Podcast Intro and Guest Introduction

And actually, this is very well known now in telecommunications. We have the issue with telecommunication that interference comes from the noise. Actually, the way that we prove actually our technology, the before and after, we use different methodologies in science.

And one of the methodologies is a software of telecommunication, the same sort of telecommunication the industry use. And it's measuring the noise level.

So the noise level is what is causing that change on the signal to noise ratio. So if we increase the noise, we have a poor signal. Hey there. Welcome to the Recharge Biomedical Podcast.

I'm Dr. Edward Park, and if you're curious about regenerative medicine, you've come to the right place. We're diving into the latest breakthroughs in telomeres activation, stem cell exosomes, and all the cutting edge science that's shaping the future of healing and longevity.

Let's get started. Hi everybody, welcome to another episode of the Recharged Biomedical Podcast. I'm your host, Dr. Ed Park, and today we're very lucky to be joined by Joaquin Machado.

Thank you for joining us. Thank you, Edward. Great. So we both went to Abundance 360. That's the Pierre Diamandis Festival. And they have a lot of venture capitalists.

They have a lot of CEOs of, well, let's say AI, robotics, brain, computer interface, even killing machines. And so it's a great way to learn. And I picked up a copy of Dr.

Machado's book. I want to say, doctor, tell us your background real quick while I grab your book. Thank you. I'm an expert in material science and nanotechnology.

I'm a self-thought. Originally studying physics, I turned out that I was understanding how quantum physics was interacting with materials. So I study material science and nanotechnologies.

So we're going to get to that, the very important mitigation factor for all the EMF that he has come up with. But first, let's talk about electromagnetism.

So most people are not electrical engineers. And even reviewing it over and over again, it's a little over my head. But people want to know. They want to know, hey, is it OK?

Are phones safe? Are 5G towers safe? Are routers safe? And there's no easy answer, but there are ways we can measure and understand. So take us through how the human body evolved in nature.

What's different about being a hominid and now what are we surrounded by, Joaquin? 25 years ago, I came across an article that in the UK, they were very concerned about potential risk on brain cancer from cell phone radiation.

And when I read this article, I was wondering, OK, how about in short term?

Electromagnetism, Bioelectricity, and Human Biology

What's happening? And this is one of the factors that people, they are not quite familiar is because we were educated in our society that everything is connected with chemical bonds.

Everything is an interchange of some type of chemicals in our body. But below the level of the chemical interaction,

we have an electrical interaction.

There is a charge polarity in our cells all the time. It's interchanging electrical charges all the time. So below that level, we have what is now a new field in medicine.

It's called quantum biology. A quantum biology is the level that everything starts from there and moves to an electrical charge that moves, and then the interaction that happens later is the chemical interaction.

So that is the sequence. And that is where everything starts in the most fundamental level, the subatomic level. And we know that matter is made from molecules and atoms.

And when we go below the atom, we have everything connected to the electrons. And when we say electricity, we are saying electrons that are moving. So in the end, that means that in our body, we are full of electricity, bioelectricity.

Electrons are moving all the time. And actually, we use electricity as a parameter to understand if we are being sick or not when we have an electrocardiogram.

What we're doing is measuring the electrical impulse of our heart, the same with the brain. So brain activity, nervous system, everything is connected to the interchange of electricity.

So electromagnetism is one of the four fundamental forces of the universe. Everything is made somehow of electromagnetism because it's made from atoms.

In the most fundamental level, we have that, the electrons inside. So we are part of, as biological beings, all nature is part of these electromagnetic fields all the time.

Our planet is surrounded all the time with so many thunderstorms because we are interacting with rays. So let's talk about, back up what you said, there are four fundamental forces that Einstein tried to unify, right?

The strong nuclear force and much weaker is the weak nuclear force, electromagnetism and gravitational, which is very weak unless you go get an MRI of your knee and then it's very strong, right?

So, you know, the question is, what is electromagnetism? You know, because the electricity or the E field is different from the B field or the magnetic field.

So you can have one without the other. So people don't understand when Walt Whitman said, you know, I sing the body electric. I mean, we are literally We, we, we vibe, we have on the quantum level.

I don't really understand it. And my first podcast out of 27 was about quantum coherence and all this. So you're going to teach us about that as the end, but everything from the visible light spectrum down to like extremely low frequency, very low frequency and the stuff that's giving us the wifi it's all on a spectrum.

And so just so we can get on the same page, it's not like it's safe or unsafe. It has to do with dose. The higher the frequency, the less the penetration of the body, et cetera.

And, you know, submarines use very long wavelength. So, you know, it's all just vibes, isn't it? Electromagnetism is a spectrum of both of stuff we can see, not see.

Sunlight is good, like infrared can help the body. So it's not good or bad. We just need to be able to understand and measure, right? Yeah, and it's all related also with the source.

The main source of radiation energy electromagnetism that we have is sun. So from sun we are receiving this powerful light. Light is an electromagnetic waves, as you say, and so The electromagnetic waves that we are receiving from the sun, we are receiving from visible light, but also we are receiving the UV spectrum, the ultraviolet

ray, and also we are receiving below the visible light, the infrared radiation, and of course, What's happening is we need to classify this radiation to be understood.

So in physics, what we did in the past was classify according to the frequency and wavelength of this radiation, how it's oscillating, the vibration of the frequency.

And that's a direct inverse relationship, right? Right. The longer the wavelength, the lower the frequency, right? Right. And the frequency, you increase the frequency and you reduce the wavelength.

And so when you go above the visible light, it's so short, the wavelength. We're talking about rays. That's why we have the x-rays. So traditionally as a medical doctor, they taught us that there's dangerous and not dangerous and they call it ionizing versus non ionizing.

Yes. Now, I think that's kind of an arbitrary thing because you know, as a couple of years ago, the European authority recalled the Apple 12 iPhone. because it was putting out too much power and causing damage.

And I just want to go back to what you said. I had a brain surgeon friend, I have a friend, and you know, he says that he always finds the cancer about four to six centimeters on the dominant hand side.

And my father also carried a cell phone, he had a diet of a glioblastoma. So I think that the cognitive dissonance tells us that Well, sperm counts, brain cancer, all these other problems are not related because if it wasn't safe, why would the authorities allow it?

We age because our telomeres shorten and our stem cells deplete. But what if we could support both? I've been taking TA65 for 17 years. It's the only supplement I trust to support better mood, better sleep and exercise recovery.

At age 57, I don't have any gray hair and I don't need reading glasses. TA65 is available now. Go to rechargebiomedical.com slash TA-65 and enter promo code RECHARGE10 to save 10% off.

But tell us about measurement. A lot of the measurement, the SAR, it's not necessarily standardized. Is it touching the skin? So are cell phones safe to put in your pocket?

I think that's still kind of an unresolved question. How do you feel about that? Well, no. There is a clear evidence that there is a risk because there is, as you said, we have the ionizing radiation that is capable because it's bringing so much energy that it's breaking chemical bonds.

Yes. And it's ejecting electrons from the orbit. Clearly not safe to be sitting, yeah, with cosmic rays or x-rays. Yeah, that's why we wear the light shielding.

Clearly not safe. But even the stuff in the Wi-Fi, and I have a lot of questions about 5G and the millimeter wavelength. So when we talk about visible light and then above that is the cosmic rays, the x-rays, those are clearly ionizing.

But even like I had a phone I once bought from Microsoft and just holding it, it caused my hand to ache. And I know it wasn't a placebo. So the power was not regulated.

So they have ways of measuring these, right? But did you remember the Apple 12 recall? Yes. Actually, I did my own research. I have a lab. And actually, I worked with ones doing a full research in several phones and laptops with the RF exposure lab.

It's a FCC lab in California. And we saw how different is the specific absorption rate we take in our body from this emission from the mobiles like iPhone or Samsung, from what the manufacturers are saying.

Yeah, it's so scary. They fixed the iPhone 12 with firmware upgrade or change. But I just saw this funny thing this

morning.

EMF Risks, Measurement, and Safety Concerns

Confucian society, Asian society, you can go upwardly mobile if you do well on standardized tests. They said that during the two hours of the standardized test, no planes are allowed to fly, and there's not any…

I'm serious. I think it's true. It might be false, but they don't want any kind of interference. You know, when you take off on an airplane, they don't want your phone searching for a signal.

So these things, they do generate power, and if they can't find it, they try harder to find a signal, right? Right. And that's one of the biggest issues that we have because there is two types of frequencies that we mainly are getting from the cell phone.

This is all below the visible light. It's all non-ionizing. And the non-ionizing stands for because it's not capable to break chemical bonds, but it's producing a specific alteration that is coming from the polarization of waves.

In telecommunications, when we polarize waves, we polarize it to use it as a road. as a highway to send information. So the polarization is the technique that we use to modulate waves.

We need to polarize. And so the problem comes that when we polarize waves, we're moving particles in artificial way that's producing completely a change on the way how the particles behave.

naturally so what happened with this radiation from the cell phone we are receiving frequencies in the microwave spectrum and also something that is a missing link in so many studies they are missing that also you're getting from your cell phone extreme low frequency radiation coming from the use of the battery the energy that is using it's the thing like what we're saying So when you combine both, what happens is produce a specific effect that is capable to change the way the voltage gate calcium channel in our cells membrane are opening and closing.

So you enter more calcium. For sure, like I was just asking AI, I use Claude a lot because it has good access. And I was asking, you know, are MRIs safe?

And the generally recognized thing is yes. But the amount of gravitation you get is very strong. I mean, it's theoretically, you're causing all the protons to shift.

So, you know, when you talk about pulsing and stuff like that, it's also the frequency of the pulsing changes. Like you may vibe with, you know, whatever, but my AI said, yeah, you probably should turn off your router.

at night because it's creating a lot of energy and i said well what about all my neighbors they all have routers and they're like well because of the inverse square it's far enough that it's not going to hurt you Yeah, but that's a myth and this is something that we need to understand.

You don't agree with that because it also said that because of the multiple pulsings it could be also… Yeah, actually I am president of the EMF Society and around the world we're conducting actively a monitoring of emissions in 29 cities in 10 countries.

And I repeat it from more than 10,000 homes. We repeat it because I have an international network of consultants. I have an academy, too, that we train people to learn how to use instruments.

So what happened is we have, in these devices, this is called near field. What we are saying is near field. The near field, it's the exposure you get when you're close to the device.

It's like a bubble. For instance, you have this phone, it's a bubble around the phone. So the near field exposure is full of both emissions, extreme low frequency and microwave radiation.

In the router, you have a bubble. For instance, the bubble of the mobile phone functioning, it's around a couple of inches around the phone. But if you have a router, the router is several feet.

If the router have more antennas using more energy, more amps, taking a power in the near field the bubble is larger. So what's happening is the reason that I always say you need to turn off your Wi-Fi during your moment of sleep because the near field the bubble is pulsing there.

But the most harmful effect from this bubble comes from the low frequency. related to the power, low frequency radiation. Because why low frequency? Because low frequency, when we go to the whole spectrum of frequency, we have 5 Hz, 10 Hz, 15 Hz.

What happens is we have low frequency emissions pulsing there. They are interfering with your brain activity in low frequency. And when we go to sleep, we need to have a REM cycle and a DIP cycle.

And the REM cycle and DIP cycle is connected to the low frequency. That's so interesting. So, so this is why I never want to get in a Tesla, you know, because I think sitting on these batteries, they're creating magnetic fields and of low frequency.

Yeah. And I think it's probably not great for you, but maybe I have an article peer review. I was, I was published this year. I conduct two years study on Tesla Model Y 2022, 2021. Actually, I did a full, complete test, and I proved with my technology how we can depolarize, filter out the pollution, and you can use the car only if you have these filters placed.

Amazing. Okay. So explain, let's pivot to that now. What is this mitigating device? Because I know there's some intellectual property. But without giving away trade secrets, what is the idea behind, is it related to dirty electricity, to quantum field coherence?

What exactly is the kind of magic that you're doing to mitigate risk? Yes, I found specific properties. I was conducting research on different material science avenues, and I found specific properties in gold nanoparticles.

And so I became an expert. I studied gold nanoparticles for years, about four years. And I studied the magnetic properties of gold nanoparticles. And I found specific response exhibits, these gold nanoparticles, that with physics, You don't know how you're going to label a new behavior.

We put the word that is closest to this new phenomenon. So they call it ferromagnetic. Actually, I was a pioneer on this field, and actually we patented this worldwide, and we patented the application of the ferromagnetic behavior of gold nanoparticles.

And that's the reason we received so many awards on this, Edison Award and different others. But the thing is, this specific phenomenon of the gold nanoparticles in a specific scale, when we combine with palladium, titanium, and other materials, exhibits a specific quantum coherence response that is capable to depolarize this artificial polarization from these electromagnetic waves carrying information and for many years people have had these little devices you can wear and put on your phone and they say it makes it safe i think it's kind of an oversimplification but forgive me like i don't really So this is something you can measure empirically, or how did you come to this conclusion?

Yes. This is very important. The first thing is, I suffer from the expert bias, because I was an expert of this field for seven years. I get married, my wife suffers from electrohypersensitivity.

It's a syndrome that is related to this. exposure to severe exposure. She was an engineer. She was exposed to the industrial facility of telecommunications in our country.

She developed this. We were not aware it's related to this at all. Actually, I was surprised because we were trying to look for a solution. A medical doctor, they say, you have nothing.

It's psychological condition or you have. And finally, we ended with the federal, there is a federation in the Netherlands, and this federation is called the Dutch Federation of Electro-Hypersensitivity.

They were starting this in 1990, and we also connected with a doctor in Switzerland, and they connected with a group in Europe, and they are far advanced there in Switzerland and Germany and in the Netherlands about this topic.

The Electro-Hypersensitivity Syndrome. Here in the US, They say that they mentioned this syndrome in the 90s. There is a medical doctor, an environmental doctor, Dr.

William Rea. He mentioned microwave syndrome. And recently, the Havana syndrome is also part of the electro hypersensitivity. I have to stop you, Joaquin, because actually, this happens a lot.

When people get emotional, I noticed that, can you hear me? Yes. Your voice was breaking up like an old Cylon Centurion. And then I always notice this with people when they get emotional, their cell phone transmission is interfered with by the bioelectricity.

So it works both ways. It's not only the devices that are messing us up. We're also messing up the transmission of these devices. yes yes yes absolutely and we have also studies in this so i run i was looking for a solution for her and we start we started as a anybody start it's using these materials that i have one here because i was doing a conducting a A teaching this morning, this type of fabrics that try to block the radiation.

I mean, yeah, you know, if you look at this in preparation, now the algorithm feeds me all these sheets, like the silver coated sheets, they got the hats to block like a little mini Faraday.

It's not good. It doesn't work, right? No, no, no, it's not. Not only it's not good, it's worse because that was one of the things she started to use and she started to feel more fatigue.

Mitigation Technology and Filtering Solutions

The problem was, and we found this answer from the Swiss groups and the German groups, there is the International Association for Electro-Smoke Research since 1990. The thing is that they call this the shielding paradox.

In the shielding paradox, actually, there is a peer review article you can go and look at. It's in 2019. It was posted. There is a group of scientists.

They have 40 years studying this subject. I know some of them directly. They know me, my technology, my work. And they found the shielding paradox says, when you block the bad EMF, You're also blocking the good EMF that we need, like the Schumann resonance.

The Schumann resonance is part of the natural EMF that is vibrating in the atmosphere, and we need to interact with that. So the problem with the shielding paradox, first, you're blocking the good EMF, and you need it.

Second, you are reducing and altering the conductivity in your skin. Third, you are not actually neutralizing the pollution because the problem is not the wave intensity.

The problem is the amount of noise these waves are producing because of the polarization. And the problem is the physical mechanism that produce this noise is in the most fundamental level of these subatomic particles in the fundamental behavior of the spin.

It's a spin particle polarization. Actually, there is a recent novel in physics related to what is called quantum tunneling. the quantum tunnel effect is capable to go through any barrier so what happens is when you use this type of fabrics you are shielding the energy but the noise that the wave is producing can go through the barrier so you get the noise not the energy that is producing the noise but the noise is what you're absorbing inside your skin

everywhere.

That's the reason that in Germany in the 70s they put to this pollution the name electro smoke. Smoke because it's after the waves if you are capable to measure there is the noise remains.

So the thing is when you're getting the noise without the electrical stimulus from the wave because you're blocking the electrical stimulus you think you're protected because you don't have any symptoms in your skin but the change on the cells communication remains and produce all the oxidative stress response especially the free radicals related to nitrogen and there is a well evidence of this because of what?

There is a specific studies around this actually in DARPA, US Navy, they post these studies in 2022 about the spin value chemistry regulates the production of and how the interaction of all the free radicals we have in our body.

So if we change the spin biochemistry. Okay, so it's getting a little bit esoteric. So people understand, I don't understand, but when you go in an MRI machine, like the magnetism causes the protons to change, to oscillate, and that creates a contrast image.

So you're saying that in your idea of physics, which somehow incorporates quantum coherence, that there is a smog or a noise that is affected even if you don't get to electromagnetism there's the randomness like it's like you're going to an outdoor concert and instead of one band you can hear music from three different bands at once it's like confusing to the mind and the body, right?

So you're saying it's really, in your book, you'll describe electromagnetic pollution. It means not just the EM, but the lack of coherence in the physical system that's produced.

Yes, and actually, this is very well known now in telecommunications. We have the issue with telecommunication that interference comes from the noise.

Actually, the way that we prove actually our technology, the before and after, is we use different methodologies in science. And one of the methodologies is a software of telecommunication, the same sort of telecommunication the industry use.

And it's measuring the noise level. So the noise level is what is causing that change on the signal to noise ratio. So if we increase the noise, we have a poor signal.

So the same happened with the body. And actually, noise is also the term that we have when we measure the dirty electricity in our homes. The electricity, the amount of noise, is the amount of harmonics and tensions that you have in your power lines.

The harmonic centrifuges is noise in power lines. The noise, when you have more noise, the lifespan, the durability of your electronic devices, it will be reduced because there is so much noise.

It's affecting the electronic devices. Okay. Yeah. I mean, I got one of these things. I don't know. Did you provide them? It's a plug that you plug your thing in?

I'm an inventor of this. Yes. Oh, yeah, yeah, I have that. I'm using it. So you're saying that the 60 whatever hertz noise to the electrical current is what's helping?

No, so that's very, this is taking 200,000 interference frequencies that goes above 60 hertz. So this is a low electronic pass filter. The low pass electronic filter is the capacity to let the 60 hertz pass in minutes.

Oh, it dampens the harmonics. Yes. So the harmonics goes on to 10 megahertz. So we're taking 200,000 of interferon frequencies, but there is a specific harmonics.

It's actually was started by Dr. Magda Habas in the University of Canada. there is in the power lines is called the

harmonics in two kilohertz. So the two kilohertz is very biological active.

Not all frequencies are affecting the body the same way. So some frequencies are more harmful than others. And the two kilohertz, this is a 100% reduction of the two kilohertz frequency.

And the two kilohertz frequency is also related with something that people are suffering nowadays is the tinnitus. The tinnitus, it's also happening. I work with audiologists, and we reduce the tinnitus in so many people using and applying the technology in their homes.

And the tinnitus, when you run an audiologist run this audiogram, they see the two kilohertz frequency in sound as the frequency that is when they have this specific curve.

that is related to the tinnitus. So you don't think it's just neurological damage. You think it's also an active stimulation by this two kilohertz frequency.

Yes. Actually, we were working and studying with Dr. Keith Darrow. He's a PhD neuroscientist from Harvard and a specialist in tinnitus. And we were with him, and they were explaining to us the new understanding on tinnitus is related to the phantom noise.

There is a neurological disorder in your brain, but we came to the conclusion that one of the biggest or worst sources that is producing this tinnitus is when the people go to bed.

They're placing their heads close to the power lines, close to fields. immersing this 200,000 frequency that we are taking out. So you are producing a stimulus that go into your brain.

And the near field that you have close to your bed, anything you have connected is producing this bubble of low frequency. So this is something that can be helpful for our audience.

You know, the phones, they create, you know, Bluetooth, they create 5G, 4G, whatever. Yes. If you put them on airplane mode, depending on the software, user interface, you will basically inhibit transmission, which is what you want.

So you have your songs saved from Spotify. You can listen to music, but I would recommend to most people, unless they're like me, I used to deliver babies.

You have to have a beeper or something. But when I sleep, I always put it in airplane mode. Is that a good practice? Yes, a very good practice and when you're going to charge your phone, I strongly suggest, as a simple tip, use a power bank.

Because if you use a power bank, the power bank is these wireless batteries that you use when you use a power bank you're reducing a hundred times the amount of pollution you're getting from the electrical field and actually anybody can measure with an EMF meter because when you're plugging your phone to your outlet You're getting around a hundred volts per meter in the electrical field, and you use a power line around one volt.

That's interesting. Yeah, yeah. That makes sense. Great tip. So now, someone said to me that, you know, if you go to Australia, every plug has a plug, like a switch on and off.

And I googled this or used AI. They're like, yeah, yeah, when you put in your appliances, you know, they do suck a little electricity and it's maybe not great.

So do you recommend people unplug their appliances for longevity and to save power or maybe not? Absolutely. This is kind of counterintuitive. People think, well, nothing's on.

Why is it flowing, right? No, because there is a principle that remain an electrical charge. So you turn on, of course, you will move electrons and you're requiring power amps because you're moving, you're producing a magnetic

field.

But this is connected, even it's off. is connected you have electrical charge that remains there and you can measure the electrical charge and the problem is the nervous system is regulated by electricity too so what happens during the night is if your nervous system is capable to perceive any electrical stimulus will change from parasympathetic to sympathetic and it will change the way you have, how long is every cycle you have.

Actually, we've run a clinical trial in double blind with athletes, and what we did was actually we measured their bedroom, and this is an institute that they were conducting this for us.

It is very interesting because all the athletes, they're plugging the phone direct to the wall, and they're just using all the time, the screen, and the brightness and everything, and the amount of electricity they're receiving.

So we place our solution, we filter out, and the heart rate variability increases incredibly, even two-fold in some cases, from just 29.35 to 70, 90, and 100, and the rest is heart rate.

Okay, so let's back that up a little bit. Heart rate variability is an indirect measure of your state of relaxation. When you're in stress mode, your sympathetic causes decreased heart rate variability and we use it as OPGYNs to measure stress on the baby.

We put an electrode and if it was flat, we knew the baby was stressed. So you're saying that when you filter out or turn off this bedstand sort of electricity doom scrolling that the body just shows that it reflects that in the heart rate variability the heart math coherence if you will right away right away there is a meta-analysis of 1600 studies that shows that the hardware availability is one of the key markers.

5G, 6G, and Future Connectivity Risks

Actually, our technology was studied for three years using hardware availability parameters to see what's happening really when you're making a call with this filtering technology.

Amazing. We can regulate our electrical conductivity in our body just having healthy habits because it's not only the way you're charging your phone, it's when you're using your phone because any stimulus during the day doesn't matter because you are in a state that can handle an attack.

So you're saying that when they call doom scrolling, like all these people in the COVID pandemic, they're on their phones and it's like really affecting our health and our wellbeing on a physical, biochemical, electrical way.

Yeah. And the 5G increase the amount of noise because there is one of the things that we always teach to people is to understand that we make it clear for them.

We have a way to measure the dirty power with these meters. You measure, you connect, you measure the amount of noise. And show us the plug again, Joaquin.

This one. People can purchase this where? Yes. The plug, the plug for the harmonica. Both, they can take it in our website, SPIROEMF. Okay. Yes, SPIROEMF.

And so is this the core technology you have to mitigate risk? Yes, this is a measure, this is the filter. Okay, so you don't recommend the silver hats, the silver bed, you don't recommend tin foil?

Because of the shielding paradox. And my wife, she suffered from this, so until we were able to filter out the noise she was not recovering. Now she's using technology all the time where there are no problems and we are measuring globally.

Actually, we have a non-profit. We are conducting a global census of this syndrome. We already have more than 1500 cases. Yeah. and of nine years, it's the same.

So you should avoid to do this. But this is not an harmonizer technology. This is not like a pendant or a stone or this type of thing. This is things that are not science-based.

yeah yeah i mean and some people are getting some ionizers these harmonizers produce some negative ions and they feel much better in the skin yeah negative ions make you feel good yeah yeah but that's masking masking the problem because it's a masker you're still getting the physical electromagnetic issue and the smog well i think it's been very interesting you know for me personally i use a 4g Downshift because I don't trust millimeter wave.

I don't think it's great for the body That's why I pay for the TSA pre-check so I don't have to go through the millimeter wave So I'm not a fan of the biological effects.

I think it was introduced Yeah, really without a lot of testing. But now we're on to 6G, which I guess is a little bit even shorter wavelength. What's the future going to hold?

Is 6G somehow related to the Internet of Things or are they totally unrelated? Do you think we're coming to a place where everything is tagged and in communication with the Matrix?

Yeah, it's possible. Look, 4G, it stands for fourth generation of telecommunications. Normally, each generation, every G what brings to the table is a new way to do the architecture that makes possible the telecommunication.

That brings a specific modality. So what's happened was With 4G, we were using so much energy to do the connection in the cell phone tower, but we were not allowed to use the specific amount of channel, they were not enough to spread more information.

So what happened, they changed the- Yeah, yeah, higher bandwidth. Yeah, so it's great. And that's great, but I'm okay with the speeds watching my video on 4G, because I don't know what the biological effect is.

I mean, I would never have a school or my home next to any tower, any cell phone tower. That's rule number one. But for me, I just don't trust the 5G.

I think there's too much, untested, too much power. and it's biologically interactive. It's even worse because let me explain this. If you go to 5G and then for 6G, because I'm studying 6G since four years ago, I started to study 5G in 2015 when they started this process.

I was part of the GSM society and we were studying this. What happens is if you extend the bandwidth, you are not going to spread the amount of energy you are spreading in each channel so you are putting more noise to the space but with less energy officially.

So when you go to the meter, and actually we're getting in Barcelona and Spain, they have a bandwidth also in China, because I have connections with several researchers that are doing this in China, in Japan, in South Korea, and South Korea is incredible.

The bandwidth are much wider than here. So it seems there is less energy, but there is more noise. So the actual instruments and meters that are being used to actually see if they are reaching a safety level or they are breaking the safety level is actually more confusing because it's less energy.

Because the measured watts per millimeter or watts per kilogram is less. And the noise is high. But there's so much more incoherence. I guess in South Korea, like you said, you can get broadband streaming on the subway.

The whole nation is totally teslified. But the question is, in our chase for unbridled bandwidth and connectivity, we're sort of inviting inadvertent consequences, no?

Yes, and it's going to be a huge problem in the future because we are developing a society that is… so connected and it's not taking in account these factors and one of the key harmful effect that we need to understand is this is changing our microbiome and it's not only our microbiome in our gut, it's also the microbiome in our brain and it's

changing the brain activity.

So in the end it's changing the way we think And there is stories in Austria. Yeah, it's so scary. It's very, very, very scary. I mean, there is a huge amount now of teenagers with anxiety, panic attack, connected with specific brain circuits.

They are related to this noise that is so much noise. I mean, I think, you know, it's a Trojan horse. All these great devices, we can do so much, but we've invited them in.

It's hard to turn it back. Like every once in a while, I get the urge to go back to a flip phone on 3G. You know, but we're so used to being able to do anything from anywhere, anytime.

So it's really been a Trojan horse. Well, you know, it's so interesting, the conversation, but generally speaking, we went from three to four to five to six G.

Generally speaking, higher bandwidth of transmission and shorter wavelength. But again, I'm not sure that the biological effects, as you say, in these in these Swiss kids, I think that society is becoming de facto sort of transhuman.

right? Even when I close my eyes at night, my mind's eye 20 years ago wouldn't have scrolled left to right or up or down, but I'm starting to see screens in my brain.

So we have to find a way to be grounded. Like you said, the Schumann Residence, like be part of the earth, be part of our biology. Because there are ways that we can reclaim that and be coherent.

Practical Advice and Closing Remarks

And I wish I knew more. I wish I could understand more about subatomic quantum. But you say that the gold nanoparticles, the palladium, whatever, somehow this can help.

And that technology is in your plug. Your Spiro technology? Yes, it's patented. It's also that I have a filter for the cell phones because we are putting the technology capable that in the future can be implemented inside.

It's not about blocking, it's about filtering. And we reduce 91% the specific absorption rate of radiation you're getting from the phone. Are you selling those credit card things too?

Yes, absolutely. So maybe that'll help too. But yeah, like I said, I came into this thinking, oh my God, I can't understand it. But it is understandable.

Like you can use tools to understand it. But at the end of the day, there's no good or bad EMF, right? It's just implemented how it's behaving. Right.

So how they behave. And also very important, what you say about the grounding. Because we always, we have a protocol, a clinical protocol, we're proofing 10,000 people.

And it's, you need to ground yourself every day. It's like you take a shower, also you need to go out, you balance charges. And because we actually, there is a very good book about the health is called Healing is Voltage from Professor Tennant.

Yes. Right. It's very important to look for balance charges and also the light environment. We need to interact with natural light. So it's a set of things.

Actually, we are promoting a certification for spaces in an international institute that is looking for a biocompatible standard without quit the use of technology.

A few years ago, this whole thing about climate change, they banned incandescent light bulbs in the US. What's your opinion on incandescence versus LED versus fluorescence?

It's much better incandescent. The LED, there is full flicker, there is more… Flicker, yeah. Yeah, the flicker is an issue. It's noise. It's all go back to the same.

If you take out the noise, you have a clearer. Actually, when we are using lasers, I have here one of the… But don't you think that's weird? I know you come from a country that has embraced socialism on some level, but don't you think it's weird that the US just banned light bulbs that we've been using for 100 years?

Like, how do they have the power to do that? Like, under what authority? It's so strange. is very strange, very strange. And there is excessive exposure to artificial blue light without the softness of the warm light that we receive in the incandescent bulbs.

I know, I think I'm getting a cataract from all the screen time, so for sure. Yes, absolutely. Well, anyway, so it's been great talking to you. I wanted people to know that you have this wonderful book and you have the Spiro.

What's the website again? Spiro emf.com and his book is Electromagnetic Pollution and it saved his wife's life and it could save yours too. So do not fear the good vibes, but filter them, I guess.

Yes, actually. Well, thanks Joaquin. You're a brilliant guy, autodidact, self-taught, and we will hope that your message gets out there and that people can live safely with these wonderful devices.

Thank you, Edward. My pleasure. Okay. Take care. Thanks for tuning into the Recharge Biomedical Podcast. If today's episode got you thinking, you'll love my book, Exosomes, Songs of Healing.

It's packed with cool analogies, full color illustrations, and all the science you'll need to understand how exosomes are changing the game in aging and regenerative medicine.

You can grab it in paperback, ebook, or audiobook, whatever works for you. Now head over to www.rechargebiomedical.com to check it out. And don't forget to like and subscribe so you never miss another episode.

See you next time.