Introduction and Background

Hi, everybody. And welcome back to the Reverse Alzheimer's Summit. Really happy today to have Marc Gilson with us. Marc works in the area of sound entrainment and you're going to be great to hear about his background and the results they're getting, etc..

So, Marc, welcome. Thanks so much for joining us. Dr. Bredesen is a pleasure to be here. Thanks so much for for asking me and looking forward to having our our conversation about this exciting event.

Yeah. So as you and I have been discussing, you know, anything that can help people with cognitive decline or risk for decline is what we're all interested in.

We all want the same thing. Let's reduce the global burden of dementia. So let's talk a little bit about how you got into this particular approach. How did you get started?

What's your background and how did you get to this area that is that you feel is is helping me? Obviously, you guys have data that supports brain resilience.

It helped to talk a little bit about that, if you would. Yeah, I'd be happy to. You know, for me personally, I mean, I think my interest in in sound technology really originates in my interest in appreciation of music.

I've always been fascinated by the power of music to, you know, to affect my my frame of mind, my mood, you know, I'll admit, like, I'm one of those people who will cry, you know, certain pieces of music or I'll just get really inspired and and energized.

So music, we know, has a profound effect on physiology. And, of course, our emotions and especially rhythm and rhythm in particular, is really fascinating to me.

You know, as a working drummer for several years here locally and I've always been interested in the power of rhythm. And then later I would learn a lot more about the power of certain kinds of rhythms and certain frequencies and certain sounds when it comes to the way that the brain functions.

And so that kind of leads into the technology part, which for me personally, I sort of owe to my my dad who introduced me to light and sound entrainment devices back in the mid 1980s.

And I know probably a lot of people listening to this are familiar with those as they're still around and they're basically just machines that use both light and sound stimulus to cause changes in brainwave activity that correspond to changes in your attention and your physiology, even your brain chemistry, I mean, pretty much everything.

So I was fortunate enough to learn from some of the pioneers who were developing light and sound machines. And that's when I really started to learn more about brainwave and tremor.

And then, of course, later in 1996, I would meet the late, great Bill Harris, the founder of Centerpointe and the creator of PulseSync, which is the specific form of sound entrainment that we use here and how that all came about.

Sort of a long, serendipitous story. But long story short, I've been with Centerpointe ever since and I've worked alongside Bill for 22 years until his passing in 2018.

And I just feel really blessed to be a part of this field, especially now. There's so much coming out about the power

of sound and the power of music and the power of rhythm.

Yeah. And you know, certainly with the light approach, which many people are involved with, you know, there are certain frequencies. The gamma frequency has worked quite well.

Alpha for more on the relaxation side and do you find the same sorts of frequencies or what frequencies do you find are most helpful? Yeah, that's a common question. It's a good one.

You know, really in a sense, when you look at I mean, the way the frequencies are broken down and I don't know, you know, how familiar everybody is with this, but, you know, the brain is kind of this, you know, neurological, biological organ.

You can kind of think of it in a way. So there's always these, you know, little micro electrical fluctuations happening, the synapses, the neurons connecting and the speed and the frequency with which those are firing really can tell us a lot about the state that that individual is in or the kinds of experiences that they're having, but it can't completely predict it.

So you got you know, you've got your beta, which we're in probably right now, and then you've got alpha, which is lower and you've got theta, which is more of a dream state and delta.

And then of course gamma above that which you mentioned before, which has been a real intense, you know, a lot of focus and interest in that recently for good reason.

I think every one of those states has specific benefits when you're talking about brain resilience, when you're talking about brain health. But I would say Gamma is a great place to start in terms of where, you know, the potential for.

I know, you know, we talked a little bit about the beta amyloid thing and other things, but even without that factored in its ability to enhance focus and sense of well-being, which reduces stress, which, you know, means a lowering of cortisol, which means the lowering of, you know, adrenaline, which means, you know, calming of the hyper, hyper vigilant state.

Brainwave Frequencies and Resilience

All of that stuff kind of combines to produce a brain that's a lot more resilient, a lot clearheaded, better memory, better focus, better sleep, you know, the whole nine yards.

So I guess Gamma would be, you know, one that we could certainly talk about. Alpha again, we don't get enough Alpha. We spend way too much time in beta.

We rely sometimes on, you know, alcohol or just being exhausted before we get into a nice, calm Alpha state. Yeah. And I mean, there's just a bunch of benefits associated with Alpha.

Yeah, that's a good point. So let's go back to the idea of how can this then translate to help for people who are either at risk for cognitive decline or people, let's say, who are starting or then people who are, you know, in late stages where they actually have significant dementia due to Alzheimer's.

First of all, what what sorts of suggestions do you make? How, you know, specifics on you know, how long you know, is there a concern? Do you ever do you ever drive this brain too much?

Do you do you use a combination of frequencies? So let's say that, you know, I'm complaining to you that I've got some early, early cognitive change. What would you suggest for me?

Well, for one thing, you know, we always start with the basics of mindfulness meditation. And, you know, when I got into this this field, as I was saying, you know, it's been quite a number of years ago that was really a fringe concept.

Right. And it was something sort of, you know, the gurus and the mystics were doing and the counterculture was doing. And of course, today, you know, mindfulness practices have been so well documented as being beneficial.

You know, you've got people practicing mindfulness in the boardrooms. You've got our military, you know, you've got pro athletes, you've got all these people who are now understanding the value of mindfulness meditation.

So we already have a really good foundation to build on when it comes to wellbeing and health. And so the first thing we'd say is, you know, if you're not meditating, drop what you're doing and start you.

It doesn't have to be complicated. It doesn't have to be, you know, some, you know, difficult to get into posture. And so what we do with our technology, all those things specifically is Bill created that technology not to shortcut the process of mindfulness meditation, but to accelerate it because meditation, as simple as it is, is not easy for many of us to really stick to and do.

And so Holosync really not only makes it easy to do, but it makes it, you know, so you just sit down, put the headphones on and you're off and we can get into this in more detail in a bit if you like.

But there's some specific kind of ingredients, I guess you could say, that makes Holosync very potent in terms of what we call a neural driver. So with the scenario you describe to me, what we'd really want to do is give your brain a stimulus to cause your brain to do what it's naturally built to do, which is to take a certain amount of stimulus, a certain amount of entropy, and reorganize it and grow in response to that.

So that was the idea behind Holosync initially. And we can get into more the technical details if you're interested in that kind of thing on a sound level.

But that's the principle neural driving, pushing that nervous system to grow and change and adapt and become stronger and healthier over time. Yeah, it's interesting.

Of course there are many things in brain training. Obviously another way to kind of push your brain when is pushing too much? When do you I mean, obviously with weights, we all know you push too hard with weights too quickly.

You don't work up to it. You can stress and strain and destroy, you know, in damage. Do you ever are you ever concerned about that? And how do you how do you set timing?

And is there a chronobiology to this for best outcomes? Yeah, I mean, the timing is a factor. I think one of the nice things about this technology, which makes it really accessible and really makes it safe, is you sort of have this built in safety valve when you're talking about neural driving because people do ask, is it safe?

That's a very important question. What really happens? You know, yes, we're giving the brain a potent stimulus, but what the brain tends to do is kind of anesthetize itself if it gets too much, basically it stalls.

It's sort of like flooding the engine of a car. You know, you don't throw your Ferrari into seventh gear immediately and drive off, right? You'll kill it.

And so what happens with the brain is the brain kind of ignores anything that it can't process, that it can't handle. You know, there's occasions where maybe worst case scenario, somebody gets a little bit of a headache or has a couple of sleepless nights.

That is really more due to what we call upheaval or overwhelm, which is a process of the system releasing a lot of old unresolved mental and emotional stuff going through those changes.

So it's a little bit like you go to the gym, hopefully you don't overdo it to the point where you've really done some damage, but you might have a little stiff sore muscles every once in a while, and that's a sign you're giving your body enough stimulus to cause it to change and improve.

Gotcha. All right. And do you have one that you can actually show people? Of course, we want to make these things as actionable as possible. Do you have something there that you can actually show people?

This is what we use? Well, you mean in terms of the technology itself? Yes, exactly. Well, we're going to have something at the end of the conversation, I think that will give people a real experiential chance to listen to all those things.

Right. And I'll tell you more about that later. But absolutely. I mean, you know, we can you can have me on here. We can talk about hollow sync and sound and treatment for three or 4 hours.

But, you know, there's no no substitute for experience, right? Absolutely. All right. Well, that's great. So let's talk about give me an example you had mentioned before we came on about, you know, there are some amazing testimonials and of course, we hear the same thing.

You know, when we heard the very first people saying, wow, you know, I'm getting better from my Alzheimer's.

Using Sound Entrainment for Cognitive Support

So exciting. Always great to hear people who are improving. And of course, we learn a lot both from the people who are improving the most and the ones who are improving the least.

You know, what's what didn't work. So if you could give us an example of a testimonial of someone that that used your technology and actually saw some improvements.

Yeah, I can give you kind of a I think kind of a a nice little example that comes to mind when you said that there was a gentleman who was getting you to 70 is 80 is, 80 is.

And he called me before he had started using this kind of sound technology. And he said, you know, my memory isn't what it used to be. And the doctors think maybe, you know, I'm sort of leaning into to an Alzheimer's or something along those lines.

And he goes, I'm really worried about it. And naturally and he said, you know, one example is, you know, I've always done The New York Times crossword puzzle.

I've done it for years. Yeah. But over the past two or three years, I've really noticed I'm not completing the puzzles anymore or it's taking me a long time to do them.

And so he had a little bit of a benchmark there, not a clinical benchmark, but, you know, kind of an experiential benchmark. And so he started using the program, our main program, Holistic Solution program, and he called me back just six weeks later, which I mean, that's not that long.

And he had been really dedicated to it, doing it pretty much daily. And he goes, How long each day? He was doing about an hour a day. About an hour a day. Okay. That's what's recommended.

Some people do a little more. Some people do a little less. And this is about continuous or broken up. It's an hour sitting, okay, so it's one hour a day.

People can kind of do it in the morning or that evening kind of find out what works best. As I said, you know, if you're people to have the hour, you know, a half hours, it's like exercise, you know, a little better than nothing at all. Yep.

But he said, you know, I can't believe this, but I'm doing the crossword puzzles. I'm completing all of them now, even the tough ones. You know, I think those are the sun ones. Right.

And I'm doing them in record time. Wow. So, you know, again, this is anecdotal, but that was assigned to him and

he had seen significant improvement in this one little kind of cognitive tasks that he was very familiar with.

And so he continued to use it, benefit from it. I heard from him about a year after that. His prognosis in terms of his mental decline had not worsened at all.

It had sort of stabilized and in fact improved a bit. So that's just one story, that kind of thing that we hear quite often. You know, everything starts with anecdotes.

You know, you've got to start somewhere. So, you know, from anecdotes to trials to mainstream, yeah. It's always great to hear about anecdotes where there was real, you know, real success.

If you could talk for a minute about resilience training and resilience conditioning and how do you use sound to do that? Yeah, resilience conditioning.

Resilience training is I think is huge. I think anytime anybody asks me what's the most important thing they can do for their brain health, I'm sure you get asked that question a lot, of course, as well.

But especially when it comes to preventing things like Alzheimer's or other age related or memory related problems. And the answer I give is you build brain resilience.

And it's not just me. Of course, the researchers really working hands on in the field like like yourself, who often talk about this concept of resilience.

And the value of this is something we've been seeing in real world results, you know, for almost 35 years, kind of conditioning through sound that dramatically improves the brain's ability to handle stress.

The way we talk about it is that if you can raise your brain's stress threshold, then you're far less susceptible to all kinds of negative stress. And we're exposed to so much chronic stress.

So we coach people, people of any age, to train and condition their brain like you would a muscle. So you challenge it, you stimulate it, you teach it some new tricks.

You get all those parts of the brains, the brain fired up and engaged. You know, you can exercise your body, which is great, but we sometimes forget to exercise the brain.

So for us, the best way to do that is a lot easier than a lot of people think because the brain resilience is really what we're about and it all has to do with what we call neural driving.

And that's one thing that really sets what we do apart from other kinds of brain technologies, which are great. But we use the basic brainwave entrainment process with specially tuned carrier frequencies that increase the potency of the stimulus that we're fed to the brain.

So the idea real quickly is not just to replicate those deep states of meditation, which by itself, as we said, got numerous benefits. But to take advantage of that natural rhythmic responsiveness that's built in and really baked into the way the brain is designed to improve, how efficiently and how effectively it works.

And I can get into more detail here if you're interested, but that concept of neural driving, that is the secret sauce, that's what creates the significant changes in the way people's brains function and how well they improve over time.

Right now, of course, we have many people who have cognitive decline and who are working or using a protocol to improve. They are including things like brain training, doing things like, you know, whether they use Brain HQ or Elevate or one of the many others that are available.

And so that's one obviously one way they're driving their their brains in that way. And then some are using light stimulation. As you mentioned earlier, some even using magnetic stimulation, for example.

So the question is, is this approach with with sound technology, is this complementary? Is this synergistic, is this antagonistic? What is your sense about the relationship between these different forms of brain stimulation?

That is a really good question. First of all, in our view, is absolutely complementary. We're aware of some of the research that was coming out from MIT about, you know, the gamma exposure using both sound and light to and train the brain using light.

That's a process called filter driving, sort of different from binaural beat entrainment. But, you know, the entire thing, I mean, for me personally, having been kind of steeped in this for so long, yeah, everything is vibration and people throw that out.

I don't know. I've heard that for years, but I'm really only finally beginning to understand it. And from what we know about the rising incidence of Alzheimer's, of other neurodegenerative problems, I really think that resilience is is key.

And to me, sound therapies in particular hold a lot of potential to help with that. I mean, it's a field I work in, so I'm going to say that. But everything is vibration, even light itself.

And we've been hearing sages and gurus tell us this for centuries. And of course, now it's not the sages and gurus, it's the physicists. You know, vibration is really the language of the universe and that includes our brains and body.

It's I mean, the expression of existence, if you don't mind me getting a little cosmic. So it's what makes solid matter solid. It's what allows us to see and smell and hear and feel.

So when you can harness the power of vibration and frequency, well, now you are dealing with the fundamental energy and the physics of pretty much everything there is.

And I mean, I think that, you know, I have a feeling you probably agree with me.

Safety, Testimonials, and Brain Training Synergy

There's other things that will go with us. But I really feel like in the next ten, 15 years, you're going to see sound and light and vibratory medicine.

Things like this really come to the forefront and really show what they're capable of in terms of of healing, maybe curing, but definitely preventative measures as well.

Yeah, great point. So the other thing that comes up is, as you know about two thirds of the patients will present with a short term memory, essentially a memory consolidation problem so that they remember their first grade teacher.

But they don't remember what they had for breakfast, that sort of thing. Whereas the other one third will present with what we call your non-domestic presentations, which can be executive problems, for example, planning, things like that, dyscalculia, for example, you know, people with PKU have visual perception issues, prosopagnosia, nausea, apraxia as ag noses, things like that.

So my question is, when you're using this sound entrainment, do you see more of an effect on memory? Do you see more of an effect on other specific modalities?

Or what are the things that really make a difference here? Well, I'll tell you I'll give you one quick example of that, because that's another really great question, that in terms of, for example, the short term memory, you know, one quick example that I'm sure a lot of people know about, you know, the brain is dualistic in nature.

The two cerebral hemispheres, you're right in your left. And as you well know, there's this band of neural fibers called the corpus callosum that connects the two sides.

It's like a bridge that carries traffic or information to and from each side and in a healthy brain. And there's a lot of synchronous crosstalk that's happening over that bridge.

And so the traffic can flow very smoothly. So these two sides of the brain need to be communicating clearly and efficiently. But as we age, the flow of the information can become slow or can become out of sync.

So traffic, in effect, slows down. You can get traffic jams and you know, that experience, you sort of mentioned it, something like it. You know, you see somebody in a crowd and you know that person, you know, in the right hemisphere.

And I'm generalizing about the specific roles of these hemispheres. But, you know, the right hemisphere, I know that person. Yeah, the left hemispheres like I going through the Rolodex.

I know, I know that person, but I can't pick the name out. We know the hemispheres aren't quite that specialized, but that's a common experience. And so with with pulsing with this kind of entrainment, it increases the synchronous crosstalk, the synchronous neurological activity between the two sides of the brain.

It speeds up the flow of traffic because we haven't really got into this. We can if you if you like. But the process demands that each side of the brain processes two independent tones simultaneously to create a third phantom children, what's called a beat frequency.

So it's effectively demanding that the brain, you know, those two hemispheres connect up and handshake and do a lot of cross colossal communication. And so that by itself, which is a real basic benefit of this technology, can help increase that that kind of memory situation.

Now, one more quick thing. The other piece of that, which is the long term memory thing you brought up as well. We know from, you know, other research that mindfulness, mindfulness meditation can strengthen the prefrontal cortex, you know, the part of the brain that's making those executive decisions that makes it easier to to access memories so it improves, you know, the hippocampus and the hypothalamus and all those kind of brain areas.

And it also more almost more importantly, it soothes that limbic system. And for most of us, I'm sure you've seen this in your work. Our limbic system is on overdrive, right.

Because it's that fight or flight. And we tend to be, you know, like in Star Trek, the Starship Enterprise, always on red alert because our bodies are hyper vigilant.

We have high cause. All we have high adrenaline. And so when you can soothe that limbic system and get out of that fight or flight mode, there's a correlate of improvement, not just in your stress levels, but in your memory, in your focus, in your ability to think clearly and to access, you know, both in terms of retention and recall makes you you know, you remember what you're reading.

You don't get to the bottom of the page and go, what don't I just you I got to read that, you know. Yeah. So could you give me a profile of a person who benefits the most from this approval?

And we we look the same thing with our protocol. There are people we can kind of see ahead of time. These are the people that are going to do the best and benefit the most.

These are the ones that are going to benefit the least. Could you give me a profile? What are the who are the people that are going to benefit the most from this sort of technology?

And who are the ones where you may think, you know, this this may not work as well? Well, of course, I don't know if this will be a satisfying answer.

I mean, as a you know, as a for profit company, everybody's welcome, right? We want to get hull sink into the hands of as many human beings as possible.

I would say we all. Want good outcomes, so we want to use it for the people where it's really going to help them a. Lot, no doubt. And, you know, we do personal growth work and that, of course, means different things to different people.

So I'll say, you know, when somebody comes to us, they could be looking to improve their relationships, they could be looking to improve their their their financial success.

They could be looking to get rid of an old bad habit or heal some old unresolved trauma or mental emotional wounds. But what we're talking about today has more to do with a group of people that come to us who say, I'm concerned about aging my brains getting older.

I'm concerned about Alzheimer's. It runs in the family. There's other, you know. Sure. Yeah. And so for us, that's kind of a no brainer, if you forgive the pun, because once you're stimulating the brain with this neural driving process, you're giving them, you know, we can't say this is going to cure Alzheimer's, but we can tell you that it's going to help mitigate a lot of the effects of aging, especially the effects of chronic stress on the brain, which are significant.

And when you can improve the brain's ability to deal with stress, there's this correlative improvement in almost every other area of your life. We always say around here, you want to improve your life.

Doesn't matter what it is. You improve your brain first and foremost. So I don't know that there's a specific profile, but I would say that there's a lot of people in their forties and fifties and sixties, you know, it used to be just people in their seventies would come and and talk to us about their concerns about brain health.

People are beginning to become more aware and waking up to the fact that brain decline, the effects of aging concert way earlier than that. And so you have a lot of people now, even in their late thirties and early forties and fifties who are like, this is a concern to me.

I need to take care of my brain and not just eat a healthy diet and, you know, drink enough water. No question. So let's talk about the stages. As you know, the new there are new blood tests now.

So you can pick up changes in fast photo to 17, for example, before you have any symptoms at all. And so now we're going to have a lot of people out there who are in this what's what's being called stage one Alzheimer's.

It's basically saying your brain is already beginning this downsize thing that some is kind of like pre pre-diabetes looking at the beginnings of insulin resistance that's going to lead to diabetes down the road.

So let's compare, you know, people who are asymptomatic but already have an abnormal fast photo. They're then progressing into to subjective cognitive impairment, MCI, then going into MCI, mild cognitive impairment and ultimately dementia down the road.

Is there a place where you say it's too late or is this something that can be helpful to all brains? Well, we believe it can be helpful to all brains.

You know, I can't tell you that we've gone into a clinical situation with someone who's got, you know, a severe condition like that and put policies on them and seen, you know, we were able to to to change that.

Now, if that happens and that certainly we have people who, for example, you know, someone might say is, can I put you know, can I give this to my grandmother or to my grandfather and say, sure, of course it's safe.

Try it and see. But I will say, if you think about groups like maybe you've heard of a live inside, they do great work. In the field. Yeah.

Memory, Hemispheric Synchrony, and Who Benefits

Isn't it beautiful and and what they do of course is that they're giving music to people who are often in in a state where they're pretty severe, you know, their memory loss is severe, things like that.

And of course, it's not necessarily a cure for everything that ails them. But you see responses, you see reactions. And so our goal is kind of similar with policies like, you know, we can't go out and say that, you know, we, you know, we're not nutritionist, for example, yet people using hello sink often eat better.

And why is that? It's not because we put them on a diet, but because mindfulness meditation, especially with classic leads to better decision making, which means they're making better and healthier choices.

We're not psychiatrists, but our clients always tell us about healing and releasing, sometimes years, decades, really, of old unresolved stuff. So we provide coaching and support which complements other therapies and so forth, that the client might be engaged in.

And so our role is just to support health and improve brain function in whatever way we can. And we think we've got a pretty good tool that does the job pretty well.

Gotcha. And then you've mentioned several times now that mindfulness and the and the sound technology, could you talk a little bit more about the relationship?

So let's say if someone's going to be doing this for an hour and I would be interested in whether you use you mentioned both morning and night chronobiology.

As you know, it turned out to be huge for, you know, when you eat, when you're exercising all these things. Yeah. So I would love to know, what do you guys recommend to start in the evening?

In the morning, late at night, in the middle of the day? And when you're doing that, do you tell people you should now be doing mindfulness meditation while you're doing this?

Should you be doing it with your eyes closed, your eyes open, should you have a mask on? If you could talk a little bit about the specifics, that would be helpful.

Yeah, sure. In terms of like the usage pattern. And so forth. First of all, in terms of the chronobiology, I mean, for us, the consistency is what matters more than the specific time of day.

But what we do is we encourage people to experiment from one thing, asking someone to meditate even for 20 minutes, let alone a half an hour or an hour, especially someone new to it.

That's asking quite a bit. You know, everybody's busy. And so what we find is people need to be free to kind of fit that in where they can. And for a lot of people, that tends to be early morning or late at night because that's when we're usually most free of distraction and have a little bit of time to ourselves to sit down and and listen.

Some people do find, gosh, you know, I'm doing it at night and then I get really energized. And so I decided to do it in the morning, which is working better or, you know, vice versa.

So everybody kind of responds differently. But like you said, you know, these circadian or trading rhythms, you know, people tend to do better on diets when they eat at consistent time of day or when they exercise consistently or when they go to sleep at a consistent hour.

And the same thing is true of meditation, if you can. It doesn't always have to be at 2:00. Precisely. No. But to stick, you know, develop a routine experiment, take a couple of weeks to figure out what works best for you and then stick with that.

You know, as with a lot of things, consistency always pays off. So beyond that, we really want people to adopt the practice and and use it the way they want to.

We don't make the distinction necessarily between mindfulness meditation and and you listening to hall sync because they're sort of the same same thing.

We just encourage people to sit and listen to it. So you sit down, you can lay down if you wish. But people tend to get better results when they're sitting upright.

You put some earbuds in or some headphones on and you close your eyes and you push play and then you drift off. And sometimes you have a wonderful, magical, meditative, deep experience.

Hopefully, sometimes you won't. But either way, just like exercise, sometimes you love it, sometimes it's kind of a kind of a drag. But if you do it, you're going to see the results.

And that's what's most important to our clients. They're more focused on the other 23 hours of the day and how that one hour benefits them. And the last thing I'll say about that is just when people begin, it's always like, gosh, how am I going to find the time?

And I usually say, Give it a couple of weeks and then see what happens. And because 99% of time what happens is they start to see the benefits and all of a sudden that hour a day, that was hard to squeeze in moves way up on the priority list because for us, meditation is not supposed to do a specific thing per se.

It's foundational. It's a foundational wellness practice that just leads to all kinds of other benefits now. And is it always when you start with people, is it always the same frequency?

Are you always starting in the gamma or are you changing over? What do you do in terms of frequencies? Well, of course, we have a lot of different programs in and and products.

But when we're talking about the main holistic solution, we're actually working primarily in Delta, and it would take quite a long time to get into the reasons for that.

But the short version is, as you know, delta waves tend to have less randomization. They're nice, slow, deep waves. And so because we're using very low carrier frequencies, which are it can be a little more challenging for the brain.

We want to make it easy for the brain to get into that lockstep. And so those nice even delta waves are ideal for that. Plus they tend to be higher amplitude waves.

That's more energy in the wave. And then one other reason is you get your conscious mind out of the way. You know, Delta is usually associated with sleep, right?

Yeah. But in this case, we use it as deep meditation. So you're not busy thinking, Oh, I've got to make my grocery list, I've got to make that phone call tomorrow.

And instead you can really take advantage of kind of that mind awake body of sleep state. But then when does where does Gamma come in? Gamma comes in other soundtracks that are supplemental or additional.

Some people use just, you know, a gamma track every day. A lot of that's because some of the brain science we've been talking about that's come out about it for for me, if somebody says, why should I use Gamma, I'm going to tell them a little bit about the history of Gamma.

I mean, you know, you're probably quite aware of this. You know, 20 years ago or so, 25, 30 years ago, nobody talked about Gamma because it was considered in an anomalous brainwave state that was associated primarily with stress.

You know, and it really I think one of the first things that happens, the Messenger Foundation, I believe, you know, they did a study. I may be wrong about that, but there was a study conducted on these Buddhist monks who are

practicing the Medal of Honor meditation, the loving kindness meditation.

And normally you stick EEGs on a meditators head, especially a monk who's been practicing a long time. And you see their brainwave patterns go down, down, down, down, down.

And instead, these meditators, there were these gamma spikes about three every hour, and they were correlating that with feelings of well-being. It was serotonin was being released.

Dopamine was being released. They were happy, happy monks. And so that was the first time people started tuning into, well, maybe gamma is not just stress, maybe it's wellness and happiness and optimism.

And sure enough, that's what we've seen. So anyway, I guess I didn't really answer your question, but, you know, we recommend Gamma for just about anybody who's looking to reduce stress and improve brain resilience.

Okay. So we as you know, we were specifically interested in people who have cognitive decline.

Usage Guidance, Delta vs Gamma, and Overwhelm

So what would you recommend for someone since you've got these different programs? What do you recommend for people with cognitive decline? First of all, I would recommend gamma for sure, but I would also recommend working with our main program because that Delta is what gives you that neural driving response.

I mean, it's one thing to reduce the stress. What we really want to do is push that nervous system to grow and change. And so with Delta, we're using the most potent version of the technology that we produce.

We're using the strongest neural driving effect that we can. So we're causing the system to reach a saturation point and then grow and respond and adapt.

It's the same process that, you know, Bill, based a lot of his his concept or reference structure earlier precautions work and in systems theory just sort of structures open systems and the brain is a beautiful open system.

And what that means is it can take in a lot of stimulus. It loves to kind of take on some entropy and then organize it. And that's how growth happens.

And for a lot of us, that stops, you know, by the time we're done with college roughly right now. And so we're trying to kind of reach trigger that. And so for somebody concerned about brain health, I spend 20, 30 minutes a day working with Gamma and then I'd spend, you know, another 30 to an hour if I could working with deep dove, deep delta neural driving stimulus that causes that reorganization of process to really exercise that brain, cause that bridge of change from.

Which so which 1/1. So in other words, we do you do Delta and then Gamma or do you do Gamma and then Delta? I'm not sure that. I'm aware that it matters.

I would say for me, Gamma makes more sense early in the day because it's it tends to energize you quite a bit. And of course, Delta is usually quite ideal before sleep because you're already heading down into a deep state.

Right? Right. And have you ever seen anyone who has cognitive decline who did this? And it seems to make them worse, or at least it was associated temporally with a greater worsening. Is that a concern?

Not long term, no. We do see people run into a certain amount of overwhelm. One of the reasons that we have a coaching team and a support team here and that's all they do all day long is to to be supportive and help people with their experiences is because that saturation process can create what we call overwhelm.

And it's it's intentionally a very broad term, but any kind of discomfort that comes from the process of pushing the nervous system in this way, we're here to remind them.

I mean, in rare cases, you have somebody who maybe it's bringing up so much stuff so quickly that we say, look, take a break, you know, take a couple days off.

As I said at the beginning of the conversation, the brain tends to be pretty good about just turning the volume down. If it gets too much, meaning it it doesn't maintain lockstep with the entrainment stimulus anymore.

It falls out of lockstep. We call it floats up. It floats back out of that deep state because it's too intense, like someone who's, you know, holding their breath under the swimming pool.

At a certain point, they're really compelled to just come back to the surface. But for most people, a little minor discomfort. You know, people might have some intense dreams.

People might feel. I'm feeling kind of pushed. I'm feeling kind of sensitive. People say, Oh, I cried at a McDonald's commercial on TV last night and stuff like me.

That's a sign that their system is feeling that push the same way that if you feel some stiff sorry muscles, that's a sign you've been working out. And do people who do microdosing of psychedelics, do they benefit and have you had people who are doing both together?

Yeah, there's been a few, you know, I don't know how many people call up and tell us that. But of the few that I know, I think those people benefit more if they do that at a different time of day.

The entrainment process, getting the brain to to match that entrainment, stimulus right to get into lockstep, especially when you're dealing with low carriers, which we do is asking quite a bit of the brain.

And so sometimes is maybe you've had too much coffee, maybe you're done an animal, maybe you're microdosing, maybe you didn't sleep well. All of those things can occasionally factor in and make it just that much more difficult for the brain to get into those deep states.

So we try and say just passively sit, listen, if you want to do other things, great. But for the purposes of listening to this technology, just be don't do gotcha.

Okay. All right. Well, so this is this is all very, very interesting. And it sounds like something could be very beneficial for for many people. If you could talk a little bit about the gamma brain refresher and I understand you have a you have a gift for everyone, which was great.

Thank you very much. Please talk a little bit about that, if you would. Absolutely. We've been talking about Gamma often all throughout the conversation.

So, yeah, I mean, we have a gift that we want to offer everybody listening to our talk today. And I'm going to tell you, I mean, I think this is something pretty special.

We're offering one of the most powerful soundtracks that uses the Gamma waves that we discussed earlier to help build that brain resilience. It's called Gamma Brain Refresher.

Now, we talked about this. There's been a lot of interest in this issue with beta amyloid plaques and so forth. I think, you know, and please correct me if I'm wrong, but I think some of your research has shown that amyloids really aren't quite the culprit here.

Necessary. But you take a much more comprehensive view of that. But for us, Gamma is not just about the beta amyloid, but it's really about a little bit of what we talked about before.

Gamma Brain Refresher Gift and Closing

You know, if you look online, you'll see there are studies that link Gamma Waves with heightened levels of thought,

you know, clear, clear thought and when you produce a lot of Gamma Waves, you tend to feel happier, more receptive to new information.

Your concentration and your memory tend to improve, but people report more peace and more centeredness. As a study, I think I'd help find that says Gamma rays are evidence that you've achieved peak concentration.

Then you can Google this on your own. And you know very well about the power of Gamma. And I already talked about the Medal of Honor study with the monks are registering Gamma rays.

So anyway, when we were invited to take part. Say that how do people access this? So what we wanted to do was offer a soundtrack that did this, get this into the hands as many people as possible.

So we're offering everybody a chance to to experience Holosync and Gamma. That's what Gamma Brain Refresher does. It's 20 minutes long. All you have to do besides downloading it is grab your headphones or earbuds and sit back, close your eyes and listen.

Ideally daily. I recommend mornings, but you do any time you want. So all people have to do to get a hold of the soundtrack is visit the following Website.

And so what I usually need to do is I'll say it and then I'll spell it out just for clarity. So the website is if you go to www.holosync.com. H O L O S Y NC Yep. Correct. Correct. Okay.

Forward slash refresh, R E F R E S H. Okay, so again www.holosync.com/refresh. So download it. Play it from your phone, your laptop, whatever. And always we crave feedback.

So please reach out to us. Try it out, let us know what you think. Tell us what you think. If you have any questions. Of course, we've got our support team here to help you along the way as well.

Gotcha. Okay, that sounds excellent. All right. Marc Gilson, thank you so much. This sounds very exciting. Great to hear that. You've had good results with it.

Great to talk to you. I hope that many people will benefit from from this sort of sound and treatment. And certainly, as you said, this has been around for for many years.

But the continuing to to improve things is always what we're looking for. And again, anything that's going to help people to improve their cognition. So great to talk with you.

Look forward to future discussions. Very good. Yeah, I wholeheartedly agree. And thank you again, Dr. Bredesen. It's been great talking with you today.