



Why PEMF and NanoVi Work so Well Together

William Pawluk, M.D., MSc interviewing
Hans Eng



William Pawluk, M.D., MSc

Hi, this is Dr. Pawluk. This is another episode of the PEMF Healing Summit. And today we have a special expert, a lot of our experts are special. But some experts are more special than others and this expert is special to me because this is a new technology that I learned about really in the last three months or so that I think has a tremendous advantage for people. I'm gonna introduce, first of all, before we get into that and we'll get into the advantage of this new technology. With me today is Hans Eng, E-N-G, you could see that on the background, eng3, his company's called Eng3 Corp. and Hans is the founder and CEO of Eng3, he comes from Germany. You can tell from his accent that he's got a German background and he has 25 years of experience at least with advanced medical technologies including medical implants. He has extensive experience in research and development, production and quality assurance for medical devices of all kinds. And his degree and background are in material sciences and proteomics and he'll explain what proteomics is in a second, okay, which allowed him to develop the proprietary technology that's the basis of this call today which is about NanoVi, N-A-N-O-capital V-small I. And this is a really exciting technology for me and obviously he's using this technology for health and athletic performance, but it does so many other things. So rather than me saying more about this, I'll let Hans say, anything else he wants to say about his background and how he got to this point.

Hans Eng

Oh, thank you very much, Dr. Pawluk, thank you very much for the introduction. Yeah, a little bit to my background and a little bit to what led to this product. What was basically the driving force you could say to get to it? Like you said, my real education background is material science and with this background, I went into the medical industry many, many, decades ago, now. And



that was basically human implants, surface of human *implants sold to in the research areas. We are looking, what is the best phase that an implant could grow into the body? It is not being rejected, so hip implants, knee implants and those things, and these were big international companies, market leaders in this area. And by looking into this field, we had to look not only into the product itself, we have to look into the body. What is the body doing? How is the body accepting some material? How is the body working actually? And that was, excuse me, little bit early, beginning of cell biology, understanding what is going in cells, yeah, why do cells act in a certain way and those things. And very soon we were recognizing that every function, the entire cell activity or cellular activity is orchestrated by proteins and proteins are sensing, triggering, they are stopping processes, they are initiating processes, so they're doing basically all the work in the cells. Therefore, they're doing the work in the body, they're also called is the workhorses and is a science about proteins is called proteomic.

So that describes the building blocks of the proteins, which of the amino acids, how is the amino acids are being chained together? And after the chain definition from the DNA, yeah, is deciding what kind of protein is being used and what kind of moment and in what kind of quantity in a cell. And then they, the chains are building together, and in the last part, the chains have to forward into a three-dimensional knot, you could say. And every protein have their very specific three-dimensional shape and when they are in the shape, then they are actually becoming the protein and they are able to interact with each other. So they can connect with each other, they can start process, they can stop processes. So that was very interesting to see what the state of the research was during this time, yeah. Basically what I just said, amino acid, chain folding, that was a state, but there were a lot of questions.

And one of the last question was always, how is the folding process happen? Because that is not a chemical process, out of other material science areas we know that those molecular folding process is thermal dynamic process. Simply higher order, yeah, or higher order switches into a media with low order, causes the low order media to increase its order. Very, very common thing and a lot of reactions that we know, I mean, any kind of explosion is for example, based on some dynamic change of order, so that this change of order is the driving force for proteins to fold was postulated in 1890s,* around there, as I said already, there is no other way that is only way. 'Cause it works in all biological systems that we know not only in humans and we see that it works in all kind of circumstances, yeah, so even the test in the outer space, yeah. It shows that something



like gravity or anything is not part of it, it is somewhat dynamic, a really basic, fundamental physical process. So the next question then was, and that is where I went in more in the research and this experiments, this preliminary studies was then connecting other areas in this field to looking in the source of the order that needs for the proteins to be in. And there was then a lot of scientific research done in the university here in Seattle, yeah, in the department of bioengineering by the leading Professor Pollock.

William Pawluk, M.D., MSc

That's Jerry Pollock.

Hans Eng

Jerry Pollock, yeah.

William Pawluk, M.D., MSc

Yeah, it's spelt differently than my name, it's P-O-L-L-O-C-K.

Hans Eng

Yeah, a great friend of mine, over many, many years, yeah. So, and we exchanged in the beginning, a lot of thoughts about it and what his research came out with. And I could combine it with the information that I accumulated over the years, yeah. And building the patents, building the test units and everything and then putting out in the field to test and the studies showed that the approach was correct. We really have with this technology, the possibility to influence the end result of addressing the protein folding.

William Pawluk, M.D., MSc

Could you pause there for one second? I have to go and... All right, I'm sorry for pausing.

Hans Eng

Yeah, okay. So we were able with our technology to really stay focused and to address on these folding process. And, around the start, all this things started 13 years ago. So Eng3 Corporation was founded 13 years ago and around 10 years later, yeah, after the first three years, we had devices able on the market registered as medical devices and being sold and adopted in clinics,



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performance centers, households, to address this process for the client who use it. And yeah, we are actually located in Seattle with our company, yeah.

William Pawluk, M.D., MSc

Right.

Hans Eng

So in Seattle and Washington, and now since more than 10 years, we produce devices in the market, the market is worldwide. We are registered medical device in the U.S. In Europe, in the UK, in the entire Western world, we are becoming more and more tool in the areas where people would like to keep their biological status where they are right now, because they're *happy. So we call it, to maintain your system, there are people who would like to boost their system, that means whoever is going in a performance field, mental or physical performance know that the demand on the body during the event of the performance causes damages and to be a high performer, these people would like to repair those damages faster. And that is not only in the sport field where you have pure physical, well, we have a lot of sports field where we need mental performance, race car drivers, for example, yeah. But we have also a lot of non-sport areas, so management jobs are requiring constantly extremely high brain power. And when you think that when you work at an entire day, very intense with your brain, you're metabolizing as much oxygen in your brain as you are running a marathon.

So, and whenever you metabolize something, the oxygen you create damages in your cells because it's really radicals are not only good, there are also that like everything else has two sides, every coin has two sides. So, and the other field is the healing field, where people recognize already that they have a loss of certain kind of protein functions,. Basically, all age related or chronic diseases are manifestations of lost protein function and they would like to have these restored and they use our technology. Because it is not that the body is not able to build this protein, of course the body is able to build this protein, yeah. Because the blueprint is always there in our body, it's always our DNA, yeah. And when it was working at the beginning, then it should work in the end of our life, it's always there, the DNA doesn't lose its part. The amino acids and we use basically, we can always say, make it simple 21 amino acids. We produce 50% by ourself and the other one we eat and all these 21 building blocks are building all these 900,000 and more different proteins in our body,, so they are fair. If you eat, if you have the right nutrition,



then you are fine at it, if you even supplement certain things, you cannot overdo it, you can overdo it, of course, if you really, really do it badly, yeah, but if you supplement it, it's fine, you will have it in your body. Your body is able to build this protein, now it's only is the last thing, it has to fold, and when it folds, then it will work. But it's the folding potential, that is something that is going down when we are getting older, that is why we are getting older.

William Pawluk, M.D., MSc

So let's talk about a specific example. Well, you had a recent event yourself, if I can share that with people.

Hans Eng

Yeah, of course, yeah, um-hum.

William Pawluk, M.D., MSc

You had a recent exposure to Covid. So let's go through, Covid has a lot of different things going on in the body, but let's say as an infection, the infection then causes the body's immune system to respond to the infection, try to knock out the infection and the inflammation that results from that process helps the body to repair itself. So from a protein folding perspective, what would be like the sequence of events that would happen?

Hans Eng

Yeah, there are a lot of things from the protein folding perspective, a lot of things happens in the same time. The first thing is the intruder, I'll say the virus comes into the body, we need proteins in body to recognize that something is wrong there, yeah. So we have a lot of proteins who are constantly screening our body, is every sign fine or not fine,? Say, if you have a cut on your finger, you see an inflammation around it,? So the first thing is the body recognizes something in, yeah, and the cut on your finger is an easy thing. If you have a virus into your system, you don't really see it as a cut on the surface, but it's the same thing. Body recognize it, the recognition is done by proteins,? So proteins have to work, like you recognize a certain smell, proteins are responsible that you smell or taste, so if the protein doesn't work, you wouldn't smell, yeah. So if your protein doesn't work that there is an intruder, the intruder could run freely around and could do something, whatever they want,? Assuming that your body recognized that there is an intruder,? Then it creates a defense line,? So either it has the information, how do I defend against this



intruder,? Or if he doesn't know how I do it, I pretty much start entire, let's say, arsenal that I have and shoot in that direction,? So the shooting in a direction we recognize as an inflammation,? So for example, you have again, a cut on the finger, you get an inflammation with all kind of things, it is red, it is hurting, it starts to ooze. You can have a lot of different things, the body is putting everything in that direction to get rid of it. Rejection, first thing is rejection,? I mean, even if you have a splinter, it could get encapsulated because a body rejected so much,? So now we have a virus, the virus is in very important organs in our body, like lung, very important. And now the protection here is just shooting everything out there because this virus was unknown. It has not have a special one little tool against the viruses, shoots everything out there.

And by doing it, it has collateral damages,? It creates a lot of other things in our body that would say, oh, I don't want to get damaged, but it is doing it,? So the signaling or the recognizing molecules say, oh, doesn't work, you didn't hit it. So the immune system hits harder and harder and harder and more and more things are getting damaged in our body, so that is the reaction of the immune system. So in my case, I was vaccinated,? Vaccinated means, I got some information in my system about what the body has to build for a special kind of tool to hit against this virus. The virus came in, at first entire immune system reacted, the next thing is the information was out to build the tool against this virus, which is an antibody, usually.

William Pawluk, M.D., MSc

Very specific antibodies.

Hans Eng

Yeah, antibody is a protein, it has to get build, I need the amino acids in the cells, they get changed together, information is there how to change amino things together. The protein has to fold and now it can act against the virus,? So the virus will be getting out of the body, though the virus is gone, the immune system did his work and damaged a lot of other things. Now my body has to repair all the caused damages by my loved immune system, yeah.

William Pawluk, M.D., MSc

By the organism itself and also by your immune system.



Hans Eng

Yeah, so basically, back to the little cut with a finger with a splinter, yeah. You had a cut immune system, does a inflammation, you have a certain kind of maybe oozing going on, yeah? Splinter is out, now the body will repair, wound healing, *scuff building, scuff will go and at the end, this area in your finger is touchable and sensible as before, because everything was built up against the nerves, the circulation, everything is back in, yeah? So all this repair is a very complex time consuming process of lot of many protein functions,? So when that is being improved or assisted for example, with different technologies, one of those technologies is ours, yeah. Then we see a faster healing, we can better combat those situations like intruder, like an infection,? And can also protect ourself a little bit better for future damages in this area.

William Pawluk, M.D., MSc

So, one of the things that happens I know as a medical doctor, with repair, regeneration and healing is it's not efficient. It is efficient, but it's not a 100% efficient, right? So the body is doing, as you said, so many things at one time, things that may not be done optimally need to be done optimally because it's doing so many different things at the same time, right? So efficiency becomes a problem and that causes the wounds, for example, the splinter to take a certain amount of time to heal. Now, I think with NanoVi, I expect with NanoVi would be the same thing. With PEMF therapy, we find that magnetic fields cause wounds to heal at about half the time that they would normally take. So when you combine technologies that basically enhance the healing process, they make it more efficient, they optimize the efficiency.

You don't leave things to chance, so for example, when you have surgery, right? When you have a cut on purpose, then that wound has to heal. What does the medical community, what do doctors do to help you to heal your wound faster? Nothing, nothing, they do nothing, they cross their fingers. So basically they're leaving the healing to chance, we're hoping that your body's going to be efficient enough. And then what happens is doctors say, well, it takes a wound about two to four weeks to heal itself. That's common experience without any enhancement without any improvement in efficiency, right? So when we add these kind of technology, like the NanoVi and the PEMF, we're leading things less to chance, it's gonna become more optimized. Now, you're not gonna heal it like that, right?



Hans Eng

Right.

William Pawluk, M.D., MSc

A wound that can heal like that tomorrow, probably not gonna happen. We still have to have the building blocks, the proteins, the DNA working, all the processes have to be working well, so yeah, so the combination makes us more efficient. Now, what causes the proteins not to fold?

Hans Eng

Yeah. Now we are getting very deep in this thing, I hope you have five minutes for this, yeah? Like I mentioned, the background is for this part material science from my area, yeah? The proteins, the unfolded proteins they're embedded in the cellular water. And that is--

William Pawluk, M.D., MSc

They're all the time, we do have 'them all the time.

Hans Eng

They're all the time, it's is the only thing that they are embedded is in the cells, yeah. And in the matrix between the cells, yeah.

William Pawluk, M.D., MSc

Matrix outside the cells, right?

Hans Eng

outside to cells, but they're always surrounded by the water,? And, the water actually is the important trigger or driver for the protein folding process. Like I mentioned more than 100 years ago, a set based on the thermodynamic laws. An unfolded protein is unordered, yeah? So to get in a higher order, to be folded and to be in a higher order, it has to be surrounded by something that has a higher order and is able to, say, donate this order to the unfolded protein. So, and I've said, 100 years ago, they said already, there's only the water. So we have to look a little bit deeper and the water signs evolved in the last 40 years dramatically in areas, yeah? What we know today about water and where this knowledge is being used is very, very impressive, yeah? I know it's not commonly used in every day's technology,? But I can tell you, it is used even in your life, in



everybody's life, somewhere permanent. And, we can explain today with the knowledge of the *water that we have phenomena that we are all aware of. And if somebody would ask you the question, you would say, oh, I never thought about it. I have no idea why that happens, for instance, right? But now by applying this knowledge, suddenly you say, oh, that's so easy, yeah? Yeah, only you looking a little bit into the material science and to do it I only--

William Pawluk, M.D., MSc

Let's stop you there for one second. This water is not the same as the water in my body.

Hans Eng

Let's say part of it, we should be very precise in it, yeah?

William Pawluk, M.D., MSc

Yeah, let's be precise.

Hans Eng

Yeah, many say water, H₂O is water, H₂O is water, yeah? So what we know today is that water, when it connects to a surface that could be a little particle in the water, that could be a little gas bubble in the water, it creates a surface, yeah? It could be the glass that you have--

William Pawluk, M.D., MSc

Contact surface, yeah.

Hans Eng

Yeah, it has a surface on it when certain things happens to the water, yeah? Then water builds thin layers, really thin molecule layers of higher ordered water on these surfaces. As long as the impact chooses body of water happens. When you take the impact away, then these orders, these layer of orders, they dim out and they disappear, yeah? So these thin layers of orders, they are responsible for example, that we have bubbles in water, yeah? So when you have a glass of champagne, yeah? We see the bubbles going up.

William Pawluk, M.D., MSc

Bubbles, yes okay.



Hans Eng

Yeah. When you have a different champagne, you have less bubbles,? So what is the difference between the number of bubbles and the size of the bubbles? And that is the difference is exactly these kind of layers around the gas, which are really strong because the gas cannot dilute in the water, it cannot burst, it's surrounded and it's very stable,? So this kind of ordered water, even thin layers has very significant different water properties than the water that is between the layers,? So back to your glass of water,? Your glass of water has a very small amount of these ordered water in there, yeah? If you take the amount of water down to cellular size then that is very different, yeah? The amount of this ordered water becomes far bigger and--

William Pawluk, M.D., MSc

Proportionally.

Hans Eng

Yeah, caused by actions within the cell, yeah? Like I said, we need an ongoing process to create this ordered water. And in *ell, there are processes they're actually causing the build of these special ordered water on surfaces, yeah? And as stronger and as more build, building processes we have, has more proteins and we can have in a cell up to several 10,000 proteins are being coded with, as it's ordered water that triggers the protein folding process, yeah. And now we see why we have in different individuals, for example, different healing speed. Why are the proteins working in a different way in different individuals? One need four weeks to recover the other one, two weeks, the next one eight weeks, yeah? It depends a little bit on the amount, What of the process that causes the build of the ordered water on proteins? So if I have a high demand on a lot of different protein functions, in those cells a lot of cell activity, you sense of resources for my or water is being used heavily, and maybe it's not available for anything else.

William Pawluk, M.D., MSc

It's not as efficient.

Hans Eng

It's not as efficient. So if you bring a lot of different other, let's say support into the system, now you can build more of its ordered water. But it's also that, for example, if you have cellular activities are really a complex area. Cellular activities does not only a involve proteins. I mean, we



need charge transportation. We need for selectivity, certain kind of molecules have to be there. Some of these molecules have to build in the search in the moment when they are needed. And therefore we have a lot of other technologies and therapies who are supporting this one know, if you have a cellular area where you need certain kind of molecules to swallow these and hope that they're getting transported to this area, doesn't work. You have to produce it in this moment when it is needed there. And you know, with your PM, PM F E technology. You have a lot of creation of certain molecule structures and things in this area. Which are needed in the moment for the healing process. You produces in the moment when you need it at the right spot. And that is tremendous support know, as a body doesn't have to do it by himself. Resources are not being diverted in other areas. And you support the body in this area to do this, what the body would like to do.

William Pawluk, M.D., MSc

To do it better yes. Either this water, this ordered water that you're calling it, Jerry calls that is that the exclusion, the easy water, the exclusion zone water.

Hans Eng

That is the same name. So they are different Jerry courts, false face of water, false face of water because of the significant different material properties. If you say you have false face of water in front of you, you can measure it. You must be able to measures this. Minimum three different material attributes. You have to measure it. Know it is different. So that is one of those things that with our technology so that we can come up to this point and say, we create those things we had to do. We can we make those tests. We make work with institutes and universities who can do those things say, yep. They are creating it. We see it as getting bigger or smaller and those things. They use different. We use different technologies, testing devices over the last decade we developed the technology forward. So we could say, okay, we increase the, performance of our technology to create this easy water ordered water in the cells. So now there's the other question that you said with your water glass you had yes. You have easy water in your water class, of course. Because every, the water has easy water. That is an attribute of water. No, without this water wouldn't be water. So these things are always staying side by side and existing question is the amount and water does used for. So if you would like to increase the amount of ordered water in your glass, you put it in the sunshine works perfect. That is shown with a lot.



William Pawluk, M.D., MSc

Right.

Hans Eng

Of the yeah. Near infrared light works perfect. Everything that is in the near infrared light, maybe even in the red light zone, red light is already going very, very low in the ability, but, and you infrared light. Creates easy water. The only thing you take of water, glad you take it. It's gone at the surface because you break the surface structure and the thing, and it has to get bit somewhere else.

William Pawluk, M.D., MSc

Let's address the water for a second just to make sure that people understand that we need all the kinds of water, right? You can't just have high ordered water. You have to have other kinds of water as well. For other purposes in the south and water is actually made by the cells as well in the metabolic processes. That's a different water that the water you, right. Or they get by IV. So you eat all of those kinds of waters.

Hans Eng

Water has a lot of different properties and all of these different properties are being utilized in the body. Water has a great property of conductivity. That is very important for our body. Water has a great possibility to distribute components now and everything. And so there's every single attribute that we know today is being utilized in our body. And that is why water is so important for us, that we use all these things.

William Pawluk, M.D., MSc

And that's why we're about 85% water, 75% water, right?

Hans Eng

Yeah, yeah, yeah, yeah, exactly. So that is Jim part. I only want to go for very short moon back to our technology to understand a little bit more the business ordered water. So the ordered water, it is important to create audited water at the point of interest. So we know there's yeah. The point of interest and our part is the point of interest is on the surface of the proteins in the cells. And not in a container in a laboratory. Not in a glass. Because we know when you have it in a glass,



even that is really with water in the moment you drink it in the moment you swallow it's gone. Know it cannot be transported from a to B know it audit water because it has to be ordered water connected on the surface with interest, ordered water can only exist on connection surfaces.

William Pawluk, M.D., MSc

We're at that point, hold that for a second. There are a lot of people who are selling structured water. So let's deal with that. And then go on to the next point you're gonna make. So what's interesting structured water and ordered water.

Hans Eng

Very often the term structured order is related to ordered water, structured water also have a different other meaning, understanding in as more in the science area, not as much say outside of science, what that means no. And not as important in our daily life. Currently, those kind of structured water, but usually structured water. When you read today is related to the ordered water and those things.

William Pawluk, M.D., MSc

Some sense, except that you do breaking structured water. As you're saying, when you're drinking ordered water, it's ordered in the glass, you drink it. It's no longer ordered.

Hans Eng

You can produce, everybody can produce this kind of structured water or ordered water can be take a glass and put it in the sun. Then you get more structure, more order. Into water-

William Pawluk, M.D., MSc

More structured.

Hans Eng

Yeah.

William Pawluk, M.D., MSc

What percentage would you say is structured when you do that? That is of water.



Hans Eng

That is very difficult to say because every water is also contaminated with a lot of different other parts in it. Every single part creates a surface. So is the amount of output depends on your location where you are. Like I said, you need your infrared light. That is going in there. Very difficult to measure you. I say you have more near infrared light in a room. There's two people in there because we are emitting near infrared. Then with one person in the room. So there are a lot of avails. It would be wrong to say, you have to put this glass one hour in, then you would have whatever, twice as much. That would be not.

William Pawluk, M.D., MSc

You have to do is control the variables to a great extent. Get predictable results.

Hans Eng

So and everybody who said, I create structured water. I create water. Ordered water is pretty much right. Number one, structure and order is always part of water. And if they do something very easy, like yeah. Putting in sun, then they create more. No questions. How long does it last? And does it go to the point where I want to have it? And so something like this, everybody can boil water, but the question is if I would like to get the warms out of the boiled water to a certain point, do I do everything correct? To get the warmth temperature increase to the other point where I want to have it to increase the temperature is pretty easy. So, and that is a part where we look more in, how does it actually work? That order on a surface is being increased when there is a body of water. So we have a small surface that is all water.

How do you increase here? The surface of the audit water. That is a process that we are concentrated on. And that we research that we work with university together to get the thing done. One thing is we need input of a very specific energy, an energy that is absorbed by the water and absorbable energy. So the absorbable energy for water are known today. And okay. We have also bit patterns around it. For this energy input, when that energy is being input, something happens to the water here. And that is called, it builds a coherent domain. So coherence, everybody know what coherence is. And I use maybe a picture know from the scientific viewpoint, maybe a little bit rough, but for everybody who is not in this field helps. Think about it. You have a lake that is covered with ducks. And the ducks are looking in all different direction and doing their thing. So when they do all these different things, they're



behaving like water molecules. Every water molecule usually is doing something. And you are staying on one side of the lake and you clap in your hand. So the duck close to you looks at first in your direction and then the next duck and the next duck and the next duck. And when they look always in your direction and they look in your correction, that's called coherence. So they do it. Even if the last duck on the lake couldn't even hear you. They do it because the neighboring duck is doing it. So for a moment in the life of the ducks, they're looking on the same direction that is called coherent now. And water molecules are doing the same thing. Similar thing, very specific energy goes in and the water molecules are creating for very fast moment. And it goes very fast. It goes through the entire body of the water, this coherence. And when they surface somewhere in the water, the coherent behavior is getting pushed together and the water molecules have to move a little bit closer together.

And they stay a little bit closer together. So when that creates this order, so when never you have now let say in the cells, a certain kind of input in the water and the input is for the duration of a spark. Then this wave runs through the body of water in the cell to a surface creates ordered water now. So what is a spark? What is the natural spark in the body that creates this? That is a very specific, free, radical, yeah. Cause certain kind of molecules. It could be also other molecules, but we know it is doing the very specific free radical's doing it. Molecules after chemical reaction, they could be excited. No molecule would like to be excited. So they release their expectation energy. And some of the expectation energy that those molecules releases are absorbable highly absorbable by water molecules, no or better.

Let say the sounds that these molecules release are able to be here by the docks. So now, so they are absorb. And when the molecule emit this energy for a certain amount of time, then it creates this wave on the surface, we see the buildup of exclusion zone water. The order that is created helps the more protein to fold and the protein can react. So what I said is that is a biological process that is done in biology. What are we doing? We are doing the same thing outside. We are emitting very specific, even higher absorbable energy into technology and emit this to water vapor. The water vapor has a, minimum amount of humidity and is connected to your mucus membrane to your body. Basically-



William Pawluk, M.D., MSc

Let's stop there for a second. So you understand this, that what you're doing with this technology, you're taking water from whatever source and we're talking about the best source. You're taking the water from whatever source. And you're radiating it with infrared as if it was being exposed in the sun.

Hans Eng

Is a very specific near infrared.

William Pawluk, M.D., MSc

So you're taking water and you're radiating it on purpose in this technology. And then that water is structured and then it becomes vaporized.

Hans Eng

We create a trust of vapor. We create a vapor. We need to have a reservoir with water to create a vapor. And the vapor has a certain amount of percentage of humidity in it. So they are water molecules, highly densely. And we emit energy to the water vapor. And that creates the coherent domain in the water vapor.

William Pawluk, M.D., MSc

In each of the water molecules.

Hans Eng

For water molecules. So there are, the water is the humidity. They are little droplets. You could say little droplets. And little droplets have thousands of molecules in there. So, and you could say every molecule, every droplet yeah. Is a kind of little lake. And in this lake we create a Korean domains and they are connected because it's humidity. They're really, really connected. So we are building basically a channel between the device and the user. So when the humidity touches your mucus membrane, your humidity becomes part of the humidity in the device connection in the flex arm. How we call it. So in the coherent domains are traveling along the humidity and traveling in your body, two surfaces where they cannot go further. So on the surfaces, we have a lot of different surfaces in the body. But we are only concentrated and only interested in the surfaces that the proteins built tools of water know your, we would like to address their behavior



to fold faster. Or the other thing is also to stay stable when they are folded. So that is the only thing. What we do. The water that we use in the device should be clean water. Not tap water. There could be chlorine in. We don't want it. Could be distilled water could be filtered water. Anything that is clean so that our device could be used for 20, 30 years without any problem. Cause we have some other glass component in there and they have to stay clean. So in this humidity that you, then people say, inhale, you don't really have to inhale it. It has to touch your mucus membrane. Cause inhaling means you have to intake a component. Like when you have an inhaler or such a thing, an AOL or such a thing that is not the case here, you don't inhale. The Water only has to touch your mucus membrane know? And then it cascades through your body. That is-

William Pawluk, M.D., MSc

Also the membrane into the circulation.

Hans Eng

All, everything that is water will transfer the Korean face. The Korean domain. And when the Korean domain hits on a surface, it cannot go further. So the other example is that we can take is a wake of a boat. You have a big lake that is a body of the water. And you have, let's say big motor boat and you drive the motor boat and the boat creates a wake? And the wake from the motor boat runs the entire body off the lake. It doesn't matter how many islands are there. It goes around island. You can measure the wake of a boat on the backside of the island. Maybe it's not as big, but you can see it. You can measure. It goes everywhere around until it dims out. So, and that is a little bit the coherent, the nature of coherent behaviors. During wake, no water molecule is traveling. Now the water molecule is exactly where it was before in the lake. Right? No water molecule is washed from A to B. It is only moved a little bit out of its position at the end is in the same. But awake, you will see the entries results in the ripples, on the beaches. That was depressing actually on the beaches, the peppers together.

William Pawluk, M.D., MSc

So now when you, there's a picture behind you of the NanoVi.

Hans Eng

Yep.



William Pawluk, M.D., MSc

So there you have the control unit, you have a bottle on the backside, back of it and out of the control unit, you have this like snake-like device, this snake tube, it's a tube. And at the end of the tube, that's where the vapor comes out. Right? But basically you put the tube near your face.

Hans Eng

We have two possibilities to use this device. One thing is only with a flex arm that you, the snake like Jupyter that is very flexible so that you can put it in a position that is very comfortable for you. The pressure of the Airstream that we put out is a little bit like we designed this entire technology with a user in mind know, simple, simple, simple, everything is checked by itself. You do not have a service. The technology is able to check itself. If something is not wrong, it tells you what it is, know what is wrong. And the same thing is people ask how close do I have to sit to the flex arm? Oh, we make it very easy. As long as you feel the Airstream. You're close enough. So we measured the, two pumps in there to create this Airstream. We measured the Airstream and we, calibrate the pumps so that the amount of humidity know that you need is correlated to the pump output.

So if you are close and feel Airstream, then the humidity in the Airstream is correct. If you would go further away, the humidity would not be high enough and effect would be going, would be going down. So on the other end, if you sit in an area where you have high humidity, I say 80%, you live, you sit in a room with 80% humidity. We can say, you can put the device in the other corners or room and it will work. Cause entire humidity will help. So, but nowadays we have air condition systems, air, condition systems, reduce the humidity in a room sometimes down to 30%. So we need the, we have to enable the humidity to be higher.

And therefore we use its one, if you need a little bit more freedom to move and those things you can attach nasal cannula, those native cannula, like from oxygen, you put this around. I prefer this very much. Cause I use this technology at my desk at the office. I put the nav canula on and now I can move my head wherever I want I can make phone calls. I can talk with somebody. So it gives me more freedom for move. Other people use it while they're working out people using it. They said, oh, I take a nap. I would like to sleep while I'm using it. And then I can turn around all those things. There are these different possibilities to use this technology. And because it goes through your breathing apparatus. Through your mouse nose. You can use it perfectly in



conjunction with other the treatment for entire, for example, with your technologies there and there are different modalities. How that works and that works in the same time. Perfectly together. You can combine that.

William Pawluk, M.D., MSc

So now let's, take your water vapor and travel through the body. So in context, the surfaces, your mucus membranes and your nose and your mouth and your airway. And then what happens?

Hans Eng

Because you mentioned before and we are 95% or more percent out of water. We are like a big cloud. That's the other thing we are not like a glass of water. We are like a cloud. So like humidity. So this entire cor let's say this wave of the coherent Korean. They travel through our entire body. To every surface that is out there. So like I mentioned, usually in the body and biology, there are these sparks very fast. They create a domain, they run to the surface and then it's over. Then it would need another new spark. Our technology is constantly are meeting this energy. In the moment when the device is on. We are constantly creating the domain Korean domains and we keep the Korean domains constantly alive while you are using this technology. So that is not only a little tiny spark here and there. It is a constant application of these cor domains and that goes into the entire body everywhere.

William Pawluk, M.D., MSc

So because it's traveling through the blood vessels, through the capillaries, right.

Hans Eng

Everything that is water, it goes through blood is mainly water. Blood is mainly water. So it would not travel through the skin. So if you would like take our UI and you would try to apply to your skin. That wouldn't do it. Our skin is very low in water. No, it is a protection say layer around our cloud that we are yeah. To keep our water inside us, you know?

William Pawluk, M.D., MSc

So our skin is actually like scales, like fish scales. It's protecting us from the water environment that's in the vapor, just like fish scales do now thick as fish scales because we're not in a heavy water, medium, like fish are right. Correct that way. So basically you said it goes everywhere in



the body now, as it enters the body. How long does the effect last in the body? A after anion safety do a 20 minute cycle or what are the cycles in the machine?

Hans Eng

We have, you see here three different devices. They have three different amount of outputs and that is related to your time that you have for the same effect for the same output. You use a small for an hour, the medium device for half an hour and a high end device. That is the exo device. You use it for 50 minutes, then you would have the same output. So the same output could have different effects to people. So depending on your general state of health or what your body demands. We have people who have a very low state of health. They couldn't use our high device for five minutes, cause effect would put him in a discomfort. So many things are starting to work. And that could be unpleasant that could create such as an, like a perim reaction for anything like this. So then you say, reduce it, reduce it. Other people can recognize, oh, I use say the high end device for 50 minutes. I can feel it. I'm more concentrated, aware. My entire cleanliness is being approved. A different other person after 50 minutes say, oh, I'm getting tired. I can really now take a nap. That depends on what kind of protein functions are getting assisted to do. What's body is requiring to do. So if you have a healing or recovery demand in your body, when protein starts to work, you probably will get more tired cause.

William Pawluk, M.D., MSc

And is an energy draw energy demand on you.

Hans Eng

Because the energy that is required, the ATP that is required for other biochemical reactions are not being supported for your concentration. And awareness buddy said, no, no. Now we have the energy. We put it into server generation, cell growth, whatever that is, wound healing. That is more important for this one. A healthy person would probably not recognize it. They would recognize a more concentration because if you would have more cell energy now, and your demand is for staying concentrated, it would get delivered to this area and you can perform better. Why cell energy? Why is it very simple to people to recognize? Cause these proteins that are involved in the mitochondria to produce the ATP, the ATP, you, these are enzymes are getting better. These things are being recognized. Most of the protein functions in our body, we don't recognize which is good. We would be pretty busy otherwise to recognize everything. Most



of them, you recognize the small amount we recognize, and those are then these things, what we recognize when you do first time, our technology. But for usual treatment, we say the high anti device half an hour should be efficient. How long does it last? It lasts for the time of your demand of the body's demand. If you demand a lot of things from your body, what we create will be used up very fast. So that is pretty much the way how it works. But we can kick start also a lot of other things yeah. With our technology, when that is working, when that starts to work again, then we see a lot of other things. So now we are coming back a little bit to the biological creation of this ordered water in the cells. Like I said, in the beginning, we need a certain kind of free eradicates or certain kind of free eradicates are doing it know to create free eradicates. We have to metabolize a oxygen well to metabolize oxygen, our APAs has to work.

So if that is damaged, usually that is age related effect. The accumulation of damages. We don't create enough of these three radicals. Therefore we cannot create in our enough office ordered water that triggers the protein for it. So when we have the spiral of aging, pretty much them. So if we go in and repair those protein or give them a jumpstart in the ATP production, now the body is able to produce enough ATP. Again, they produce as a side effect for free, radical that as a side effect, amidst the important energy that is used for the all water, the product to the protein help and forward again. So it really depends on the individual level. Where is your demand? What is your lifestyle? And cause we don't know it. We simply say use it as much as you can do in combination with other treatments as best.

William Pawluk, M.D., MSc

So it's just a matter of replacing the wall water that has to be filtered through the system. So once you've depleted that supply, you replace that supply and then you can keep using it. So there's no risk in using it except for the Hering responses that you would have with people who are very sick and depleted that you have to be titrate the doses more slowly, but otherwise you could use, is it all day long?

Hans Eng

You can use it all day long. You cannot overdo it. Cause you are not forcing for example, protein creation or those things, you cannot force it. You only provide the resource. And the body desire to itself at what moment and at what place do I need? What kind of proteins for. No cause the body will not create, let's say immune response proteins, if there is no intruder, so it's not



necessary. The protein will not create fever. If you don't have anything else in you, the body, everything keeps your body temperature exactly where it is necessary for all these processes. Actually it has to, it has to keep it low know because with all the biochemical process in our body, the tendency is that you would like to go higher and that is not good for the proteins because at temperature, since.

William Pawluk, M.D., MSc

Let's go back and talk a little bit about free radicals. So in other words we have this conception, everybody's got this perception or conception been told and trained for years that free radicals are bad for you, but we need free radicals. So if you're talking about exclusion zone creation, ordered water creation, you need free. But what's the harm? What's the risk? What's the balance or a trade off between harm and benefit.

Hans Eng

We have always like the beginning, a coin with two sites today. We know not today since many decades, we know that the free radicals are not only harm free eradicates in certain areas are important. They're part of our protection system of our repair system. Every infection that we have produces free eradicates and these three eradicates are so strong that they can yeah. Destroy everything what we get in our body for splinter, for example, free eradicates are important for the uppers. For the so-called program cell desk.

William Pawluk, M.D., MSc

The turnover of cells.

Hans Eng

When the body recognized here is the cell structures, that is not okay. I say case it's a cancer cell. Then the protection is to kill the cell to eliminate it. And in doing this process, there's the burst of free radicals to make sure that everything is getting killed in this part. So and we use these technologies or no, not as good technology. We knew we use this process in a lot of different other treatments there. For example, in certain chemotherapy treatments, we use this, that we have burst of free radicals in a very defined area of tissue to damage the tissue, to kill the tissue, stop that unhealthy tissue grow there. We know that the free radicals are important for this part. And we have a lot of other things we know that free radicals are also some called messenger



proteins signaling proteins because of the nature that they are emitting energy. This emitted energy is being recognized by other molecules. And that something is going on there. Now we have to get busy to do something. I describe it. Very simple. But there are sensor proteins, sensor molecule. They can send those things. There was, we have to get disease there. For example, we have to start the new server generation, because there was the cell air areas that got damaged. Our immune system relies on free eras. So when we have people and we know the high, high intake of antioxidants know and I mean really high intake with injections in certain areas. Doesn't create pain. It reduces the pain. No, because pain is one part of inflammation and free eradicates are responsible for inflammation. So if I have an event that would require the creation of inflammations with free radicals, but I don't like the pain, then I put in a lot of antioxidants to suppress the free radicals. Therefore there is no information, there's no pain. And we know those things for example, out of sport.

So we see athletes who are training for example, half of their life for Olympics. And in the last day or in the qualification run, they band an angle or they do something to their body, which would usually reside in an, with pain and those things. So they are getting treated with high antioxidant doses in this area to suppress inflammation into pain so that they can do the final event and hopefully win what they there for going to the Olympic games or such as. So we know all these procedures, you also know that's a high intake of antioxidant in some literature you say, oh, that is one of the reasons why we have a huge amount of cancer. Cause we suppress unknowingly their own body repair ability by fishing out and eliminating far too early, the free or know, even if they're good. So they are always two different coins, two different sides on the coin.

William Pawluk, M.D., MSc

So and you have the antioxidant components on the outside of the cell and you have the Antiox components inside the cell. And the inside component basically is what you're talking about with program cell death, apoptosis generation healing. So as you said, you need both, you need to have a reasonable amount of antioxidant support and a reasonable amount of oxidative stress in the cell to do the cell's job.

Hans Eng

Right. And with our technology, we could avoid the free radicals and we can avoid their bed face the bedside or the coin because we don't use these guys. We not use only inside the device, the



certain electromagnetic energy that is emitted, even in electromagnetic, that is more potent than this. What is emitted by certain kind of free radicals? Cause we apply material science and knowledge about water to create at the end of it on the protein surface ordered water so that they can fold and do the work, whatever that is required. And we have a lot of sale piece that require proteins to work so now all the, intentional of the other therapies are being supported by those proteins that are starting to work again.

William Pawluk, M.D., MSc

Well, this was a fairly dense, relatively heavy session. And there's a good chance. You're probably gonna have to listen to it several times to really understand what we are talking about. And that's okay that's good. Because we're talking about a very important technology. That's a, I think a, leap forward in what we can do to help the body to heal and repair. But since this is a PEMF summit, now the question is how does PEEM F integrate with the NanoVi and what the NanoVi does? So what the NanoVi does is unique given the way that things work inside the body, but PEMFs also enhance all the things that the NanoVi is doing, which is to help the body to repair and regenerate and to rebalance. Now, PEMFs have a number of different actions. One of those actions is to increase ATP. Another action is to improve circulation. In other words, you're delivering better oxygen and you're also delivering better nutrients and so on tissues. So when you do those two things by themselves, but PMFS also increase DNA. They also stimulate repair and regeneration. So all the things that, we need anatomy to be doing is complimented by what the PMF therapy can do. And there's no reason they can't be done at the same time. There's no interference basically, except maybe you, you do generate infrared in the machine. I suppose a high intensity magnetic device could upset the electronics of your equipment?

Hans Eng

No, no, that is all we, Medicare device and medical devices are only allowed to emit a certain kind of ideation so that they don't feel interfere with other technologies and medical devices have to be shielded that they cannot be affected by other technologies. So that is part of a safety net yeah. Product safeness in general. When I have a device or any kind of electric device at home and I turn it on and I see a funny screen on my TV, then I know that this product is not allowed to be on the market because it emits.



William Pawluk, M.D., MSc

Shielded.

Hans Eng

That is not properly shield. Or pretty much emitting too much. And your technologies as they are all properly technologies, they don't affect ours and ours is protected. No, it will not get affected with any other legal, as I say, pretty much legal device.

William Pawluk, M.D., MSc

Normally, still say other, keep, keep PMFS away from other electronics by about a couple of feet anyway.

Hans Eng

Yeah.

William Pawluk, M.D., MSc

Just to be certain. There's no way.

Hans Eng

Very often it is also part because you don't know what the other electronics are doing.

William Pawluk, M.D., MSc

Well that's the problem. You don't always know. And older equipment can have certain breakdowns and not be functioning as adequately or the protections are not as they were when they were first made. So how do you see PMs working with NanoVi then?

Hans Eng

Yeah, we see a lot of implementation already. How they work it yeah. Where they do both treatments at the same time or PMF is a local treatment. The person doesn't run away. So they sit comfortable. They lay comfortable. They can use in the same time as NanoVi treatment. Or they do it before or they do it afterwards, Cause every treatment has a certain kind of long lasting time in the body. So it is not off in the moment you get up and walk away, it lasts four while there, so you can combine it even later. So we have places where there's one NanoVi



devices and several PMF stations, right? So the person IS going to it or the NanoVi of it device is on a little rolling cart. And then it goes from one station to the other where it's used by the client. The next thing is that the device, our devices are so easy to work. You don't need a higher education training on it. There's an on, off button. So we created it very simple. That means that people can administer it by themselves if they want. So they innovating a room before or after they can use it. So there is no additional person necessary who adminis it. So that can always be easily done together. And in some facilities because they use already treatment combinations, they put it in the line of treatments, wherever it fits best.

William Pawluk, M.D., MSc

So you could use it in the setting of acute inflammation, you can use it in the setting of recovery from COVID. You could use it in the setting of setting of stroke and cancer. There's no re really there are no contraindications in terms of medical conditions that you could treat.

Hans Eng

No, we have no Contra things. We are class by medical device. So we can use it everywhere. You can use it at home. You can use it in a clinic. You can use it at a workplace. So in a clinic, usually the device is in the room with a client and it stays there. For example, in a more corporate wellness area. You have a device that is again, either in a room where people can go in and use it know or you have a device that goes from one desk to the other yeah. On a cart that is flexible to do. Corporate awareness is becoming more and more an interesting topic probably. And I can see absolutely for the PMs technology as well. Cause it works on everybody only and only has benefits. So that is it treatment that should be used where people are that is at work know. So make some time yeah. Use it there. Or at the time there's a space, there's a room where companies should take those things in there, have one room and have it being used during the entire weak, by 2030 people or whatever who have the benefits and maintain your workforce. And the health of people who are working for you on a higher level. Don't wait until they are sick use it beforehand.

William Pawluk, M.D., MSc

That's the goal with P therapy. It both as prevention and as treatment too. Do you have any examples? Have you heard any stories of people who have added your technology or used your



technology and added PMF either way when they started to combine them? Have you heard any anecdotes or case histories of bigger changes when they combine?

Hans Eng

They basically always say they have an increase in beneficial output. Increase in beneficial output. Some can say, oh, the client reports benefited in a completely different other area. For example, people recognize, oh, I can taste and smell again. So that is a completely different other area. But these are protein functions. Where you say, okay, we recognize we, we improve this thing. So they go in a clinic for an health issue that is being treated there with success. And a completely different area is being also getting improved. That is always very nice to hear. Where people say, I come to you. Not only because this reason I come for the other one. And cause they can recognize it in certain areas. Like I said, most of the protein functions, we cannot recognize no faster wound healing. We don't really recognize the difference in the speed side. The, my phone is ringing sorry. We don't really recognize only if you would stop the time.

Now we don't don't feel it too much. But when people recognize other areas, then they come and can introduce those treatments. So we had clients who said, well, so professional who are offering both of the treatments that we are getting people in because our clients telling us is how good they feel when they get out here. And then the other people are coming in and said, oh, I would like to have this the same thing. Not because I have a problem, but I would like to do it for prevention, purpose for wellbeing. And I would like to have these same protocol with all the treatments that are used on my friend or neighbor or such a thing. So that's a good multiplier. To get acceptance for Preventional treatments. That's the people do something before they have, it has issue.

William Pawluk, M.D., MSc

And that's our goal as well. So ongoing use decreases aging, ongoing use of NanoVi would decrease aging as well. And we talked before when the interview began of how different kinds of therapies complement each other. And if you understand that mechanisms of action, then you understand out how this therapy works, especially, and then you add another therapy. It makes it work even better. So one plus one does, does a multiplier, one plus one doesn't equal two, one plus one equal 10 or 20 or 100, even when you're starting to combine things. And the earlier you



start treatment, right? The better, the results where you're almost dead. That it's hard. I tell people magnetic field therapy doesn't raise the dead.

Hans Eng

Correct. Yeah.

William Pawluk, M.D., MSc

Yeah.

Hans Eng

No, yeah. That is right, you should, we were talking earlier about the difference in the healthcare system, the challenge of the healthcare system system that we have here and is that we are focused on prevention. We do a lot of things with changed in diet or in the last decades. We are doing more active things. We know how important that is, how will that keep us healthier? But there's more room to do. There is really more room to do this. Not everybody can have access to healthy food in the right amount they needed. Not everybody has the possibility to do the exercise that is for this individual person necessary, but we have more and more systems in place, you know, for example, in different, completely different other area is in Germany where we also sell the products. There are tax deduction for companies who are doing preventional treatments who are offering preventional treatments to their employers. But it has to be when I say registered and approved treatments. So a massage field, good treatment is not a preventional treatment that is deducted though. But there are certain treatments that are deducted. And one of those ex for example, our treatment. As I say, that is something. If you put this in front of your clients and say use it, we see the benefit. I don't know whether PEMF, if that is part of in Germany also S one also text deductible treatments, but I would think so.

William Pawluk, M.D., MSc

There are some applications in the US that are approved by insurance companies. Most of the time P therapy is considered as a wellness therapy.

Hans Eng

Is then is a, the spread of this and say the implementation of those technologies with prevention focus, we get bigger and bigger and bigger.



William Pawluk, M.D., MSc

Well for those people who have HSAs or FSAs in this country, PMF therapy can be covered by those, if you have a prescription. And that's one of, of the things that we offer Dr. pollock.com, where can people get more information about the NanoVi.

Hans Eng

A big, good resource is our website that is www.eng3.copr. And of course.

William Pawluk, M.D., MSc

www.eng. And then number three, corp.com.

Hans Eng

Correct. Or you simple Google NanoVi N-A-N-O-V-I and.

William Pawluk, M.D., MSc

And NanoVi, I did that myself before coming on to get more familiarity with you and yeah, there are plenty of that. You've given plenty of interviews that you've had with other people as well. So you can learn quite a bit more about NanoVi.

Hans Eng

We have a lot of animations that hopefully will better show what I described to people. And of course you can always contact us via there before education. And we have a lot of materials that we can provide. And that is also very helpful for clinicians. We have a very good app that for, especially for clinician use, they don't have to learn everything. What I said. They turn on their tablet and there they have library, of movies yeah. Of animations that show specific areas, how it works and why the combination with other technology is so important. Yeah.

William Pawluk, M.D., MSc

Fantastic. Well, Hans, I appreciate you very much coming in to visit with us and sharing your knowledge and information. I really excited by this relatively new technology. When was it launched in the us.



Hans Eng

10 Years ago?

William Pawluk, M.D., MSc

Really? I we're already hearing about it now. I'm sorry about that. I'll say thing about magnetic therapy.

Hans Eng

Yeah.

William Pawluk, M.D., MSc

Well again, I thank you very much and hopefully you can have a great rest of your day, any final thoughts?

Hans Eng

Thank you very much for being here for having me here. And I really enjoyed your discussion with your questions that we are exciting with hopefully questions that your listeners would ask. And I'm really looking forward to stay in contact and with other experts out, of the PMF theater to exchange the results that we can accommodate over the time.

William Pawluk, M.D., MSc

We can get combined results.

Hans Eng

Yeah.

William Pawluk, M.D., MSc

Good, again, thank you so much for your time.