

Today's show is really cool. You're going to love listening through it all the way to the end, and the reason is that I'm recording it live here at Bulletproof Labs Alpha. We're talking with the creator of a new kind of technology that takes ancient sound healing from a variety of traditions, largely in this one Native American, and building on it. And actually making that something that you can use in your own home or even at a doctor's office in order to change your biology just using sound. I've been playing with this tech at home, it's really cool. So you'll hear about my story of how I've been using it, and some of the mechanisms for how sounds can affect your biology directly at the cell and at the nervous system level. Check it out, there's some new knowledge here for you.

Today's cool fact of the day is that France just banned WiFi in preschools. They basically said that EMFs or electromagnetic fields, I think it was like cellphones, computer tablets, and WiFi are probably not good for kids especially under age of three. They're even tracking EMFs from cellphone towers, and have a law in the book saying that you have or that you must sell a headset to anyone under the age of 14 when they're buying a cellphone. They've recognized electromagnetic hypersensitivity because a growing number of people in France are having adverse health reactions when exposed to EMFs. You might go, "What the heck is going on here?" Here is the deal, if you've been listening to Bulletproof Radio for a while, I've had several guests on, Dr. McCall was on recently.

It turns out that it's not just an effect of like a microwave cooking you that's the problem, because that probably isn't a problem. What is a problem is something called calcium or voltage-gated calcium channels in the cells that get activated by non-natural EMFs. What those do is they cause inflammation in cells and kids, especially little kids, have a thin skull that doesn't protect the brain with all of those precious mitochondrion as much as it could. In my house, my kids aren't allowed to hold a cellphone that's turned on. They had to use tablets on occasionally on airplane mode, and we have WiFi. Oh my goodness, but it's turned off most of the time. I have a switch on it and here at the labs, I actually have a switch I can control with my cellphone. So I can turn my cellphone on, get a little EMF that way, and use it to turn on even more EMFs.

The point here is that if we have some governments in Europe looking at the data, and saying, "There's enough data here that we have to at least be precautionary towards our kids," and that's worth noting, because you could say, "Well, everyone in France is crazy," which isn't the case. You could also if you're French say, "Everyone in America is crazy because they're not protecting their kids." I think that there is, we'll call it meat on the bone here, and that you should be paying attention to this. I'm not telling you don't use electromagnetic devices or don't use cellphones, they're incredibly useful. Just be aware, it comes at a cost, so use them consciously and with awareness and kudos to you France.

Today's episode is going to be pretty cool, but before we get into it, did you know that if you're too lazy to grind your coffee beans from scratch and then brew them perfectly in a specialty coffee association certified brewer the way I do, that's okay. No one's going to judge you, at least not out loud. For those of us who just sometimes don't have time or in hotel rooms, we actually make Bulletproof coffee pods that are compatible with the latest Keurig Brewers. You can take these ones with you when you travel, and you can still get your mold-free of lab tested Bulletproof coffee beans, stack that with InstaMix, the new flavor that just came out that is much better than our old InstaMix. It's got grass-fed butter, brain octane.

You can actually have the full Bulletproof coffee experience in your room, or you could just hit your local Wholefoods, and get some of the Bulletproof cold brew, and just have that ready to go in the morning. I will not travel without Bulletproof coffee, because it's part of what makes me work. Now, you got the coffee pods, you've got InstaMix, or you can just grind the beans the way I do at home. Today's guest is Larry Doochin, who flew up to Vancouver island right here at Bulletproof Labs Alpha. He's an entrepreneur and an author, and co-founder of Uriel who also has another name, which is Sohu-

Larry Doochin: HUSO.

Dave Asprey: HUSO, there you go, Human Sound is what that stands for. He's a patent holder of a new technology in sound therapy called UrielTones, and it's making some waves in the field of frequency medicine. He's written three books about personal spiritual growth, and is now using sound frequencies to have some pretty remarkable effects. I've got his clinical grade equipment up here at Bulletproof Labs. I've been playing with it, and it's cool enough that I wanted to invite him up here to share with you what's going on, and what sounds actually do in the body, so I can ask him some hard questions, and we can all learn a thing or two about what sound is doing in our cells. Larry, welcome to the show.

Larry Doochin: Thank you for having me.

Dave Asprey: How did you get into sound therapy, which is about the hippiest sound of anything I've ever heard of by the way?

Larry Doochin: Well, I have no music or medicine background, so a lot of people look at that as a disadvantage. I actually look at that as an advantage, because I am able to take a look at certain situations, and see them from a non-biased perspective, and see what's going on. I was really able to look and understand what's happening with frequency. That frequency is a foundation of life, and that what is affecting us with these EMFs and other things like metals and toxins in the body, stress, and how that affects what we call the frequency language in the body. But to answer your question, I came into this, this is spiritually oriented, and it's like God dropped me into this because I had the skills to bring this technology into fruition and to take it to the point we're at right now.

Dave Asprey: You're a co-holder of the patent on this technology. Just tell me the story about what made you notice that sound healing had an effect?

Larry Doochin: UrielTones consist of sound frequency that was done by two very powerful sound healers in the studio. It broke into its individual frequencies, and it was toned with great intention for healing, and so I was aware of these two sound healers for a long time. It was actually my wife, one is my co-founder, and so they've been doing sound healing for a very long time, and I came into this. We were trying to develop something that would be an answer to, a noninvasive answer to the types of problems that we're facing in the world. So we believe that we have developed something that fits that bill because we are restoring healthy frequencies in the body through the power of human sound.

Dave Asprey: I have traveled the world and experienced all sorts of unusual things. You go to Tibet, they've got Tibetan healing bells, and you go to Australia, they do unusual sound healing with didgeridoos of the shamanic drumming. In fact, I've talked about how sound and these different types of frequencies are some of the original ways that we could actually get in to change the state of our minds. How do you define sound healing? Is it that kind of stuff, or is it something else?

Larry Doochin: Yes, sound healing, what we're using is a human voice, but it's certainly there's a number of other sound healing modalities. We feel like the human voice is probably the most deeply assimilated by the body than an instrument because human sound is organic to us. So you think about listening to a choir, you feel that energy running in your body. That's the power of human sound, and there's a reason that human sound has been used for millennia by native traditions and indigenous tribes for healing, because it's that powerful. And sound is really fundamental to basically to all creation because all the spiritual traditions and religious traditions talking about sound as having created the universe. Sound is a very fundamental element in what we're doing, and we think human sound, because we produce human sound, is really the basis of what we need to help us restore those frequencies.

Dave Asprey: There's a time in my life when I would have been highly skeptical of something called sound therapy. However, in Head Strong, my last book, I wrote about how this network of bacteria in the body, the mitochondria that generate our energy, they are vibration sensitive. We've absolutely proven this, and we know all bacteria are, because when you're culturing bacteria, the vibrational frequency, and frequencies can sound esoteric or something, but vibrational frequency means number of time per second you vibrate the plate therein. It's a hard science definition. It actually dramatically affects growth of cells. When you're culturing human stem cells, if you vibrate them the wrong way or you don't rotate the culture dish in just the right way, they actually won't grow, or they'll grow twice as fast.

We know our body is listening to sounds. I think we've known this as a species for a long time, we're in the womb, and we're getting our mother's heartbeat. You can actually play sounds recorded in the womb for people, and it puts them

in weird altered states, but how do you know what sounds do what in the human body?

Larry Doochin: Well, let me back up for a minute and say that I know your listeners understand, a lot of your listeners understand frequency in medicine, but let's just give a quick overview of that. Basically, science has proven that everything in the universe is in vibration, and also when it's in vibration, everything is giving off a sound whether you hear it or not.

Dave Asprey: When you say everything, you mean like subatomic particles vibrate a certain way, or way up from there?

Larry Doochin: Yeah, I mean everything is energy, Albert Einstein said everything is energy and that energy is all light and sound, so it's all basically frequency. Nikola Tesla said if you want to understand the universe, then look at frequency vibration in energy, because that's what the universe consists of. We're all, everything is in vibration and everything basically has a resonant frequency, and the frequency is basically the rate and form of that vibration. So everything in your body has a resonant frequency, everything in the universe has a resonant frequency and what we believe is happening is that the frequencies in the body have become distorted, and this is coming from several sources. This has caused a large part of our health crisis today.

Dave Asprey: When we're talking about resonant frequencies are people who have an engineering background, and who studied that sort of thing will understand what that is but can you define what a resonant frequency is versus a normal frequency?

Larry Doochin: Well, when I'm talking about like we use the terms entrainment and resonance, so there's a natural frequency that is in your body that each of your cells and organs have. Your body is producing a frequency that is between, depending on like if it's a brain or the heart of what it is, it's producing a frequency that's between like 2 and 12 Hertz. What we are being exposed to like with cellphone transmissions and other types of electronics and other metals and toxins in the body or frequencies that are radically different than that. So for instance the cellphone is producing a frequency that's over a billion Hertz, and that is obviously something that is quite different than what your body's accustomed to.

The other thing is if there's frequencies coming off of the earth that are natural frequencies that we've evolved with over a long time that we're accustomed to but then those are obviously radically different than these electronic frequencies. But when we talk about a resonant frequency, we're talking about the frequency that your body, in its normal stability and stasis, is one that is using to communicate properly because your body is, your cells are communicating through what we call a frequency language.

They're telling, they're communicating through this frequency language in order to uptake proteins, create energy, release waste, and so forth. That frequency language is becoming distorted by all these metals and toxins in the body by EMFS, by cell phone transmissions. So it's like the American alphabet and you were to put some Chinese symbols in there and you tried to communicate through that language, it would be distorted. You wouldn't be able to understand it, and that's what's happening in the body.

Dave Asprey:

When you look at a guitar that's out of tune and you can hear it and what's going on there is the string isn't resonating properly, right? Because there are certain frequencies where things will oscillate properly, and a lot of people probably haven't heard that we know in hardcore biophysics and bioengineering like there's a rate of oscillation of the mitochondrial membrane, it's 100 Hertz. Different, some membranes in the body resonate at different frequencies and that you can manipulate those things with some of the grade gear here or some of this post-electromagnetic frequency and things like that. But it's not clear to me anyway, we have toxins and even some emotional stuff probably that can affect these things at least in my experience.

But maybe we can directly put frequencies back into the body or maybe we can pull the toxins out and allow the body to go back in. Is it your experience in working in clinical settings and with some people at home with your devices and their just addressing the frequency level helps with these things like environmental toxins and things like that or what's the net impact of the idea of going to the frequency instead of to the underlying or removing EMFs or something?

Larry Doochin:

Well, I think it has to be ... We believe it has to be comprehensive approach, so for instance our sound frequency equipment is we believe very restorative and having very good results in restoring the healthy frequencies that are in the body, but it also needs to be paired with other things. For instance, we know from another company that we have ... There's some metal detox program in that the large majority of people are heavy metal toxic to a significant degree. So those metals and toxins in the body have their own electromagnetic signature and they're also throwing off the frequency in the body.

Stress is throwing off the frequency in the body, and so what you have to do is you have to do a comprehensive approach, which includes a lot of the things that you're doing that you advocate. Things like UrielTones, use of our sound frequency therapy, and then also things like maybe a metal detox program. Some simple things like taking precautions in terms of protecting yourself from electromagnetic fields. Like you sleep with a cell phone next to your bed, do you have a digital alarm clock that puts off a huge field? There's some things that you can do. We live in a pretty toxic world in a lot of ways and we have to take a comprehensive approach to stay in good health.

Dave Asprey:

There's a couple of things that I came across over the last 25 years of exploring these stuff, even before I really was as focused as I am now. One of them is I

read a book by Robert Becker Electromagnetism and Life, I think it was called, and after that I went out and I bought a Schumann Resonance Generator. For listeners, a Schumann Resonance is one of those resonance frequencies that happens when we have lightning, and there's lightning on the planet and it creates a reverberation between the upper atmosphere and the earth and it's around 7.8. So my house has always had a predominant Schuman Resonance because the cells in your body, between themselves of that, as a timing signal. These are things that are just missing from our awareness yet this is proven that like we know this.

Larry Doochin: This is all proven and that's why when you go into nature, you feel good because you are receiving the natural frequencies that come off of the earth, which include like the Schumann Resonance and other frequencies. What we're doing with our sound frequency is taking somebody back to the same state in terms of what they're getting in nature. We have evolved over ... We've only been living in houses and we've only had for, obviously several hundred years, we've only been living and had electronics and all of these cell phone transmissions and large proliferation of electromagnetic fields for the last 30, you know 30 to 40 years. We haven't evolved yet to be able to take that on and we're trying, our bodies are trying to adjust that but it's causing a lot of health issues.

Dave Asprey: It's definitely something that has an effect. One of the things that really drew my attention was a video taken about three miles from an airport, and it was aphids just on a weed. Every time the radar system from the airport would basically sweep in that direction, you'd see all the aphids twitch, and they would just twitch exactly. You're like, "Okay, I'm pretty sure that these electromagnetic frequencies do something to the body," and some of the clinical grade gear here like the stuff from pulse centers, which was a previous guest on the show. Where you can see your muscles jump when you put a big enough magnetic field on it. What we are doing is sound and sound is different than a magnetic field or an electromagnetic field, and what does sound do that's different than a magnetic?

Larry Doochin: Well, we believe that sound, especially human sound, is going to be the best carrier frequency, restored frequency back into the body because again it's oriented to the body. So what we did was, first off, we've taken ... The sound was created by two powerful sound healers with a great intention for healing, and again science has proven that our thoughts, beliefs, and intentions create our reality. That's all proven in science.

Dave Asprey: I think there might be some debate about that, but I believe it to be true.

Larry Doochin: Yeah, I'm sure that some people would debate that but anyway so the intention of that healing was put into that original toning and it was basically toned in Native American tradition, and then it was broken into its individual frequencies and blended with harmonics of that base frequency to create an oscillating waveform. That oscillating waveform through the principle of entrainment and

resonance is very restorative for the brain and the body. When we talk about entrainment and resonance, we're talking about again about the fact that, "Okay, we have certain frequencies in the body, if you have something that's a more powerful frequency, that's affecting it like metals and toxins in the body or harmful EMFs or things like that, they will takeover, and the natural frequencies in your body will entrain with that other frequency.

Because those other frequencies are more powerful, so what we're trying to do is we're trying to have the natural frequencies in your body entrain with the proper frequencies. That's what we're introducing back into the body through our sound frequency technology. So what we've done is to create an oscillating waveform and we've taken, like our website says, we've taken ancient tradition meets quantum physics. So we've taken human sound [Securio 00:18:58] and then we've put that into an oscillating waveform that's helping the brain and the body because it's an overall body effect. Because you're listening through headphones and you also have pads on your wrist and ankle acupuncture meridians.

Dave Asprey: Now, any time we're dealing with mitochondrial function in the body, we're dealing with quantum biology and people here at quantum physics and it's used a lot in personal development because part of the story of quantum physics is that, "Well, if you're not observing something, it doesn't actually happen." Which can be abused when you're working to establish a mechanism for why something works. In this case, though, we know flat out that mitochondria are sound sensitive and we know that they use quantum effects to generate electrons, and that's actually something that no one understood they were semiconductors until very recently. We're discovering all these strange things about it and that you can change how they function with sound, so there's a definite quantum effect.

What I did because well I'm an unlicensed bio-hacker and I don't really follow instructions very well, so you sent the clinical ... Wait, wait till I'm like to that noise. I unpacked it, opened it up, slap some of the sound quells on my acupuncture meridians, and then I did what it said in the instruction manual for clinicians. This isn't the home unit, and I said, "Well, I'm going to listen to these 48 different tones that have different biological effects in them. I'm not exactly new to this kind of stuff, I've run 40 years of Zen neurofeedback and we're always looking at different sounds of what they do to the brain and measuring brain with feedback. I don't exactly know what you've got going on in some of the tones, but I'm seeing weird things and you can really feel them in the body. I picked the three that seemed to be most effective, that you're supposed to do this with some electrical feedback stuff that I kind of skipped, oops. I did-

Larry Doochin: Which you're still alive but you're not going to sue me, so that's something.

Dave Asprey: Exactly, and I did find the majority variability went up after I did it. I monitor that with a ring when I sleep, so my sleep did improve after I did this. So what I do is I listen to three tones that seem to just resonate best with me for lack of a

better word, and there is some you can use muscle testing or the normal way is to do an electrodermal screening where you look at a change in resistance in the body. But I skipped that step, all I know is that there was something interesting going on there but I haven't used it enough to really know what it is, but I was intrigued enough to say you need to come here and tell me what's going on so that it does the background for listeners about why I wanted to do this. You worked with two Native American sound healers to understand how in that tradition they would do sound healing with essentials like chanting sort of stuff to work with someone.

Larry Doochin: Yeah, it's like a chanting or toning type of tradition, yes.

Dave Asprey: And you recorded that and then you added ... You explained this to me before but I'm not sure I understand, while you added something on top of it?

Larry Doochin: We broke the original toning into his bass frequencies, and so those frequencies were basically the 48th that are on the system. And then we took each of those bass frequencies and we blended harmonics of that bass frequency in to create an oscillating waveform. It was done, it's like a mix of a little bit of experimentation, mathematics, and just working with it to get that perfect waveform that has restored it for the brain and body.

Dave Asprey: When we're talking about harmonics, you can basically take a frequency and you can double it and that's a harmonica.

Larry Doochin: Yeah.

Dave Asprey: If you had a 10 hertz frequency, which would be a low rumble, and then you double it, that's the first harmonic, and you double that, that's the second harmonic. It sounds good, like this is why a guitar or a flute, any sort of music, we have these musical notes that are harmonics. There's definitely more power that happens as you go up in harmonics and you can do strange things like you get the resident frequency of something in a cell, and you can take multiple harmonics of that. And they have a really powerful biological effect, and that's why music either sounds good or it sounds awful because the harmonics are wrong and our brains processing that. You digitally introduce harmonics of a Native American sound healing tradition in order to increase the strength of it, right?

Larry Doochin: Yeah, so basically we had the bass frequency which is all human sound and then we blended harmonics of those bass frequencies using a wave generator. Up to three different signals replied to each of those bass frequencies to create that very complex waveform that you're hearing and you can ... For each one, it's different and you've told me you can hear that on the waveforms. So each one is done differently, and it has a different sounding effect, it has a different feeling effect as it comes through the pads. I also want to mention in the pads is a small speaker and high grade Lapotron Crystal. So that Crystal is amplifying the

oscillation, we're also creating a very ... We're making that crystal move in a certain effect, basically a pattern, of what we call an oscillation, a pattern vibration.

It's different for each of those tones and that is creating a very subtle PSL of electric effect. Because each time you make a crystal loop scientific principle, you're creating a subtle PSL of electric effects who are introducing a very subtle electromagnetic current to the body, but it's a very natural electromagnetic current because it is human sound based and it's also Crystalline based. In our bodies have a lot of crystal and the properties to them.

Dave Asprey: PSL of electric effect is something that a lot of non-engineers aren't going to know about, and this is just that idea that movement of some surfaces can create an electrical current. What is almost unknown is something I wrote about in Head Strong is that your cell membranes in the body are PSL of electric.

Larry Doochin: Yes.

Dave Asprey: So that means all of the little tiny droplets of fat that surround your mitochondria to make the membrane and surround your cell membranes, they make the electricity when you walk, when you jump, When you breathe, when you sing, when you speak.

Larry Doochin: That's the basis of why right there, and Dr. Bruce Lipton talks about how our cells are very crystalline in their alignment and properties. We're basically like the crystals-

Dave Asprey: Water is a liquid crystal.

Larry Doochin: Yes, and actually there's water surrounding our DNA, and so obviously Dr. Emoto through his experiment showed that how you can ... With whatever you say, intention that you put into the water can create certain crystalline shapes or you can create very disparate negative shapes by saying negative words to it. So literally is what's coming through our sound frequency technology, but also what's happening in everything we're doing in the world is how we speak to somebody, how we think, and everything, we are literally reshaping our DNA to a negative or positive pattern.

Dave Asprey: It may sound out there, but that-

Larry Doochin: That is all scientifically proven, if somebody wants to contact me, I can give them the study. There was actually a study at UCLA that showed the water surrounding the DNA and they did experiments on that.

Dave Asprey: There's definitely water surrounding DNA, and we've had Joe Paulik, in fact, [inaudible 00:26:24] support did some of the research at his lab now at University of Washington where he's looking at the core properties of water

inside cells to see what happens there. I think a lot of people don't know about that kind of research but there is something going on there. I'm still not convinced fully by Dr. Emoto's things. I just I haven't seen it replicated enough to say no. If you look at water and say bad water, that it's somehow going to make ugly crystals and if you say good water it's going to make happy crystals, but there's probably something going on there.

Larry Doochin:

I think what's happening is what you're seeing is you're seeing spirituality and science come together in a way that they haven't done before in a lot of the things that spirituality has understood over for a long time. A lot of the mystics have understood it, and it's starting to be duplicated in science, and that's a beautiful bridge that's happening between the two because that's really what we are at a core. I mean basically the science has proven that everything is one undifferentiated energy field. We're coming in and science is starting to prove these things.

Dave Asprey:

We've had a few guests on the show who are definitely doing research in there, and Bruce Lipton came on. He's just a fantastic guy. In fact, I met him years ago through the nonprofit antiaging group that I run, and he just blew my mind. But when you meet, he's the Biology of Belief and some pretty out there metaphysical religious stuff, but when you meet him he's like, "Oh yeah, we were cloning cells in 1968 like before you were born, Dave." He's like a hardcore cell biologist and it's like what I saw in cells led me to believe everything is connected and that the environment programs, the cell and water, is part of the environment frequency, is part of the environment both the electromagnetic and sound and vibration.

I fundamentally believe just based on all of the experiences I've had including Tibet and all sorts of altered states work, look if you're sitting with a heart full of hate and negative intent towards others, it's going to cost you something and it's probably not good for the people around you. Which is why I work to not do that in my life, it's just not worth the time. There's enough evidence to act on that and I don't think we know all the mechanisms inside it but we're starting to take what ancient traditions have looked at for a long time and you can feel something, right? Now we're saying, "Well, why do you feel it?" We're crafting the science in the story and looking at that.

I don't think science is anywhere near done doing that, but without any science at all, you can have a tradition of sound healing or Tibetan chanting or any of the Hindu derived, the various oms and postures and mudras and mantras and things like that. The bottom line is that they work and they work differently for different people, and things like that but we don't do those things for thousands of years because we're crazy pants, we do those things for thousands of years because we can feel they're doing something. And we don't like it that we don't know why they're doing something and it sounds like you're taking some steps towards taking advantage of those effects as we're understanding the mechanism.

Larry Doochin:

Yeah, and this is a patented technology that nobody else has. I think what we're doing is that's been obviously been used for thousands of years, and so we want to take ... Then we've come into a technology age where it's almost like a lot of those things we were doing before have been discarded. Well, we don't want to discard them, we want to take the best of what's there and blend it into the new and create things that can really benefit people. I think what's happened is that the with the understanding of frequency, back in the early 1900s through the '30s and the '40s, frequency was well understood in terms of its effects and there was a number of people doing things with frequency.

I think we moved into another model, and we've forgotten a lot of the benefits of understanding frequency medicine and how we can affect that, and they're starting to come back in. Stephen Hawking, the British physicist who wrote A Brief History of Time said that basically electromagnetism controls all chemical reactions, all biological responses in life itself. So really frequency medicine underpins everything that's happening on the biochemical level.

Dave Asprey:

We have this problem where 100 years ago or so we had this fight between the electromagnetic arguments for medicine, and this goes back to a guy called Pliny the Elder. The first guy to use electric eels to treat migraines like back in Ancient Greece, and so there's been this tradition there. Then there's been the more the alchemy derived chemistry based tradition, and about 100 years ago like chemistry trumped electromagnetism in just a few debates really. Medicine went down this chemical pathway but as we start understanding more about this stuff, we realize all chemistry is essentially physics when you get right down to it, and all physics eventually derives down to oscillations, vibrations of what's mostly empty space.

Nassim Hamein was on the show recently looking at quantum physics and talking about even a proton is empty inside, so we have all these very thin membranes in the body, but even then we're mostly space and the space vibrates overtime. This stuff blows my mind because I think there's a lot we don't know yet but we know enough that you can take an older technology like chanting and you can apply newer technology like signal processing and waveform generation. Put it in the right parts of the body, which came out of the field of acupuncture and then say, "Is there an effect you can generate?" Certainly, there's something going on there, I can feel an effect whether it's permanent or placebo or whatever, I haven't done enough playing around with it. But what are some of the effects that you see when you get someone hooked up and you screen them for the right tone? What's the experience for people who use it?

Larry Doochin:

We have a professional system and there are most of the physicians and other health practitioners that have that are prescreening people to determine which tones are most balancing. Then we also have a home unit which has four preset programs on there, and so we're in both receiving fantastic results on sleep, stress, low energy, mental focus, things like management of chronic illness, kids who are highly sensitive, and unable to regulate their emotions or behavior. This

really grounds them, and we're also seeing or having reports in a number of other areas that I really can't talk about. But certainly a lot of things, what we're doing is we're balancing all numbing nervous system and we're taking somebody into a deep parasympathetic state.

So we're taking them from a sympathetic state, which is a fight or flight state into a deeper parasympathetic state which is a resting or healing state. Any health practitioner anywhere, whether they are alternative or conventional will tell you they want to treat people in a parasympathetic state. That everything that they do to treat people is that much more effective when they're treating it from a parasympathetic state. Because of all like the voltage gated calcium channels, the EMFs hitting that and all this other stuff that we're undergoing with stress and everything, probably 90% of the US population is walking around in the fight or flight state.

We take them into the deep parasympathetic and for most people, vast majority of people, they feel that the very first time that they run. It really grounds them and puts them back in their body, and they are like, "I didn't know it was supposed to feel like this." Because they've been walking around in this other state for so long, and you're probably not a good case because you are doing so many other things. But for most people who are not doing anything and who are around huge amount of computers, or WiFi, or things like that, they're like, "Oh my gosh, this is amazing, I didn't know it was supposed to feel like this."

Dave Asprey:

I travel for Bulletproof about at least 125 days a year, so I'm on airplanes, I'm in hotel rooms, and as I do that I take every step I can to protect myself from excessive EMF exposure and toxin exposure but I'm on an airplane. Like I'm going to take the hit, and I'm going to counter as best I can. I'm pretty open about the fact that I spent the first 30 or so years of my life in a constant sympathetic state. In Head Strong I read about this idea that the cells in your body are actually listening to the magnetic field that comes from your heart, and it comes from your heart in a measurable, quantifiable way where we can describe the shape of it, it's shaped like a donut, a Taurus, and this is actually like biophysics, not the shock rock things.

By the way, Shock rocks are useful for meditation, they exist as well but the cells listen to this, and if you are emotionally or physically in a state of stress, you'll be sympathetic and then the body is ready to fight, but it will not turn on cellular repair mechanisms. So if you can use sounds to shift someone out of that into the state that's required for the cells to clean themselves out, for the cells to fold new proteins and things like that, that is going to have clinically noticeable results. I definitely felt some shifts from using the tones like actually more than I expected. I have to say when I unpacked all the clinical stuff I'm like, "Okay, so it looks like I'm putting some speakers on my ankles here." Wow, what have I gotten myself into? But the combination of that end, it sounds like, "Okay, that's relatively strong in the overall still effects."

Larry Doochin: Yeah, obviously, we're obviously coming into the voluntary cortex with the headphones, but then we're coming into the acupuncture meridians and Robert Becker talks about this. Talks about the Acupuncture Meridian System and we're spreading those frequencies throughout the fascia of the body. That's the mechanism, the pathways for basically frequency is how the frequency spreads along the bodies, so we are spreading along the fascia of the body and it's affecting all of the whole body system as opposed to just trying to affect the brain.

What we're trying to do is we're trying to restore, I mean frequency has been, again, frequency has been proven to kill cells. There's been studies showing that frequency can kill cells, or ... So frequency and the concept behind that is ... I don't know if you remember back from like if you're old enough to remember like Ella Fitzgerald used to sing and she would shatter the Memorex glass.

Dave Asprey: Right.

Larry Doochin: That's a dissonant frequency, you're giving a frequency to the glass that's incompatible with the frequency in the glass and you would shatter it. That's some of the experiments that they're doing now with frequency being able to kill cancer cells and things like that. There are certain people doing some stuff around there, but what we're doing is we are sending a restorative frequency back into the body to bring the natural resonant frequencies back into what they're supposed to be, and to allow the body and the immune system to operate more as intended.

Dave Asprey: The first guy I'm familiar with using resonant frequencies to kill things is a guy named Royal Rife and years ago when I had Lyme disease and I hadn't solved it with Ozone and just mitochondrial resuscitation stuff. Frankly, I think, Lyme disease is always triggered by toxic mold. I was living in a place with toxic mold too, and so the chicken and egg kind of thing. Anyway, I bought a Rife machine, and Rife was around 100 or so years ago, and-

Larry Doochin: '30s.

Dave Asprey: '30s. yeah, so almost 90 years there give or take, and I actually bought ... Like I have all of his original research papers and all this, and what he did is he invented [inaudible 00:38:23], the instrument manufacturer, and he invented a very, very high powered microscope. It was so high powered that you couldn't use a normal light to look at things because he was looking at things that were amplified beyond the wavelength of light. He started using basically electromagnetic frequencies to eliminate cells, to watch live cells, and he noticed one day that if he would tune the electromagnetic frequencies, some cells would die. He actually spent years looking through a microscope saying, "Well, here's syphilis, and let me just tune this and then, oh there, the cells just broke apart." So he was finding nonresident frequencies.

I was a little skeptical, but hey, when you have Lyme disease and toxic mold and you feel like crap all the time, and western medicine doesn't work, you'll try anything. I did, I tried everything. I have this strange looking device with a tube full of Neon gas or something, it might have been Argon or whatever it was, and I was living with someone at the time. And she had developed Herpes lesions in her sinuses, it was terribly painful. This was also a result to learning that also toxin and mold in your immune system goes nuts. I didn't tell her what I was doing, she was reading, and I'm like, "Let's see what happens."

So I tuned in the frequency on this thing, specifically, for the herpes virus, and within five seconds of me turning it on, she's 20 feet away from the machine, she drops the book, screams, grabs her face and says, "Turn it off, turn it off, what are you doing?" You can't make that up, there was no placebo here because she didn't know what I was doing. I'm like, "Whoops, I guess there's something going on here, right?" Then Rife's work, surprisingly the guy who started the American Medical Association tried to buy the technology, and when Rife said, "I'm not selling it," they actually went out and wrecked most of his microscopes and tried to destroy. They actually burned some of his research and all sorts of bad stuff in the history of the formation of the modern establishment of chemical based medicine.

I think there's ample evidence based on that experience that I had myself that frequencies really can do something on a cellular level. With the sound frequencies that you guys are using, there's a plausible explanation for how this could be doing something. You mentioned in this fascia, and the fascia planes and the body are basically the things that hold muscle and organs together, and they're made out of this amazing substance called, you guys ready, Collagen. Gee, do I put that in my bowl of coffee every day? Yes. Well not every day, some days I do, but I eat it every day and it's one of our products. Because when you have properly formed fascia on the body and fascia conducts vibration, it also conducts electricity. We mentioned PSL of electricity which comes from sound.

So you're creating a PSL electric signal at basically parts near the fascia on the wrists and ankles, and you're creating specific frequencies of electricity using these vibrations and probably these crystals in there as well that are part of it. Then it's traveling along the fascia planes if your fascia is intact, and then could it have an effect on the nervous system? Yes, you guys are seeing changes in heart rate variability and you're seeing behavioral change, right?

Larry Doochin:

Yes. We're seeing very large changes in heart rate variability. Certainly, people that have nervousness significant changes in that, and just an overall restorative effect in the whole body, in the brain. I think coming back, having the dual effect, there's a number of reasons why what we're doing is so unique and powerful, but definitely coming both into the brain and into the body is having that dual thing is significant.

Dave Asprey: Tell me one of the most dramatic things you've seen from someone who strapped on the electrodes ... Or not electrodes, sorry, strapped on the ... What do you call them? Signal transducers, speakers?

Larry Doochin: There's actually speakers in there, and crystal and then certainly the headphones. I think the thing for us that we are most ... We are very grateful for this technology because we've seen such significant results in people's lives in terms of what they tell us from ... And what we've seen in terms of helping kids who are dis-

Dave Asprey: Give me an example like a specific one?

Larry Doochin: Like there's a testimonial on our website from a mom who basically tried all these other things and whose child was just unruly and the teachers were just like, "We can't handle this child." So she started running on UrielTones and she is continuing to run, and it has made a huge difference in well grounding her. Her teachers have said, "Oh my gosh, what you are doing? There's such a significant difference." We've seen results in so many areas outside the physiological. We have people like telling us that they're undergoing cancer treatment, this is a great adjunct to that, and it's helping them with sleep and stress but also with their fear over cancer.

So there's definitely there's some ... This is not a scientific thing that I can say, but there's some principle of peace that's coming through our equipment that's helping people just feel that they're okay about things, and there's no science around that.

Dave Asprey: I think there might be some science around that, and it comes down to sympathetic versus parasympathetic. If there's something going on, whether it's environmental, or emotional, psychological, spiritual, whatever, that causes your body to be in fight or flight, then you're going to feel anxiety and fear and pain and suffering more. If there's something in the environment or inside of you and your thought process is spiritual team or whatever you want to call it, that causes you to consciously or unconsciously be in a parasympathetic dominant where your body is in that rest and refresh, you're more resilient when you have the ability to switch between the two.

Fight or flight is useful if there's a tiger about to eat you, but if it's turned on during chemotherapy, it's actually going to make the drugs not work as well because you're going to be fighting it, but if you can turn on the repair and recovery mechanisms. So if the tones can help the body shift, that would be the feeling of peace. Peace is associated with parasympathetic dominance, and we can measure in brainwaves too. Do you ever strap an EEG on someone's head and see what happens in their brain when they do it?

Larry Doochin: We've done that, we did that one time and it shows significant results. We need to get into ... We feel like in 2018 we are going to be getting into some clinical

studies, so we need to scientifically validate what we're seeing subjectively. But I can say the subjective results, I know you're talking about other things. We see such a wide variety of things, and sometimes they are like things that make us shake our head like somebody who was on the table who had not been able to smell since she was three years old. Got off the table and was able to smell for a number of days. We see people who have chemical sensitivities, and this is helping them.

People are reporting a wide range of things, and we think that's because for several reasons, but one of the largest reasons is that when frequency ... We all pretty much have a different body blueprint, so when our frequencies in the body become distorted, then that is manifesting in a number of ways. It could be certain health issues, it could be something like chemical sensitivities, and there's certainly other things that could play into that. They could have mold issues or things like that, but we are helping, in some situations, we're helping completely, and other situations we're helping partially, and they're seeing results.

When you're able to get in frequency, the frequency is foundational to the body and to the brain, and when you're able to change that back to its healthy frequency, then that's why we believe we're seeing results in so many areas.

Dave Asprey: I'm intrigued with what I'll do one of these days when I get around to it is I'll either take the gear down to 40 years as in and run it with a neuroscientist down there, or maybe I'll just put the electrodes on my head and-

Larry Doochin: I'd love that.

Dave Asprey: ... and see what happens. Because it's easy for me to get signals up my brain like clinical grade stuff. The problem is I'm probably not a good guinea pig because I might be subject to placebo because I understand what it's supposed to do, so I'd want to stick it on an unsuspecting guinea pig, or probably some family member or a child or something. Child experiments are okay, right?

Larry Doochin: Yeah, I don't know about the EEG part but yeah.

Dave Asprey: Yeah, but as long as it's noninvasive. If you're hearing sounds or looking at your brainwaves, I don't think you're doing anything dangerous there, because we hear sounds all the time and we generate brainwaves all the time, so measuring things like that seems within the realm of exceptionally safe which is cool. What would happen if I played some Nine Inch Nails through system?

Larry Doochin: Some Nine Inch Nails?

Dave Asprey: You don't know Nine Inch Nails? Trent Reznor, it's one of the angrier kinds of music that are out there, I used to be a big fan when I was in Middle School.

Larry Doochin: Yeah, well, I mean basically our system is ... I'm too old for Nine Inch Nails. So our system is designed to play what we've created, and also one of the things, I want to mention this, one of the things, the reasons that this is ... Another reason this is powerful is because we are giving the body lossless sound and what I mean by that is this is not been digitally compressed at all. Anything that you ... We have a number reasons, but anything that you download over the Internet, or you're listening to over your iPhone or anything like that has all been digitally compressed.

What we've created has not been digitally compressed, is if you listen to it in the studio. It's been modular in a certain way but it's basically it has no digital compression to it, and what happens when you digitally compress something is you lose a lot of the subtle frequencies and harmonics, because you're pulling out certain things to be able to compress it to send it. So our system is delivering lossless sound, and that is another thing that is a big part of what we're doing.

Dave Asprey: Are using vacuum tubes in it?

Larry Doochin: No.

Dave Asprey: Okay, cool, so there's still a digital component there, but it's just extremely high fidelity digital.

Larry Doochin: Basically, what we're doing is obviously when it's on the system it's digitized and then we're sending it through a digital to analog converter. So we're basically delivering it back to analog.

Dave Asprey: Got it and this is something that unless you are a super geek like me, a lot of people haven't thought about that, but the true audio files they listen to records. Because when you have a record all the way forms around just like if you're playing real instruments where live music just always sounds better. Then when you put it even on a CD instead of around, you're getting all these little basically stair-step functions, and if you really tune in on the division live music or something that's played through a warm-up tube amp, there is a difference.

And it's a subtle biological difference when we first switch to CDs and I'm just old enough to remember getting my first CD and not buying records anymore. People were complaining like it sounds like someone is shattering ice, or it doesn't sound right. Now that's all we know out here, because pretty much anything you hear is digitally modulated unless it's live. What you've done is-

Larry Doochin: It's also digitally compressed because it's having to come over some device, come over the Internet or some device. Musicians really appreciate what we have here because they understand that it's delivering a pure essence of sound, and they can they can appreciate the difference. Delivering those subtle

frequencies and harmonics is really important because that's where a lot of the healing effects come from, and is in those subtle frequencies and harmonics.

Dave Asprey:

Yeah, it's just being a podcaster and having been around it when the very first MP3s came out long before Napster or any of that stuff. I think my first MP3 download was Metallica. Gees, this would have been 1995, '96 before the first MP3 player. By the way, Metallica if you're listening, I apologize, I did want to wear a Napster shirt at one of your concerts but I would never do that now because, well, I see what happened to music. Anyway, at the time I thought it was pretty cool because I was a big fan.

One of the things that happened was that it just didn't sound the same, and you buy a CD and it was better. If you hear musicians like that play live it's like, "Oh my God." It's a whole a visceral sensation, it's not because the speakers are better, it's part of it, but it's because you're actually getting all the harmonics because it's live. I do notice a difference just from working with stuff, using like a Rolls amp, which audio files will know what that means, but you're using super high end gear. Yeah, if you're looking to do more than just cognitively hear something, but to viscerally feel it, okay, I could see there being a reason to do that. I'm guessing you tested using cheaper stuff in smaller signals that doesn't work.

Larry Doochin:

Our home unit is one piece of equipment so our action profession unit is three pieces of equipment, and we are looking for ... We're looking to go to our next round of funding, and one of those things would be to develop one piece of equipment, but it would certainly be everything that we're doing is going to have very high end reproduction capability similar to what we have right now like the Rolls amp and so forth.

Dave Asprey:

Interesting, so part of this equation for people listening who are saying is there something to sound healing? Because you've got a guy playing a didgeridoo over your navel, it's going to be different than listening to a recording of the didgeridoo over your navel. And part of this is that there's a certain compression thing, and then part of this with what your real tone is doing is you're putting resonant frequencies in there and some waveforms that you've generated. Certainly, I was pretty impressed when I hooked all this stuff up because I didn't expect it to be the level of ... I wouldn't expect to have been able to feel it or to just sense an altered state coming on the way it did. Do people report feeling altered states seeing things?

Larry Doochin:

Yeah, it's very interesting because for us we're seeing is working at many levels beyond the physiological, so definitely certainly working in energetic level. working very much in an emotional level, we've seen people have major emotional releases on the table, like remember past things, and release things, and we've had people have major spiritual experiences on the table. Those are types of things we shake our head at and just not that we're in disbelief, we just ... Just it's amazing things that are happening, with what happens through that technology, because it was done by two powerful sound healers with a great

intention for healing. There's a certain whatever you call aura or something that's coming through there in addition to how we're putting ... We have a combination of the mystical stuff and also the science stuff, we're combining both.

Dave Asprey: It's easier for some people to shake their heads and say intent doesn't matter because it hasn't been proven to my personal satisfaction. I'll just stipulate that, look intent matters. It's made a huge difference in my life, and I don't actually care if it's placebo at this point, but I'll keep rolling with that and all of the most successful happiest, most productive like amazing people I know are all in alignment on the fact that intent matters, so hey you know.

Larry Doochin: Go with the flow.

Dave Asprey: Maybe we're all wrong but in the meantime, I'll give you that one.

Larry Doochin: Yeah, and I think I'm in complete agreement with you, I think that basically our intentions definitely our thoughts and beliefs create our reality, and so you seem like a very fun loving, life loving person. You are good hearted person, and so you are ... I think it's your intention of what you created to what you want to do. How you want to help people, how you want to spread the word about some amazing technologies, and what you're doing, and I think that's how you create your reality and what happens to you in life.

Dave Asprey: I would agree with that, in fact, that gives us a little bit of time to transition, you've written a couple books around personal development and things like that, so what's your basic theory behind it? Your basic making behind that?

Larry Doochin: Well, we discussed this a little bit, I came to this in a little bit different way than what you did, because I went through a standard thing of like emotional therapy, and so I was working off a lot of emotional trauma that happened in my childhood. As I was doing that, I was also working on my spiritual path at the same time because I believed that our emotional and spiritual paths are intertwined. All the religious traditions talk about God being love, and so I think we come back to a spiritual nature through our emotions.

I think the way that you do that is you have to release false beliefs and so we have a lot of beliefs, and some people have more beliefs than others and a lot more negative beliefs. So we get entwined with those beliefs and there's a certain frequency to that. There's definitely very much a frequency to those beliefs, and so as you release what is false inside of you, what is true basically remains and that's what comes up and that's what you work with.

Dave Asprey: Very well put, I wouldn't counter any of that. I have one more question for you Larry. If someone came to you tomorrow and said, "I want to perform better at everything I do as a human being." What are the three most important piece of advice you'd have for me? What would you offer them?

Larry Doochin: I would say become a lot more aware of yourself, and when you become aware of yourself, I would say, "Witness how you interact in life and with others." We talk about all the spiritual traditions, talk about like witnessing, taking a step back and seeing how you're doing things. So witnessing is very important because you can't change something if you're like ... It's like if you're in the forest, if your nose is pressed up against a tree, you don't know you're in the forest, so you got to take a different perspective and step back, you've got to take ... Get above the trees and see you're in the forest, and then you got to ... You have to make the decision to change the behaviors that are not productive for you, that are not in alignment with who you want to be.

Now maybe you decide that you don't want to be ... That maybe you decide you don't want to be a nice person, maybe you choose that, okay, but I think most people will choose like, "Okay, I don't want to do that, I want to be a good hearted person who's putting really good in the world and helping people." I think the first thing is witnessing that, and then the second thing would be taking action on that. Then just being aware of all these things ... Being aware of things that you need to do to ... Besides your beliefs but things you need to do to improve your life, and especially on the health end.

I think there's one of things that we had to be careful of is people will say, well this technology, or this supplement is good for everybody, and that's not true. There's no one thing that's going to do this specific thing for every single person, and there is a lot of people hawking that message. So you have to determine that this is something that you're probably the leader of the world on in terms of testing things, you've had to ... I'm going to say, you just have to evaluate things, you've got to read up a lot, and where appropriate you've got to test it and see what works for you to help you to be more healthy.

Because when you are more healthy and basically you remove the things inside of you that are preventing you from what I would say recognizing your divinity and those things can be physiological things like metals and toxins in the body, or polluting your body with fast food, or being around too many EMFs and then the other thing is belief. It's a multifaceted thing to be able to take a look at yourself and figure out, and make decisions, what's right for you? Because what's right for you doing certain things may not be what's right for somebody else.

Dave Asprey: I think that was number one was awareness, what are the other two?

Larry Doochin: That was like a multifaceted answer, you're going to ... Awareness is the best thing. Okay, I would say choosing to be the best version of yourself.

Dave Asprey: Okay, got it.

Larry Doochin: I think basically choosing to be kind in all instances. Realizing that what you put out there has immense ripples, even the smallest of gestures like a kind gesture,

a smile, a kind even a short word to somebody that has immense gestures in the universe. I believe that strongly that what we put out there comes back to us in a certain way, and that we are here to evolve and to recognize who we are, and to basically ... And to come into alignment with being the best version of ourselves, which is the divine self.

Dave Asprey: Very well put, Larry, all of your research and work is available at urielsound.com, [U-R-I-E-L sound.com](http://U-R-I-E-L-sound.com) and your company is called HUSO or UrielTones?

Larry Doochin: Yes.

Dave Asprey: I'm definitely playing with the technology here, people can find this at a few practitioners offices today. I think you've got a finder on the website for people who want to do that, and there's a home unit that you've also just started selling recently.

Larry Doochin: Yeah, we started selling a home unit this year. We're in a number of physician and health practitioner offices across the US, a little bit in Canada, a little bit in Europe, a little bit in Australia, mostly in the US on the professional model. Somebody can contact us and ask let's know whether they are at and we can tell if there's ... We are in a lot of the major cities but not all of them. We can let them know if there's a practitioner there and then we're selling our home unit off of our website. We're going to have a pretty neat thing in 2018 where basically we'll have great synergies between home unit users and professional unit, and professional centers so they can go and get prescreened for their own technologies, and then be able to download those into their box, their home unit.

Dave Asprey: That's pretty cool stuff, so maybe we can make traditional sound healing more effective, upgrade it a little bit and then make it more accessible, which is cool. Because I don't know that many world class sound healers floating around, and there's billions of people. So maybe we can scale this technology out which is cool.

Larry Doochin: Yeah, well, thank you, that's obviously there is very ... We've met many, there's many very good hearted powerful sound healers out there and people doing some amazing stuff with sound. We think we've developed something that takes this into where it can be spread and it can be in many people's homes, and achieve the same effect as if you go to a sound practitioner. Because there's only so many of them and they can only see so many people, and there's so many people in need.

Dave Asprey: Beautiful, well, I support your mission there, and I love how you're taking these older ancient traditions and ancient healing technologies and building on them. I think that's one of the core things we can do as bio-hackers, so thanks for your work, and thanks for being on Bulletproof Radio.

Larry Doochin: Thank you for having me.

Dave Asprey: If you like today's show, you know what to do. Head on over to iTunes and leave a review that says I really enjoyed this show, give us like 19 stars or whatever the number of stars you can leave us. If you think this show is worthy of that, I certainly appreciate the reviews. If you haven't had a chance to check out Head Strong, now is the time to read it or maybe even buy it as a gift for someone you care about. So you have some new knowledge about how you can upgrade your cognitive function. When you read Head Strong, you will find that there is a bunch of information there about how vibration affects your cells, and this whole episode at the end of the day is about how vibrations can be controlled, manipulated, and tuned so that you get a biological effect from that. That's cool stuff, and that's biohacking for you.