Introduction and Dr. Porteru2019s Background

Welcome to this episode of the Reverse Alzheimer's Summit. I'm your host, Dr. Heather Sandison, and I am delighted to reintroduce you to my friend Dr.

Patrick Porter. He is going to introduce himself because thank you for your grace as I struggle with laryngitis today. I was so excited to have him back on and see him again that I did not want to delay or reschedule.

So I'm going to let him introduce himself and let him do most of the talking. While we understand brain tap and what you've created. Welcome. Well, thank you.

And yes, my background is I started off actually in electronics, so people ask me, how did you create a piece of technology when you're a psychologist?

And I started off by dad was a simple method instructor, which for those who didn't know he was back in the seventies, the simple method is still very much popular out there and millions of people are using it.

And my dad found help, as in with an alcoholism using silver. I found help with my learning disabilities. And so that got us on the trail of doing this with sound, something they called the silver sound.

So people go, why do you use light sound and vibration? That's kind of my background. And I went to school for psychology. I have a degree in Christian counseling.

I don't use very much of that anymore in what I do. But over the years I have a lab here in New Bern, North Carolina, where we actually do a lot of testing.

We're partners with 12 different universities. So what I'm going to make my answer is will be predicated mostly with research and things that we've done back in the seventies and eighties.

When we first started doing this, there was no research capabilities like we have now. We would we would look at skin temperature, respiration, heart rate, and look at the biology of somebody and getting them to relax.

And now we can measure brainwave activity and what's going on with the brain. And we know so much more about neuroplasticity, neural pruning. And I want to share that with the audience.

And we now know that the brain can change. So I'm sure you've heard that over and over again, hopefully within this the context of this summit, because your brain isn't fixed and you're not subject to what other people are telling you, there are a lot of methods to keep your brain functioning into.

You know, I like to tell people, just as we begin here, that there's been no ancient culture that I know of that keeps the wisdom of the tribe with the youngsters.

They kept the wisdom of the tribe with the elders. So that must mean something's going on with our lifestyle and how we're living. And we need to change it to get back to having a healthy brain 100 years and beyond.

I mean, there's no reason we can't have a healthy brain for as long as we're breathing. And so start with the basics, like what are the principle tools that allow light and sound therapy to change dementia and support Alzheimer's patients through this entry in this brain and treatment?

Well, the the the most unique part about this whole thing is that we're doing it all the time anyway. So we didn't know about this back in 2003 when they said they mapped the human genome.

And I know a lot of people are afraid. All my family has a history of Alzheimer's. It's in their genes. Well, there's a lot that's in your genes that will never be activated.

This is called epigenetics. So we have what they did was they mapped 1% of the gene expression. So they're they're taking 1% and they're telling people about their life and their future where the 99%, they're just leaving it aside.

Well, in 2018, they actually proved that that 99% is not junk DNA, like they said in 2003, that junk DNA actually is changing every 40 seconds and it's changing based on like sound and vibration.

And it's your environment, everything about it from the thoughts you think to the food you consume, to the people you hang out with to are you consuming water? You are consuming alcohol.

What are you doing? All of those are playing into how your genes express. So when you're eating junk food or the sad diet, the standard American diet, and you're you're dehydrated and you're not active, you know, there's three rules to brain fitness.

And really, if you think about them, the number 1/1 rule is nutrition. You cannot think about diet. So we need to eat for our brain. Now, back when I still remember in the seventies when I was in Iowa with my family because they're Iowa farmers and I was training to go to school to Ferris, I had a track scholarship, so I had to stay in shape, right?

Brain Health Basics: Diet, Movement, and Brain Fitness

So I put on my track shoes, I put it on in my my uncles are all laughing, what are you doing? And I said, Well, I got to stay stages to go come out onto the farm, I'll teach you how to stay in shape, you know, and been, you know, because they didn't know working out, you know, back in the seventies they thought if you basically worked out like muscle building, you were going to actually stunt your growth and all of that.

Well, now we know that we have to physically work out. So number two is you got to move and breathe. You know, they say that not only is sitting the next smoking, it's actually worse than smoking because smoker's going to have to get up and go outside and smoke where we can sit.

And they now know what 2 hours of sitting down, watching television or sitting at your desk, you lose 10% of the oxygen to your brain that things happen when you don't get oxygen to the brain.

So number three is you need to do some kind of brain fitness. And this is where light side of vibration comes in. So when we walk outside, just to give everyone an example, we walk outside in the morning and we ground ourselves and we see the sunlight.

Our cells are waking up based on light frequencies from the sun and so cortisol, dopamine, neuroprotection, all those things are being triggered by our brain, naturally.

Now, if the first thing you did in the morning was get up and go get a cup of coffee, you started out in a deficit. You can drink all the coffee you want.

You just have to drink three cups of water to replace that one cup of coffee, especially as we get older, our brain dehydrates, so we need to hydrate our brain first thing in the morning.

I always recommend water with salt, you know, because body's a hydro engine. But think about our brain takes all of its information really from its environment.

So when somebody says they have jetlag, it's really light lag. And I'll get into that a little bit later. But how it works, if you go to sleep at night and you don't get to sleep before 10:00, between 10 and 12, you make more melatonin between 10 and 12 than you do the rest of the night.

Doesn't matter if you go to sleep at 1:00 in the morning, you've got to get to sleep between 10 and 12. If you don't get to sleep before 11:00, your liver cleans at 11 to 12.

All these things are your body is on schedule with the light frequencies of our sun. It's not that light. That sun is actually pulsing information to ourselves.

And this is what they found out back in 2018 with what they call Photobiotics of our body. So our body by light is telling itself what to do and it's getting that from our environment.

So like whether it's the light you're under right now or the walls or the walls you're in, the plants that are around you, the books you read, all of that has a vibratory frequency.

Everything is moving and teeming with energy and every cell, not just our brain, has something called mirror neurons. These mirror neurons actually are evaluating our environment and then setting our body up saying, okay, this is the environment and this is how you need to show up to handle that.

So if you are the type of person that looks at life as a series of challenges, which is good, like an optimist, then your body's going to express on the top level, it's going to it's going to have its best level.

But if you if you look at life is a series of threats, then your body actually down regulates under a threat feel situation. So that's why mindset is so important.

It's not the most important. Like I said, diet is most important. Movement is really important. That's why we work a lot with diet and we work a lot with you know, a lot of people don't realize one thing you should do right now.

Everybody on Earth should be taking some kind of niacin supplement in the morning because vitamins, vitamin B3 is something we don't get and think of B vitamins is brain vitamins and not a lot, especially if you haven't tried it before because you'll get you'll get what we call a niacin flush.

But, you know, when people think they go, why would we use niacin? Well, most people know about the program called AA. When Bill wrote the book about AA, he left out the part about nutrition.

He stopped drinking because he took niacin. So the same thing in niacin creates blood flow and circulation microcirculation. And that's really what we need and when we think about light, so when you're looking at the nutrients and you look think about light, whether it's brain tap or the sunlight or infrared light or some kind of red light therapy, that light therapy the body is creating what we call vaso dilation and blood flow circulation, nitric oxide release.

All the things you get from taking the supplement, nitric oxide you can get by taking the supplement of light. And Dr. William Cousins said the most under prescribed nutrient in earth today is light because people stay in their homes if even if we like.

I'm in a studio here with some some lights they fixed up in the room in my home. And so these lights are bright, but they're nothing compared to the light of the sun.

I mean, they're just a fraction of that. So when you think about sound, no sound. We're born with only two fears. You know, the fear of falling and a fear of loud noises.

Those are the only two fears that we had. So when we think about sound, it's really there to protect us, you know? So our reticular activating system is part of our brain that is hardwired.

We're we're unfortunate. We're designed to be kind of pessimistic. You know, that's just part of our nature because we have the genetic memory of all of our ancestors inside of us.

And so they don't consciously come to bear. But like we all know families, they they actually what are the best

experiments that I saw was they took ducklings and they had them hatched by a chicken.

But the ducklings still after they were hatched, they still found their way to the water and went into the water. So the mother didn't teach them to do that.

It was already encoded into the duckling in the whole the whole idea was that we have something that's already encoded into us. So whoever you are now, the good thing about the brain now, through something called neural pruning, is we can change those things.

But it also is a double edged sword when somebody says, How can I change a habit? Like, if you're the type of person that's used to drinking diet sodas all day long and you wonder why you have dementia or that's going to lead to Alzheimer's, it's because that's dehydrating the body and has no redeeming qualities.

The number one thing I always tell people is start drinking water is you're or or herbal teas are also good good substitute because you're most people, they're dehydrated.

That's the first sign. And then when that that starts a problem happening in the brain. So but when we when we think about that changing of behavior, it causes a neurological reaction inside of us because we're used to having that soda, we're used to having that coffee, we're used to having that whatever that drink is, it becomes it's programed into us.

That's a frequency response as well. Because if I said to or actually think about this after a meal, are you the type of person after a meal that can just get up without dessert or after a meal?

Light, Sound, and Brainwave Science

Do you actually like the meal is not complete without the sweet, right? It's just like the person that smokes, you know, some people, they're not done eating until they have their cigaret or they're not done, you know, if they have sex or whatever, it's not done until they roll over and have their cigaret like in the movies or whatever.

That's all conditioned response. It's over, but the brain doesn't know when it's over because that's programed into it. So some of the things that we need to do is reproach, rhythm, the way we think about things, because it's our behaviors that brought us to where we're at right now.

So when you think about frequency, follow response, we put our beautiful music in the background. For instance, there's something called the Mozart Effect.

They know if we play classical music, which is what they call ten psycho music, that our brain works better. People are smarter, they don't have to teach them anything different.

Just play that music in the background. Their brain works better. This is because the frequency response of the brain hears the music and matches it. The same thing's true with your friends, you know?

And they say if you have five alcoholics to hang out with, you're going to be possibly the sixth. If you have five winners that are successful in business, in life, you're probably going to be the sixth.

So that's why it's so important. And the other thing most people don't know is as we age, our mitochondria loses its shine, if you will. It loses its ability to broadcast light during COVID.

They did a test and they they found people who were pessimistic and people who were optimistic. The optimistic thinkers actually broadcasted 200 times more light energy from the cells.

Every person out there, you and I included, where we're broadcasting light energy, Dr. Heather, all the time, and it's in the form of 810 nanometer light.

Now, if those people who are into light therapy, they know, wow, 18 nanometer light, that's healing light. That's that's light. It heals the brain. Well our mitochondria is designed to instruct the cells of the body through biofuel.

Take exchange how to change every 40 seconds. So every person out there every 40 seconds you you have the potential to reprogram every cell of your body or every DNA strand, I should say.

And that's really what's happening. And it's happening all the time anyway. So what we're doing with light, sound vibration that we're using is we're using very specific frequencies of light, sound and vibration.

And then the brains already these are called Earth frequencies, not like EMF. You know, you might have somebody on your summit that's talking about that and how it affects the brain.

I'll tell you why it affects the brain here. When you get it, when you're standing by a 5G tower, it's broadcasting a frequency of 50 pulses per second.

Our cells are trying to figure out what is that instruction set telling me to do, because we've never seen or heard or experienced that many pulses per second.

We're used to 0.05 to 100. Those are called Earth frequencies. So if you and I were on a spaceship going toward Earth, the Earth would have a evoked potential of 0.5 to 100.

And if we're by a body of water, it's ten hertz. That's Alpha. That's why 90% of all humans live near water. Because we need it, right? We're 90% we're up to 90% water depending upon what books you're reading, 70, 80%.

Most of them say, so we want to be near water. Now we go to the mountains. Mountains have a evoke potential of 7.8 hertz frequency. They they call it the human frequency or the earth frequency because the Earth at that level where the treeline is, it's actually now these are what is alpha, which is a very relaxed and comfortable healing state.

And that is even deeper, which is even harder to get to. But when you're sitting in a theta field like you go to the mountains like somebody says, I had a mountaintop experience.

There's a reason they say that is because you have a lot of gamma activity, too, because the minute you have theta, you have gamma which rewires the brain and dementia and Alzheimer's.

More specifically, we find that gamma is not there anymore. It's almost like the autistic child that doesn't have Alpha, the person with Alzheimer's doesn't have Gamma.

We need at least 5% of our brain and gamma all the time. Think of it like a bass drum of a band, the marching bands going, but they don't have any bass drum anymore, so it just regulates everything.

We need that gamma to regulate the brain. It's kind of our it's the Northern Star, if you will, for the brain and keeps the whole brain all the frequencies in order.

How fascinating. So we've heard a little bit about brain waves and certainly nutrients. I think sometimes our our conversation is dominated by nutrients and toxins.

And this light and frequency concept is is unique and new. I'm curious how the lightning and sound and the science of brain wave in treatment is like by narrow beats or ISO chronic tones.

There's some other things that we can kind of compare to or put it in the context of other things that people might be familiar with. Right? When you think about just relaxing music in general, when you go to a doctor's office and they're playing that relaxing music, they're playing that for a specific reason.

There's a reason they're not playing Metallica. You know, Metallica would would put you in a high state of data and

stress and anxiety. So when we when you think about binaural beats, the brain is doing this all the time.

It's always measuring the differences between things. It's when somebody says, I don't know why. When I have a good experience, I'm thinking about bad thing.

They're just aware of it. Our brain does that all the time. It's just, which one are we focused on all the time? We always have. We always think of the very good and the very worst.

You know, it's always there. But with these sounds, we've we've mirrored by neural beats, isotropic tones and frequencies itself, it's like everything has a frequency.

So like a tree as a frequency, you have a frequency we can measure. Most people know about what's called heart rate variability. Now that's because we have very high frequencies in very low frequencies.

And most things like the orienting or the bias strap in these kind of devices, they can extract like that from EKG, which is your cardio, your heart. Your heart has 40,000 neutrino cells.

So what happens is these these frequencies are measured. So whether it's sound frequencies or light frequencies, we've matched them. We do what we call by ocular.

So the same thing we're doing with sound, we're doing with lights in the eyes. So your eyes are closed. You don't need a lot of light. It's only eight LEDs.

So unlike your cell phone, which is over a million LEDs, this is only eight LEDs. And what it does, it's flickering in a very specific. And just to put in perspective what I was doing some research with with Bhopal, India, which last year they voted our team researchers of the year in India congratulations.

Yeah thank you. What we did was we showed him with pranayama breathing. You can match the two hemispheres, the brain and put dementia on hold by doing a breathing exercise.

And then we showed him, you can do that three times a day or your brain tap 10 minutes a day, you know. So of course people don't want to work at it. So they put the brain tap on because it's easy.

You just you put it. But I wanted to show them that there's ancient traditions that they've been doing this with, and we can create modern technology that does it.

So when you think about it, so breathing is really key to doing this. I want people to understand that, like you said, okay, in 10 minutes you can do this. What does that 10 minutes look like?

What are you doing? So with the 10 minutes, what you do is you put the headset on. If they're watching the video behind you, the headsets on the glass head over there and you just put it out, it looks like virtual reality, but it's not virtual reality.

It's actually flickering light at very specific frequencies in their sound that matches it. So what's going on in the right ear is actually happening in the left eye and vice versa.

We have it mixed and matched so that the brain, we're really stressing out the brain a little bit, but it's a pleasant stress. It's kind of like playing a card game where you're trying to figure out what everybody else has.

It's, you know, and then when you figure it out, you get that eureka moment, you know, something like that. So the brain's figuring out and the brain's used to doing this.

And to put in perspective when I would James Bhopal, a doctor of a room, we took a girl room, we measured him and then we took somebody who'd never meditated.

And we measured we made his brain look like the guru's brain during meditation. And they said, that's cheating. All you do is put this on. And I said, What do you mean it's cheating to go?

Well, the guru's been meditating for 30 years. You know, this this person isn't meditate at all. I said I said, Varun, have you ever meditated to a candle?

And he said, Yeah. And he said, well, that candle flickers at ten hertz frequency. Of fascinating. So the mirror neurons in the mitochondria in the eyes which has the most mitochondria per square centimeter mitochondria.

His job is to absorb light and transmit light. But if you don't have a lot of light energy, it only absorbs light.

How BrainTap Sessions Work

It doesn't transmit anymore. That's why when somebody says you, you when somebody like they go, you're glowing today. Well, they really are, because we're giving up that light, you know, like when you're pregnant or you're in love or something positive is happening to you because you have more energy, more light energy.

You're you're transmitting. And he said, okay. I said, Have you ever wondered why the guru was go to the mountains to meditate? And he goes, No. He says, I think just to be alone.

I said, No, they're cheating because what do you mean? I said, They're sitting in a theta generator. They're sitting in the in the atmosphere. So when you think about what's happening, is there with the brain tap for 10 minutes, you put this on, you don't have to do anything.

We said we tell people, let it happen in the word let means in no way help or hinder the process. You don't have to do anything. You just close your eyes in the process will go on.

I love it. And when we do things like we were just talking before we started a forum and sometimes we'll bring people up and we'll I'll say, who's there, who's really skeptical about this? Who doesn't believe this will happen?

And of course, a doctor will raise their hand or whatever. And I'll say, Would you mind? We're going to put you on the machine. You're not to do anything.

Just lay there. We hook them up with the egg. We put them on the brain temple. I'm talking. And then while we're going, I'm telling him where his brain is going to be in when I'm done.

Usually what they'll say is, how did you know his brain was going to be there at 7 minutes? In 10 minutes, everybody's brain works the same unless you have something organically wrong when you get when this stimulus is, when you're hit with this stimulus, it's kind of like tasting salt or sugar.

Our body tastes salt and sugar pretty much the same no matter who you are. The same thing's true. Heart reacts to these frequencies. So you just lay down, close your eyes.

It takes you through a cycle of sleep. But the benefits are very much like meditation, you know, where a lot of people can't meditate because they their monkey mind's going everywhere.

What we do is that's because the beta brain takes over. And when we're doing the brain obsession, it actually lowers those brain frequencies. And when you get into Alpha Theta, you get into this timeless space.

And they also call it hyper nausea, super memory. So if we impress upon you some information at that level, like your memories improving and things of that nature or that your concentration, we're actually building new neural pathways.

Now, the brain can do the work it needs to do. And while you think nothing's happening, there's a lot of neurological activity going on and the benefits we find at last, about 72 hours.

That's why we've we've priced it such that somebody could buy it and have it for home use so they can continue to improve. Now you'll get a basic improvement, but you have to do it over time.

It's like working out. That's why we call it brain fitness. If somebody just does it once, you might have a good experience, like going to the movies, you might have a good experience, but it's not going to be life changing.

You need to do something over and over again. And a lot of people have abused their brain or not worked on their brain. Maybe it's a better way to say it.

And they just it's going to take some time. It's going to take an hour in our six week dementia study that we did, we've not done a full blown Alzheimer's study.

It's right now in the works in Seminole College. I was hoping to get some information from that, but they're not back from school yet. Before we did this call, the but in our dementia study, we took everyone in our study off the dementia scale in six weeks.

So the secret to brain health is to do it early. Don't wait to you get diagnosed. You know, like they say, if you can't smell peanut butter and you can't say certain words, you know, you want to you want to start.

But everybody needs this, you know, we're all subject to the ravages of time. And if we don't do something to improve upon our brain function, it doesn't have any choice but to go backwards, you know, especially if we're not eating healthy and we're not doing physical activities.

And, you know, our thinking is not very well, well thought out. I think many people are probably listening going, this sounds too good to be true. In 10 minutes I can do something each day that's going to reverse, potentially reverse my dementia.

Tell us a little bit more about how it works, because I think light and sound, a lot of people aren't as familiar, but like circulation is one of the mechanisms.

So just blood flow, the delivery of nutrients and oxygen to the brain is another piece of what's going on here. Can you explain how that works? Sure. There's three reasons. Obviously, the brain isn't functioning.

Thoughts, traumas are toxins, right? So if they're thinking poor, the brain can shut down because of stress. You know, the the stress can cause that the toxins are a big thing.

So what brain tap does, it's going to help you sleep better when you offload stress. The first cycle of sleep is the most important cycle. Most people, unfortunately never get through their first cycle of sleep.

They never reach deep delta sleep. In fact, we did a sleep study in Australia and when before we did, we did the wash out period. It upfront where we're measuring their sleep.

For the first two weeks before we did this study, the average person in the study got less than 5 minutes of deep sleep a night and you need an hour minimum to score, you know, 80 to 90% of these and these little apps that we have out there and the only time your brain detoxes unless you're stimulating it through light sounding vibration is that you have to get into level four sleep so people can be in bed for seven, 8 hours and still not get the sleep they need.

They can wake up tired because they never got that deep delta sleep. So the first thing brain tap does is going to help people sleep deeper, get back on a cycle.

And if we can cut that first sleep cycle down to an hour now, you have more sleep cycles. The more sleep cycles you have, the deeper sleep you acquire.

Most people find that they have an increase between 40 and 60% of deep sleep within the first three weeks of

using brain tap. So that's number one. Number two, the way that light works and you kind of mentioned it already is blood flow and circulation when you have a damage.

And all of us unfortunately had damage before four or five years old. We hit tables, we hit the ground. We fell, we got in car accidents, whatever's going on in, we just our brain just remodeled and remodeled and remodeled in.

But there's still might be hematomas in there and we've measured you know, that's why like Dr. Ayman does his scan technology and shows these blockages in the brain.

Anywhere there's blood flow, the brain's functioning anywhere. There is no blood flow. Obviously, the brain isn't functioning there because without blood flow, the cells will die.

In what light does light is absorbed into the hemoglobin of the bloodstream. So through the eyes and through the ears are a couple of good ways to get blood into the brain.

I mean, to get light into the brain. So the ears, all of the blood in your body goes through years every 3 to 4 minutes. So when we when we use the red and blue light, when people look at the ear lights and they go, why do you have lights in the years?

Well, number one, that light is not just light, it's actually energy frequency light. So every 2 minutes, it's changing to another energy frequency. And what doctor knows year, what he found out was there's seven frequencies in our body and he would use something called Irit ology, which he would use needles input the frequency of that sound into these regular points in the ears.

Well, what we started having this was back over ten years ago, I had some of my doctors using lasers with no J frequencies. Of course you can do that.

It works really well, but it takes a person, right? So it takes a doctor or somebody to do that. So I thought, what if we did the same thing? But we used photo bio modulation.

What that means for the listeners who don't know that is cells work differently than people. Most people, if you get too much stuff, you go by a storage unit and you fill it up.

And if you fill that storage unit up, you go get another storage unit. Well, what cells do when they fill up with energy, they share that energy with the cell next to them.

That's called for by a modulation.

Sleep, Circulation, and Brain Recovery

So no cell takes too much energy. It just takes the amount of energy it needs and shares it with the rest in. It's very efficient that that's what mitochondria does.

If it can get the right light energy or the right energy, everything you consume, everything you breathe, everything you do is about bringing energy to the cells in the brain gets the first 25%.

It's like the king and queen. So it's going to get the first cut of everything. It's the tax for, you know, because really what are we were digestive machine for our brain to take us out to get experiences so when we so what's happening is we're going to feed light into the brain through the blue and red light in the eye.

We use the brain blue and red light because we want to have a combination of those two colors to imitate sunrises and sunsets in we we are working on a full spectrum light device.

I've done it before, but we we had to stop. But we're right now we use blue light for the front and that's mainly because blue light is the safest. It has the lowest income of light, which means it penetrates to the the smallest

amount into the skin.

It doesn't even penetrate the eyelids. So you have your eyes closed. But what happens is the photonic energy is still absorbed by the cells in the lights are so sensitive, like if you have blue eyes like you do with green eyes, I hope they're blue or green, but I have dark eyes so I can take more light.

But a blue eyed or green eyed person, they don't take as much light. So you just adjust the light so it doesn't have to be overpowering. It's just enough to trigger the optic nerve.

It's not even using the real pathways of light. But what we found is if you meditate and this is one of the reasons people can't meditate, only 5% of people who start meditating continue.

And it's such a powerful process. But the problem is that their monkey mind takes over and they don't have energy, so they fall asleep in meditation isn't sleeping.

So if you know anybody that does yoga, which is really good for the brain and tai chi, these kind of things, they're really good. And we have a device we call the 60 Up, which is an exercise system which we've been getting people out of wheelchairs and everything.

It's really cool. And he's right there in California. I should introduce him to you. And we've been using it with our dementia programs now to get it's part of the movement because it has you can hold on to it.

But what it does, that movement is going to activate the brain. Now, if we put light with that movement, now you have that only neural pruning, which means those things that are working for you, the brain will stop doing.

You know, it's going to say, Oh, we don't need those anymore. And then it's going to say, Oh, we need more, but we need oxygen, we need blood flow, we need nutrients, because those those dendrite connections in that brain wiring is not going to happen on its own if we don't have energy.

What's going to happen is we're gonna hit the couch, we're going to pass out, we're going to go to sleep. We want meditation if we give light energy. Now the body has the energy it needs and how when we're feeding the brain this light and sound, which I'll give the example of sound in a moment, but light, the hemoglobin comes in, it absorbs that will take energy.

It circulates into the brain because the ear, all the blood circulates in and out of the years, too, to keep the brain cool or warm, depending upon what's happening outside.

So now we're delivering that. We're delivering that light into the brain when that brain when the light finds a cell that is dying, which is a pop ptosis, when that happens, it becomes like a negative pull and the full time becomes like a positive and it absorbs it into the into the cell.

That cell actually comes back to life. It starts the Krebs cycle. So that cell, the only reason that cell died, which there's actually I published a paper on that and the heart they kept alive for 35 years at Harvard, which is not a myth. They did.

It wasn't the whole heart, it was just tissue. But as long as they gave it the right light, the right nutrients, and kept and kept a clean, that they felt like they could keep that tissue alive forever.

Wow. So the reason that our cells need to age, but they age because of oxidation and stress and things of that nature. So if we can get light into the brain, then the brain can heal itself.

Basically, the brain knows how to heal itself, just like the brain is designed to heal itself, just like the body. But it needs the right nutrients. In the one nutrient most people are getting.

The brain is light in the. And so when we give that now sound works the same way. You've probably been at a

party before, you didn't really want to go, but somebody talked you into it.

You get there and they start playing your favorite music from high schoolers or college, and I'll certainly start tapping your toe, you start moving, you start dancing, and they go ahead and think you ought to be here because that music moved the cells of your body into your body, absorbed that energy.

Your body's always absorbing energy, whether good or bad. So we want to be around that. That's why we want to have our environment to be clean and, you know, free from toxins and things of that nature.

Because it give you an example with what happens. A lot of people with mold, you know, they and I know you probably have somebody on here talking about moldy brains.

And that's one of the first things we have people look at when they come to us with dementia or Alzheimer's because they might be living in an environment that's it doesn't matter what you do at the doctor's office, if you go home and you're sitting in a toxic environment now, the reason somebody goes, well, if there's mold of my house and I know about it, you probably did know about it two years ago when you got the runny nose and you got sick the first time in the second time and the third time.

And then your nervous system said, You know what? He must like this. He keeps coming back here. It's like living next to a paper mill, you know? And most people can identify with that.

If you've ever known somebody lived near a paper mill and you go, Wow, how can you stand living? It smells so bad, smells like dirty diapers or something.

And they go, Oh, I don't even smell it. The same things trip, you know, somebody that lives near a railroad crossing and you're there with them and you're hearing the railroad eagle man.

How can you stand that? That train go by what train? Because the nervous system is really good at taking things that it doesn't think are threats anymore and make basically harassing them.

From your conscious memory, which is bad because they're they're hurting us. But the brain says, okay, well, they're not taking action on that. I made him sick a couple of times, but they didn't do anything about it because you didn't know what was happening.

It didn't say, Hey, you've got mold in your house or you're sitting under 5G tower or you know, whatever's going on. So, you know, smell this sense of smell is one of the best danger identifiers we have.

But but we can obviously we don't use it as much as we would like to or I think we should. And it's one of the early signs of dementia is having a lack of smell, not being able to distinguish smells.

So tell me, are there ways that you personalize this program, Brain Tap? And I've been working with Neil Nathan. You mention mold for years and he has suggested brain tap for a long time.

And he would always say, make sure they get you the right program. And so is there a way that for people who are suffering with dementia versus somebody that's maybe more mold?

Specifically, how do you help people with their cognition on an individual basis? Yeah, we have specific sessions for those things now, so all they have to do is put those in the search feature.

But the the main thing that we tell people, we have a protocol now in the morning, we need to wake up the brain with something called s m t s s m arms are sensory motor rhythms.

So there's a brainwave just below beta and just above alpha. It's right between there. That's the cognition. That's the one is we get better looking and more intelligent with age.

That's the one that atrophies. So if you're wondering what happened and exercise stimulates that now when you drink coffee, unfortunately it suppresses it, so you get a synthetic lift.

That's why I always recommend, especially people who are they don't really need to do it. They're just drinking coffee. Out of habit is to drink your coffee 2 hours at least after waking up.

So you give your brain time to create your own neuroprotection and dopamine and cortisol. Because if you don't, the brains, the brain will very easily say, okay, you want to do it for me, do it.

And then what happens is you become dependent upon that coffee down the middle of the day. It's very common. In fact, everyone in the world at 2:00 in your in your time zone, your temperature is going to drop two degrees, you're going to get hungry.

And that's because you should be taking a nap. Everybody and I'm talking about our bodies now was designed to live in the Serengeti and what do you do at 2:00 in the afternoon in the Serengeti?

Nobody's running around chasing zebras. They're taking naps.

Personalization, Daily Use, and Long-Term Benefits

So we don't do that. You know, what we do, of course, is we have lights and we have cars and we have traffic and we we have our jobs. We got to keep pushing through it.

You know, I mean, these bodies weren't designed for the lifestyle we're living right now, so we need to somehow reboot our brain. Now, if you can't do it at 2:00, I recommend doing it right when you get home from work, because what will happen is you'll offload the stress.

Stress builds up kinetically in the body. That's why, you know, if you're if you're relaxed and having fun, you're in love. Let's say you can you can take more.

You can take a bigger hit. Let's say something bad can happen in no problem. But if you're you know, I had a person I knew that used to say she was on her last good nerve, you know, because, you know, so they that's because she's like that.

The teapot is full and she's trying to put more in it. There's nothing no place to go. So you need to offload that stress. So do a 20 minute session, middle of day.

Those sessions are called brain fitness. We actually have a series called Brain Fitness and that's we find that there it's a longer version to train those SMI brainwaves, but also includes training more of the alpha and then get you into Gamma.

They could also do the gamma like if you were to come in to see me. And I was to do a brain map with you, I might say, Oh, we need to every other day you would do a gamma session and you would do a brain fitness session because we need to increase that gamma.

We need to see at least, like I said, for at least 4 to 5% Gamma, most people will have a boost of about 20%. GAMMA When they listen to brain tap now.

And instead of taking a nap, you would do a 20 minute session in the middle of the day. And so someone who's using this typically, I know we're talking about personalizing it, but would someone use it in the morning when they're waking up at midday or 2:00 and then again before going to bed?

So not just 10 minutes, but maybe 40 minutes a day with different sessions, with different goal people. Like in our study we did we told them, just set your alarm.

We don't really like alarms, but if you're going to set an alarm, set it to some kind of music, something that sounds peaceful for your nervous system.

Yeah. You know, enjoy yourself awake, put some kind of beautiful music on. So at least you wake up realizing that this is a great place to be. Not. Not not shocking your system.

But if you set it for 10 minutes early, do your session in the morning because you're going to get an equivalent of 4 hours of sleep. So if you need to catch up on your sleep that 10 minutes, so you're not really taking any more time.

And then at night, you know, you just you can wear just the earbuds or even some people will play just in their room without anything on their head because the eyes are kind of tones, can work in a room environment.

So you can just put it on, go into the delta sleep because there's also sessions that we have that have two voices that not a lot. We don't use it a lot with people with dementia or, with Alzheimer's, because they kind of think it's not right.

But it's it's designed to trigger and exercise the nervous system. So there's different voices to trigger in stress out the brain again, because we are only learning growth through stress.

And but we want to make it fun in. So the time that you're really going to spend is that time in the middle of the day. And you can we do have ten minute sessions you can listen to at that time if you want.

But in our study that I was talking about, they did it three times a day for six weeks and they had a 39% neuro plastic change in six weeks. And that's why they were all taken off the dementia scales, because their their brain was now functioning like it like it did 10 to 15 earlier.

And because of blood flow and circulation and getting those neurons to wired fire together. How exciting. What what great stuff. And it sounds like there's there's like long term benefits.

Of course. There's short term benefits. You're talking about six, oh, six week trial. But what are some of the longer term things that people can expect?

Well, they can. One thing is that that SMR brainwave I was talking about is your distributor system or your balance. So a lot of people think, oh, I'm getting older, I'm losing my balance.

We found that it's actually your brain that's the problem, not your muscles, because your muscles don't move your brain. Your brain moves your muscles.

So if you fix your brain, your balance will return. Now, if you can do exercise at the same time, that's we have a 60 up program on the app where they actually exercise while they're wearing it.

So you're going to see that balance come up. But you're. Now 60 up Is that for people 60 years and older? Is that what's going on there? Yeah, but we have athletes using it in stuff too, but it's it's more because that's, I guess, Dan Metcalf, the designer of it.

I don't know why he called it 60 optigan but he he got Bob Eubanks out of a wheelchair. And so it became kind of famous because of that. And it's a very different exercise.

It's different than you think. It's not about it's really about movement therapy, getting the body and the brain to connect. You know, you can do a lot just with your brain, but if you connect it with exercise, it's going to be much better, you know, physical exercise and doing it.

That's why I like Dr. Miller, who wrote the book Saving Your Brain, which is it talks about our study in his book. He has even but we didn't do this during the study.

But afterwards he took him through his whole program because if you he didn't have any nutrition in there, he didn't have any exercise because you're doing a study, you got to just take one thing and even get better results when you get them on the proper nutrition like, you know, and get him on a right diet, you know, where to get rid of the sugars and and have them eating more of the low glycemic fruits instead of, you know, the high glycemic fruits and things like that. Really putting him on a inflammation free diet, you know, not quite a keto diet, but similar, you know, something like that to get them to get their body.

Most people don't realize that every stressful event your liver actually delivers to your body, 25 grams of sugar that's housed in your liver. So when you have a stressful event, the liver pumps that sugar into the bloodstream.

If you're just sitting there watching a movie or reading a book or talking on the telephone, your body's going to put all that sugar into the adipose tissue, and it's going to cause a cascade of events in your body that you don't like, just like you did Candy Bar, but you didn't get the pleasure of eating it.

So, you know, this is why we want to it's it's it's all part of it. You know, we reduce the stress, get them sleeping better, get the meeting better, the body will heal itself.

Yeah, we are certainly fans of stacking interventions and and I think what you're describing is almost like dual tasks, getting the brain involved at the same time as getting the physical body involved and how that really exponentially it's the benefits that you get from any sort of activity or challenge.

So I want everyone to know how they can find out more about BrainTap and kind of what you're looking for. It's you. You've been at this. You mentioned this.

You started it in the seventies, maybe even before. And like you, I just want to tell everyone how much I admire you and how impressed him with what you've done and just your staying power that you you keep reinventing and coming up with new things to help and support people.

And it's really inspiring and I'm just so appreciative and I'm looking forward to hearing like what's next on the horizon? Because I know for you there's always something.

And then making sure everyone knows how to find out more. Sure. Well, we are coming out with a a sleep mask for people that and the second the first one will come out, won't have this.

But we're going to we're actually working on an EEG protocol that will measure brainwaves while you sleep. And if you come out of the sleep cycle, the lights will come back out and put you back into deep sleep.

Now we're working on that, but a lot of people have asked for one that will be cloth. So it's cloth and you can take the electronics out to wash it and people it will cut out all the the because about 90% of our people, at least weekly, do a nighttime session.

So it's easier than our plastic one. You know, it's a little uncomfortable to wear. So we have that coming out, which I just saw the prototype working today on video.

It's being built by our our researchers. I mean, we built it, but now it's at the prototype and they're putting it all together and we're hoping to launch that within the next 3 to 6 weeks.

So how exciting. That's great. Congratulations. And so BrainTap Where can people find out more about you and BrainTap? Yeah. If they go to BrainTap.com they can see the website or @braintaptech on other social media sites.

They can also find my website. DrPatrickPorter.com and it's @drpatrickporter for all the social media is a lot of videos there are a lot of I've interviewed a lot of great people like yourself and some of my podcast and things like that.

So we have the bullet points in a little videos there. They can learn a lot more about brain tap there. That's fantastic. Thank so much for joining us.

It's always a pleasure to connect with you. So thanks for having me. It's great being here.