

Tap Into Your Brain's Full Potential – Patrick Porter, Ph.D., with Dave Asprey – #869

Dave Asprey:

Today is a special show because we are live in the same room, the way people used to meet here at the Biohacking Conference the day before it's going to start. And I'm here with Dr. Patrick Porter, PhD and he's the founder of BrainTap. BrainTap is a technology I'm really interested in, in the world of biohacking because they're able to change the brain using several different we'll call them modalities or input methods for our biology, stuff that I've been talking about for a long time in the world of biohacking.

And so here, instead of just doing one thing, it's going to sound totally crazy. What if you did more than one thing that works all at the same time? This is what I've been teaching you guys to do as biohackers for a long time. What if it's the Vitamin C or the zinc? How about you do them both right now and then after you get the results you wanted, you got over your cold faster, then you can see if just one or the other works? But the idea is get the results, and there's a ton of real science here about why you would use these types of modalities.

How you package them up and how you put your brain in states that you wouldn't otherwise think about. Dr. Porter, he's an author, he wrote *Awaken the Genius: Mind Technology for the 21st Century*, as well as three or four other books. And he's run one of the biggest self-help franchises and self-improvement centers called Positive Changes for 20 years. So this is a guy who is a master of helping people improve themselves who's using tech. And if that wasn't enough, you became the Dean of brain-based medicine at Quantum University in your spare time, right?

Patrick Porter:

Yeah.

Dave:

Welcome to the show Patrick.

Patrick:

Hey, it's great to be here. It's great to be live again so.

Dave:

Well, it's fantastic because when we get to sit down, something happens in communication that's harder to do, but not impossible over remote sessions. What is that?

Patrick:

Well, there's energy here. And in fact, when I interviewed you on one of my summit, you actually informed me about biophotons, right?

Dave:

Oh, right, right.

Patrick:

So now I've done a lot of research with that. You took me down the rabbit hole that it's awesome, but we're sharing energy. We're sharing more than our conversation in that energy, hopefully will be picked

up by the podcast and others will feel it as well because there's a synergy that happens that's actually palatable. People can feel it when they're live.

Dave:

There's a magnetic thing, there's probably some kind of electrical thing, there's certainly a microbiome in the cloud around us thing. Gross.

Patrick:

They actually prove that now. You share the microbiome with your five favorite friends. So when they were saying you're the sum total of your five favorite friends, it's also your guts.

Dave:

For sure.

Patrick:

Pretty scary.

Dave:

They can even identify who was in a room up to two hours after you leave the room just based on sampling the air which is totally crazy. So there's some kind of interaction that's unstudied I'm going to say there.

Patrick:

Yes.

Dave:

But then we have biophotons which may or may not transmit between people because different parts of your cells make single photons at different times that do something.

Patrick:

Well, we do know that we emit infrared all the time.

Dave:

There you go.

Patrick:

In fact, TB12, our science officer created clothing that Tom Brady actually wears every day because our bodies emit infrareds. So we're healers just by being in the presence of other people.

Dave:

So there's something good happening. I know interviews in person are always better and so I built a studio. Of course, you know I'm in a country that's locked down forever apparently. And we'll see, but the border should open soon. So anyway, it's an honor to get to in person at the conference. And I want

to thank you guys for our top sponsor at the conference which shows your commitment to the biohacking community in general because there's a lot of biohackers globally.

Latin America, you go to Asia, you go to Europe, there's whole communities of people based on this work, and they're always looking for, "Okay, what works? What's valid and who's with us?" Is Big Pharma caring about biohackers now? They're trying to shut them down because they might think it's competition, it's not, it's disruption, that's different than competition.

Patrick:

Yes, yeah. We're pulling the rug out from under you, we're not actually competing with you.

Dave:

Correct. So this is applicable, this being the BrainTap, but I would love it if you talk about the tech from a high level. So everyone listening knows what is this thing? Because the name is a little bit creepy.

Patrick:

Right. When we talk about BrainTap, when you think about tapping into your brain's full potential.

Dave:

That's the BrainTap, not a vampire tap.

Patrick:

Yes, right. That's right. So everyone would agree, you go to a conference and you say, "How many people think they're using 100% of their brain?" Nobody raises their hand. And then finally gets down to about 5%. The reality is that we use 100% of our usable brain, but we don't use its potential.

Dave:

You don't use it very well, but you're using it all. Right.

Patrick:

Yes.

Dave:

Thank you for saying that, that we only use 10% of our brain. I was so pissed in fifth grade when I heard that. I'm like, "I'm going to use 12%." That was a limiting belief.

Patrick:

Yeah, right. So the key is that what happens though is people get habituated to their behaviors and their lifestyle. So right now obviously what's happened in the last year and a half, but even before that, people had already habituated to being stressed out, they had become addicted to being stressed and that starts with their brain function. And that locks them into a brain frequency really that causes fear, frustration, and anxiety, and we all know if you want to cause problems in your body, just start ... Those three are the big three that cause it.

Dave:

Let me ask you this, you say it starts in the brain and I tend to agree with you. However, there's also a hormonal thing. So you get a cortisol response which starts in the body that then changes of the brain, but if the brain is stressed, it makes cortisol that, or it doesn't make cortisol, but then the brain triggers the release of cortisol. And you end up with this chicken and egg thing. Is this physical or is this emotional?

Patrick:

Yeah, let me clarify. There's three brains, and when I'm talking about brain, I'm talking about all of them at the one time. Our real brain is the one in our heart, 40,000 neutrino cells, that controls the show. That's why more people die on Monday morning than any other day of the week. If the heart's not in it, the brain's not in it either, the body shuts down.

Dave:

I thought that was just because Mondays sucks.

Patrick:

Yeah, that's because they're not living their dream, they're not living their focus.

Dave:

Interesting, okay.

Patrick:

But also, the gut brain actually is independent.

Dave:

Okay.

Patrick:

It can work, if you're paraplegic, you wonder, "How does the body work without this spinal cord that when everything's working?" So this brain can have stress too, right? That's where our immune system lives. Right? The psycho immunology, when these two can communicate correctly which means these three are communicating correctly. Now we get that synergizing effect. The brain appears almost like for lack of a better word, it's like a drone or like a Google tablet, it really doesn't do anything. It just goes gets the information somewhere.

And the gut does most of the work. So that's why when we talk about the different waves of wellness, that's the first one, you can't think a bad diet. There are a lot of people out there that think they can, they go, "Oh, I meditate. I visualize." But they never do anything. There's a saying, you know, faith without works is dead. You can't just think it, you've got to be it.

Dave:

It makes a lot of sense in that there is distributed intelligence it's in the body. If you touch something hot or see a snake, your body will move before your brain registers the actual change and it's really fascinating to look at that. So okay, there's some dumb thing in your fingertips that keeps them from getting cut or something, but it's a dumb little intelligence and then there's a big one in the gut.

So now we're looking at BrainTap where and I'm going to grab these things. They've got lights that actually go over your ears, there's a light thing that stimulates the light in your eyes, and then you're using really carefully engineered sounds and vibrations. It's got vibration sound, light and actually light through the normal light receptors plus light through acupuncture points on the ears. How's it going to affect the gut though, or is there some crosstalk? What's the connection?

Patrick:

Well, what happens is when this brain is going through the different brain wave frequencies, for instance, if we cross over alpha, our brain up here is going to tell our gut to start making acetylcholine and that's what we're doing with Brazil right now with the neurotransmitter study that the government's paying for is we're looking at what are all the 54 different neurotransmitters and how are they upregulated or downregulated with stress hormones? So this brain, remember, it's not doing anything itself, it's just telling the rest of the body what to do.

So what happens is when you're in sync, that's where the coherence comes in like what all the work they've done to HeartMath that shows, "Hey, when this brain is communicating with this brain, now you get the gut brain working for you." It's more sophisticated than just saying one word, but if you're stressed out, for instance, just give an idea. If you're stressed watching the news, eating your meal, you could be eating the world's best meal, but it's not going to digest because you're upset and angry and so that's why you got to calm down, get into that calm space before you start to digest and metabolize food.

Dave:

All right. I'm going to have to ask you a real specific question about that. I was at dinner the other night with some friends and one of them brought their kid who was maybe seven or eight and the kid's watching videos on a phone and just eating, I think lamb chops. And I'm like, "All right, kid's eating meat, hooray. That's a win." And another friend who's into mindfulness is like, "I'm not sure his body knows that he's eating right now."

Patrick:

Right.

Dave:

So what is the ideal brain state to be in when you're eating?

Patrick:

Well, whether you pray or not, you should center and focus yourself because once the body knows when you're present and you're eating, that's the state you want to be in, and that's usually more of an alpha state than it would be a beta state. You shouldn't be reacting to information or being critical. Being really relaxed and doing that, and by the way, we've done Dr. Rosenthal who did several studies within Dallas showed when kids play computer games, if you saw what their brain looked like afterwards, you would not let them play computer games.

Dave:

What do their brains look like?

Patrick:

Oh, it looks like an alcoholic's brain.

Dave:

What does that mean?

Patrick:

It means they're high Delta. Their brain goes into inflammation. When you're thinking about looking at that tablet or that pad, whatever it is, there's hundreds of thousands of pixels. Our brain isn't discerning, it measures every pixel. It's monitoring just like when ... What's the name? Dustin Hoffman in the movie where they dropped the toothpicks on the ground, he says 1,200 toothpicks. And he goes, "How did you do that?" He said, "I counted them." Our brain is doing that same thing all the time.

In fact, while we're speaking here, our brain is processing 25,000 pieces of information, but we're staying focused on the conversation instead of what's going on over there or down the hall or what's happening.

Dave:

It's processing and discarding because it wasn't relevant.

Patrick:

Mm-hmm (affirmative).

Dave:

I'd love to get your opinion because mean you're a heavy duty brain guy. And I read a book a while ago that described how one of the functions of the brain is to predict the future of microsecond in advance, and then only notice what doesn't match. Do you ascribe to that?

Patrick:

Yeah, they say we render 80% of our reality, that's where that comes from. So we're rendering actually the sides, that's why we have what they call a [Stick Tolman00:11:18] psychology which means the ... It's based after a Bible quote where when Jesus said, "You can't see the sin in another with a stick in your eye." So psychology took it and said, "That's where you go to find the salt shaker in the kitchen and your wife or husband says, hey, the salt's out there. And you said, no, it isn't. And then they finally come out and they say, "Here it is." You didn't render it.

Dave:

Interesting.

Patrick:

And that happens in business all the time for entrepreneurs. They don't see opportunities because they become so fixated in myopic and what they're doing, they don't see all the other opportunities. So part of what we're doing is we're widening that scope because once you start to let the brain process and I think that, and Deepak Chopra said this 20 years ago, he said, "97% of what's going to happen to you

tomorrow you know about today." So most people have to think, "What am I pretending not to know?" We've got this globally world class brain that can do incredible things for us, but they don't listen to it."

Dave:

Yeah, you reminded me of Jack Canfield. We did an interview about parenting and it's because I don't know. And he goes, "Well, if you did know, what would the answer be?" It's one of the best lines ever, I've used it on my kids and it just makes them mad, but it's still worth using them on my kids.

Patrick:

Right. What if you pretended you did know? What if you couldn't fail? That's where those questions came from, people have figured out, "Hey, the brain works best in an opportunity state, when it's in a fear state or, or a very limited state, the brain ... There could be a great opportunity there." And I could tell you hundreds of stories about that, but when people, they mostly, when you go to a friend and you maybe you're having a problem, you talk to a friend, you go, "Wow, why didn't I think of that?"

It was something really simple maybe and you go, "That's because you were so myopic and your brain was so fixated on your own solution. You didn't see the other solutions that were there. So we call it the quantum gap if you think of quantum physics because we live in a particle reality, but there's also this wave reality that works in consciousness. So with consciousness being the underlying reality, there's infinite possibilities, but if you come in with a limited possibility like an addiction, that's a limited possibility like let's say smoking or drinking, any problem happens, the brain automatically goes to that one solution because that's what they think is the best.

But if you come with what they call the Zen mind where they call the beginner's mind, you don't know what to expect, so you're open to infinite possibilities. So that's what we're looking for.

Dave:

I totally get it. You said something about we have a problem with the rendering. So does that mean that the BrainTap is giving you a better GPU?

Patrick:

Well, what it does, it's going to get the neurons to fire. So when you think about brain fitness, a lot of people think it's like brute force doing games, doing puzzles. Those are all really good, but they stress out the brain and we've shown that. So then once you stress out the brain, that's good, but the piece most people are missing, almost a 100% is recovery. So when a kid studies, when my kids would study after they were done, they immediately did product we had that wasn't BrainTap because they're 40 years old now, but when they were younger, they did the one we had, and now we took that short term memory information that went across the hippocampus and we stored it now in long term recall because now they've replayed in their mind and the brain says, "Okay, these neurons are now Hebb's law, those neurons that fire together wire together." So we're exercising it by sending energy across the brain.

Dave:

So that means with the BrainTap, I could put it on like post studying you're saying. So and how long? And I'm going to do it right now.

Patrick:

We have actually have an accelerated learning series, but we also have let's say they want to do alpha or SMR training would be really good. We have music only tracks for that.

Dave:

So it looks like this if you guys are watching on video.

Patrick:

Yeah.

Dave:

Very Tron, but what's going on here is there's blinking lights that affect the brain very strongly through the eyes. And you've got four, one for each of the quadrants in the eyes, four lights. And then this is ... No one does this, that I'm aware of, this is new, but hitting the acupuncture points on the ears with light therapy, very, very legit and I've been doing stuff like that with lasers for 20 years.

Patrick:

That's where we got the idea is our doctors were using it for laser, for addiction. And then we had autistic children that weren't able to respond to verbal conversations. So we're actually broadcasting 197 Hz frequency which is a [inaudible 00:15:38] frequency that tells the body, "Turn off sympathetic overload. Turn on parasympathetics." So we found that that would work without ... It bypasses the conscious, so it's a hack, right? It bypasses the conscious thinking and the body just relaxes, and these mothers, it was crazy when we did the experiments with them with Dr. JoQueta Handy, the kids would lay down, put it on and the parents say, "They'll never listen to that."

Boom, they're passed out for 10 minutes and they're not even moving, the parents go, "I'm not leaving till I get that. What just happened?" And that's because they didn't have alpha. So we call it a symphony of brain waves. We need all the brainwaves. There's not one that's better than any other, it's can you flow between them like the flow states. Even the people they do the Buddhist monks, they're able to get into that deep state of relaxation, they produce high gamma, but then they're able to get right up and do exercises or do some kind of martial arts or something.

Dave:

But gamma is very energizing. It's a state that it's possible to entrain which is what you guys are doing. And it's also surprisingly possible to learn it with neurofeedback. But most of the industry thinks we can. So we had to build our own equipment at 40 years as then in order to be able to do feedback at those frequencies because it's hard to do. So the much more affordable way of accessing a Gama state is, well, I guess, to live in a cave for about 10 years because that's relatively cheap as long as there's something to eat.

Patrick:

They're showing a lot of promise there or actually you go in, people are going into Thailand for a week in the dark.

Dave:

Oh yeah, I've been thinking about doing that forever.

Patrick:

This high gamma happens when it ... And they start seeing lights.

Dave:

There's a place in New York state that does that as well. These are ancient, mostly 13th century Buddhist cave meditation techniques. In fact, Dan Brown has been a professor from Harvard, not the famous angels and demons guy has been on the show who, in addition to being the father of attachment theory translates those texts. So I have some of the books he's translated where he finds very old thing from sounds grid and yeah, there's great stuff that can happen in darkness in a cave for a week, but you and me and most people probably aren't going to do that very often.

And so BrainTap, very affordable, and the idea is okay, you can use the device to get your brain into a gamma state higher than you normally would. And once you feel the state, it becomes more accessible. And as you do it more often, the brain's like, "Oh, I guess I should get used to being able to go here." And suddenly it's within the reach and the range of what your brain can do. Am I saying it the right way?

Patrick:

That's right. Yup, yup.

Dave:

All right.

Patrick:

Once it experiences it, the brain will have the opportunity to go back and visit it. If it's never been there, then it doesn't know what it's ... It's like if I told you about Hawaii and you've never been there, it'd be nice for me to tell you the story, but if I took you on the trip there, you get to see the waterfalls and rainbows that's much different.

Dave:

I want to go back to the conversation about autism.

Patrick:

Mm-hmm (affirmative).

Dave:

So I had Asperger syndrome for certainly all my childhood and probably till my mid 30's, maybe early 30's, I finally got nutrition and brain training and body and stuff down. And your description of those kids is really accurate because when your sympathetic is turned on all the time and it's just too much in information for you to pay attention to the world around you. So another person who came on the show a while ago described it as, imagine if you're in a blender with a smoothie and every now and then your face is pressed against the outside like, "Hey look." And then you just swirl around and go, "Hey look."

So to be able to pull someone out of that state and into, "Oh, let's turn the blender off and just smash your face against the edge." Now you can see everything consistently even for 10 minutes, it helps the brain filter out what's going on. And you're saying that everyone is so stressed, at least almost

everyone. And I would agree with that. We're stressed by overuse of devices and God knows media and algorithms that are designed to induce stress.

Patrick:

Yup. Mm-hmm (affirmative).

Dave:

All those things. And so you use BrainTap, how long does a typical person use it?

Patrick:

Well, you can, you can use it as long as you want. I've been using some tech ... Form of this technology since the '80s.

Dave:

I mean like how long per session per day.

Patrick:

Oh, the sessions. Let's say you want to wake up in the morning, we call these digital coffee, because 10 minute sessions. There's a brain wave called SMR, Sensory Motor Rhythm.

Dave:

Yup.

Patrick:

That's the one as we get older, atrophies. So when people are thinking about their balance, their vestibular system, that's part of the process. So we have those in the morning that wakes you up. We have ones in the middle of the day when our temperature drops by two degrees, and everybody's rushing out to get some stimulant, coffee, tea or chocolate or whatever.

Dave:

Yeah, like coffee people.

Patrick:

Yeah. I'm a coffee person, I like coffee too, but the [crosstalk 00:20:11].

Dave:

I'm messing with you [crosstalk 00:20:13].

Patrick:

Yes, but in the process of what happens though in the middle of the day is if we could use our electrical system to upgrade our energy, that's what we show. So most of our programs are built for that session because in the middle of the day, imagine if you could have two mornings, most people know they get more work done in the morning. So if you can reclaim about 80% of the energy you had when you were in the morning, that's what we found in our studies has happened with BrainTap.

And then at night, depending upon if you're light sensitive, then we don't use the light, the visor, but you just use the ears, the ear buds. But we have sessions that take you and drop you off into sleep. So those are the three primary times, but really, there's no bad time. It's just, you don't want to listen while you're driving or something like that because I'm asking you to relax. We do have sessions designed by Kathy Smith who she's been on your podcast before, too.

Dave:

Oh yeah.

Patrick:

We have her exercise, physiology sessions, people listen while they're walking with SMR training.

Dave:

She's like the first person ever to have in exercise record before cassette tapes, before CDs, before MP3s, MP4s, whatever else. So yeah, she's awesome. So you went to someone who's been training people for longer than anyone else on the planet for home use.

Patrick:

Yeah, we were in park city and we were doing demos and she shows up and I said, "That's Kathy Smith." And they said, "How do you know?" I said, "I watched a lot of her videos even though I wasn't exercising." And then I said, she did a pre and post with our HRV yeah. And she said, "Wow." And I said, "Do you mind if we get a comment from you?" She said, "Well, I need to come back." And sometimes I'm thinking, "Oh, she's blowing us off. She got all dressed up and ..." Because she didn't look like your normal Kathy Smith when she showed up at first and then she put it on and we got the picture and then we became really good friends. And now she's a real proponent of BrainTap because the physical exercise and then yeah, I know she's going to be here too because [crosstalk 00:22:03]

Dave:

She'll be here. Last time I saw her was also in Park City. I walked into the wine star which is hard to do in Park City because it's the Utah. So it's a government wine star and I walk in and she walks up, but like you're saying, it was just like normal Kathy not, made up Kathy. I was like, "What?" So that's pretty cool. So you've got a session with her though. Do you use the BrainTap before exercise? You can't use it during, it's after.

Patrick:

After. Like what we did with Kansas. Most of the sports teams out there profess or college have some BrainTap in the organizations. But with Kansas City Sport, they actually put in a 20 station room that has the lymphatic drainage boots and they use BrainTap at the same time. And that's where we found the trainer that brought it in, he actually has the HRV and he showed the 80% improvement after the practice. So they did a scan before the practice, now they must do that before they leave the facility after their practice.

Dave:

They have to do BrainTap?

Patrick:

Yeah, BrainTap and their lymphatic-

Dave:

Okay, smart.

Patrick:

Not always the HRV, we don't do that every time, but that's-

Dave:

All right, let me explain HRV for listeners real quick. If you guys are long time listeners, you have to just pause for a second or you can fast forward 15 seconds if you want, but Heart Rate Variability is a measure of the spacing between your heartbeats and when you have lots of changes in the spacing, the body's calm and when it's very rhythmic and regular, the body's stressed. So you can get a signal that's relatively easy to get that tells you are you stressed or not called HRV. And so when we're talking about HRV, that's what we mean.

Patrick:

Okay. Yeah, so part of it is we want to show energy, right? I tell people we live in an energy economy, right? When we wake up, if we can give a housewife or a mother or father more energy so they can play with their kids at night, that's a benefit.

Dave:

It's a big deal.

Patrick:

So that's what we're doing, and we know that sound, vibration and light are what our body needs besides the foods, we need good food. But all of that, once we have all of that, the synergy effect of our body is we have more energy. We have more ATP to heal, to recover, to enjoy life, to do the things we want to do with ourselves.

Dave:

I think that you're tapping into some really primordial stuff, maybe more primordial than most people would think about with BrainTap. When we were single celled creatures, you wake up in the morning and you get sunrise, right? And so we're light sensitive and we have been forever and 5% of the cells in your eyes do don't even go into being seen, they go into telling the whole body what's going on right now? And they tap into the deep structures in the brain.

And even our skin is photosynthetic and it has light receptors and all of that. So there's that, and then vibration, you can look at any single cell creature. In fact, when we're culturing them, we'll vibrate dishes and move them around. So that basic motion is a fundamental sensor that's probably right after a pain sensor which is tied to touch. Substance P is the original pain sensor. So wait, vibration and light are fundamental things that plug into the brain way, way, lower level than almost anything else I can think of.

Patrick:

Right. When we first came up with this back in the '80s when I was with a group called Lights on Research, we were looking only at sound. But then we found out that the light receptors in the eyes you're talking about actually activate 30% of our hearing, most people don't know that. So when they go, "Why do you have lights in the eyes?" So you can hear it. If you've been to a lecture and you couldn't see the lecturer then you couldn't hear them. But as soon as you adjusted your sight, now you can see the lecturer, now you can hear them that's because our primitive brain, that limbic brain is not listening to everything.

Remember, it's too much. So it says, "I'm only going to listen to what I'm looking at because that's what's most important." But if something really bizarre happens like if we're downstairs having lunch and somebody says, "I'm here for the upgrade lab, we might turn and look because that triggers our reticular activating system."

Dave:

That sounds odd to me because I'm one of those guys where I don't sound filter very well, that's part of the whole Asperger's thing. So for me, I'm in a room, it doesn't matter where I'm looking, I hear everything and it's actually tiring and I've gotten way better. I've done auditory training and things like that with BrainTap. As you're expanding your brain's capacity and its resilience or things like that, I could see say in my case which is not as unusual as people might think, but I'm consciously filtering versus what you're unconsciously filtering.

If I'm using BrainTap and I'm increasing resilience of the brain, that means I can be in a noisy environment for a long period of time, I won't get tired because my brain just has the energy to do it, right?

Patrick:

Right.

Dave:

And then the other part of it though is it actually could change the not resilience, but actually the capacity or the ability of the brain and there, that's auditory filtering and all, but we've got lights and sound together. Are there effects that happen for people's perception of reality when they use BrainTap regularly?

Patrick:

I don't know exactly how that would do, but I can tell you that in our study we did with a group here in Florida, we did a pilot study with women 55, 65, they were on the dementia scale and we found that within six weeks, they had that neuroplastic change which is measured in energy across like with [inaudible 00:27:15], not with-

Dave:

Yeah, with voltage.

Patrick:

Yeah. So we looked at a 49% shift in six weeks and that maintained as long as they did three a week of BrainTap session.

Dave:

49% shift in-

Patrick:

Energy.

Dave:

In electricity formed in the brain?

Patrick:

Yes.

Dave:

Okay, so this is exercise for the brain, right? But not the lumosity kind of exercise for the brain which is intention and effort-focused. This is making the brain do stuff which makes it stronger, like going for a walk?

Patrick:

Mm-hmm (affirmative).

Dave:

Right.

Patrick:

Like for instance, I did a whole series back in the '80s actually for ATA because I'm a black belt on Taekwondo, so I did a whole series for them, and they sold it through their organization. And we took people learning those moves because they're moving their nervous system. You have to learn those in a way that you're not consciously thinking about them. When somebody comes up, you're not thinking, "Oh, I should do a cross black." Or whatever, you're just doing it.

So we have them visualize it because our brain doesn't know the difference, but we have to be in the right physiological state. If you're not relaxed, your visualization isn't going to work so well, your ability to mimic, those mirror neurons are not going to turn on. The biggest difference between people who are good at sports and people who are not is that mirror neuron.

So in your case, you have super hearing, some other people have this ability to have ... They watch somebody to do something they can mimic it. They just have that-

Dave:

Yeah, that's a good skill.

Patrick:

Yeah.

Dave:

Lets you dance, right?

Patrick:

Yup.

Dave:

I don't have that skill.

Patrick:

Right, or like our science officer speaks six languages, we're traveling through India going to university to university giving lectures and we're getting ready to leave. And he starts talking to Hindi to somebody. I said, "Francisco, when did you learn Hindi?" He says, "I didn't. I just picked it up." But his brain circuit that learns languages because he knows six languages, he just picked it up like a universal translator. So the brain is pretty incredible.

Dave:

People like that, they're like morning people. You just want to punch them don't you? That's just not fair. My wife is one of those where she's like, "Oh I spent a week in Japan. I almost know Japanese." "What are you talking about?" I can barely say sushi and I love Japan.

Patrick:

Yeah, that's the difference I found between the European education system and the American one.

Dave:

Yeah.

Patrick:

Maybe it's changing here now, but I didn't learn the language till I was in college and I only learned it to pass. I can don't know, all I know is banjo and cerveza. That's [crosstalk 00:29:29]

Dave:

Yeah, I've got enough Spanish to say, "Are you wearing a green shirt?" But nothing useful. Right, yeah. So there's something else going on. So in my wife's case, Daniel Amen who's been on the show, a dear friend, probably you must be friends with Daniel, at least have met him a lot. He did a scan and looked at her brain and was like, "Hmm, your language processing center, it was like someone took a bite out of your brain right there. It was a childhood brain injury."

Patrick:

Oh.

Dave:

So her brain has distributed language processing.

Patrick:

Oh wow.

Dave:

It took over as a kid and that means she can do simultaneous translation which only one in 20 million people can do which is where you hear one language and speak another language at the same time of what you're hearing. It's crazy. Now, here's the question though, and I'm not sure you're going to like this question, but she has a weird brain because of that. Right? So it doesn't work the way most brains do. It works better for some things and probably worse for others, but we're all like that.

My brain does some things, but don't ask me to do the other thing because I just suck at it. Now, how do you know if okay, putting the BrainTap on, I'm going to do whatever the program is, how do I know that's going to work for my brain versus for your brain?

Patrick:

Well, I tell people the difference between this and neurofeedback, just to put that in perspective is neurofeedback is like going to the gym, you get a personal trainer. Of course that's going to be more targeted to your brain, you get to focus right on that brain function. Now, what we do is we're going to take you through the circuit training. So this is like going to the gym, but you should already know what you're going to do, but we have a lot of professionals that recommend different things.

So let's say that you're doing alpha training or whatever, theta training or gamma training using neurofeedback. What you do is you do that training first and then you'd do this, but most people, we know there's a book out called The Master Brainwave by Anna Wise, she was the person that we consulted with in the early '90s. She's passed away now.

Dave:

Yeah, she's an older author in the space, right.

Patrick:

Yeah, and she was from San Francisco and basically what she did is she went around the world, measuring people's brains with the capacity they had at that time which is called the mind mirror which is nothing like what we have today.

Dave:

Yeah, very primitive.

Patrick:

Yeah. It was LED screens and told people what was going on, but what she found out as every person's brain that was a high achiever, captain of industry, performance in sports, they all had the certain rhythm to their brain about 45% beta, 30% alpha, and the rest went down like the mountain. And if that's not happening while you're awake, then you don't have the efficiency because you can't flow through these states. You want to be able to flow back and forth. So what we do is we train to that, what we call the master brain wave.

So what's nice about our brain like chiropractic is the best example is when we know because we've hook people up to EG when somebody's getting an adjustment, the brain basically lights up, puts so much energy into the brain. That's why some people like it, some people don't, but they're sensitive

in their nervous system, they're going to say, "Man, that chiropractor, what happened?" But if they're like me, I want to hear my bones cracking. But what happens is we know it reorganizes the whole brain.

Then the brain goes back to its optimal state, not the state it was in before the chiropractic adjustment, but we have a genetic code or a memory on all levels that says, "This is the perfect Dave Asprey, and this is how you would operate in whatever the optimum state is." So what we're going to do is we're going to give the brain the opportunity. We don't stick in any one state. One thing that is really important for people to know is it's not about one state.

It's not about 10 Hz frequency, it's not about 11 Hz frequency, it's not about 7.8 Hz frequency. It's about training the brain to go to all those frequencies and giving your brain the chance, what we found over time, we used to do it with Galvanic skin response systems and all those kind of things. But what we noticed was, everybody's brain regulates back to whatever is normal for them, but not normal like when they showed up because they usually showed up stressed out, I'm talking about clinical now.

They showed up stressed out, worried, whatever. And basically once they do that, it's almost like they offloaded luggage. All this stress left their body and then the brain regulates back. It doesn't change the brain in a way that says this is permanent. Some people over the years, there used to be a program called the dolphin mind, and it was one of the very first electro cranial electrical programs, and it was really cool, but what they found was it actually was damaging to the brain. That's why it's not in the market anymore, they have a lower voltage one, and things like that which is good for some things, but that causes damage just like magnetic resonance therapy. They have those programs, they do change the brain, but it's works on a damaged approach like lifting weights does.

Dave:

Well, it depends on the strength level and the frequency, right?

Patrick:

Yeah.

Dave:

Some of the heavy duty PEMF stuff that I'll use for muscles and joints and making your neck not hurt for time in your life, you might not want to put that right on your head and turn it to full strength because I don't think that's wise, but I know some people who like to do that, but that isn't my recommendation.

Patrick:

Right. Depending upon how our nervous system, whoever is doing it, their nervous system is in good shape. They can handle that kind of energy. But like you were talking about the cells, we have something called the cell danger response. If one group of cells starts to feel because let's say we're getting EMF and we can't handle that, and we're one of the 20% that gets damaged, then the cells start to shut down. And so, but if we're open to that and we know, "Hey, this is a safe place, safe environment, then the body can handle it."

And we're always people like yourself, always looking for ways we know this is going to happen. We're not going to avoid electric smog, right? But we have to have ways to combat that, and so there's different ways we can do that. So what we're doing is we're saying your brain's going to get out of regulation. In fact, we know for a fact that I would challenge anybody watching this to tell me I'm not true because we've measured thousands of brains.

Dave:

Even the most advanced meditators who live in caves, when they leave the cave, they get out of balance, that's why they live in caves.

Patrick:

Yup. We've actually had the chance in India to measure gurus brains.

Dave:

Yeah, I have too. Yeah.

Patrick:

Some of them are really good. Some of them would surprise you.

Dave:

So how many gurus had that little dalliance with one of their or 20 of their followers, it's actually a very common thing.

Patrick:

Right.

Dave:

Right? And that's not to cast dispersions on them, maybe there were some spiritual tantric thing going on, I don't know. But there are certainly times when even the most honored people make mistakes. In fact, I had a Buddhist monk on who actually cheated on his wife. And we talked about it on the show a while back and it's one of those things where if the people who are the top athletes of cognitive state which I'm going to call advanced meditators whether it's any one tradition or another, I'm not highlighting Buddhist or Hindi or anything else.

What you find is that if the top ones are having problems with that, then the rest of us probably are too. And okay, maybe you're fully enlightened and you incarnated on purpose, all right, you're accepted. But other than that, I'm pretty sure this is a common thing. And your approach with BrainTap is interesting because you're saying like, "Let's take the brain through the entire road or the entire spectrum that's available on the roadmap of what the brain normally will do so that it can at least find those states and be comfortable in them, and the more you do it, the more it can be comfortable in them." And if you do it the right time after learning something or after moving, that the side effect of that is that it's ... Or maybe it's not a side effect, but it's at least learning better because you did.

Patrick:

Yeah. We call it side benefit. The brain learns how to regulate. So what I was going to say was that everyone's brain when they get stressed, the left hemisphere starts to slow down. That's the reasoning power you're talking about. So that's why we can make poor decisions. Right? That's why people like you're talking about, people know it's going to happen. They'll have a few drinks so they have permission to go do the things that they wouldn't do when they weren't drinking.

So they set that up, it wasn't like the drinking caused them to do it, they knew cognitively, "Hey, I'm going to go have a few drinks that's going to liberate my moral code. Now I can go do these things

and I'll be ashamed tomorrow. But today in this moment because we're all looking for ... We're creatures of we're creatures of passion in the moment ..." Most people want to ... Even though we all know that we run away from pain and we run toward pleasure, we are driven by pleasure.

What they do is they drive us away from fear to get us to pleasure or to relief, whatever you want us. You want to do that so when people think, "Hey, I need this release or I need this relief, I need this." And we know that, of course, sex is one of the biggest ways that people get this relief.

Dave:

That's why there's a whole panel on it at the biohacking conference.

Patrick:

Yeah.

Dave:

[crosstalk 00:38:14] bring in an expert on sex, energy, tantra and BDSM. Let's just get it all out there. So I'm with you. Okay. People are driven towards pleasure. Is there an alcohol setting on BrainTap?

Patrick:

Yeah. We have a whole-

Dave:

Sorry, I can use BrainTap and I'm like, "I'm sorry. I BrainTapped so now I can go tap that?"

Patrick:

Yeah, no, no, no, no, no, nothing like that. My wife would really like that one. No, I thought you meant we do have programs to help people off alcohol to make better decisions.

Dave:

I so got you on that one.

Patrick:

I guess you could ... We have one called putting future events into perspective, they could use that one for that if they want.

Dave:

It takes away all the fun, come on. So you have things to help treat addiction and with all the personal development work that you've done over the last 20 years, of course, addiction is part of it. So there's things that can help people get out of the stuck alcoholic brain and alcoholic brains have electrical patterns you can identify. They have things that Dan Amen talks about a lot, there's holes in them and things. So alcohol is not good for the brain. Do you drink?

Patrick:

I drink occasionally. Yeah.

Dave:

What's occasionally mean?

Patrick:

Maybe once or twice a month.

Dave:

Okay. So super occasionally, not the only once twice a week which is what a lot of people think.

Patrick:

No. Usually with my CEO. No.

Dave:

Yeah, CEOs will do that too man, you should watch out for those guys. By the way guys, he's right off camera here, and sending daggers over here, not really. But you're a black belt, and do you still regularly practice martial arts?

Patrick:

I do more Tai chi now.

Dave:

Tai chi, okay.

Patrick:

I don't think I'm going to be kicking people over their head at 60, but.

Dave:

So you went more feminine, is that?

Patrick:

Yeah, that's right. Yes. My wife says I'm not enough feminine so I got to get more of that. Actually, I had a chance to go to Wudang Mountains and train for 30 days with the monks there. So it was like in a Kung Fu movie the whole time. It was really cool and-

Dave:

Incredible.

Patrick:

So you go there and what I didn't realize was the kids they drop off there, they were training. This little girl, she might have been 4'9" or something. She jumps up and kicks the basketball hoop without any warmup.

Dave:

What the heck?

Patrick:

And these kids were just super athletes. They either make it as a martial artist and they train every day for eight hours or they become Daoist priest, and then they have to measure, they have to memorize the Dao which is thousands of pages, so they really work out hard.

Dave:

So they don't have to memorize.

Patrick:

Right. In a month though by the way, I only learned one form. So people in America think, "I've spent a month, I should have learned all seven forms." No, I learned one form for a whole month, yes, yeah. That's all they do. They go, "You want to come ..." And that was supposed to be for six months, but I couldn't get away for six months.

Dave:

That's a long time.

Patrick:

Yeah.

Dave:

Wow Patrick, that's pretty neat. You've also though I think earned credibility because of that with some of the UFC athletes.

Patrick:

Oh yes.

Dave:

And so you've been able to use BrainTap on Corey Anderson and some others. What do combat athletes or martial artists get from BrainTap?

Patrick:

Well, first thing is that we call it, it's neuroprotective. So part of the study is instead of waiting till you get a traumatic brain injury, you're always maintenance in your brain by bringing energy through the form of lights on and vibration, the brain can heal itself on an ongoing basis. The biggest problem is not the knockout punch, it's the practice is leading up to the knockout punch and getting those CTEs as they call them and the brain is not reorganizing them.

So what we're finding is that we can get them to sleep better, keep their memory, their focus, their concentration, and then also just keeping them positive because they have anxiety too even though they have brute force, but they still have the stress and anxiety. So lowering that and sleeping before the fight is really important. In fact, Corey Anderson talked about on ESPN that in his room, he

was doing the BrainTap before he went out and fought and he was listening to one, "It's Your Time to Shine," which is a session we have for sports.

And he said he visualized knocking the guy out in 49 seconds. And then he knocked him out in 49 seconds. So that was really good when he said that on ESPN. We could see a spike in our people going to our social media pages and looking, but then the other of course, once he said that other UFC fighters who, "Hey, what's going on here?" So we can show them after they work out, it's all about recovery because most pro athletes, they don't have a problem working out, they're overdoing it actually or they're not eating correctly is one of the other things, then they're not recovering.

They think, "Oh, I'm going to go have a beer or two to unwind." And that just destroys everything they did that day. If you saw a brain after two or three drinks, you'd only drink a couple times a month too. So if people don't realize what happens to their brain doing these things, that's what's so cool about biohacking is we now have tools then we can say, "Hey, you can wear a monitor all day." Right? And shows you, "Hey, I just ate the Snickers bar. It really does hurt me." Before you're tricking yourself saying, "Hey, that's the healthiest junk food bar."

Dave:

It's funny because you really aren't going to feel high blood sugar. It's very tough. Even with a monitor after probably a few years, you might be able to get a little sense for it. I got to the point where I can say, "I'm within this range, it's not super crazy high probably because then you feel a bit lit up and you know at low feels like at least." So you've got it. With brainwaves, I think it's a lot harder to do, and with the, let's see, I think I've spent four months with electrodes on my head at this point with the 40 years of Zen stuff.

So I can feel certain states, but most of the states that are interesting, it's not like, "Oh, I had alpha." Well, you always have alpha, right? Or, "I had alpha on this half and this half." Yeah, that's relatively old stuff. The stuff we're doing now is advanced mathematical functions. I can't necessarily feel one of those except when you get it right. You're like, "Oh, everything around you is very different." So that's a thing where you're not probably going to get there. But if you take a hit to the head and I've had a couple of those in the last six years, one of them I was swearing all the time, I couldn't play, even go fish. My working memory was shot.

I had a little bleeding in the brain. I sent angry emails to Tim Ferris for something he didn't do. Sorry Tim, and actually once I was healed, I sent him a note. I'm like, "Tim, I'm so sorry. I didn't even know what was going on." He was very gracious about it to his credit. And then I looked at suing someone who didn't need suing. I was out of my mind, but I didn't know it. And it's a long lead up to my question for you which is when you're working with these athletes, you're able to pre-condition their brain so it's less likely to have that kind of response when they take a hit or do you do it after they take a hit so they recover faster?

Patrick:

We do both because you have to be preemptive because they know they're going to get hit. It's not like we're doing this also with different people, with snowboarding and different athletes like with skiing because they're going to fall down all the time too. So any sport that has to do with or football for instance, the brain needs be maintained. And if not, when you have a brain injury, what happened with you and happens to a lot of people is that your brain will go into a high Delta mode, and that means that it wants to reboot because you have a lot of inflammation, a lot of damage.

So the brain is saying, "Hey, you need to just go to sleep and let me take care of this." But we don't want to do that. We want to get up and move and, and have our life. And so once that happens,

used to be they put you in a dark room and not any noise. And that's probably the worst thing because then the brain starts thinking, "This is normal." We need to get the brain back to normalcy, and that normalcy is again that 45% beta, 30% alpha.

Dave:

I can't imagine how light sensitive I was. If I saw ... So full disclosure, I took that brain injury at Burning Man and there's lots of blinky lights at Burning Man and within like 10 minutes of it, I'm like, "I'll cover my eyes because I can't see anything blinky." And actually put on the darkest of the true dark glasses that cut out a lot of the spectrums and then I can have my eyes open and a lot of people with migraines and all will do the same thing just to turn down. It's like noise canceling headphones for your eyes for the little while. I can't imagine though putting the BrainTap on right then because I guess I would've waited a couple days.

Patrick:

Which was designed for headaches actually back in the '80s. When the brain is in sync, you don't see the lights at all. It's like the black lines on a film that you edit out, the brain will actually edit that information out because it's not really using the light receptors of our eyes, it's using cranial nerve too. It's basically saying, "Hey, there's something going on over here. There's something going on over here." And it's not really the way we see, it's more about if we were in a cave let's say, and light came in, we'd wake up, but we're activating different regions of the brain. And so-

Dave:

And your eyes are closed to be really clear. So it isn't seeing, it's just light, dark, light, dark.

Patrick:

And if somebody were to get these and they had a traumatic brain injury, we don't recommend using the lights for 30 days after.

Dave:

Okay. That makes sense, but [crosstalk 00:47:05], let's talk about sounds. I started using sounds for hacking my brain in the very, geez, in the early '90s. So that's I guess a long time ago now. And there were a couple companies who did that. There was The Monroe Institute, which is the preeminent one who did a lot of the work. And then probably even more successful was CenterPoint with Bill Harris who passed away, he's been on the show. He was a dear friend. I dedicated one of my books to him.

So these were two of the pioneers in the very first generation of sound therapy. So I learned about binaural beats and actually made my own. I'm like, "I should be able to do this." So I got to now I'm dating myself again, sometime in Windows 4 or something, Windows 98, some sort of an app that it was a video game sound effects thing. I'm like, "Oh, I can do this." So I'd make my own binaural beats and I'd actually go use my own files to hack my brain, but it didn't work as well as all these other things that were done by people who knew a lot more than I did and what I learned about is two technologies I want to explain, then I want you to go into what you're doing. The original sound in treatment is called drumming.

Patrick:

Mm-hmm (affirmative). Yes.

Dave:

It's Monaural Beat is one. And so, but it's true. If you beat at a certain thing and I've done work with a Siberian lineage Shaman who pulled out his drum and beat at a certain frequency, and then within 20 seconds maybe of doing that, he just literally dropped to the floor. That frequency leaves his body, hits the floor, starts snoring and goes to the underworld and does the Shamanic stuff. So that's the power of one to a brain who can do that, and then the next one would be Tibetan singing bowls, one bowl on this side, one bowl on this side, and all of a sudden you hear a woo, woo, woo and your brain does something. So these are not new technologies, but you've taken it a few steps past that. Can you explain isochronic and phantom and all the stuff you're doing?

Patrick:

Sure, sure. Well, what I tell people is we take ancient traditions and make modern technology. So I don't think there's anything new under the sun. People just figure out how to like we did. We made it commercially available that people aren't getting it. So I'm a big believer in shamanistic drumming and things like that. So what we looked at was what's happening the ... That's like more like an isochronic tone. So if we look at the earth for instance, if you and I were on a spaceship moving toward Earth, the Earth would have a frequency between 0.01 and 100. Some people say up to 400 because they've had brain states up to 400.

Dave:

When you say the Earth frequency, you're talking about [crosstalk 00:49:33]?

Patrick:

I'm talking about by a volcano would be about a hundred.

Dave:

What would be the [crosstalk 00:49:37]?

Patrick:

The Hertz frequency.

Dave:

Hertz frequency of what?

Patrick:

The planet. If you're standing there, [crosstalk 00:49:42]

Dave:

Is that a magnetic or an electrical?

Patrick:

It's electrical. Electromagnetic.

Dave:

Electromagnetic. Got it.

Patrick:

So the planet has a frequency.

Dave:

Yeah.

Patrick:

So everything is frequency, right?

Dave:

Okay.

Patrick:

This table has a frequency. This mic has a frequency. So let's say we're standing in a ... When you're talking about the cave for instance, we're inside the cave, that's 7.8 Hz frequency because the mountaintop, that's what most people call the earth frequency, right? That's theta. So our brain actually is always sinking to its environment. That's why if it's chaotic, in your case with all the sounds, that's causing some disruption. So you had to filter it out. You had to learn how to do that.

Most people just do that normally, they tune out, right? But our brain is always engaged. So for by the ocean, it's 10 Hz frequency. So we're looking at that. How does that happen? So if we put on earphones and eyeglasses, we're actually filtering out the reality that we're in, we're creating another reality which is our internal reality. And so we can't have both. That's why when you're in class and you daydream, you don't hear the teacher. You're basically playing ball in the yard instead of listening to the teacher. So we're going to take them away from this external world, and we're going to put them into a synthetic world where we're going to stimulate them with sound.

So we live in a synchronizing universe, all people have to do is go to YouTube and put in synchronizing metronomes. There's a guy who starts 200 metronomes and they sink. So our brain wants to be in sync, our body wants to be in harmony, but other things drag it off there. So we use a sound. So by neuro beats in general, we're going to put a frequency in one ear like the singing bowls, they're going to have different size singing bowls maybe, whatever the difference is, the brain actually makes a phantom sound. That phantom sound what we found out in the '80s and it was actually not till '92 when they had the neuro techniques or the neuro equipment that we could actually measure what was happening.

Dave:

Because we could measure brain waves very well before that, right.

Patrick:

Before that, we were using mostly respiration, heart rate and things like that, but not HRV, it was different than that.

Dave:

It's pretty brutal.

Patrick:

But once we started being able to measure the brain, we could track how the brain changes. We know that every three to five seconds, we need to make a change or interrupt the pattern. If not, the brain will go "bye-bye," it's like advertising. They know they can only hold your attention for so long. The brain only has so much. So let's say you have a fully functioning, both ears work perfectly, isochronic tones can work really well for you. And by the way, our first program that we did was called the mc2, we actually licensed The Monroe Institute's binaurals.

Dave:

So you got their sounds because they were the most tested on the planet?

Patrick:

Yes.

Dave:

Okay, very cool.

Patrick:

And I actually had property and shipment in Virginia, just three doors down from them. So I knew them [crosstalk 00:52:20].

Dave:

I never got to go, are they still, I don't think they are.

Patrick:

Yeah, they're still there. Yeah.

Dave:

Oh, in was always my dream in the '90s to do that, and I never did. I ended up going down a different path, but what they had done, and guys, this is like the ancient history of brain hacking, right? It was change the sounds based on what your brainwaves were doing. And I think things have evolved a lot in the last 30 years or 25 years or so, but it was the first group to do something like that and the learning that came out of that was the impact of the sounds on the brain so then you don't have to go anywhere, you get the sounds and you actually license the sounds and BrainTap so that you can use those to tune where the brain goes, and then you layer in the vibration and then the lights even on the acupuncture meridians on the ears. So then you're stacking the lights up with the binaural beats.

Patrick:

So what's happening in the right ear with sound is happening in left eye with light. So we're doing binaurals with light.

Dave:

Very cool.

Patrick:

That's why when your brain doesn't see them, it's because they're in sync just like your brain doesn't hear either a sound in the ears. Now what we did was we found out, it happened to me, I like you were traveling a lot, I had my ear drum busted on a flight. And so I had to get it repaired. And then now I have 20% less hearing there, and I found out that I wasn't tracking to the binaurals, but if I could layer in the ice chronic tone that matched it, now my brain could make up that difference.

Dave:

Yeah, it will fill it in.

Patrick:

And both of them work really good separately. But when you stack them, it's like we're giving the brain another piece of information that is healthy. And to give you an example, we did a study in Provo, Utah with an amino acid for the brain, it's an addiction center. And they actually were measuring through urine analysis how much nutrients the people were actually using and not using.

Dave:

Wow.

Patrick:

And they found 30% more absorption into the body if they were doing BrainTap rather than watching their phone while they were getting this IV treatment.

Dave:

Wow.

Patrick:

So when the body's in this relaxed state, so if we can get the body into the relaxed state, now the body can do it. It does better, and that happened because we were synchronizing the brain. And most of the people in that study used only the earbuds because they didn't know they were photosensitive or whatever was going on.

Dave:

But it's kind of cool because you guys have an app as well that uses just sounds, right?

Patrick:

Mm-hmm (affirmative).

Dave:

And that alone is profoundly strong stuff with a long history of use and understanding of science behind it. And so I like the idea of, "All right, if you've never experienced this state, use the sounds to get there

and say, oh, can I go deeper and faster?" And then you end up getting the full, what do you call it? The headset? I guess eyes-head? Headset? What's [crosstalk 00:55:04]

Patrick:

We call it a headset. It used to be called a visor, some people call it a visor, but we call it a headset because it's connected.

Dave:

It's got both. And you can wear it, it's kind of cool. You can wear it so that the headset or the visor isn't in front of your eyes so then it's basically a headphones.

Patrick:

The default setting is no light. So when people listen at night and they just want to black out the light and go and get to sleep at their room or if they're in a place that's not dark.

Dave:

Yeah.

Patrick:

They can just put the visor down and it won't flash. You have to click the button to get it to flash. And it has five different settings and most people will contact us and say, "How do I get more light?" Because once the brain learns how to run energy, it's all about energy. So if we can run energy and that's where the ear lights come in because we can show the meridians and how the body recharges through and meridians of the body, but when you're doing it with sound, the body's already used to doing it. So now we're more adaptive to sound than we are light.

And then, but light amplifies it where there's a lot of great studies. We do a lot with light other than this as well to show how it works with the brain. We talked about this in one of the other conversations we had. We need to get light into the brain as quickly as possible so that it can heal. The body knows how to heal, but if it doesn't have light like Dr. Cousin said, it's the most under prescribed nutrient on earth. So we need to get it into the brain so that's why the eyes and the ears, but the sound sets it up.

Just doing the sound the light alone, we have some people that do ... For some reason they do just the visor lights without the ears, without hearing it. I don't know how that works so well because we've never done any because I wouldn't imagine that you'd get the same brainwave and train with, but maybe you are.

Dave:

I have purchased through the course to my life, even when I really couldn't afford it, pretty much every one of the technologies that I could find around that sort of stuff. And I've had light sound goggles. In fact, I have some from the '80s, it might have been from your company, right?

Patrick:

Yeah.

Dave:

Some collector ones that could be in a museum. And generally my experience has been even with different colors and patterns and all the different things that have happened, light by itself blinking in the eyes, is good for trippy visuals.

Patrick:

Oh yeah.

Dave:

But I don't know that it's going deep in the brain, but when you add in the sounds, especially really well formulated ones, it's a much, much deeper experience. That makes a lot of sense. You also of though, you have, what? 100 plus programs in 12 languages, and are you reading in all of those languages?

Patrick:

No, no, I'm not. They're using my scripts. We have over a thousand word sessions because we now know you can change 2,300 gene expressions through the words we use or the foods we-

Dave:

No you can't.

Patrick:

You can't?

Dave:

See what I did there? I shut up half of your genes. One of the weasel words.

Patrick:

Yeah. Well even when I was doing the research about the biophotons, they're educating our body to change every 40 seconds at the DNA level. So if we give energy, now we can change appropriately. If we're not, we're changing more, we're aging in other words instead of staying youthful and young because there are a lot of science shows that we can keep our ATP production up, our energy up and we can detox and we can provide our body with the right nutrients, the potential to live a lot longer than 70 years is to our advantage.

Dave:

You said something a little while ago about that ability to absorb nutrients in a rest and relaxed state. And it makes so much sense if the body's in a fight or flight state, it's like, "Why would I bother absorbing nutrients right now? I'm going to either kill something that I can eat or kill something that's trying to kill me." So it's inappropriate to be absorbing nutrients when all systems are pointed externally. Right?

Patrick:

Mm-hmm (affirmative).

Dave:

So I've seen other research where people do forgiveness which is a core part of the work that I do, which changes your brain state radically as well as almost anything that puts you in parasympathetic where not only can they absorb nutrients better, they can also dump toxins much better. So do you think people should take charcoal or glutathione or something before or after a BrainTap session?

Patrick:

Well, I do. But anything you can do, that's why we call it the first wave of wellness. It started in 1890 with Dr. Kellogg and now what you're doing and following it, so he's the first one to do travel medicine, not like the Wellville movie. I grew up in that town, so I know the real deal. He had the first health food store in the world was in our hometown.

Dave:

Yup.

Patrick:

Like I said, you can't out think a bad diet.

Dave:

It's embarrassing though. If that's where really where it all started, I might not always entirely agree with you there because he did talk about health food, but Kellogg's primary motivation was to reduce male sexual desire because that was the root of all evil. So he literally invented testosterone-lowering foods which was-

Patrick:

Well, he is Seventh-day Adventist, everybody has their own little yeah idiosyncrasies. When I went to that, when I'd go to the hospital in Michigan though, I would go there because they had healthy foods in the hospital, not unhealthy foods.

Dave:

Oh, compared to anywhere else. Yeah.

Patrick:

I think that there's always you've got to look at the political agendas of people. Back then, of course that was the demon.

Dave:

Of course it was, and so between Graham crackers and corn flakes, that was pretty much like, "Great, let's ..."

Patrick:

Well, that was his brother, not him. He was the medical doctor.

Dave:

Oh, do I have these guys mixed up?

Patrick:

Yeah, his brother was the one-

Dave:

Oh, thank you. See, I've been corrected now.

Patrick:

Yeah. So Dr. Kellogg, we might not agree with some of his foods now because of the science, but he would do basically warm cereals was his secret and eating healthy diet, minimal amounts of meat, but good meat, but the Seventh-day Adventist were mostly.

Dave:

Vegetarian.

Patrick:

Vegetarian.

Dave:

And you can pull off vegetarian if you eat enough eggs and cheese and you tolerate those pretty well just to get the fats, right? So, and compared to what a lot of people are eating back then, I think they were doing better, right? Spoiled whatever. So, okay. Well I'm glad we separated out there were two Kelloggs. I only knew about one of them.

Patrick:

Yeah, the brother took his name. If you had a Hank Asprey and he went out and started selling something based on your name, that's what-

Dave:

Yep. I know how that feels. Okay. That's interesting. Okay, very helpful. So this was the beginning of the health movements going back to 1890. This is where biohacking has gone. So we went through our 1970s, low fat phase, maybe a little bit of the '80s when there's Susan Powder, the insanity of having enough fat to make cell membranes and all that stuff, right?

Patrick:

Mm-hmm (affirmative).

Dave:

And then we ended all the really heavily processed stuff in the '90s, and then we started waking up and saying, "Oh, less processing, et cetera." So we've had these arcs and these things that come and go. By the way, yoga and lots of sex was the '70s, right? And lots of pot probably in the '70s and the '60s, right? And now it seems like the pot and psychedelics are coming back.

So we have these waves every 20, 30, 40 years, and you've been around long enough and you've also studied the history of our field here. I feel like biohacking's job is to bring a lot of this together

because I'm not sure light sound and neuroscience would've really hung out with the hippies in the '70s, right?

Patrick:

Right.

Dave:

They would've been trying to put them in jail. Are you hopeful? Do you see over the course of your career a positive direction for all this stuff?

Patrick:

Oh yeah, I think that if we could get the politicians out of the way and let people control their own health, I think when you're healthy and you have energy, basically you're like a light bulb in the middle of the room, that's a 100 watt, everybody else is a 25 watt light bulb, they're not going to shine brighter than you. So I think-

Dave:

They're going to attune to you is what they're going to do. So that's why the more powerful you are, the better of a person you have to be because otherwise, you [crosstalk 01:02:50]

Patrick:

There's actually research, I don't know if you've seen it, recent research, they can actually have the voltaic discharge from the heart now, they measure it. Somebody who's in gratitude and forgiveness 200 times more light than people who are in fear and anxiety. So we've got to be in the light. We got to be the ones that are showing. Nobody wants to follow some of this, not practicing what they preach anymore. It just shows up everywhere. So you have to have that full commitment to your health. Not a part-time commitment because it shows up.

Dave:

Mm-hmm (affirmative). It will definitely show up, And I don't know all the mechanisms of entrainment, but we know heart rate variability is there. So the person with the highest amplitude, the strongest heart rate variability, tends to change the other people in the room. And it's funny. We're here at the Biohacking Conference. For the first time since the first conference, I'm emceeing my own conference, which everyone told me not to do because it's a huge amount of work to be the MC and to introduce every speaker and all. But I've missed having the conference for the last year and a half or so because of all the pandemic, government cancellation stuff. So I'm like, all right, I'm going to be on stage.

[inaudible 00:00:38] much time with the audience in our community as possible. So for me though, that means before I go on stage, I will be doing exercises that raise my heart rate variability, and I will be doing everything I can to be in that state so that the audience will resonate with each other and with me, and we'll be in the right state. And they don't teach you that in speaker school. But there's another guy who understands that really well. Tony Robins can pull that off in orders of magnitude greater than what I'm talking about.

But backstage with Tony, he has his energy workers. There's Dr. Barry Morguelan, who's been on the show. Dr. Barry is speaking at the conference. Energy for success is what he does. And I do his exercises. So I'll be back. He'll probably be standing next to me and telling me how to move my arms or

something before I go on stage. And even with BrainTap, use the BrainTap ahead of time that morning. And the idea there is I don't want to do a heavy duty exercise session, but you want to do one so that you're in a parasympathetic, relaxed state. So you walk out on stage and your fight or flight, people are going to feel that and go "Oh, this guy is nervous. He's anxious." But if I can use it to get me into a state that's more relaxed, you walk out on stage, there's dopey, chill, Scooby-Doo snack time. That's not what I'm talking about. But someone who is relaxed and high energy is a very different thing. So my job with this, the hard thing, it's why I care about all this tech, it's why I'm interested in these things, is to be able to show up that way and then hold it for 12 hours.

So John Amaral will be there as well speaking at the conference. He's another guy who is oftentimes back there with Tony. So I learned that from Tony, how he has people who help him and technologies and all that stuff. So it's fascinating. And I think BrainTap, you have such a pedigree. The technology itself has a lineage. And you've done the work both as a martial artist, as a brain scientist, personal development work, to be able to put together cool tech like this. So it's cool. And because there's an unwritten rule that if you come on and you make something cool, you got to give our listeners a discount. So it's BrainTap.com/Dave. And you've got a discount for listeners who want to check it out.

And guys, I'm just going to tell you, there's lots of ways to change your brain. And if you want the free one, try fasting. You didn't have to buy breakfast. There's breathing. You do that every day. There's meditating with a YouTube video that's free. Everything that you intentionally and purposefully choose to do can work. Some things work faster and some things go deeper. And you can spend the rest of your time on earth meditating and doing personal development things and you'll get this far. And my challenge for you would be this. Hurry, meditate faster because the world needs you to show up. So you should use technology like BrainTap in order to say, how do I tap into, see what I did there, how do I tap into that in state so I can get there faster? Because if you can get the increases in performance and increases in calmness and energy sooner, they pay dividends.

So if you get there this week instead of next year, the rest of this year is going to be better and you'll do other stuff that matters. You don't even know what you're going to do. That's why biohacking matters. And that's why I'm really excited that you could come in and we could have an in-person interview. So thank you, Patrick.

Patrick:

Well, thank you for having me. It's a great being here. Look forward to the conference.

dave:

It's going to be great.