Brian Richardsu2019 background and Sauna Space

Hey, Brian, I am so glad that you agreed to be part of the M. S. and Neuroimmune Summit. So welcome. And what I'd like to have you do, Brian, is briefly explain who you are and why you have this expertize in red light.

Thank you for having me, Terry. I'm Brian Richards, the founder and CEO of Sauna Space. I, um, I had my own health problems a decade ago now and adrenal fatigue and insomnia and other mood related issues and skin related issues that led me on the path of self-healing and finding my own solution.

And I discovered the electric light bath, the original electrically powered sauna. It's using an incandescent light bulb. And I built my own and essentially healed my own problems.

And that inspired the formation of my company, Sauna Space. And I've spent the last ten years really pouring my heart and soul and a lot of love and some tears probably too, into this one concept of making the world's most effective, most perfect sauna experience.

And along the way, I've I've had to learn to research a lot and learn about the science of light therapy, the science of sauna and heat therapy. And that's brought me to where I am today. I have a company of 40 employees and we handcraft our products are sauna therapy products in Columbia, Missouri, in the United States.

And I now speak a lot about the science of light and heat therapy from this particular perspective of of the fire light and the history of our relationship with the fire and with the sun and why we love light, why we love it.

Okay. So I love this. I love my sauna. People watch me in Instagram. They see that I spent a lot of time in my sauna. So let's talk about this magic word photo.

Bio modulation. Yes. What about modulation? Very fancy word. It means like controlling biology. So it it refers to originally the the use of well, it's a technical term that that it's it's nature's basis is our exposure with sunlight particularly red light that we see and near-infrared wavelengths that we don't see.

And that's 700 to 1000 nanometer wavelengths. So this narrow band of light from the sun's spectrum triggers light therapy responses in our mitochondria and results in a lot of beneficial effects for the body.

So Photodiode modulation is defined as the use of red and near-infrared light to heal damaged and degenerate cells and to re optimize healthy cells.

What photobiomodulation is and how near-infrared light works

And that's every cell of the body. And what's really interesting is when we look at the sun, 70% of it is near-infrared light in terms of photons absorbed.

So even though we talk a lot about ultraviolet light promoting vitamin D production and we are visual creatures and we talk a lot about the visible light from the sun, the majority of what we absorb is in the near-infrared band.

It's in this band that is stimulating mitochondrial response and doing other things as well. Like it promotes cellular melatonin production. 94% of the body's melatonin, the world's or the body's number one antioxidant is produced through the exposure of our cells to near-infrared light, which we can get from hang on.

So the near-infrared light that our melatonin needs. Yeah. So melatonin used to be thought it was mostly produced in the pineal gland and then released through the blood to the body.

But now we understand actually newer research indicates that 94% of the body's melatonin is produced centrally in

the mind right next to the mitochondria, where all the oxidative stress occurs.

And we have all the free radicals being produced when near-infrared light hits the cells there, it promotes cellular melatonin production, which is a basically a built in antioxidant system to to heal the oxidative stress from mitochondrial work in cellular respiration all day long.

And and we get that normally from the sun. And if we don't get near-infrared light, we don't have this daily refilling of the cellular antioxidant reserves.

So that's and that's an effect in addition to the aforementioned mitochondrial response. And this is, again, in every cell of the body. So with light therapy using primarily near-infrared light, we we can heal tissue re optimize tissue and organ and cellular function and sort of boost our immune function or antioxidant reserves and heal oxidative stress, you know, the aging of the cell and and many other things as well.

So photodiode modulation has been really well researched. There's like over 7000 studies in the literature now and there are other are there are various art of manmade light technologies to produce near-infrared light and to produce red light to stimulate these healing systems.

But what we use is the incandescent bulb that's on a space which is the same type of light of the sun, which is a near-infrared focused light source. So again, the sun is mostly near-infrared in terms of what we absorb.

And the incandescent lamp mimics that spectrum in producing mostly near-infrared light. You see a lot of red light therapy out there, but near-infrared light is what goes in deep.

So if we want to do photo by modulation to our brain, only near-infrared light penetrates bone tissue. So we're better off using near-infrared light to do to do this therapy.

Yeah. Okay. So you have a lot of people with multiple sclerosis and immune issues are heat sensitive. And I was for a long time too that if I ran a fever, I couldn't function.

If it was really hard, I could not function. And so if they if they tried doing a hot tub or hot shower or a hot bath, they are much more symptomatic.

How how could they still get access to the benefits of photo bio modulation? Well, what's interesting about our sauna technology using the electric light bulb is we're using near-infrared light to heat the body.

So at the same time that we're heating the body for a heat shock effect and a sauna effect for the benefits of sauna therapy, we're also photo by modulating the body at the same time, and in the way we heat the body is near-infrared light, just like the sun does.

So you're heating the body from within. It's called radiant heating. So when we use light to heat the body using near-infrared light, just like the sun, we can heat the body up with the light itself and not with the air.

So we don't need the air to be hot. So in a sauna space, on an electric light sana the air is much lower and more gentle. And the addition of stacking on the the light therapy onto the sauna therapy really makes it a lot more soothing and gentle and enjoyable.

And so we see that with our customers and those in your community. Of course, the walls, lawyers and elsewhere, we see people being able to build up access to sign a therapy by using this more gentle approach and and also using less bulbs and sort of shorter durations of building up to building up a tolerance to correct a longer sauna session.

So in my clinical practice, so everyone is listening, we use a lot of near-infrared light if people are concerned to have them get just a single bulb unit and then let them know you sit as far away from it as you need to and you start with as brief a session as you need.

Because if you get symptomatic, if you have more pain, sensory disturbance than you did too big of a session for too long, and you just very slowly, gradually get closer to the light.

You have a longer session and you do it at a pace that feels comfortable. And so we certainly have people come in with one bulb. They gradually get closer, longer duration, then they can get to two bulbs at a time, then they can get to three bulbs that they can get to four bulbs.

Then they can enjoy a more regular sun. I don't want anyone in my clinical practice to do sinus sessions so long they become symptomatic. Mm hmm. Yeah.

Gentle sauna use for heat-sensitive viewers

And that's and that's also just generally with sort of users is we want to do only as much as our body can handle because we do have healing reactions and detox reactions where we sort of experience symptoms related to toxins.

We're detoxing. So we want to take a slow, methodical, gentle approach. And yes, some many people start out with just using the photon, the single light for many, many months and then slowly using our sauna, which also has multiple switches.

So you can start out with one and then add to three and four and even more bulbs and increase duration, you know, and as long as it takes, even if it takes many months.

Correct. You know, and I personally love my son. It's a lovely part of my routine. I go in and I read and I do my meditate. I'll do some dry brushing.

It's just very, very lovely. Now, why don't we talk about sweating? Should I get out before I sweat? Do I want to sweat? Do I want to sweat a lot? A little.

Yeah. If we so so so if we look at long term population studies with sauna, we see that the most impressive clinical benefits are reduction in all cause mortality and reduction of risk of dementia.

So people are increasing their health span. The years during which they're healthy, they're increasing that and the reducing the risk of dementia. And that comes from if we look at the sauna studies from sweating out £1 of water and raising core temperature three degrees Fahrenheit on average in each sauna session, and then ideally doing that 1 to 3 times a week.

So when the whole body sweats, we know that we've raised core temperature, three degrees in all the cells of the body. We've activated these heat shock protein responses that are doing detox and they're restoring and re optimizing protein function and fixing the body systems.

And that's what we would qualify as an effective sauna session. So, you know, you can weigh yourself before and after a sauna session. And the amount of weight loss is equivalent to how much you sweat out or you can measure your body temperature increase, you know, with the thermometer.

But that is the goal. Having said that, we, you know, was particularly with with the the autoimmune community, we want to be slow and gentle. And so even if we don't have a strong sweat response the first time or the first many times, that's okay.

But certainly it's definitely to validate, have we gotten a good sauna session and are we on on the on track to achieve those sort of longevity all cause mortality and the dementia sort of goals.

Then we definitely want to sweat out profusely in a sauna session. Now again, those listening. I know some of us have difficulty with our autonomic nervous system and you may know that you don't sweat as readily.

I have had a but I still would think you would have benefits from the red light therapy in that with persistent use, I predict that you would be experiencing better function of your autonomic nervous system, and I sort of had patients tell me that they have again begun to observe, that they sweat more readily and again, I would anticipate that this would be variable person to person.

How does a sauna help neurodegeneration? What do you think? Well, you know, there's there's there's sauna studies that where in songs been used for chronic fatigue and fibromyalgia and for for amelioration of symptoms.

But also there's spinal cord injury studies where you see improved like motor function with the task groups that do sauna. You know, when you heat up the nerve cell, for example, you produce something called brain drive, neurotrophic factor.

You know, it's a it's kind of like Miracle-Gro for your your nerve cells. And it's you're helping the cells rebuild themselves. And also with with the sauna, you're sort of conditioning the body to improve its immune response.

So it's called immune modulation. So we're literally with a sauna, you're inducing a fever state. It's what your body does when it has an infection here.

Sweating, detox, and sauna benefits

And and the reason it's doing that is because when we heat up the cell, we produce heat shock proteins that help cleanse the cell of of of toxins and and pollutants and also help fix proteins by folding proteins and moving them around.

So we see improvement in cellular function with with sauna, but also in in terms of immune function as well in the body. Yeah. Again and always listening is thinking like, oh my goodness, I don't tolerate heat.

They single bulb units you can keep farther away. So you're getting the red light and you just start with a small dose that you can comfortably tolerate without any sense of worsening of your symptoms and take your time to make these kinds of changes.

Yeah. And I should also note that our our single light, the photon therapy light is, is not just used for the reasons stated for the spot therapy in the red light and the, you know, the light therapy and the sort of symptom relief, it's also used as a fire light.

So it's used to cancel out blue light stress and flickering stress from overhead LED lighting and indoor sort of blue light. And it's a great way to have clean, healthy sort of circadian rhythm approved lighting after dark, but it's literally a fireplace.

So when we're indoors, we're missing that 70%. Photons absorb near-infrared spectrum that our bodies love it. The big part of why the sun makes us feel so happy.

And so we can introduce that into our indoor environment and make the indoors kind of like the outdoors. So people use it just as, you know, like a fireplace, like next to them all day long for technology fatigue and screen fatigue and and for enjoyment.

Thank you for reminding me of this. So I have designed my light, so I have full spectrum lights. Earlier in the day, a little warmer spectrum in the afternoon, and then in the evening we turn off those lights and we just have near-infrared and red light.

And so we have this beautiful warm glow in the evening. And I have only red light bulbs that I read by at night and a red light bulb in my bedroom, in my bathroom and my the rest of my family.

We once we did that, we're like, this is just a much more pleasurable light environment. If you when people come over and hang out with us, you know, and they sort of watch the transition of how we light our home in the

afternoon and then in the evening, they're like, wow, this this is really nice.

Yeah, I have you people can't put their finger on it in the beginning, but it's we get used to this all these blue light sources, but they really are stressful.

It's particularly after dark on our on our bodies. And so yeah, once you kind of shift to a more of a red light in the evening and near-infrared light, firelight, fireplace light, and then you go into a place where there's that harsh blue light spectrum you really can feel how irritating it is.

And, and even working all day long in that is, is very irritating. So yeah, it's, it's something that the light environment is very important. We're beams of light, we eat light.

You know, we're, we're converting photons from the sun into electrons and energy and healing in our body. And so we're very much affected by light and all this blue light from artificial lighting. It's called junk light.

It's it's damaging to us. We really need a balanced lit, balance it out with red and near-infrared spectrum. Absolutely. And, you know, I think for millions of years we're in the sun, in the sunlight, 24 seven.

Then we came inside, we became vitamin D deficient, developed rickets.

Sauna for neurodegeneration and immune support

And so we take vitamin D supplements. It's very good for rickets. And the supplement studies that use high dose vitamin D have been disappointing. And I'm not surprised because I think vitamin D is also a reflection of how much sunlight we get.

And so I guess I take a vitamin D supplement, but I'm also very tender to get myself outside every day, and I'm now very tired to make sure I'm getting myself plenty of red light and your infrared light as well.

And my sleep is so much better now that I pay attention to that. What where do you think your sleep problems? Insomnia. Very, very common for people with MSM nor immune issues.

Is this a strategy to help improve our sleep? Our customers definitely report that. That was also my my initial success at the beginning was I used this the electric light sauna that I built the the bricolage version right before bed.

So we know that cold therapy and actually sauna therapy promote improved sleep. There's something to do with the temperature change in the body, but also and that's just the heat of the sun are getting in there and raising your temperature and having a nice sweat session.

But additionally, there's something with the near infrared light to the photodiode modulation. It has a calming effect on the nervous system and you know, the light itself directly increases blood flow and tissue oxygenation.

So you see, you know, you can use it on the back of the head for a little bit for lymphatic drainage and for sort of generally relaxation. There's also this concept called Ogni.

Hoekstra This is an ancient are you Vedic tradition of of basically casting this the blessed ghee into the sacred fire at sunrise and sunset and and the waves of the the spectrum of the sun, the light of the sun hits the fire and the ghee and casts healing wavelengths, you know, onto the people around the fire.

So the scientific basis for that is, is, is in gazing into the sunrise and the sunset. And when we gaze into the sunset, we're getting we're programing our brain sort of to relax.

Red light, sleep, and evening lighting habits

After all this blue light that was high energy visible light during the day and a lot the ultraviolet light that kind of wore us out and to prepare us for sleep and ancestral humans had no light source after dark except the fireplace.

So they were going to bed early and true. And if we think about that, wow, if we want to have better sleep, you know, we, you know, pay attention to cutting out all the blue light.

As you mentioned. And there's ways to have replacement light sources in your home. So you're only red and near-infrared and then yeah, also using the photon and other near-infrared light sources, particularly this though, because it's so enjoyable to mimic gazing into the sunset, this agriculture thing of programing, the brain to get ready for bed.

Well, I have two ways. I like to get ready for bed. One has a nice bath and one is the sauna and I really like the ice baths. And then Mani said, You know, I don't like those cold looks for you.

Go back to just doing the sauna before bed. So I'd rather snuggle snuggle up to you with warm legs than with those ice legs you have. So. So I do more saunas at night and I'll do cold showers and cold plunges earlier in the day.

In the morning you say say happy wife, happy life. I'm sure you've had the same thing. Yeah, yeah. We've got to keep our loved ones happy for sure. We have to balance. Absolutely.

So I know. What would you say is the one thing you want people to most learn or take away from this wonderful conversation we've had. That everyone has everyone benefits from sauna and from near-infrared light.

And this and sauna space is providing a way to to try this out and really the most safe, gentle way that that exists out there in terms of sauna technologies.

And and if you're going to do sauna and light therapy, why have two different devices when you can do them together? So that's sort of our approach is more more intelligent, more smart and fun way to do sauna delay therapy.

And of course, we you know, we're all our products are handmade in the U. S. and we offer everyone free shipping on 100 day money back guarantee. So we just want you to try this out and see if sauna space is for you, whether it's our full body sauna products or Faraday sauna or even our photon therapy light is providing so much fun, value and comfort to people all day long.

Really? Not just for spot therapy. Yeah. I love. I love my red light, I love sauna and I. It's definitely a big part of my healing ritual. Me too. So, Brian, where do people find you?

So we find all of our stuff, all of our products on sauna dot space. That's our website sonnet out space.

Where to find Sauna Space and closing remarks

You can read more about in our learn section about the spectrum of light in the sun and what are the thermal light bulb that we've created, produces. And there's a lot of customer stories on there.

You can search in our and our customer reviews by keyword. So for people with autoimmune or other particular issues, you can hear other people's stories.

And of course we have a lot of content on Instagram and YouTube at Sonia. Space is our handle everywhere and. Oh, hang. I want to be sure it's at site at Sana space.

Yeah, on YouTube. It's on a space on Instagram, it's at Sonia space. Same thing on on Twitter and Facebook and TikTok. And yeah, we have in-house customer support for Monday through Friday.

So you can you can chat with us, you can actually call us up. Our products come with a lifetime customer success

support. So we're here to to support you along your healing journey.

Like all the way, all the way to the end. 120 years, I'm planning. So we'll be having these conversations for about another 60 years, my friend. Yeah, I believe you, too, if you're ever on such a healing path, Terry. Wow.

All right, Brian, thank you. What a pleasure. Thank you for having me.