, we do a technique in our office called neuro emotional technique, and there's a setting on our laser. That is amazing. emotional trauma. So I might shine it at the frontal lobes while they're processing because your frontal lobe is what shuts down your limbic brain. So if I want to shut down that survival response or the fear the amygdala, or some of those other deeper structures, I want to bring up the health and the activity of the frontal cortex. And that's really kind of how we'll layer a laser on top of what we're already doing with anything else. You know, and then sound is hugely important. It's a big, it's how we perceive our environment. When we do different therapies, I might put red red glasses on somebody, and then I'm going to want to play a specific frequency in their ear. So I'll play 396 in their ear while they got 396 on their eyes, and it might be the first time that their nervous system is seeing and hearing the same frequency. So it's the first time their system has time to kind of relax and calm down because when you go about your day, you've got sounds all over There's a place there all sorts of different frequencies, you're getting bombarded by all sorts of different light frequencies. So it's a way for us to really harmonize their system and allow it to relax and go into that parasympathetic mode or that rest, digest and rebuild. And then you know, what I, you know, kind of how we met you guys in and using the Brain Tap is using that meditative state to then do that as well and bring those areas of the brain together. So, you know, I kind of finish every session with a meditation using by neural beats and isochronic tones and all this stuff that you've put together for us. Because what it does is it allows the brain again to harmonize and sync up. You know, one thing that you see time and time with the new research that's coming out on concussion, we always heard concussion was, you know, the brain is in the skull and it flashes and it smacks the front and

then it smacks the back with the coup and the Contra coup. But what university of Stanford is really shown is what happens is the two hemispheres of the brain Actually twist and torque around each other, and so does the brainstem. So we get shearing of the corpus callosum, which is what joins the two hemispheres together. And we get shearing of the axons in the brainstem right below the hypothalamus, which is what joins our brain and in our chemical releasing centers, to the whole body. And what's great about using binary beats, or one of the things I really love is the two voices on one ear and one half of the meditation sets. It helps the two parts of the brain start to communicate better, because you hear with one side here with the other at the same time, and they've got a play back and forth, so to speak. So it allows us to really help integrate everything that we just did and allow their brain to take in all that activity. So we do a lot of movement based therapies get them up movement is life. And then we do a lot of frequency based meditations and frequency based therapies, whether it's laser or sounds to harmony. Eyes, the brain and allow them to take all that activity.

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Right? When you have somebody there, I know usually have them for a week or two weeks. And then you send them home doing exercises that can kind of tell us that journey a little bit because a lot of doctors think, you know, if they can't do it in one visit, or something, they're, you know, they're doing something wrong, you know?

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Yeah,

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well, especially. So we'll kind of stick with a traumatic brain injury. But in my opinion, this is true of a lot of really complex neurological conditions. Something we're realizing now is that traumatic brain injury isn't something that's fixed in a one off or a one week or a two week. traumatic brain injury is something you live with probably for the rest of your life, some aspect of it. And it's about how do you manage that? How do you kind of get over the hurdles? And how do you get through your day to day and still continue to improve and thrive in your day to day in your environment and you know, still be whatever you want to be when you grow up, so to speak, and that requires management. So you're right, we get people for a really intense program. We might get them for a week, two weeks. I've seen people for as long as a month before, and we see them really intensely while they're there, maybe three visits a day, for five days. But then when we send them home, they have to have tools. So we build their toolbox for them over the week or two weeks that they're there. And then we send them home with tools to manage what they what they're dealing with, and what they have to kind of overcome on a day to day basis. So we'll send them home with different eye exercises or balance exercises. And

we always send them home with a way to get to sleep better, and a way to wake up better because if you don't start the day, kind of on high, and go to sleep, ready to rest, digest and rebuild and allow those synaptic connections to form stronger, then you're the whole thing in between is really a struggle. So we usually send them home with exercises and then we have doctor in their area. Hopefully they were seeing a Cairo or a PT or somebody that we can communicate with, to help carry on some of that care at home. And then we always send them With meditations with your stuff, too, because it allows them to set those brainwave patterns, we can, you know, I've got a guy right now that he has really bad cluster headaches. And he wakes up every night at 1am. And that's when the cluster hits him. So we work through some things on the the acupuncture biological clock, and we cleared some emotions and some meridians around that. But now what we're doing is we're running him through Delta progressions when he goes to sleep. Because what we found when we did brain mapping is he wasn't able to get into delta. He's going to sleep basically in theta, that kind of sleeping with one eye open, and at 1am. He's waking up, and he's got that horrible headache. So as we start to progress him through Delta, he's going to be able to fall asleep more and while he was in the office, he slept for the first time without a headache waking him up in four weeks. And that was just with a Delta progression that we put them to sleep with. So we give them tools. To manage the things that they have to deal with and the things that they're going to have

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to kind of be obstacles in their way as they go. When you're you mentioned brain mapping, and I know that we've seen a lot of the doctors that are doing evaluations, the brain, especially not just traumatic brain injuries, but also like ADHD, and dementia, that the hemispheres are talking about the two sides of the brain that they're not in sync. Have you found that to be true?

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Yeah, absolutely. So they don't sync up.

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At the University. That's one of the cool things is we have access to a lot of different toys. So we can brain map people, we can do some really intensive brain maps and we have some stuff that actually there's a database with I think it's s Loretta is the name of it. And they have 5000, ADHD brains, and they have 5000 OCD brains and they have 5000 concussion brains. So when they do a brain map, they put you into a kind of a category, so to speak, where they look at the The lack of synchronicity from side to side or the what they're calling incoherent brainwave patterns from side to side. And that's the fun part is when we give people things to do. We had the one guy that I was talking about the 16 year old that was really struggling mom saying he's just a jerk. We changed brainwave patterns in two weeks with him that normally

don't show up in research of 12 weeks of therapy. But the really cool thing was is after he left with the therapies and homework, his brainwave patterns stay the same when he came in this kid who was a high functioning high level athlete, high functioning high level student showed AC ADHD, OCD brain. And when he left he was showing normal functional brain for a 16 year old. So we were able to see changes in the coherency from left brain, right brain and frontal lobe posterior kind of all of the different coherency sets of brain mapping checks. Yeah,

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I know now we with Brain Tap. We've been doing a lot with them. feedback. In fact, you can look at your app. I made it available to you yesterday. So I don't know if you've even seen it. But we have ones there. We call it new mind. And we did that based on the research of Dr. Kelly Miller with the two hemispheres. You can you can do speed changes with that. So it'd be interesting to see what it'll it'll get the hemispheres working differently. It'll tell you what, what speeds we're training to write on the in the diagram because we found that we did a six week study with dementia patients and we found we got 64% more neuroplasticity with a course we don't you can't really count the neuron connections, but it's the voltage really of the brain and then they extrapolate out the neuroplasticity. So what role does neuroplasticity play you think in these changes that you're seeing?

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That's I mean, that That's it? That's the term right? Your brain I always everyone always asks me patients. What is neuroplasticity? And I always say it's your brain's ability to learn new tricks, and you can't remember you know, the whole thing. can't teach an old dog new tricks. Well, what they realize now is your brain has the ability to rewire remould learn new tricks from cradle to grave. You know, you see it really fast and a lot in babies, you know, the baby gets up and he does a drunk walk, and he falls over after, you know, three steps, gets up again. And he makes it six steps and 12 steps and further and further. That's neuroplasticity, that's your brain kind of getting rid of the pathways that are are not serving it, and building more pathways as it goes. And the more times you do that, we create long term potentiation. And the easy way is things that fire together wire together. So the more you can drive a pathway, the more you can create that neuroplastic change. The more you can get rid of those symptoms, the better your brain has. Like I said, we send them home with tools to control those symptoms. It increases the efficiency of your brain to control those symptoms. So neuroplasticity is it I mean, that's all of it, the better Your brain. And that's why I love doing, you know, the meditations before and after because it allows them to integrate all the information we just did, and solidify that neuroplastic change. And when we do them before it opens their brain up to get ready to make neuroplastic change. So because your brain, you know, one thing that people don't really understand sometimes, in order for neuroplastic change to happen, you can't be in sympathetic escape.

Your brain won't neuro plastically wire, at least not the frontal lobe and the cerebellum. Because when you're in when you're in sympathetics, you're driving blood and resources to the limbic brain, which is deeper. So if you want to unlock and get ready to exercise the parts of the brain that make us human, we need to have something to unlock that and and train us so to speak. And then we need to have a way to integrate that and solidify that on the back end.

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Yeah, we found that in the school systems were working with, they use it with they should use it with everyone but they're using with course the the ones They are in the special classes or they might be autistic brain or something. And they call it brain prep to get their brain ready. So you're hitting right on that with it about even as early as five years ago, they used to think the only way you could really improve your brain or get better brain function was exercise and you said movement is life. And we usually say that one Sundays working better, we want to get them out there doing yoga, dance, Tai Chi or something because they just getting an adjustment even once a week isn't going to be enough to keep the spine. What is your What is your concept of movement and therapy along those lines?

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Yeah, so you know, even depending, again, on what text and some chiropractors might slap me for this one, but there's some stuff that you can read from Palmer, not the founder of the son of the founder, and he said that it was 10%, adjusting 90% rehab. Your brain experiences the world and depending on how it experiences the world is how it grows and molds and how enriched by those experiences, now, the adjustment is necessary to remove the interferences so that it can perceive better. But then you got to get people moving. You know, and in every aspect, if you look at depression research, you know, outside of chiropractic, just medical, they've got their medications, and they're, you know, 40% effective with the medication inside of six weeks. So then they did medication and exercise, and they're 60% effective inside of six weeks. With just medication alone, after six weeks, they kind of fall off the table and it goes to about 12 to 11% effective with exercise, it stays in about 30% effective with exercise and the medication. And then when you just do exercise alone, it's 60% effective. So the exercise is almost strong enough to stop the huge dip in the medication. But just by itself, it's the best thing that we have. So and we often say the reason we do our intensives is you got to get the word Wheels back on the car. And then you just kind of go drive it. And what we do is put the wheels back on the car, we give you tools to keep the air in the tires, all that kind of stuff. But then you got to get out and you got to move, you got to drive it, you got to go, you got to do things. And you got to experience life and experience the world. And movement is one of the biggest tools to do that.

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I know that you and I are going to be speaking together at life University. Hopefully it happens this fall. If not, I'm sure they'll do it online or something so people can learn more from you in this. But can you tell us how can a doctor learn more from you? Because you're I mean, you're with a group of neurological doctors that can train and somebody from the ground up that doesn't know anything about this. So maybe you can share a little bit about that.

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Yeah, so there's two different groups that I teach with I teach with brain DC. For chiropractors, we it's it's geared towards the chiropractor who's in the office and wants to be able to use some nerve with their patients and use the tools. Dr. Michael Hall, who's one of my mentors is who I teach with there and then I also have $100 certification program through life University and applied clinical neuroscience and that goes start to finish. We take you through all of the neuroanatomy kind of re, relearn those tracks and relearn those pathways. And all the way through neuro rehab is the last couple modules. And then the last, so most of that one is online, the first 50 hours, you can watch, you know from your couch eating Cheetos. And then the next 50, we encourage you to come on campus for the live ones, but you can archive those or you can watch you can live stream them, the only one you have to be there for is the last module module 10. And the reason being is because we actually bring live patients in and we all work them up together, and we put a program together for them. And Doc's in the program actually bring their tough patients, and those are the ones we work a program up for. And then you know, life has got their CD through the neurology and all that kind of stuff that's coming out as well.

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Well, that's great. Where do you see, I know can be used For anybody who is in functional medicine, but where do you see this changing the conversation about chiropractors?

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It has to right? In my opinion, we're all brain Doc's. And that to some extent goes beyond chiropractic as well, when you touch somebody, when you you know, spend somebody in a chair, when you do therapy with somebody, you're affecting the brain. So I think we all need to be able to understand what it is that we're affecting, and how we're affecting that. And with chiropractic, especially because that's, you know, my passion. When we deliver an adjustment, you're sending the biggest sensory input, the adjustment when you rank them, it is the biggest spike in input to the brain or afferent information. So it's a really, really strong tool, we need to know how to harness the power of that best. And so we need to get away from this bone on a nerve because I mean, realistically in the 80s that research was done that said, we're not

moving a bone off of an earth so We need to understand what it is that we're doing with the adjustment is how, as far as how it affects the brain, Stephanie selon. So Stephanie Sullivan, who's the lead researcher at life, she just did her PhD research, which, when that gets released that should flip our industry on its ear. And Heidi Hawick has been releasing stuff and doing stuff for a while now. And the two of them, their research just builds and plays off of off of each other Bernadette Murphy up in Canada, she's showing she's got one of the only, I think, one of two brain maps that will actually map the cerebellum and the changes in frequency in the cerebellum, and she's showing huge changes with the chiropractic adjustment and how that is affected too. So the conversation will change. It's just a matter of whether or not we can keep up with it and keep up with the language as a profession.

33:49
Right. One of the things that this is a final question, somebody's got to get back to patients and things are doing the big movement with biohacking, and when I speak, I always tell people, the first thing you need to do Before you do all these other things is go get your C one adjusted because the light the power is not on. You've kind of alluded to that in, it seems like for whatever reason chiropractors have been left out of this biohacking, which I think chiropractors were like one of the first biohackers, they just didn't have the term. So what's your feelings about that?

34:16
Yeah, I mean, if that's not on straight, you're always going to see the little oval off skewed, right? And how I always tell my patients, because what we do a lot of things in our office that look like vestibular rehab, or look like things they did for PT, and they come in and they're like, well, how is it different than what I did at the shepherd center, or what I did at this brain center? And I say, well, the difference is, is I'm going to make sure you're in line and your brain is not getting any interference. So when we have the adjustment, we're going to light up your brain and get it ready, or primed to take all that information in and I think the adjustment is paramount in that. Again, it's the hugest barrage, that we can send it a brain. And if I go back to DD's story, it was a reset. So with Harvey Lillard, when he sent that huge barrage in it reset the brain. And then everything kind of came back on the same way like with a computer, right? The extent of my tech ability is to unplug it and plug it back in. And most of the time that fixes a computer, right? Well, your brain is complex circuitry like that. And the adjustment is a huge effort reset, to allow the brain to reboot properly and now be ready and more efficient at taking all that information.

35:27
Right. Well, we really appreciate you spending your time here with us summit and being a part

of the faculty here sharing your knowledge and wisdom and hopefully we can tap you for some masterclasses as we go forward because I know people are going to want to know more from you. You've got a lot to share, and we'll make sure that they get access to those those training modules you're talking about. We'll put that over in the VIP section so they can go get those. So anything else you want to leave our our summit with before we we end the call today?

35:54
Oh, just it's an exciting time to be in healthcare. You know, I think people are starting to realize that A lot of science, you know, you get into all this weird kind of quantum physics and science stuff, you guys and light therapies and different things were at the forefront of this years ago. And it's a really cool time because science is finally starting to prove what all this stuff is doing and how it's affecting the brain and the nervous system. You know, we shine weird lasers on your head and, and you know, put lights in your ears and lights over your eyes. It's really cool that science is catching up to how that's affecting us. And it's exciting time to be part of it.

36:29
Yeah, well, we appreciate you being a part of this and and helping us to move this, this whole technology forward and willingness to look at other options because, unfortunately had to go through your own pain and suffering to get on the journey. But you're now helping thousands if not millions of people, because every every doctor you help, of course, is helping thousands of doctors. So congratulations on that we look forward to helping you along that journey. If you're watching this video on the summit and you know a doctor that you think hey, my doctor needs to know about that. Remember, this video is about available for free for the next 24 hours send an email to your doctor say Hey, get on this get on this summit sign up it's free. Go watch Dr. Michael Longyear's interview and then that will give them an idea of what's possible out there. And then share this with anyone you know. So again, thank if you're waiting for the next summit speaker be right back with you. Stay tuned. And Dr. Michael, thank you again. God bless you.

37:24
Thank you, you guys have a good one.