Introduction and Guest Background

Hello and welcome to another Telomere Summit episode. I'm your host, Doctor Joseph Rafael. Today, I'm very pleased to have Rob Benner, on to talk about photo bio modulation and its effects in health.

To hear about his journey from, from helping his daughter with her illness through creating a world class company, delivering this therapy. Rob Messner, side co-founder and science officer of Fera Sage, has always been an advocate of natural health and wellness.

Graduates from Boston University and pre-med, engineering, psychology and business. He continued on to post graduate work at Case Western Medical School and Holistic Medicine.

After many years illness, Mr. Business teenage daughter was diagnosed with Lyme disease. And I'm going to tell you, he's going to tell you his story about that just briefly. In a minute.

He is also a professor for the World Federation of Chinese Medicine Societies, an annual contributor at the World Committee on Infrared, a member of the Education committee of the prestigious Hippocrates Health Institute, and a presenter at many medical, integrative and anti-aging health conferences, as well as an invited contributor on many podcasts, online summits, on air radio and TV health shows around the world, and he's also a bestselling author and considered a leading scientist in the field of integrated infrared technology.

Robbie continues to research and develop new device and health science applications to bring the power of healing with nature into the world. Welcome, Robbie.

I'm really pleased to have you on. And, I always like to start by hearing the interesting stories that brought our, our interviewees to where they are in their lives at this point, and, and the technologies and, science that they're doing.

Well, thank you for having me. Doctor Rafael. And, I'm really, really very honored to be part of your summit and to have the opportunity to share my research and some of the great results that we've gotten in our clinic.

And, you know, with the with your viewership. The the backdrop or the the basically the underlying story, the impetus of how we got started was somewhat serendipitous.

In a sense, my my oldest child, my my daughter contracted, chronic Lyme disease in her early teens. And I'm going back about 30 years now. And 30 years ago, the amount of scientific advancements and applications in Lyme disease was just, sort of scratching the surface in a way.

So we didn't have a lot of resources in terms of Lyme literate doctors available, and advanced methodologies and protocols at that moment in time. So having a medical background and other skillsets, it gave me the opportunity to kind of focus on my daughter's health and, and, and looking at, taking a deeper dive into the ways that she was exposing herself and the the way that she the ones that became most apparent were high levels of inflammation and toxicity.

And so when I kind of unpack that a little bit, I focused on toxicity and the best methods and ways to detox. And so we know invasive forms like dialysis and, and, and certain kinds of I. V.

therapies and then less invasive ones where you're using either a pharmaceutical based or natural homeopathic to stimulate some kind of chelating process to get toxins out of cells or tissues.

And then I discovered that they're actually wavelengths of sunlight that can mobilize all the toxins in your body. And that really intrigued me. So as I was starting to look into that a little further, I realized that there really wasn't a lot of

applications for the mainstream public to to gather again, devices and or protocols in that way.

In fact, 30 years ago, infrared therapy and photo bio modulation was mostly used by in the sports industry, by sports medical doctors to kind of lower pain thresholds and, improve the or expedite the ability for the player to, to heal from an injury and get back on the field.

And so all of that stuff intrigued me. But how does that apply to me and my family crisis at that moment in time? So what I, decided to do was organize a trip.

Lyme Disease and the Origins of FeraSage

I went over to Asia. I spent, better part of six weeks. I interviewed more than 50 different factories and started developing devices, mostly for our home use.

Daughter experienced some really great results from them, from these devices and applications. And her doctor, she had a team of doctors at that point.

Noticed that and ask that we start to develop these devices for their patients because most of them or most of these practitioners were their practices were almost 100% Lyme disease and co-infections that that follow, in the, in the path.

Or they travel together as families of microorganisms. And so and so we started to develop these devices. And that was essentially the genesis of, of Saracens, the company.

And so, now as time moved forward, obviously Lyme disease, has advanced greatly not just in the, in the tri state area around, Lyme, Connecticut, which they consider ground zero, but it's fairly well spread across the U. S.

and has actually spread, I believe in pandemic, proportions around the globe, mostly because we really don't have a statistical data to support a lot of the cases, because the Lyme disease mimics many other kinds of infectious diseases.

And so it's greatly misdiagnosed and obviously mistreated because of that. So, so, but bringing us back to, to, the central point, it is clearly a problem.

It's not the one that's in our face today because we've got the the pandemic and the covet challenges that we're working with globally. But certainly it's in the backdrop and it's one of the big ones up there.

And, one that I think needs a lot more attention to, so it is something that we do focus on here, there. Sage and, and, with my company, with my research now, what so unique about, what we found in terms of understanding light energy was that the light as a wavelength, and creates a frequency in the body.

We call that bio resonance. Just like sound waves. Light waves have a resonance in the body, and certain light waves actually resonate at the same frequencies that our bodies resonate at.

And as I discovered and started to dive deep into the research on this, I realized that there were really many, almost a systematic approach that light energy can affect in in creating what I call a primal healing platform.

The body. And that's really where we have center most of our research for the last close to 25 years. And our company. Wow. Yeah. So that is a really interesting story.

You you had a need, a loved one and that created a passion that then you saw how effective it was. Let me ask you a just sort of a little bit of a primer on infrared.

I mean, we've hear about various technologies that are sort of non-medical ones. What's the basic physiology? We're talking about wavelengths. And then and you said it resonates with certain, I guess cells and mitochondria

potentially, for our sort of, you know, fairly educated listeners.

How does that work? Okay. Well, let me start with the sun image frequencies, and there's a full range, they call it the electromagnetic radiation that comes from the sun.

And it's stems from or it's spans from gamma rays all the way to radio waves being the least of, let's say, the most benign on the body infecting our health infrared spectrum.

So it's sort of right in the middle and it actually represents, or is responsible for heating 82% of the Earth's surface. Infrared frequencies do not, there are wavelengths.

They have three different sections, the near, mid and far each of those wavelengths, two different things to the body. That's what I found so intriguing.

And as nature delivers these wavelengths to the Earth, actually some scientists like, Nikola Tesla and, Albert Einstein, they actually together did some work.

But Einstein did a study in their early 40s that, studied the suns, the effects of sun and thermals on all life on the planet, and came out with fairly broad statements that without the infrared spectrum, there really wouldn't be life, both in the plant and the animal kingdom as we know it today on the planet.

So that's how important these wavelengths are in stimulating, systematic, primal healing in the body. They're responsible for structuring the water in the body.

Well, why is that important? Because when we have structure water in the body, then we have better cellular communication. Right. And also having structure water is responsible for what's called protein folding.

So we've got trillions of strands of proteins in the body that are looking to get sort of married together. And what the, the sort of the glue or the excipients that holds it together is actually a structured water molecule, a single structured water molecule, absent infrared spectrum, or that light frequency resonating in our body, that water would not be structured.

The these strands of proteins would not fold around, and we wouldn't have a full protein formed that the body can actually use, which is obviously for people listening, the one of the building blocks of a primal health.

So these are just some of the deeper science that infrared frequencies, can do to help heal the body in many ways. And so today's topic is, you know, telomeres and life extension are anti-aging.

And there are multiple systems that infrared frequencies, the spectrum the full spectrum can influence in order to, support, the slowing of the aging process and mostly just creating a health of really good health and wellness platform for for longevity, or at least for as long as we're here, we're living in a healthy format.

So, just a couple of terms that I probably should know, but structured water, as opposed to unstructured water, what what is that? Okay, well, this is the body of work from Doctor Gerald Pollack, who's probably considered the world's authority on water.

Now, he wrote a book about 7 or 8 years ago that was revelation and called The Fourth Phase of Water. And in his studies, clinical studies, he noticed that the water inside the body is taxed differently than water outside.

And as we all know, probably from high school days, water is either a solid, liquid or gas. But actually the water inside of us acts differently.

Infrared Light, Bioresonance, and Structured Water

Hence the fourth phase of water. Now, in order for a cell to actually methylated properly, we need to have

structured water in the body. The, the water acts as a transport system.

Structured water acts as a transport system to get, nutrients into a cell and to allow the cell to get, export toxins and waste products. So. So what?

Doctor Pollack noticed in clinic was that all of his patients that he studied, that had structured water, that had enough sunlight to have structured water in their body, they were basically healthy.

Their cells were functioning properly. They had great vital signs and so forth. People that didn't get that sunlight were absent, that they were more on the clinically, sick, diagnosed, status.

So it was very clear to him that light frequencies in particular, infrared light frequencies, were responsible for creating that, polarity between sickness and and or disease and and health simply by cell function.

And you might agree that we probably get sick on a cell level. And we also heal on a cell level. So everything that we can do to support cell health, is going to, kind of cascade into general health, general tissue health, organ health, and in systems health for the body.

So, that's great. Yeah, that's a great explanation for the, the structured water, the, the, the you're we're mostly talking therapeutic about near infrared, but there's also mid and far. Yes.

And I guess we think about radiation as generally being bad. You know, gamma rays are not good. Radiation therapy fries things. This is non thermal radiation and it's generally really good.

I mean from what you're telling me it's almost like we need it as much as we need oxygen. But maybe be a little slower. You know, you're not going to die as quickly from it, but if you lived a mile underground for a long period of time, you know what you're telling me.

You probably won't have a good as good health as if you, you know, got up to the surface more regularly. My correct in thinking that way about it. Yes.

And I'm not looking to go underground right away, but I think when you put it like that, yes. Probably more obvious for people to know and it this is a little different range of frequencies.

It's more appropriate for the UV spectrum, which is just before natural light, which is just before the infrared spectrum. Right. But but people may relate to Sads, which is a condition of basically light deprivation.

That happens mostly around wintertime and or in the more northern areas of the world, whether it be US or European. And and that light deprivation, what it does is it creates, emotional distress.

And, and also people, their bodies don't function as well during, during winter times. Well what's happening? You're it's colder. You're wearing layers of clothes.

Your skin, which is a photoreceptor, is getting less exposure to natural sunlight. Hence all the things that we're going to be talking about today. And my whole body of work slows down greatly during the winter times, which would suggest that having devices or ways to supplement, just like we do with a nutritional supplement, you can supplement with light and in fact, in certain parts of the world, like the Baltic countries, which I have through my studies, have come to understand that culturally, many of these societies have embedded light frequencies and infrared sauna and saunas in general for both detoxing, general health and wellness and to offset, the, deficiencies that they have in their part of the world because of the azimuth or the, the, the, the angle that the sun touches the earth at that particular time of the, of the season for them.

And so, so light is a big is not. Well, it's not on the the top hit list, like you say, we won't live very long if we don't have water or we don't have oxygen.

But no one really thinks that if we're light deprived, that in fact, it would create a physiological, challenge for, for anyone. But in fact, it does.

And it does move in a much slower pace, meaning the withdrawal from light frequencies will show its symptoms in a way, a lot differently than they would from starving from food, water or oxygen.

Yeah, that's that's interesting that I mean, it's known that higher latitudes have increased incidence of autoimmune disorders, infections and chronic diseases.

You know, some of that was thought to be from lack of vitamin D, but it's probably more than that. And quite likely is, so that's a, that's a that's a really good explanation for getting down to the cellular sort of molecular level.

How is it working, for instance? I mean, seasonal affective disorder is I mean, I certainly understand that and want to get that in New York soon as I can after the, after the holidays.

And I do use light therapy. So I think it's definitely a real thing. If and if anybody suffers from it, that's absolutely, something important to do. But at a cellular level, the structured water makes things, I guess, function better.

Is there more molecular detail that we know about? In terms of, you know, epigenetics gene, you know, Gene expression, mitochondrial, health, that that gives the benefit.

And then as a secondary question, you know, how is that harness to to deliver therapies? Well, it's interesting because as we unpack the different wavelengths within the spectrum.

So you have near mid and far you referenced near infrared earlier. If for people that would be researching today, there's a big range or a big divide between the effects of Nir and the effects of fire.

Of course, the providers that that make fire devices say they're the greatest, the ones that make the nerve say they're the greatest. And the approach that I've taken is more of one following a page out of nature's playbook.

Because the sun delivers on a nature, delivers infrared and a full spectrum that's both near mid and far. And what we did in our research point of view, NASA actually publishes the amount of these frequencies, which are measured in nanometers up until a thousand nanometers, and then they're turns into a micron.

So the full spectrum of infrared is from 600 nanometers to almost 20,000 nanometers, or 20 microns. Now, what being said, these different wavelengths, they kind of it's almost like a step like a FM station.

They all dial in with specific frequencies or specific nanometer frequency measure, and they all do different things. And so the nearer what are near frequencies are principally responsible for things that are skin related.

Skin at around three centimeters deep is that of general penetration. But they also will stimulate mitochondria, which is, you know, the ATP, ATP, cycle, circadian cycle, and also, is the powerhouse of the cell.

And so that's very related to anti-aging and to the length of the telomere, because if we can do something like bringing in Nir or infrared frequencies to the body on a regular basis, then we can extend the telomere length.

We can support mitochondrial and cell energy, which, really is a really important, system in order for us to all be healthy and, and to, you know, support our immune systems and various other systems.

It all starts and comes from the cell. So the Neo frequencies do that. They also produce a natural transient gas, one of the three gases that the body makes.

And it's called nitric oxide. Nitric oxide is two things that create dilation, which increases metabolism. Also something that is great for anti-aging because the more we can move blood around, the more exposure to our tissues of whatever nutrients are in our blood, which are the DNA, RNA factors as well as, nutrients, for supporting

cell health and tissue health.

And so increasing metabolic rate is very important both on a micro level, which would be your capillaries, the smaller ones, which is more appropriate for the new frequencies, but it also triggers the hemoglobin or your blood cell to grab more oxygen when it makes when you make it available.

So wonderful synergy or SAC would be to marry nitric oxide and more oxygen like ozone therapy for instance, or hyperbaric therapy.

Near Infrared, Mitochondria, and Telomere Support

And so if you have Nir frequencies and or a nitric oxide supplement and you combine that with an oxygen, an enhanced oxygen source, then you're really talking about changing your physiology, the chemistry of your physiology, on the inside, which obviously manifests, in many different ways, and helping the body, keep a stable microbiome, for instance, which affects your GI track, which also support your immune system.

I mean, there are cascades of influences that the area that we're, working in can help to support good health. Well, that's, that's it. I mean, we've had I've had a, hyperbaric oxygen therapy, expert on, and, hydrogen water expert on and various people that have these different modalities.

And they seem to be there may well be some significant synergies. Did you, you know of any, papers looking at them working together? Is your company done any research on putting them together?

Because I mean, something that you certainly could do in the larger, hyperbaric oxygen therapy chambers. But if you have into, you know, then the next question I have really is, you said potentially lengthening polymers.

Have you seen any, actual lengthening of telomeres in studies? Telomere attrition, slowing can be can happen for many different ways. Pretty much everything is good for you.

Slows down attrition of your telomeres and, and that's because of reduced oxidative stress and more antioxidants around, etc.. More, more, more mitochondria, a better mitochondrial function.

But have you seen actual increases because they have published after for hyperbaric oxygen therapy? What one group in Israel published that recently? Have you seen any of that?

Well, we see a lot of studies in different areas. Like, for instance, we are signaling molecules. Many of these systems just like nitric oxide and redox signaling molecules as we start to age generally.

I don't know why this is, but the precipice seems to be, late 20s, early 30s, that at that point, as we're aging, we make less nitric oxide. We our body produces less of these, redox molecules.

And so, so that's that then, you know, following that train of thought, we're getting more oxidative stress and we're getting less oxygen in our blood or our blood's ability to hold onto oxygen.

And this is all contributes to our aging process. And so you can easily extrapolate that if you can supply more oxygen to the blood and, or you can supply more redox molecules as infrared frequencies do, and that stuff has been that kinds of science has been researched, has been proven in clinic, and also expresses in the way that patients respond to, to this kind of therapy in terms of healing themselves from potentially infectious or chronic elements.

And so so they kind of all work hand in hand. And some of the specialists and I'm very fortunate because in my small area humbly said, I've come in contact with some of the greatest minds in the areas of research of nitric oxide.

For instance, Doctor Nathan Brian, has the company and he is the protege of the Nobel Prize winner who

discovered nitric oxide. A personal friend has developed supplements, and we actually stack and use these protocols with our some of the devices that we've developed in our company.

And so so when we we interview a patient and they present themselves with certain symptoms and we see that, or we work with a doctor in their clinic as we dialog with them and get a better understanding of what they see in their clinic and their normal demographic, we can easily, show them protocols that we've developed and the devices that we pair them with and in our body of work that will enhance the efficacy of, of that platform, of the system that that doctor and or that clinic is treating in their with their demographic.

And so we have seen in many areas, we use different kinds of testing, equipment. Besides the electronic testing, we also use heart rate variability as a noninvasive way to understand, exactly how the autonomic nervous system is affected by, the, the, our body of work or the infrared frequencies.

By the way, our approach has been a full spectrum approach. And so in nature, the sun delivers a near, mid and far. In a certain proportion it does change or vary almost second to second because our atmosphere becomes a lens that and or a filter that actually changes the that cocktail.

But what we did as a company on the research side was we took the first, first and second standard deviation of the data that NASA has produced to show us how much, how much of these frequencies and and what proportion they come to the Earth on a daily basis.

And that's been sort of our secret sauce behind the the way that we develop our technology. That being said, three years ago, I have been teaching for more than 20 years at Hippocrates Health Institute here in West Palm Beach in South Florida.

And I teach in a room that has a big mural of the properties. And I was it was bothering me after the first 18 months. And I thought to myself, you know, one of his big sayings is food is your medicine.

But the food as a pocket is day is much different than the food of today, right? Right. So is our environment. And so you mentioned epigenetics a little earlier.

The way that our, our lifestyle choices and the environment that we're living in these days has affects our DNA and RNA, and the way that we express ourselves.

And, so I decided to shift a little bit from the playbook that nature gives us on a daily basis to really adjust to the times that we're living in. And in doing so, our latest iterations of our own research and development has been in devices that actually incorporate more of the Nir frequencies in proportion to than what was normally delivered.

By nature. We've actually dialed up more of the new frequencies to address mitochondria stress, problems and so forth. And so, I believe that we're living in a dynamic time and we're also living in a very dynamic environment of which our bodies are all we're seeing it in every different way.

Chronic disease is off the chart. And the direction of the actual ascension of the, of the growth of these various areas of the chronic disease areas are ascending and they're not coming down with all the money and all the research that we're putting into this.

And so I think in through the evolution, we're not just seeing advancements, but we're also seeing in the advancements of the way that our environment is affecting and our choices are affecting our overall health.

Those are that's really what the the deeper the statistics are showing us. And what's really alarming to me is that the ages that people are affected, being affected by their environment are coming down.

So we're seeing and you may see this in your clinic as well. We're seeing, you know, women in their early teens, showing signs of infertility. Then 18 or less that have low testosterone levels.

This is not a genetic expression. This is more of an epigenetic expression. And I think, we have real solutions that are not expensive, but it starts with us talking like today and creating more awareness as to the ways that you can stack different kinds of, interventions to create a much greater result than just the, the single ones by themselves.

Yeah. That's, that's very interesting to work with, Doctor Brian, that you've done, of course, aware of him and use his products in my practice all the time.

And, and myself, they work great to to be able to couple that with, the infrared therapy, full spectrum. I mean, when you're talking about, how you move towards more of the nir, even though that's not, you know, that there's a full spectrum of infrared that comes through.

You know, we evolved as a species in an environment where we, you know, restart peak of health around age 25. And, the vast majority of us were gone by age 45, certainly 50.

Yes. Some lived to be 50, 70, 80. But we're optimized for perhaps the needs of that full spectrum in those proportions when we're that age. But as we get older, we may need more of the, the nir.

And that's what your research is showing. And it's not you know, we're a species out of its natural environment. And so thinking that way I think is actually the right way to think about it.

Because, you know, we don't move around as much. We have these, decreases, probably more rapid decreases and longer time for decreases in NAD either, you know, the redox molecules, and nitric oxide to decline.

So I think that's, that's, that's really fascinating. Let's, let's talk a little bit about, I know there's conditions that can be treated with, with infrared, therapy, the overall aging process.

What would you say would be for somebody who has who's functioning, you know, relatively well, there's we all have our strong systems in our weak systems.

But what kinds of protocols, what kinds of things and what kinds of devices. And then also what kinds of results would you expect, for someone who wants to be proactive about their aging process, improve their performance, slow down their aging, and perhaps through all that affect their telomere length?

Well, that's a loaded question. We probably would need more than just today's interviews. Well, I mean, it's a start. I mean, because I'm like, let's say I'm asking you as this somebody I was thinking about and I have many patients who are asking me, you know, asking me, you know, Doctor Rafael, there's a lot of devices out there.

What should I be looking for? What's the best? One of the ones. The ones who stand in front of the ones you. Where? You know what frequency? I know there's, obviously it's a hot area of controversy that you mentioned earlier, but some basics about what one might consider, if one wants to.

Well, I mean, I know that one of my patients, I look at many, many biomarkers of aging, from the vast majority of ones that you've seen in the literature.

Protocols, Sauna Use, and Detoxification

One of my patients that's doing the best and actually reversing her aging from many markers, is employing, you know, fasting, PBM, PMF, you know, various other things that she's on hormone therapy, but a lot of my patients are on hormone therapy.

A lot of them are on telomerase activators. And so I think it's going to it's coming to sort of where there's a multi-modality approach to this. I think it's going to be really important.

So I know it's a it's a longer discussion. People can go to your website, I'm sure, to look at the options. But I mean, how often would you stand in front of a light or have one on you, for general improvement of mitochondrial health

for.

And then we can talk a little bit about skin. I was I was curious about that because I know when I go to my dermatologist, they have me stand in front of a light, for a bit.

And, you know, usually with dermatologists, they're they're like vampires don't stand in front of any light. So, so with that, maybe take a stab at this line.

Some light has changed quite a bit, too. And I think before. Well, I'm in South Florida, so here they want us to slap on these carcinogenic, sun blockers.

You know, before I even step out into getting any sunlight because of potential harm with carcinomas and, and, various different skin, related challenges or damage.

I think the big ones, in terms of my body of work would be probably the ones that affect, aging in general, like better sleep, better diet. And toxicity is probably the biggest one we make.

We're living in a toxic environment. People know that when, when, you can have a food source. And I'm not against Twinkies by any means, but when you can go to a gas station, buy a Twinkie, that's got a shelf life of 500 years, you start to wonder exactly what actual natural nutrients are in that Twinkie.

Okay, again, nothing against Twinkies. So, but the but in terms of toxicity, the body absorbs toxins in many ways. And for the most part, the ones that are that are, environmental are the ones we will get in, taken through basically water, food and air and absorb a lot through our skin.

And the layer of fat just under our skin actually will hold close to 70% of our toxins. So, so, so in the detox process, one of the devices that we make and our company is an infrared sauna, for instance, and there are other sauna, competitors and device developers out there, and they make pretty good devices.

Again, we've taken a full spectrum approach, which is different than some of our competitors do, mostly, again, because we're trying to harness nature's playbook.

And in our belief system, there is something in full spectrum for everyone out there because similar to vitamin C, the body will absorb what it needs.

And when it doesn't, it just sort of stills spills out. The same thing with these light frequencies. You can't get too much of them. Whatever you need or whatever where the deficiencies are, the body will take that from again, from the full spectrum.

When you when you offer that and then whatever doesn't need it just through the process of, of homeostasis will actually just let that, frequency go. And so we got all the benefits without any of the drawback.

Quite Revelator. Now the detox point of view. And the only caveat to this is let's say for instance, for instance, infrared sauna. If we had a, an older person, an aged person that was presenting very fragile and, I wouldn't necessarily throw them in an infrared sauna and tell them to stay there for an hour, even though that's what they need.

It wouldn't be where I would start. Similar to if I were swimming instructor, I wouldn't throw you into the deep end of the pool without a life preserver.

I'd probably start you off in the shallow end. If you are really presenting gradually the medium just put your toe in the water where you got comfortable with the depth.

We got comfortable with the temperature and then gradually walked you into the deep end. So we are very conservative for a very low and slow, process in our protocols so that we are able to check in with the practitioner,

the leading practitioner in mind, and also with the patient, making them aware of exactly what signs of detox and recovery they're going through so that they aren't alarmed.

Number one. And secondly, that they can, adjust accordingly. And so hydration is a big part of this. Earlier we talked about, light frequency structuring of water.

But many of us, even today, we're a body. We're a country that drinks a heck of a lot of water. But we are not cellular hydrating. And the reason why we're not cellular hydrating has to do with sunlight.

Because if we are deprived from these frequencies, then we're not structuring the water so the cell isn't actually holding on to that water. And so it's not using in the right way.

In fact, the water is just passing through us. So that's important for us to know. And in order for us to detox properly, we have to be we have to be hydrated.

And so that's in our protocol. But you asked a very important question how long do you stay in front of the light. And and so it really depends on your end game.

What are you looking to try to achieve. Right. Like in any kind of diagnosis and protocol. And so, generally speaking it for the average adult it takes close to eight minutes to get enough infrared frequency in their body for there to start a physiological that.

And so we look for a threshold, at least in the beginning, while we're acclimating for something between 20 and 30 minutes at a very, good, good heat or, easy heat around 125°F 230, which is really just maybe like 22 to 24 degrees higher than your normal core temperature.

So it's not enough to cause heat frustration like the other kinds of saunas per se, like a hot Roxana or steam room that are 185 to 200°F. Or some people have even trouble breathing in those hot environments where infrared sauna, you get absolute.

Just the opposite. If my schedule could permit, I would probably stay in it for hours on end because of the benefits. But again, I've been doing infrared sauna for close to 25 years, almost every day.

And, it is important to understand that this type of therapy or, photo bio modulation is a cumulative kind of therapy. So the more you do it or more often you do it, let's say daily and or the, and the time and temperature you do it will make all the difference in the benefit or the result that you get.

So a great analogy is this, Doctor Rozell, do you have any animals in your home? Do you have a dog or a pet of some? Yeah. Cat. Okay. Okay. So let me ask you when your cat is comfortable in your home or your apartment and it's Sunday and you know you guys are just waking up, your family is waking up and then you open up the shades.

Do you ever find your cat or your animal and people out there listening can maybe be able to relate to this? They kind of meander from their pet bed or wherever they were comfortable, and they sort of move towards the window or the glass or the, or the, sliding door.

And then they do one of these things where they kind of roll around and they kind of bask in the sun and so forth. So are you can you relate to that? Yeah.

No question. They're always looking to find where the light is shining in and they'll will curl up there and they'll move with it. I definitely noticed that.

You ask you, did you teach your cat how to do that? Did you train your cat to do that? Oh no. No, of course not. They just have something they do. We are here.

We are that like a child. Animal. They're they're they're showing us the playbook. You know, like, here we are, the most intelligent high end of the pyramid, right?

Yet we don't meander ourselves. We don't find ourselves going over to that same pane of glass, getting that sunlight. What they're doing is what nature gave them that information to do.

Which means we are light beings, all animals and plants on the planet. And so we need infrared spectrum every day in order for us to be healthy, a certain amount of it.

Generally it's somewhere between 20 and 30 minutes for the average adult. But the caveat is, is that in our busy lifestyles, we don't get out. If it's wintertime, we hardly get out at all.

Maybe to get that sunlight. That's why we need to supplement or understand that in order for our body's systems to function, our immune system to be supported, that many of these, even on a cell level, mitochondrial health, natural production of antioxidants, things of that nature.

We need the sunlight. We need at least 30 minutes of it every day. And so as a company, we developed techniques and devices and protocols that allow us to enjoy our lifestyle, busy lifestyles, and also get what we need from a physiological point of view, to be healthy every day, at least to create that healthy platform.

So that's a really interesting, anecdote about the cats and, or animals in general. And I think you're absolutely right on like that. I'm always looking for the sun.

But, in terms I'm just a little bit of confusion in my mind and, you know, forgive me, I'm a neophyte at this. There's infrared light in there. These things that you can stand in front of that don't necessarily heat you up.

And then there's infrared sauna. I take it that you get the benefit of the infrared with these things that, you know, that can give you the frequency of light, but it's then there's just added benefit sitting in a sauna that also warms up as well.

Or, or, you know, for those that can't, don't have the space or can afford that, then standing in front of a light or there's also ones that you drape on you.

I know that for a while there for my hair, you put one of those caps on that gives you that's a I guess, a little bit different, but it's, essentially photo bio modulation as well.

There's a difference between those two. The sauna part is additive to it. And, and you can still get quite a bit of benefit from and it's the same amount of time, I guess, standing and, and you have protocols and different devices for all that or so.

Let me explain to maybe we'll dive a little bit deeper on that, because it's important for people to know. So there's basically two delivery systems. There's convection heat and then there's radiant heat.

Right. Infrared is radiant heat. That's light waves in a wavelength. So some delivers radiant heat or these wavelengths to the Earth. And it does not heat up the ambient air, the atmosphere between the sun and the Earth.

It just shines on the Earth. And the frequencies are absorbed in the Earth and in our bodies. They're absorbed in the densest parts of our bodies, which is our muscle mass or organ tissue.

And so, so it as opposed to a hot Roxana or a steam room where you have an element that heats the ambient air up and then the air touches your skin, and it has to warm your skin at a very high temperature in order for it to pierce through that insulating layer of fat under your skin.

That's designed by nature to protect our insides from extreme heat or extreme cold. And so infrared works differently because it actually resonates. Like earlier we talked about the frequency as well.

There's a frequency of water inside of our body, and the infrared spectrum actually resonates at the same frequency as the water. And so almost 72% of a fat molecule is water.

And so when an infrared ray or wavelength comes into the body, it actually resonates called a by a resonance. It's a vibration and it penetrates right through that insulating layer of fat.

So hence we don't have to have a high elevated temperature in order to get all the benefits. Right. And it now comes into the body and it's resonating.

It's actually vibrating in an organ or a muscle tissue which are the most vascular parts of the body. And so when that vibration actually liberates heat warms up that area warms up the vessel, creates vessel dilation.

Now we're increasing metabolic rate your blood flow by close to 15, almost 20%. And all the attributes that go to that better oxygenation, better nutrition but or potentially aiding nutrition.

But by your own tissues and organs and so forth, cells of the body. And so all of these, functions are all circled around these wavelengths. And so, yeah, they, they work in that way.

So, the sauna then sort of just combines them when you're in the little in the box, combines the it's it's warm inside there as well. And then there's also the infrared.

EMF Stress, Microtoxins, and Modern Environmental Challenges

So it's a combination of those two when you're standing in front of a light do you feel warm. Not on your skin I guess, but you feel warm inside. You start feeling warmer. Inside. You okay?

And it doesn't matter whether you're. You said. You said three centimeters deeper is your full spectrum. Go deeper. You're in near frequencies or penetrate three centimeters.

The far frequencies will go somewhere between 6 and 8in, depending on the density or the BMI of the of the patient as they present themselves. And so that varies from person to person.

But but generally that can be adjusted by time and temperature. And the temperature will promote sweating which is one of your best detox pathways. If there were one, only one thing we could talk about that would be today to extend the aging, slow down the aging process or extend your life.

I'd have to say, if, given today's environment, if we could lower your toxic burden on your body, which also lowers inflammation and keep your body hydrated, we're going to improve that.

Your overall profile greatly. And so that's the big message an infrared sauna using it regularly will help detox the body. Keep your detox pathways open and help support your immune system.

It will also, affect your autonomic nervous system. Shift you from from sympathetic dominance that fight and flight very anxious feeling to being, less stressed, more relaxed.

We all know from therapy and clinic that when your body is in parasympathetic mode, you know that your body will receive almost any therapy and and embrace it in a much greater and more sustainable way.

And so by simply going in infrared sauna, we we in our protocols, we suggest that you follow nature's playbook and go in the earlier part of the day, almost when you wake up, similar to the way our ancestors, way back when, 8000 years ago, we lived on the land, we lived in tents, in caves, and we woke up to sunlight.

It woke up our body systems. This is the power of what we're talking about when we harnessing, natural sunlight, and particularly the infrared frequencies.

Wow. So that's that's sounds like, it needs to be done pretty frequently in terms of. I'm just curious. Right? I know there's lots of studies looking at applications and various conditions.

Are there any hard endpoint studies looking at sort of markers of the aging process and say, a six month course of or even eight week course of, infrared therapy?

On a, you name it, some process of the aging process. I'm not familiar with the literature. Well, you know, again, we've taken a more systematic approach.

And in all of our work, we have proven our own work in clinical, clinical applications. But we backed it up by PubMed in various different articles and research and essays from the New England Journal.

There are many, many publications that we can reference, and I'm very happy to supply that to you. In any area that you feel comfortable to give to the audience so that they can feel comfortable researching and understanding exactly how deep the sciences on my area of my body at work.

So, yes. And we're happy to do that. The other area that I think is really important and it really comes under the bigger category of stress, which also affects our aging process.

And today we have another stressor out there, a more modern one, which is the effects of the exogenous frequencies that were being influenced by like, magnetic fields.

And now the newer one that we've been doing a lot of research on, which is extremely low frequency, is coined as dirty electricity. They call it. But all of those, manmade frequencies do affect us.

So today we've been talking about a whole bunch of frequencies, sound frequencies, like frequencies. But there are these manmade frequencies and EMF, 3G, 4G.

Now, 5G is the government, our government and the military are actually posting seven and ten G, amplifiers on the same micro towers that they're delivering our phone systems to.

So the challenge here is that we can't see them, hear them, smell them, taste them. And so but we can see certain ways that it does affect us for instance, there's a practitioner in the Pacific Northwest named doctor teacher Clint Hart, and he's done a blood study where he studies the, the effects of microbial activity in the blood, meaning that a microbe, a parasite, a mold they will in their life cycle, they basically die.

That's a toxin. They have biofilms that surround and protect them. And they also poop, which is either a neurotoxin or a micro toxin that can be measured in blood.

Study. And so what Doctor Klinghoffer did was he took 200 patients. Half of them, or 100 were from the urban areas and 100 were from the rural areas, all basically drinking the same water within the same air and eating the same food.

But the difference, dramatic difference is the concentration of microbes, wave towers and cell towers in the cities versus the rural areas. Well, it turns out that when we measured the micro toxins, there was an 85 to 90% higher, higher levels of micro toxins and neurotoxins in the blood serum of the people in the cities.

And the only way we can explain it is that these exogenous frequencies are actually energizing. The bugs and the bugs are are replicating. They're using more of your body resources and they're pumping more.

Wow. So okay, so this is fairly significant on a stressor that is more modern but still affects our aging process greatly because stress is a big one.

So, infrared frequencies will pull the EMF that the body is holding. We as a company started studying and remediating EMF almost 17 years ago. So we are very advanced in our own applications and the way we

remediate to so that when you're sitting in one or using one of our devices, you're getting the pure frequency that as the sun delivers it.

Not all the manmade effects, like the electronics and the emfs that might come from, from, the device itself. And so you're getting all the therapy without any of the, drawback.

And I think this is important for people to understand that the body is affected by all these stressors. And, of course, ultimately, it rolls up to affecting us and our aging process or our ability to maintain good, vibrant health to almost our last breath.

Well, that's a really, I think, a good way to close our discussion. Unless, you have some final words you'd like to say. This has been a really fascinating conversation.

An area that I definitely want to learn more about. Having lived in New York City for the past 25 years, bathed in all sorts of electromagnetic and other kinds of toxins, and pollutants, it's time for me to do more detoxing.

You know, and, so, do you have any parting words? And certainly, you can just say any, your website is there SARS-CoV, is that correct? Yeah. It is. You can get us by 800 number, which is 888416 4441.

You can email us at info info at. There's a PhD, a shaggy.com or go to our website.

Closing Thoughts and Contact Information

We also are public on Instagram and Facebook and so forth so you can contact us that way in partying, you know, we're living in a sort of a tumultuous terrain these days, both environmentally, from socially, politically, all that stuff.

It seems to be hitting all at once. I think that it can be easily you can easily be overwhelmed. You know, we have a tendency as practitioners to focus on, and compartmentalizing, the challenges that as the patient presents themselves, I think it'd be nice to take a little bit of a step back and look at things more holistically and then and more systematically that how things affect each other.

And and I'm happy to be here today to at least introduce the idea that you can harness such an energy as we have in various different devices and applications and, and the appropriate protocols to improve the efficacy of whatever the doctors are doing that are listening today or doing in their currently in their clinic.

In almost there's something in it for almost everyone. And so I, I love that because we don't believe that our position and our body of work is instead of any practitioner.

It's really and it we work hand in hand with the practitioner and the patient to try to improve health and general awareness. And it starts with education.

And that's why today's session and today's interview, so important, is to just introduce the idea that there are actual modalities and interventions out there that are affordable, that you can easily integrate, with your current protocols that will make a marginal, you know, a magnificent difference in the end result.

And we both know that oftentimes just the order that we do a protocol in and or the way that we dose the protocol can make all the difference in a moderate result or a fantastic result.

And so let's go for fantastic right. Yeah, absolutely. Yeah. And and I'm all for it. We're all in. We're very available. And we are we work hand-in-hand with the practitioner.

And I'm very, very grateful for for you asking me to be on this interview and to join your summit today. Well, thank you very much again. And, I look forward to, running into you, perhaps down on the beach in Boca sometime soon.

Come on over. The water's fine. Take care.