A little bit of housekeeping on this end, I may ask for some people to unmute to ask questions or discuss throughout this discussion and I will let Trey know so that he can take care of that and also, if you want to unmute in order to ask a question, please feel free to type that in and ask Troy if he can do that for you. Throughout the presentation, there is a lot of information that we are going to be covering. I will top from time to time to ask questions and I know there is a delay. I will patiently await to see if any questions come in. We have a one break in the middle of the presentation and then we will resume and finish with a Q&A. I will be doing Q&A throughout this presentation. Troy, I'm just going to ask you. Any other housekeeping on that or any issues on you unmute people?

No, if they are using audio, they would press star pound [indiscernible] they can do that themselves. If they are using their computers, I would need to know so that I can unmute them specifically.

Okay. Terrific. I will be great. So let's get started.

Welcome, everybody, to pain skills. This is a disclosure that I certify that I do not have any immediate family member of my family, spouse, partner in it the last 12 months or expect to have upcoming arrangements in the next month that have to do with financial or a gift in kind with any industry that is relevant to this presentation. With that in mind, we also need a remainder that what I will be talking about with frequently specific Michael, the views I'm expecting in this presentation is those of mine and do not reflect the policy of the Department of Army, Navy, Air Force Department of defense or the U.S. governments and this presentation is on Relieving Pain with Frequency Specific Micro-current and we are going to be looking at Clinical Applications for Acute & Chronic Pain.

I am an acupuncture position. I am a trigger point therapist, pain specialist, and wasted massage therapist. I reside in Florida and this is where I am licensed and suspended most of my time traveling and teaching, although I still keep a clinical practice and I have been doing micro-current for over 16 or 17 years now. Maybe longer. I came in to the world of treating pain through the world of myofascial trigger therapy and I was fortunate enough to meet, in the 1990s, Dr. Janet, along with Dr. Simons. They wrote the books on the trigger point manuals. Long before I was even a practitioner, I had the opportunity to be with Janet and be in the world of myofascial pain. I call it the myofascial Mafia and with that, I would say that my brain got mapped in very, very differently. For being in that environment and having not gone into any kind of informal, medical training yet. I see the world a little bit differently when it comes to medicine and I tend to be far more open-minded about everything fits together because the first thing I learned about was perpetuating factors.

With that, once I finished my first training for myofascial trigger point therapy, I realized that I did need to have a license in order to do perpetuating factors and the state of Florida, becoming an acupuncture physician or a doctor of Oriental medicine is basically considered primary care and allows me to order labs and order imaging and make all

kinds of nutritional and lifestyle recommendations and work with people on all levels of help. That was a perfect fit.

Plus, I got to do acupuncture and put needles into trigger points. I did learn, very, very quickly that acupuncture is a beautiful and a brilliant form of medicine and through that four years, I have incorporated how we see the body from a Chinese medicine standpoint as well through traditional Chinese medicine and also classical five element acupuncture. That is a little bit on my background. Most recently, and you can see that in my bio. I have been working with the military since 2018 and started with Nellis Air Force Base for a demonstration project. They have continued on and also doing some very special myofascial therapy and including all types of bio-energetic devices, including lasers.

That is my background with the manual therapy, myofascial pain, neuropathic pain, for specific micro-current, and the military. Let's get started. I am in private practice and I primarily teach and everything that I do is feed for service. I do a lot of work with micro-current and protocols but I don't have any direct contracts with anybody. I'm going to be showing you micro-current devices from companies and I don't have any financial relationships. I have been an independent instructor since 2012.

I'm going to be discussing the benefits of these bio-energetic devices and what clinical experience has taught us. With those, any of you that are doing micro-current or have devices, because we have had these days in the military for over 15 years. Any 210 ohm micro-current device will work. In this course, I will be talking about the enemy and the tech devices and showing you those and you will see some pictures and I'm going to show you all of the other devices also. Then, anything that I'm going to be talking about, the clinical method, this is based on decades of combined clinical experience with not only advanced practitioners but also many, many instructors that have so much experience with micro-current.

The learning objectives that we have for today and I really to inform you about the history, research, and the science of using micro-current and hopefully you will be able to understand the indications, language, frequently selection, and application of two channel micro-current, frequency specific micro-current. We will be talk about historical, physical injuries and unresolved chronic pain because this does actually matter as you will see when we go through and there is something that we can do about it. We will be talking about concussions and brain injuries and the impact if the chronic pain is left untreated and we will go over adverse childhood experiences. PTSD, emotional trauma, and how it can impact chronic pain if we don't address it.

I also have a few ways that you can easily get history from your patients very quickly because time is an issue and we are going to talk about that as well and that the Nellis Air Force Base, they have had a couple ways where they have been able to resolve this and use these techniques to get the information they need quickly. When your patients come into the clinic I coined a term neural myofascial body. They are

arriving and that this wholeness of how all that neural myofascial tissue works together and if you listen, they will tell you what is wrong and they will often tell you it how they need to fix it. It's an order of how you look at the patient's differently and asked the question.

When the first moment they arrive, especially if you have the opportunity to watch your patients come into the clinic and if you listen to everything that they are saying, verbal and nonverbal, there go to be able to tell you from how they approach you and how they appear everything that they are doing. Their stories. Their histories, and at their emotions. Also, there values. We know that is happening with the social and psychological -- and social impacts on chronic pain in people, we know that depending on the people you are with, the problem, it determines what kind of issues they are going to have.

During this workshop, we have a lot of materials to cover but I am going to take the time to talk about trauma and acute injuries, neuropathic pain and myofascial pain. We have finally, after two decades of talking so much about it. It's a common, understood condition. Anybody dealing with pain, knows they need to look for trigger points. We know about referral pattern. It is not that disbelief for diagnosis when I was coming into this world in the 1990s. As part of a differential diagnosis. I'm going to demonstrate to you that sometimes that myofascial pain is actually being perpetuated by the other issues that we haven't had a very easy time treating and that this is problems that have to do with a brain processing. People who have had traumatic brain injuries or concussions of many kind and also, when we have spinal cord irritation and inflammation -- nerve irritation and inflammation and the actual spine structures themselves. The joints can cause secondary myofascial pain and emotional trauma and adverse childhood experiences.

I'm going to lay out the story for you of what is happening and how we were treated with micro-current and why this is one of the best ways to deal with those structures, that we haven't been able to do that much for unless people are taking medication and or have had the surgery and really, if we had a noninvasive away, and easy way without side effects to address it, this would be great for us. Let's just talk about the FDA right away.

Micro-current devices are cleared through the five 10K process. They are in the category of tens. However, even though it is advice that was the predicate device for micro-current devices to get cleared. The specific frequencies that we are talking about having been cleared by the FDA. Therefore, the statements and techniques that I'm going to be talking about in this training also haven't been cleared by the FDA. The good news is, we have research that is being done at the Nellis integrated medicine clinic. Hopefully we will start seeing research for backups of the statements we are making. I won't be making any claims about being able to diagnose, cure, treat, and mitigate any condition or disease state and with micro-current, we are going to be following the same rules of treatment and treating the same patients for conditions with micro-current that we do with TENS therapy and this is keeping everybody compliant.

With that, remember physicians are able to practice off label. The contraindications, so you know what they are in the very beginning include the fact that if you have something electrically powered in your body, it has to be turned off or you can't run micro-current. Any of your patients that might be pregnant. They either are pregnant or might be pregnant, we cannot run micro-current. We do not know the effect it will have on a pregnant uterus. We do not do it. Anybody who is had an organ transplant, especially true that we need to be mindful with the two channel micro-current because you can see that there are some effects on the immune system with improving immune function and reducing inflammation. We don't know long-term effect of that. Cardiac arrhythmia is in there because TENS has the ability to stimulate a construction in muscles. Cancer and any kind of cancer lesions, we do not run micro-current through those areas. Micro ones, it hurts terribly if you put any kind of current through an open wound. These are the same type of contraindications that are specific to TENS.

Your orthopedic patients come again, you can use micro-current if they have had knee replacement, hip replacement, pants, plates, artificial joints anywhere and even stents. If they have had cardiac procedures or any time a vascular procedure. The current physiologic. If they were in the more body current, it's fun to run micro-current on it. There are a couple questions we have also and that is cardiac pacemakers. It could interfere. We want to make sure that they can stay working and pavement. There are ways around that and also, most of you already know that for most people, a pacemaker, it is usually off though.

Anyway, remember that caution and any kind of pop. We have to make sure that you can turn it off. Morphine, pain pumps, insulin, baclofen pumps, and you have to turn it off or do not treat with the micro-current. I know from working with children who have cerebral palsy and were getting pumps put in, it can actually interfere with it. Spinal cord stimulator's would be a really common one that you see if you can turn it off, you have to get clearance from the doctor that put that in or is managing it or cardiac hospital monitors. We do treat people right after surgery and/or acute injuries if they are on a monitored bed though.

The micro-current, if you put it directly on someone, it can interfere with those monitors. The one other one is if people have infection and illness. We asked people to never run any of the pain protocols on someone that is dealing with an active infection or is taking antibiotics because they have had an active infection. Sometimes patrons will say, no, I'm not sick but they are still on antibiotics. Do you have an infection and are you on antibiotics? That is because the body needs information in order to address infection and so we don't want to interfere with that but it has been demonstrated to reduce inflammation. We only use protocols that are labeled for infection or illness because they don't have inflammation frequency in them and that they are not making any claims for curative value. [Indiscerible] patients and practitioners faith if that is going on.

Anytime you have a patient and if you are running micro-current and the pain increases or they feel like they are getting sick, you want to stop using any of the pain protocols. Switch to those infection once.

Always get appropriate medical care. I'm going to pop right into the frequencies. Where they come from? They've been around since the 18 and 1900s. It was out from Abrams who really started using that in his clinic and he has lots and lots of students and they were really seeing positive results and he was a D.O. and one of the doctors who would work under Alan Ball Abrams and really continued to use all of these frequencies.

They are very different from what we are using right now and there was also where they were doing radiofrequency and if you remember, that was another one from the 40s where they were using different frequencies and getting very good results. What happened with the two general frequencies? George Douglas, who is a chiropractor, he has long since retired now. He got a hold of these frequencies because he worked with Terry and have been treated by him and they were passed down in Georgia Douglas worked with Carolyn, who we will talk about in a little bit.

We don't know where these frequencies were derived from and we still don't know the actual mechanism. We do know that they work though. Electromagnetism has been around and used for centuries. We can go back where they were using electric eels. We have much more data now the small amounts of electricity coming into the body and it these micro-current and a laser and even sound therapy, energy coming into the body really does have a really powerful effect on the body in a very positive way when done correctly. We can go back just looking at the cell physiology.

There has been research that has been around for the last 50 years and we know from early on research that when they applied micro-current into the skin, what they were able to see is that there was an increase in ETP production up to 500%. Most of our patients needed to improve their ATP and their mitochondrial function. Remember, this is within the mitochondria and this is where all of these metabolic reactions are happening within the mitochondria and the cells in order to get energy. The other thing that they noted was there was an increase in protein synthesis and amino acid transport. Remembering that proteins are the building blocks of life and our ability to code for these proteins and improve this is what really helps with healing and metabolic function in the body.

With micro-current, there is a novation, signal transduction. This research goes back 20 years and we know that this actually happens in the low and in vitro. The petri dish in the laboratory and also in living animals. When I was in school back in the 1970s and 80s, the picture on the left is really how we were thinking about cell membranes. Very mechanistic. Lock and key. We didn't really have the ability at that time, obviously, to understand what was happening with cells. It was very-mechanized with what could be seen and I was taught that the nucleus was the most important part of the cell.

Now, what we know and especially with the work is that it is the cell membrane that are the brains as Terry, the retired every kernel, OB/GYN physician. She will tell you that the brains of the cell is in the membrane and that is because now we have this other picture on the right and below, which actually show you how complex the signaling is in and out of those membranes and how many things are happening simultaneously

and how powerful that membrane is for allowing things in and getting things out and we basically have fascial components that actually go all the way from the outside into the inside of the cells that are communicating with the nucleus and your genetic material.

This is where, what's happening with proteins actually affects what's happening with transcription of proteins and this is where we get into our epigenetic spirit way back when, Albert St. George, we always have these people that are years ahead and to me, the people that were single-minded in their research in the 50s and 60s and that included people like Janet and Einstein and Tesla and so many other people. Early on that were single-minded and focused. Albert was saying, you know what, these proteins in the body art semi-conductors and this is where we are getting is to attain this information all over.

It is not this lock and key biochemical reactivity. Way too slow. There is instantaneous information happening and he was told by his colleagues that he was nuts. Everybody was lock and key and looking for the magic bullet with drugs, so to speak. We can track it, cut it out, kill it, do something to it and everything will be fixed. We know that that didn't go so well. Much later on, what he was saying was proved to be correct. Virtually all of the molecules forming the living matrix in the body are semi-conductors.

I'm going to interrupt for just a moment. I didn't say it early on. For those of you that might be like me that are very, very particular about how things are laid out and how things look. When we uploaded all of my slides and converted it and put it into Adobe, Adobe change the formatting on my slides. Throughout the area, you will see things that look like they are a little off like James Oschman should have PhD at the end of the name. When it got loaded to Adobe, they decided to reformat all of the sites. If you are one of those people that like everything to be centered and clean and neat and it makes sense, just ask your brain to overlook that because Adobe had a different idea.

James Oschman. Some of you may know James Oschman. For a very long time, decades, James Oschman wanted to get to the bottom of the scientific basis for all of this energy medicine that we have been doing for decades. Going back to acupuncture. Why would that work? Why would cranial therapy work? Why does massage work? Why do other hands-on healing, the list goes on and on when we have had our brains set up that only Western type medicine things could possibly work. A lot of it is because we just did an investigation to understand the energies and this is what James Oschman had been working on for decades.

In the end, is that every part of the body, including all of the molecules that have been thoroughly studied by our modern science, form a continuously interconnected semi conduct their electronic network. Each component of our organism, even the smallest part, is immersed in and generates a constant stream of vibratory information. Everything vibrates and we will talk more about it. We are putting positive signaling information into the body and when I say positive, it's helpful. Once we understand how we can help with this, this is where it changes things. Most recently, this is Dr. Guimberterau. Anybody that has command over

their language knows that I may have mispronounced that. Please forgive me.

I met this man the first time back in 2007 or eight. He was hosting a low back pain and iliac. He was one of the presenters. We were just really starting to talk about fashion and the world pressure Congress was just getting started at the 2005, I believe. Five or eight. It might've been the first one.

Anyway, he is a surgeon and he went in with a camera and was able to magnify the tissue inside a person over 20 times and in these images on the right are actually the images as the connective tissue matrix of the fascia and at this beautiful Saturday model and he was able to put strain into the body and to see how that fascia responded. Again, he was commenting as well that the major's is believed to be the ground matrix for a high-speed signaling network using bio photons and electromagnetics transmitted by liquid crystal Lane. The structures are in college and you can see it here in this picture. This is where we have things happen at lightning speed in the body. You do something and change someone's foot and all of a sudden, their headaches go away. There is biomechanical visits for bad but there is also this energetic, high signaling network that can make a global change. We do this with acupuncture as well when we put the needles in that special connective tissue and that fascial network.

If you want to see more of these beautiful pictures, you can go to YouTube and type in Dr. Guimberteau's name and strolling under the sun and you can see the magnificent pictures and videos that he has done. He really change what was happening in the world of Arthur Asche and was able to show us that we are dealing with a three dimensional tissue that globally responds to strain and of course, now, everybody is much more burst on treating the fascia.

We have Dr. Huynh on the phone. I've had a pleasure of collaborating with her for over a year now. She let me use this slide to remind you that it's in the literature. Resident signaling is everywhere. Everything vibrates. Just recently, in April, in the new force of nature, here is the end of the quote. Nature appears to favor the route that ends with the electrons and the things that we are actually vibrating and changing and improving communication with micro-current is with the electrons.

This is where we basically have organization from the smallest subatomic particles anywhere in the universe, all the way up through human beings and social groups. Social groups, whether minute? I can give you an example of that, which is, I'm sure that some of you have walked into a room and/or a group and you just got a little uncomfortable or as old-time E kids would say, the heebie-jeebies. You could feel something was not right. There is energy being given off from groups and we get uncomfortable feelings sometimes. We also can tell when there is someplace, oh, boy. I really want to be with that group.

The signaling is everywhere in the body. We have been using micro-current for a very, very long time. It did go out because you can't feel

it and if you can't fill it surely nothing is happening at all if I can't feel it. Fortunately, it could come back in the late 1990s and 2000 and we have more information on what the signaling works. We have thousands of articles now on micro-current. I did give you a one pager with links to take you to some of the articles and additional articles that we are talking about today but you can certainly look up all of the different ways micro-current is used. Certainly for pain control.

Honestly, veterinarians have been using viral energetic devices for a very, very long time because animals don't care. They just want to feel better and get better. They know that they are unable to heal fractures and help animals and we know that we can speed up healing. P EMS devices, when you see orthopedically. They broke a fibula that was high risk for not healing. They had a spine surgery. They had a neck surgery. They put in external buys. It's P EMS. It is broadcasting frequencies into the body to help the bone heal. They also have internal ones that will actually stimulate. We got all the data that we know these frequencies will work and for all of you doing acupuncture, we have been using electrical stem on acupuncture needles for a very long time. There was a lot of data that it was helping with addiction treatment, withdrawal, and pain. We know that we can heat up and the speed of diabetic wounds and a surgical use wants when we use micro-current and certainly, injured athletes, special ops forces.

You know what, especially the athletes. They don't need to wait for meta-analysis and controlled studies and evidence-based medicine because they are being paid hundreds and hundreds of thousands of dollars. Sometimes for one-game and they do what works. Just as a side note, to digress. The last three Super Bowl football teams that have won the Super Bowl. That is the Philadelphia Eagles. The Kansas City Chiefs. The Tampa Bay Buccaneers. They were all using this two channel micro-current and they used these devices.

I worked with NFL players. We have a couple of docs that exclusively work with some of these teams and are also the team docs. They channel micro-current devices and they have been using this for a long time. I certainly do this with all of my athletes, whether collegian or professional. The DOD is using it now and Andrews and Walter Reed for quite some time. Dr. Mylene Huynh, who is on this call, she had it in the pain clinic and she had so many units when I got to visit her there. She used micro-current regularly on her patient and also in her private practice. They had this.

Nellis Air Force Base was part of the demonstration in 2018 and then they created the integrated medicine clinic within that family practice family residency and that they have been doing micro-current now for over three years with great success. They do have IRB controlled studies for two channel micro-current, including some manual therapy myofascial techniques, lasers, and other type of devices. They are getting really good thoughts. We had improvement with daily living function, which is what I think we should be looking at. It is the quality of your life and improving and if you can do more, the pain is decreasing.

Recently, Scott Air Force Base and Eglin Air Force Base is starting using this. They are part of that integrative medicine project. They are collaborating any facility that can do research and are interested, I would encourage you to email me and I will get you in touch with Dr. Dave Moss, those are the two doctors that are running at that clinic. Right now, we are continuing to use the pain fibromyalgia nerve pain, one pain, and even shingles. It works for shingles. We have a delayed onset muscle soreness, research that was done that was a very, very controlled, well formatted IRD study and still, it's not out there. We will talk more about that but we have actually used this at Nellis Air Force Base and other places. Of course, it would be really important from the standpoint of helping to heal nonunion factors and actually speeding up bones.

I'm going to stop there for a moment and see if there are any questions before we start talking about some of the published papers.

April is in Hawaii. I was supposed to leave for Hawaii tomorrow and had to cancel my trip. I hope that everything is good there, April. I'm really sorry for what you guys are going through in Hawaii with the Delta strain right now.

Any questions?

Catherine Miles asked, are there studies on micro-current transcutaneous or intramuscular?

So I don't know exactly on that other than I didn't leave these particular sides in here. There is a neurosurgeon that we are probably going on 10 years ago now. Actually demonstrated that doing an implantable micro-current to stimulate the vagus nerves actually improved immune function in people and they have been working with implantable devices for signaling the system.

Intramuscular, I believe somebody has actually done some research with that, along with stem cells. They have been able to grow back muscle tissue, especially for military people that suffer serious blast wound to their body.

Let's see if there are any other questions?

Okay. Let's go through it a little bit of these published papers and the history of how frequently frequency specific micro-current come about. She is a chiropractor and she's on the West Coast in Portland, Oregon area. She started using the frequencies in 1995. She had gotten this dual channel device, which I will show you a picture of it soon and that the intention was to use it for anti-Asian. She was going to supplement the income of her clinic by doing anti-agent anesthetics. Interestingly, people will pay a lot of money and put a lot of attention into how their skin looks and as most of us have learned, you can actually be treating pain and doing other things and your skin ends up looking better anyway as you age, even if you haven't done the [indiscernible]. Her goals for the skin and lo and behold, she had patients coming in from orthopedics because she had a five Pro myalgia and coastal plain clinic.

She was running certain frequencies that she got from George Douglas. All of a sudden, pain started going away. In a very curious nature, she wanted to research what was going on and she realized that this micro-current was having a very powerful effect on decreasing pain. Janet travail was actually talking about micro-current in the 1990s and we were using this for post-treatment soreness and improving function in the body.

Janet Travail was a champion of using micro-current in the body. The good thing that happened with Carolyn after she started seeing all of these results and she kept on repeating with her fibromyalgia patients, the particular treatment. They all started improving much faster than anyone in would have expected and getting out of pain after we had all of them told in the 1990s that you can't treat fibromyalgia and that it is forever. There is no cure for it except that was not happening with using the micro-current.

She was invited to NIH. Right around the corner for you in that Maryland, Washington, D.C., Virginia area. She said, can someone please tell me what I'm doing and why these people are getting out of pain? Terry, and some of you may know, basically his CD of all of the published articles that he had. A textbook. It's so long. Terry Philip said yes, if you can give me blood patches, I can tell you what is going on with these folks. We just need to do it before and after. Send it to me. I'll analyze it and tell you what happened. This is where the game changer was with micro-current.

She had already been seeing all of these results but because of the date of the came back from Terry Philip [Silence], which is staggering. I will show you in a minute here. She was able to produce this paper with Terry Phillips on his cytokine changes with micro-current treatment of fibromyalgia associated with cervical spine trauma. Where the cervical spine and the spinal cord get involved. This is the paper and you have a link to it in the PDF that I sent in on papers and abstracts and you can read the whole article and research paper here.

It was published in the Journal of bodywork and movement therapies. It was sent into some very heavy header journals and medical journals and also, even having to do with the immune system. It was all rejected and interestingly, with one of the regions that was rejected was because of the outcomes. When you think of your patients with fibromyalgia, you can see this graphic on the left where these patients start having everything go wrong. They have chronic pain in a lot of different places. Also, they are going to end up with brain fog. Their brain is it going to be functioning right. They will have depression, headaches, fatigue. They end up with difficulty swallowing. I will talk about that later. A toothache.

We had a phenomenal presentation yesterday. It did a terrific job of explaining what the neurology is on central centralization and why things start getting things so messy when you pain anywhere else in the body. Certainly, in the neck and in the head, how when things start to centralize and proliferate that pain cause can be very confusing. This is what we see with these fibromyalgia patients. They can get swelling and

the hands and feet and they feel like they have it. It turns out that when Terry Phillips evaluated the blood samples, this is what happened.

Most of you know what substance P is. It's something we find what people have chronic pain that increases in the tissue and in the spinal cord and it will drive up pain. We're always trying to keep it down. There are people who were genetically predisposed. Also, these are very, very special. I always get people bigger sister analogy when I'm talking about this and just say, need a cleanup on aisle six. Needed cleanup on aisle six. Cleanup on aisle one please. This is where we need to bring down that information and look what happened to these markers.

Now, what you haven't seen, which is in the paper is that these changes, which are already kind of impossible because this doesn't happen with injectable Toradol. This happens in 90 minutes. These were arrhythmic changes by factors and it came down in 90 minutes. If you know on the bottom, with the data endorphins, that one went up. There are frequencies that rerun that had to do with central office systems and the brain and when people strongly resonate with those frequencies because they have old head injuries, concussions, things that have happened inside their noggin, this is where we get some of the depression that people don't feel great but these frequencies actually increase beta endorphins.

She used to say, oh, and you have this because we were talking about the endorphins and people get this kind of happy drug feeling and many patients and if you have anybody that drinks wine or any kind of overhaul they may say that they feel like they just had two glasses of wine or somebody is an exercise fanatic because that is how they deal with their pain and they are going for that endorphin high.

They would say, “oh my, gosh! This feels just like that fabulous way I feel after a long, fast run.”

You will see people very quickly get relaxed and have this, I feel really good feeling. The exception to this. I always want to tell patients that this can happen and that is because if you think of your special forces. If you think of your Navy SEALs. If you think of anybody that is for their career hyper-focus. When a colleagues says that they sleep with one eye open. They are all about having complete control over their cognition and focus and alertness. These people have to know this could handle because they are very big on having control over their state. Anybody that does not like to have that feeling, this will bother them.

My funny story. It wasn't funny for her but it was a funny story. It was a young lady that had chronic anxiety since she was a child and we were using the micro-current and I was able to get her to calm down when she was in the clinic but working on her and keeping her engaged and she got a home micro-current unit so that she could relax at night to sleep because her sleep was so interfered with by this chronic anxiety and she couldn't settle her mind. She came in the next week and she said, I don't know if I can do this. She's like, this thing got me so relaxed so fast. I freaked out. That's an example of, oh, I don't like the feeling because I am used to seeing this a separate letter.

We modified it to slowly take down the anxiety and the edge and start using into it. Those are examples where we have to be mindful of that. Most people love the way it feels. This was the paper that was a game changer. Actually, I should say that this research early on and this is where we realized that the cyclooxygenase inflammation was actually changing quickly with micro-current. This research was done by Vivian Reeves and she is in Australia, at the University of Sydney. And the seminars were actually going over to Australia and working with her. It's literally anybody that was trying to get an anti-inflammatory drug on the market had to go through Vivian's lap. She had the entire animal model set up on how you would evaluate whether something works for inflammation or not.

She agreed to do an evaluation to see what was going to happen and research with micro-current because we were trying to understand what it was happening with each frequency. This is a very, very well controlled accepted model for evaluating inflammation. Was she wanted to do was see what would be the effect on information on these laboratory animals using micro-current of the accepted model is putting a swap on both sides of the ears because it induces swelling and you use these little calibers and you see in these that what's happening.

What happened was, after four minutes, okay? Four minutes. When you translate the language that is inflammation in the immune system. And immediately, after they did this. After they painted that acid on, when they were tested with the calibers of what should've happened, 70% reduction. Something happened with four minutes which is inflammation of the skin. She had never seen anything like it. And she basically was like, oh my gosh. I don't know what's going on here. She kicked everybody out of the room and she redid it and everybody was spotted what was happening. She was able to reproduce these results. You get the maximum result and you won't get anymore. When it's done, it's done.

Four minutes was the magic number for laboratory animals. We don't know what it is for humans and it looks like it varies on some people. We know what happened consistently with these laboratory animals. The next thing she did, once she saw, oh, my gosh, we can reduce inflammation and this is consistent the way this is happening. She did several other experiments. The next one was like, let's see what happens when we give them a sunburn. The female albino knockout mice ended up getting a laboratory sunburn and what she did was, she it was taken the calibers and she wanted to measure the edema from that and of course, 24 hours after, when this is worse, she had four groups of mice is used different frequencies. It was 40 and 116. 40 minutes. 40/355 for two minutes. This other one, 40-103. That is not a tissue associated with this for two minutes. It turns out that absolutely nothing happened with 40/103.

Again, we were able to see inflammation reducing these laboratory animals with information in the immune system and inflammation in the skin. After she had given them a sunburn, there is another experiment they do in the laboratory when they are checking inflammatory reactions and when you get a sunburn, it actually causes immunosuppression. There are parts of the immune system to get suppressed and they can actually

measure it and she wanted to say, if we do another laboratory experiment, to see if the immune system is suppressed, let's see if we had long-term results from the micro-current and this is where we get that data from the Houston point.

You just get healthier and healthier when you run micro-current on a regular basis. In the end, these were her conclusions. You can actually type in Dr. Vivian Reeves micro-current and you will see all of the graphs of this experiment and the entire abstract. That is still available online. These were the most important things that happened because it turns out that when the mice were treated immediately after the sunburn, there swelling went down but the mice had gotten treated two hours after the laboratory sunburn, their immune system was actually fully functional. Looking like a normal immune system what. They basically painted it on the hind leg to create a chronic hypersensitive you reaction and then you see if the immune system is responding to this obnoxious as a loan that is coming in after they were sunburned two weeks earlier and usually what happens is, they are having immunosuppression.

What she saw on the micro-current mice they got micro-current two hours after getting some, they had a near-normal immune response. She was demonstrating that there was long-lasting results. Now that we know that we can reduce your swelling, inflammation. It was well over 60% using those two information frequencies in the immune system and the skin and then she blotted everybody. She was able to consistently repeat getting this 40 and 116 response even when everybody was blighted. Obviously, the animals work because they didn't need to be. It was reproducible every time and because that is 40/103 did not work, it really was specific frequency combinations that mattered and this was statistical and the reduction in inflammation and of course, we saw two weeks later, there was actually the immune system that happened logically.

When we are using our hypothetical reasoning on why we are seeing some of the things we are, clinically, we have these original animal studies and also, the human studies, where we were checking the blood samples and the delayed onset muscle soreness. Everything is consistently telling us the same thing. This is Denise Curtis's research. She's in Ireland. She did a very well controlled IRB on delayed muscle soreness. She works with athletes. She kept on saying that when she ran for him frequencies, she was able to get rid of their delayed onset muscle soreness. They didn't have it. This was the outcome and all of you know from a readiness standpoint. I bring it up with the military.

Imagine what would happen when people were recruited into the military and they went in for 2 to 4 weeks of training and they are doing all of that running and exercising and we are going to times where we are doing readiness training and skills, et cetera. What would happen if none of those people got delayed onset muscle soreness anymore because it is with delayed onset muscle soreness that the muscles don't contract at the right time? Especially if you are stabilizing the knee and ankle and this is where we see a lot of these knee and ankle and athletes who have over-trained. Imagine what would happen. We reproduce this at Nellis Air Force Base, also when we were checking these protocols.

I reproduced it two other times at sporting events. The iron horse race in Durango and also the tort of pain, which is three days of learning. 5K, 10K, and half marathon in three days. People on day two, which is when it is worse, do not have much pain. They say that there is no effective treatment except this paper was published in 2010 and we have all been able to reproduce these results. These come pre-programmed on all the devices that go out automatically for the military. This is actually a new injury. This is the most common new injury and anybody that is training athletes that we would want to address.

We know from the research that when we put the correct frequency in and there is residence, the tissues change very quickly. Patient's they get that happy truck filling. They relax. They get sleepy. That is when you know it is in progress on the sensations and what happens when the frequencies are done. This is what we saw with the laboratory animals that after four minutes nothing had happened. When it is done, it's done. We don't have negative consequences for running the frequency for longer well we don't know how long we should be running them. We just have to make sure that people stay well hydrated because you do use up a lot of fluid when you are running micro-current. Now we know that the lasting results that we are seeing in the clinic and people being improved was actually demonstrated by what happened in the Vivian Reeves laboratory. This is why we think we have this.

James Oschman wrote about this quite some time ago and you have a link to the paper as well. He went way, way back to the 1970s where we were talking about the hypothesis and what happens when the sympathetic nervous system where we see this kind of global tension that happens in people, now, we actually understand the neurology of what is going on with the signal to the central nervous system into the brain and epinephrine being released in the sympathetic nervous system getting activated. James Oschman was able to show that when we are doing subtle therapies and doing just the right thing for people, even if it is manual therapy, acupuncture, and if you were hands on healing or doing breaking. Any subtle energy. Guess what? If you do the right thing, people just subtly relaxed. I know all of you to treat pain and have done any kind of hands-on therapy or acupuncture intervention, you have seen this happen.

It turns out that there is this vascular automatics signaling that happens and when he puts it into the body, globally everything relaxes. We rely on this smallish response and this global relaxation to know that we have the correct frequency selections and this information is also when textbooks well over a decade ago. Caroline released frequency specific micro-current in pain management and now there is annual micro-current conferences where people bring it all their cases. When I was there in 2013, the seventh annual, I ended up presenting about six different cases, three different subject matters on chronic pain and decreasing pain after therapy for implementation. Then, a case.

In the eighth annual, I published on posttraumatic stress disorder and arm pain. We have all of these different publications on cases that people had. Everything from the eye to pain to anti-aging. Structural injuries. Killing people after acute injuries. There is information that is out on how micro-current has worked in a wide variety of practices.

Whether people are doing-good post-operatively or working with athletes, chronic pain, any of it. You can look up those books. We have decades of information. It works. We have global corporation. Certainly, thousands as case studies in the U.S. and all over.

There is a pure review literature on this and we know that we have the biomarkers against a placebo control from Vivian Reeves and we know that we have been able to reproduce our results. This is where we already have protocols done that have consistently worked and now we have seen, with the research that has been at Nellis Air Force Base. They have been clinically able to reproduce results there as well. We've been using molecules on devices in the military and dual channel and there is a variety of micro-current devices that we can be using and they do different things.

I'm going to talk now about micro-current 101 and let me see here. I'm going to stop for a moment to see if we have any questions. From Pensacola, whoever that is, will you be able to go over the devices that are available for military facilities? Yes, I want to show them all. We will talk about it. Some of the dates actually days I will show you some of the devices. You might have to go find them in that the closets where they store some of these devices.

The biggest challenge that the militaries had and I have talked with them is that all of you end up getting deployed or shipped out somewhere. You get somewhere. We did intense training at Nellis Air Force Base. We have a whole department that were so well-trained and everybody left and the same thing happened at Scott and Eglin Air Force Base. We are trying to get more and more people train so that when people get shipped out and moved that that fabulous knowledge of how to do this is not lost when they leave. That continuity of care that has happened for people and then these devices end up on a shelf somewhere. They are there but nobody is using them so they just get put back on the shelves. You might have to go dust them off and figure out who has them. Dr. Mylene Huynh may be able to speak to that also.

Any other questions? Okay.

Micro-current 101. This is to give you the information on it. Here are these devices and this is what they look like. This is where you can see all of these different devices. This is actual practitioners and actual treatment rooms and honestly, all of us that have these devices, they actually combine all of them and they are actually doing this at the Air Force Base. The actual Tron four channel with micro, this is steering he is been over at Pensacola and with several of the docs there and I know that these actual Tron's, the doctor and several of the other docs, these are at different Air Force Base is paired we would have to pull them out and dust them off and use them if they are not being used.

These are custom care devices right here. These are the old devices. They use a dance plug. It's the original technology. They still work though and we use them in our practice and these are definitely the different basis. I believe that these are at Andrews. I know that they

were at Walter Reed. There is a couple of other places that they have them.

This is the two channel micro-current device. This is that original blue box that I learned how to do micro-current on. A look at how gigantic that one was. It's an analog device. I still have three of them. I still use them. You have to send them push all the buttons. You really had to want this and it's very hard to do in the owner years. This device here. Which I will show you a bigger picture of it. This device replaces these great big two channel device and it holds 999 protocols or up to 999 protocols which make it press and go. This is what began the game changer because once we had figured out the sequence of frequency that seem to work the best for different conditions, it was present go.

You can also treat on the body. This is a device that is also being used at all of the research facilities with the integrative medicine clinic. It is single-channel. You can either be used directly on the body or it plugs in and has these electrodes. All of this work, we are actually using all of these different devices and if you have lasers and acupuncture. We are putting these extremely small pulsating currents of electricity and they are much more like the electricity in the body. We stimuli such an increase for geological activity.

The spinal cord in the nervous system doesn't like a lot of information coming in. It overwhelms it and shut things down. This is where we are putting in very, very small amounts of information. Improving the signaling and functioning in the area. We know that this is going to increase ATP protein synthesis. We improve oxygenation. That means that the stuff is getting in and waste product going out. We can neutralize the cells.

There is a doctor that said, you know, basically, that voltage is everything. If voltage is healing. The other thing about using micro-current, you do have to abide by the laws of electricity. Electricity takes the path of least resistance. In the issues we had with scar tissues. We are really congested with the tissue. Electricity will go around it. It is hard to get to where the problem is. Dr. Mylene Huynh did a fabulous lecture and the point being, when they have acute pain, rather than just waiting it out and hoping that it's going to resolve, we should be intervening so it doesn't get chronic. That is where we have this information problem where things get started and congealed.

The other side of it, from a practical standpoint, is when you are running micro-current, you have to make sure that the two pieces of conducted material is not touching each other. That's because the current will go right to itself. You are treating the electrodes and not the person. Fed up is really important on this. We are measuring the current and it is micro-amped. When we are doing micro-current, which is 1 million of an amp and went these are very, very small doses. It would take 1 million doses to light up 40 lightbulbs. It's much more in tune with the body.

What I always tell people is, the body needs no help or no interference. We are genetically designed to heal. If we give the body

what it needs, it knows how to heal. He knows how to create the proteins. He knows how to generate the collagen and it has the building blocks. This is where we are hoping that I already know how to heal myself process. For all of you that I know that are still dealing with the problem we have with opioids, narcotics, and even surgical procedures and really, really strong drugs, it really takes out of the mix, your medical concern for side effects and having to deal with side effects. People misusing things. People being overstimulated and it really, really improved that healing potential for people. It's a great match for any of you that are treating chronic pain.

If you are using TENS because TENS is used for pain, rather than 10 to the negative six, 10 to the negative three. Dad is your transcutaneous electrical nerve stimulation and it to stimulate the nerve which causes muscles to contract. It tends to be more of a thick. With micro-current, we have this huge range of what we can do. Those are the frequencies when I gave you the number 40, it is 40 hertz and 116 hertz. Inflammation in the immune system. The dynamic frequency allows this to resonate with many different types of tissues and with this, we can actually manage edema, pain, and we are fabulous with stopping bruising and using bleeding from capillaries. Inflammation seems to go down. We can speed up healing and restore tissues. It actually goes out throughout the body. Probably affecting the immune system globally for humans as well and changing how the body functions.

You have already seen that the frequency and the way that I've always described it is that Michael granite two channel is a language. I was when in those people who did not get the language Dean, if there is one. I think there is because I took Spanish four times and attended to drop out four times. It wasn't in the cards for me. I am a numbers person though. I'm really good with math. When I started doing micro-current in 2001, I thought, oh, my gosh. This is numbers. This is going to be so easy for me. I feel, unlike some people, don't have all of the frequencies memorize. I looked them up and that is because it is a language. It has nothing to do with math because of numbers. You are trading numbers for words. With that, we are dealing with frequencies and we write those frequencies numerically and whatever the frequencies are, that is the hertz. There are different ways.

We actually have a variety of different types of waveforms that we can use and on the device, you can go anywhere from zero to 99.9 hertz. The frequencies that you choose are on a carrier frequencies. Irritably going to see this and on those single frequency channels, I will tell you that the wave formatters the results we get from these different devices there are things that we can do that we cannot do with the single-channel. And vice versa. This is why you see practitioners with so many different devices. You get them in your sweet spot.

When we deliver micro-current to our patients and document this because this is where we need to have communication for the integrative medicine clinic here they actually have devices that are set up with press and go when they have every single protocol number. It's in the EMR that they use. It has the frequency and there they input all of that and it auto generates with the note whenever they do a protocol. We change the micro amperage depending on whether you are dealing with children,

people who may be seriously ill or have tissues. We are matching the micro amperage with the size of the tissue. We would treat a wrist with a lower micro-amped that we might a football linebacker with a thigh that is bigger than most people's entire hips and waist. We don't know the full response. There are some people that say the lower we go, the deeper the current goes. We don't have data on that. This is where we look at clinical experience.

On the two general, it can be alternating or polarized positive. We marked that with either a positive or a money for alternating. You can write ALT for alternating or POL for polarized. Anybody that does micro-current 10 exactly what you're talking about and the format. On that, we need either go from gentle to sharpen anytime there is a new injury, we are always using a general way slope and some pain problems, we are using medium. If you have chronic, old problems. Kilo tissues. Scars. Condensed tissue. We will typically do a sharp waiver form for that. Those are preprogrammed on those devices the way they should be. Especially with all the trauma protocols. Those are present: they are done. When we are talking about those two channels, we have a convention. This is where we are talking about a condition, which is on Channel one. The target tissue, which is on Channel 2. I refer to this as the issue in the tissue and that is your channel one and two.

Vivian Reeves research with a 40/116, the issue with information on the tissue with the immune system or 355, the skin. 40 is inflammation and 355 skin on channel 2. We were able to pre-program these frequency pairs. Jenna one, we are thinking about wanting to neutralize something as specific frequencies are associated with the pathology and we are going to neutralize it. We are going to get rid of the information. We are going to decrease it. We’re going to get rid of scarring. We are going to address calcium deposits. You name the condition at this is where people tell you their story, you just match the frequency number that matches the story of what happened and what's wrong. This is an example of a crystal class with the right frequency coming in, if any of you remember. This is where the crystal glass shatters. It isn’t a shatter, but it falls apart.

The frequency that holds the crystal together is there and neutralizes it. That is where we think about neutralizing. It's the biggest frequency known. It's been used since the 1920s. It's about energy medicine and this is what Vivian Reed did in her laboratory. We can also support it. This is the case that I presented in the seventh annual micro-current conference. It was called the power. It was 81/142. The woman that is pictured here actually had a massive die stasis his right eye, the split in the linear outlet. She actually looked like she was seven months pregnant and this is without any weight loss or any kind of exercise whatsoever. They were in this protocol that had been put together for die stasis. They had an IRD at Nellis because we demonstrated this over and over again where we very quickly changed the die stasis right eye. After 14 hours, this is what she look like on the right. Secretions tend to release ground substance which hopes that get back together and improve the integrity. It can activate to hold in the abdominal proton. I asked all of my practitioners to check for die stasis right eye because it is one of the problems with low back pain.

You have channel 2 and there are hundreds of tunnel tissue. You don't have to know any of these. The equivalent is press and go with preprogram protocols on their. A lot of people who aficionados want to know all of the frequencies but there are lists for them. You name it and there is a frequency for it. You just listen to what the patient tells you. If you listen, they will tell you what's wrong. Here's Janet. Early, early on when she was President Kennedy's in the White House. I'm so glad I got to know her and just change the way my brand was mapped. This is where, with that, find out what the pathology is, what happened, and what is the tissue that is involved? That is what is causing and perpetuating illness and et cetera.

When we are putting this together, you can actually take what the patient is telling you, but what they're telling you for frequency. You know, the muscles are inflamed. The frequency for, so is 62 and inflammation is 40. The issue is 40 and what is the target tissue? 60. 40 is on the left. Channel one. There is a/in the second one is the target tissue. Most people don't have a single problem like that. It really happens but it does sometimes with normal tissue but for the most part with the rest of it, there is a problem. This is how we communicate with each other about what frequencies we are running but most people have multiple things wrong in a single tissue or one thing wrong and a whole bunch of tissues.

Notice that all of the issues or conditions are on the left-hand side and we just pray, between each one and a/ to tell you which target tissue. Typically, it's multiple conditions in multiple tissues and so this is where the finesse comes in where you could run, if you look at that bottom for multiple conditions and multiple tissues, you could run the spinal cord, nerves, and muscle and 91 and those three tissues and 13, which is scar tissue industry tissues or we could run the 40, 91, 13/62. We could run all three of those in the nerves and in the muscle. There is no real or right answer on this. Sometimes people want to clear all of the information before they do anything else in those target tissues. This is the language.

Here is an example of acute trauma and a list of frequencies that we would use if somebody had any kind of acute trauma. If they stop bleeding and there is usually nerve involvement where there has been trauma to it. There is tissue trauma. The area is not working great. You get allergy reactions. Tissues are torn and broken. We know that there is going to be inflammation. People may have nerve pressure from the inflammation coming in or congestion. That is 20. Irritation is 30 and congestion is 50. Again, these frequencies are all on frequency list. You don't have to memorize them. Look them up. The ones we used was, you will eventually learn them. Same for persistent pain. This is the most utilized one.

Notice, with persistent pain, something that has been there for a long time. Things get scar down. We are going to be running those type of frequencies. We would never think about running any scarring frequencies and a new injury. This is why the trauma protocols tend to be press and go. This is an example of frequencies and here is our common, frequencies

for target tissues. In my world, I always start with the nervous system and I go down to the nerves and I'm dealing with the tissues of the spine and I'm dealing with the muscle tissues and the joint tissues. There is an order in which we do things but these are the most common tissues.

When we learn, we encourage people to start out with these easy frequencies. Remember, all you need is a two channel. Any devices that you already have it on your basis or wherever you are or if you get equipment. Two channels. One frequency on a shadow. You have to make sure that you have created that inferential pattern. We use sticky pads to deliver the current. You can use gloves. There is still a mess once. This is where the current comes through those conductive materials and into the body. The DOD is using dolce no micro-current. They are using MEND devices. You can use in superstar or any of the precision. It's a single channel. There is interactive but does that and the PEM asked devices sometimes have onboard electrodes with single channels.

Alpha stim, which a lot of you already have, they have a repository way form that nobody knows what it is. That is what seems to make the difference with it. If you are using the mats, this is a form of PEMF and if you have lasers or doing great. B, this is where we are getting the photons into the body, which is also delivering laboratory information and frequency this is definitely some of the basis and it has four channels. You can actually run two protocols at the same time. There is preset ones. It also includes Russian stem and integrates the micro-current recovery will appear.

If you do acupuncture, this is where you do the cover light therapy right into those acupuncture points. Again, just so you can see the devices again, this is that AccuTron device. This is the Abbasi array here. These are your two channel micro-current devices. Water. Water. Water. The biggest thing that gets in the way of micro-current is not having water. I'm going to take a sip right now. We want to make sure that people are hydrated before they get micro-current.

Any questions? Are there any questions?

Is there advantage PEMF versus micro-current?

Absolutely.

The advantage is, you don't need to have any conductive materials. People who are averse to having anything touch her skin, you can broadcast those frequencies and on the spices, there is actually a PEMF converter. It does not do as well for modulating the nervous system now. Yes, this is why we have all of those.

Any other questions?

Okay.

This is an example of what the professional device looks like. This is what they are using at negative gross, Scott, Eglin, and a couple of other places they are very, very easy to carry around. They are super

easy to use and very durable they hold up to 999 protocols. This is an example of the screen. It tells you which protocol number it is on the device. The name of it. It will tell you what frequencies are running on channel one and channel 2. It tells you the polarities right here for that plus on, remember we talked about that. That is polarized positive.

This is your micro amperage. Set up at 100. It'll either say, gentle, moderate, sharp, and there are several other waveforms or you will have a number here to tell you how it was built. It tells you how many minutes are left on the frequency. That you are running. What frequency pair you are on. This is 10 out of 15 frequency pairs and its' got one hour and 16 minutes left. Some of these protocols are really long and this is the biggest challenge that we had in implementing it. They realize that they had all of these procedure rooms that were open at Nellis and when they knew people were going to need the phone protocols, number one, they would use multiple devices to get the protocol in and they would park them and would make of the procedure rooms that was open that has a bell in there and one of the assistance check on them from time to time.

These devices also have all of these functions that are available that allows it to be completely changeable in real time. This is where you can modulate anything you want on to these devices. It is used in clinics everywhere but was intended to be a programmable press and go device for patients to treat themselves at home. This is what Nellis is dispensing to patients. I'm not going to go over all of this. It's in your notes and it shows you all of the features that are available on these devices and they are very, very easy to use. This is what happens in real life though. What does it do when it works or doesn't work?

There are times that micro-current doesn't work and that is when we have to go back and ask more questions. Still back to Janet Travail. This is where getting that detail history really matters. With micro-current, highly recommend people go back and get histories on how many times people hit themselves in the head. People think a concussion is days I didn't have a concussion unless I was knocked out. But that didn't happen, I didn't have a concussion. All of you know that there is very, very subtle injuries that happen and actually going back to neck injuries because remember, that paper, that was associated with people having neck injuries and inflame spinal cords because of it. When people have that history and sometimes they forget about it and I asked people to go back to the very beginning, which is trauma.

Certainly, in the military, you need to be thinking about chemical traumas and exposures that people have an emotional traumas and what is happening for people vocationally and recreational. If we get all of this information, this is where we can match the story to the issue in the tissue and this is why we get miracle results. We want to know, was it effective? How do I need to know if it was effective? Well, we get the objective findings with the history and with her pain score is and we are looking at some of the objective stuff that we can get diagnostic testing we can. Laboratory testing. You can see what you're feeling in the body and visual changes that are happening with people. Objective from a standpoint of people talking about their pain.

Remember that that tends to be subjective and also, from a neurological exam, the reflexes are going to be the most active that we can get. Use research source. The Dallas pain questionnaire is one that is used with the integrated medic and clinic and it is all about how much is your function improving by your pain going down. What are you able to do with work? What is happening psychologically, emotionally, and what is happening with work and with your home life and promise, which is the patient reported outcome measures. If it works, you know to just continue on the path that you are going. You did your educated, clinically informed guess. It was on the right track and that you want to keep going as long as you got that medical improvement and there is something that I call a rescue frequency. That is the frequency pair that brings down peoples pain the most and very quickly early on. Once the frequency works, it's always going to work for that particular problem.

As I'm getting people improved, I want people to start exercising, moving, and getting back to their life and engaging in social activity. As I encourage people to do this and we're doing that process, which is what we do at home. They might get flared up but as long as the government rescue frequency which is usually going to be a brain combination or he never spinal cord combination. That one will almost always bring the pain right back down. They have the security of knowing, even if I do this, there is a way to get this to calm down. It's nice for patients to have devices at home.

Then, the other funny thing that we see and we saw this at Nellis also common it's when you've got early and dramatic pain reduction, it may not be sustained. Patients may think that the pain comes back worse than it was to begin with. The reality is, they had such a dramatic drop in their pain and when it started inching back, because they had a break, a vacation from the pain. They actually think it's worse because they are comparing how they feel to having no pain at all and they are not used to in the same way. I always educate people when they have an, oh my, gosh moment. I was a nine when I got here now I am a zero. I don't know how long this is going to last but what I can tell you, it works once for this condition and it will always work. We know we can bring them back in with the frequency and they are going to get the same results and when we clear out perpetuating factors and everything else that is involved, then they have more sustained relief.

I'm just going to interject here. I know that Dr. Trejo is going to love this.

You know how incredible hard it is to tell somebody that has a seven or eight out of 10 pain, if you would just get off of the inflammatory food and you would start doing this and that or the other, your pain will go down. Getting off inflammatory food, sometimes it could take two weeks. It's really, really hard to motivate people when they don't have immediate results. When you use micro-current and their pain changes right now, boy, you have hooked them and now when you asked them to make lifestyle changes in order to maintain the results you got, the buy-in is a lot easier. When it doesn't work, I told you water is so important and you have to go back and check your diagnosis and your

history. You have to go back and do your own research because we have all the frequencies that we can address things the way that we can before.

It's not uncommon for people to show up with the wastebasket diagnosis. Oh, it's arthritis. Oh it's fibromyalgia. Oh it's that. When there is a bigger story behind it. The nervous system takes time to modulate. That in that paper, it was 90 minutes of treatment. We don't know if it takes that long, everyone, but we do know that if we frontload it with these longer programs for the central nervous system, this is where you really get the result. You have to have the time because you may think it didn't work but actually, you needed more time. Then, sometimes this is partially affected. You have to go back and get questions and if you increase systems, which actually can happen, you have to reevaluate what we are doing and see if there is an underlying perpetuating factor.

For instance, Lyme disease. Your suppressing inflammation and increase the activity or there something going on in the spine and you actually increase their range of motion which actually cause more symptoms. I have an 80% rule with this. 80% of the time the patient is going to respond to the basic treatment. This is what we have seen with the research and what we had with the pricing go. They have over 100 press and go protocols for the research but the doctor will say yes, we end up using the same ones over and over again for most people. That is in a 20% of the time, you are going to have to treat for odd or unusual things.

We do have protocols for those odd or unusual things and when you run the basics, the pain is going to typically resolve. This is if we have the pricing goes and where they help with. You are going to find out that all of you treating myofascial pain, 99% of the time, there is going to be a [indiscernible] zero perpetuating factor. Remember, I am a myofascial pain expert and everything changes for me dramatically when I could modulate the nervous system to a degree that for two years, I don't even think I saw someone with myofascial pain. I was starting to think, gosh, maybe it doesn't really exist. It does. People get it. In our population, there is going to be a neural component to it. You have to remember acute versus chronic. We have to make that deliberate distinction if it's acute or chronic. We always, always treat acute first.

If somebody has a chronic soldier problem and they trip and fall on the way into your clinic and they sprained her ankle, you're treating a sprained ankle. You are treated it completely different. We always use the pre-programmed acute or trauma protocols that are on devices. Here is an example of this is my dear friend John who had a boogie board accident in Hawaii and in this picture right here, he is actually paralyzed from the neck down. He had a transient spinal cord injury along with this. I got an emergency call from his daughter while he was in the ambulance to tell me what happened. He got a head injury open and they are attending to that. This is where if it's going to bleed and bruise, it's broken or injured and we are going to be running this trauma frequency. Just think, is it going to get bruised?

There is a real, true 4 to 6 hour window. If we can get the frequently protocols on these right away, we can start the oozing from the capillaries. We can start the bleeding. We can stop all of the signaling that happens from the bleeding so the area doesn't can just. It interferes with the electric energy getting in there. We can maintain it. People heal at dramatic speeds when we can do this. This is where we really, really want to make sure that we know and we didn't get it to work in Nablus. We couldn't get the surgery folks on board but honestly, the place that micro-current would just shine from keeping things going from acute to chronic is if we were running these two general devices in emergency rooms and postoperatively. We would totally change the healing process that happens for people.

I've treated thousands of post-operative and new injuries. I healed the fracture in two weeks. I hear it the fusion and four weeks using these devices radiographically. This young man ran all of the frequencies. You can see the scar on his head. Even though the neurosurgeon said that we don't know how long this is going to take for things to come back with your transient spinal cord injury, he had use of his hands and both of his legs and was playing competitive ball after this happened. We can really make a difference. The delayed onset muscle soreness, this is the most common trauma you were going to see with your military peers and people who are having to do any kind of -- boot camp or any kind of training, we can prevent injuries from happening if we were actually stopping the delayed onset muscle soreness so that people would not get injured.

Remember, on your trauma protocol, this is where you want to press and go. There's not much else you can do besides I can puncture and any of your remedies and anything else that you are using. You want to make sure that you are getting the frequencies on right away what kind of injury are you dealing with? Remember, the great think about surgery and procedures is that it is planned. We know there's going to be a schedule, to someone. There is really no reason not to have these frequencies running if we have permission or if they end up in their room after surgery. I send it devices with people to have at the hospital after surgery and procedures. This is our first prevention on patient developing chronic pain and really, we need to move into that prevention.

We are going to start talking about chronic pain now and what we are going to do is: I would like to take a break. When we come back, we will go in to that -- I didn't mean to do that. You might have to help me out here. Any questions for where we are right now and actually, I will have you tell me when we are supposed to be back. Let's see. What is the difference between Trent 22 and micro-current from Richard? Micro-current is actually going right on the body through electrodes. It has to be touching the skin in order to go through the tissue whereas, PEMF, it's electromagnetic so you have these pulses of information going out and it is being broadcast into the body and actually, there is a lot of science on PEMF being used and certainly, we have all of these animal studies. You would actually be able to look that up. There are thousands of articles on PEMF also.

I have been asked, QRS -- I like all of them. I have one upstairs. I have Beemer. Where people that are using QRS on an advocate that restores the body and helps give energy back in. We know that with the beavers, and improves circulation for people. There is plenty of research on that. I support all of it and they all have a sweet spot. Okay. I apologize if I mispronounced. Cats purr for many different reasons, one those is when they get hurt as per and generates a frequency this other breaks bone, tendon, ligament, and organ healing. That is absolutely right and cats purring that you hold onto, even when you feel them that vibration is really good for healing also. They are delivering frequencies into your body and yes, there was research showing that they actually can accelerate healing with the purring.

Let's see if I missed anything else here. Let's see if I missed anything else. Okay.

Any other questions?

Okay. Troy, can I have you come back on and it looks like it is 2:45. To know what when we are supposed to come back.

Hi. Can you hear me?

I can. Hello.

The break is supposed to be at three and it's going to be until 3:15. Since we are taking it now, we can do a 1600.

Okay. Great. I hope that is okay with everybody. Sorry I stopped a little early. This was a perfect place to stop. When we get to the brain break, we will not take it but maybe a breath. Okay. Yes, wonderful. Okay. Should I call it back in?

You can simply put your phone on mute and walk away.

Okay. I will do that.

I want to let you know that number eight in the files pod is the presentation. You can go ahead and download that now.

Okay. Excellent. Then, there is another question. Can you comment on personal human voice frequency use for healing?

Yes, I can and we actually have research now on voice sound and intonation. Especially when we start talking about people who have been traumatized, PTSD, and childhood trauma. There is a program called faith and found and it is specific to listening and to very specific sounds that are suiting. I could actually, when we get into some of this, demonstrate for all of you, to have a visual response on how things sounded. How what we use our voice and how we speak has a very, very calming and healing effect as well.

Part of those pathways have to do with not activating the limbic system and different parts of the brain and the vagus nerve and

epinephrine being released. There is never going to be anyway, anymore that we can separate anything in the body. It is whole. Your brain and your body are connected via the vagus nerve. There is no separation or no psychological problem. There is nobody problem. It does not have an effect on our brain function. I think that finally, after thousands of years, we are now in agreement that there is no separation in the body. It is one.

Okay. Great. If there are any more questions, I will answer them as soon as we come back and we will be talking about chronic pain and go from there. Okay. Thank you. I'm going to mute my phone now.

Okay. I think we have everyone back in the room. Troy, can you verify that you can hear me? Or if someone wants to type in on the chat.

Yes, ma'am, I can hear you.

Excellent, excellent, thank you, thank you. So any questions while you were away on break that came up?

Okay. The first thing I'm going to do is direct everyone's attention to the files pod. Troy was able to add another one page handout. It says number 9, pain skills with FMN bonus. What I have included for this class, we were hoping this year it would be live but it is not. It is difficult to teach this kind of work shop when you so much need to do the hands on and have the hands on with this set up. I will do the best I can with pictures.

What I have done is when you download that PDF, there are two choices and you can choose both. I asked my website which is the training site, there is a link for you to go in. You click on it or cut and paste. Follow the URL and it will take you to a specific care skills, bonus class. It is a series of videos I put together that actually give you information on how we would be thinking about checking people neurologically and why we do that and doing a neuro exam, what it looks like to be testing frequencies on people to see how they respond. And what people's different responses are to those frequencies, given an explanation to talk to a patient to explain what micro-current is in layman's terms.

There is also a video that is a discussion that I had with a patient, we were doing a demonstration and then what happened after the treatment and the patient talking about it. It talks about the difference between people that basically have childhood trauma, PTSD and don't and how their brain processes the elimination of chronic pain. Those videos are there for you. It is a private site and it is a protected series. No one can see it except for you going into the link. It is intended for this class only. You would have to put in your information and register in order to log back in and watch that.

The second thing I'm giving you is a bonus. Anyone who really wants to do micro-currents, has an interest, wants to bring it in and go through the full introduction air training that is a foundations class. It is about 10 hours. I'm gifting anyone in this class that wants to take

the foundation class online which includes quizzes, takeaways, and a certificate at the end to show you have taken training in frequency specific micro-currencies, I'm giving that to anyone in the work shop who would like the full training for the introduction. Just email me with the instructions in the bonus. I will create a code for you that will reduce the price by 100%. Those are your bonuses for being here. I realize that I'm going through the material fast. People who have not heard it before, you don't have filing cabinets in our brains so it is a way to reiterate and to see it going at a slowing pace. This is introducing how we think about and then you would be able to watch these videos at your leisure.

If you wanted this to be live and get the practice home and for us to get you up and running like what is happening with Scott and Ellen, take the course. Get in touch with Dr. Crawford or doctor notch. I'm hoping to be at Reed soon and maybe some of the other naval and army bases where the rest of you may be. I'm looking forward to getting out there again.

I also want to make sure as we go into the chronic pain and the rest of this that you have downloaded the other PDF's. These will be handouts that you can use for the clinic and what we will be talking about at the end. It has to do with emotions, PTSD and adverse childhood experiences. I encourage you to make sure you have those downloaded. You will have those forms and you will be able to use them in your clinic and thank you very much IFM for making that happen and Dr. Polettia Andanda for what they did.

We are going to jump in now to the chronification of pain. This is the world I deal with. This is my sweet spot, dealing with people with chronic pain and turning this around. And then as I'm in the fourth quarter of my life and my career, it is very clear to me that the place we need to go is preventing it. This is where prevention, prevention, prevention, and we have to see if there is some way to address acute pain more quickly starting with kids and all of these things that seep into it, to see if we can turn the tide on what is happening with chronic pain.

I would like Dr. Huynh to speak to this. I think she has the ability to unmute. She reminded everyone when she spoke to IFM that the Institute of Medicine had recommendations 10 years ago about what needed to happen with internal medicine. They had a blue print for changing prevention, transforming it, and then actually dealing with education and research, and what we could have done to change what happens with acute pain so it doesn't become chronic. So Dr. Win, if you are able to get unmuted and speak that would be great.

Hi, Shannon, can everyone hear me?

Hi, I can hear you.

I'm a family practice preventive medicine physician. I retired from the Air Force. Until recently, I was working at a clinic. Being a family doctor, and preventive medicine doctor, every patient, I thought how could we have prevented this? In the U.S., there is this document that

was published 10 years ago. I went and read it and it is a beautiful blueprint of how we can not only address the opioid crisis but prevent chronic pain.

It is an innovative approach to engage the patients and families, modifiable life style factors that are critical. And the critical role for primary care physician because we often see the patients when they present with acute pain. But yet ten years later, we have really not implemented the blue print. I would say most chronic pain doctors are not trained to deal with pain. There is constraint in a family practice. Most physicians have very limited knowledge of the therapies they can offer.

In the military, we have battlefield acupuncture and most are trained but out in the civilian world, there is such low reimbursement for innovative care that it remains a barrier. Thank you, Shannon.

Thank you. And yes, this is as we go into this now, I'm going to ask some of you who don't know anything about this because it is new, to suspend your beliefs as we go in. I'm basically going to be talking about Star Trek medicine to a degree. A lot of us didn't have our brains to think this was even possible. What it took at the Air Force base was me working with the doctors and seeing the chronic pains. Really, the worst of the worst, bring me the people that everyone goes, oh, when they see someone on the schedule. Take me to those people and I will demonstrate with you what we could do. And we basically were 100% with those patients with some impossible outcomes. And the rumor mill through dull S Air Force base was fast. And then it was standing room only. All they needed was to know wow, this happened and then this was the outcome.

Now I'm seeing the patient that has been the bane of my existence on my schedule because I can't help the person and it gets me in the cut, and then all of a sudden, the people are bright and cheery, and doing gardening and back to housework and their lives. That's all they needed to see. This is where suspend your belief. I will give you three cases to demonstrate this. There is more online. We will go through and talk about chronic pain now and what really happens with micro-currents. So again. Mystery is in the history.

This woman changed my life with how my brain got mapped and how I was open to things and thinking about things. Fortunately, that happened to me before I got into a structured, standardized, medical training of any kind where I already had my brain mapped differently. So I could think about things differently and be open. When we get the histories, that's the key to the results. When we are thinking about myofascial pain, practice has thought me if I treat in these orders with these specific protocols, this is where I get the dramatic results. So you are going to see that sometimes you don't make it down to the muscles and joints, and you have already taken care of the muscles and joints pain. I will demonstrate that with some of the cases. The good news is these protocols are all prep and go. They have been automated. And after ten years of having them work no matter what environment, we know they work.

Practitioners who are highly trained can make mod KKZs for the 80/20 rule. This is where we are thinking of issue on channel 2. These

are the frequencies. You don't have to memorize them but think about what is going on. If we had a way to treat the brain, spinal cord, and the nerves and modulate how they are functioning, would I start differently in how I'm treating people? The reason we ignore things that are going on or don't ask the question is because there is no way to treat it effectively. So 10 is the frequency for spinal cord on channel 2 and nerve is 396 on channel 2. I'm bringing up these structures and some of you may have a lot of command of it and some of you may remember the diagram from 10 years ago. Remembering this and knowing it really matters because we can modulate it.

Remember the central service system and peripheral service system and we want to start asking and talking about what it is. I always start with the brain. This is where I talk about mending the painful communication links. Remember, it is all in your head. I literally tell my patients that I had this chronic pain problem and no one can figure out where it is coming from. They told me to see a psychiatrist and I would say yes, it is all in my head but not the way your practitioner was thinking about it.

This is the area that gets interfered with, and injured, and abnormal processing or mal-processing or how you want to think it, because too many things have gone wrong. When we have frequencies to modulate this and change the communication, it changes life. This is where we are dealing with pain, perception, and processing because it is all in your head in the end.

If we reset this part of the body which is connected to the body, we can optimize the centers of perception, and action, and change outcomes for the better. Remember, there is that motor sensory Cortex. It is like, what am I feeling and what am I going to do about it? We have all of the brain temporizing, can't always put the brakes on with the prefrontal Cortex. We have a way to this. It starts with concussion. When I was talking about people getting that happy feeling, this is the concussion protocol that brings that on in the beginning. This is where I encourage people to think about concussions differently. It is not just traumatic brain injury. You can have a traumatic brain injury and get a concussion from that but any kind of overwhelming stimulus that comes into the brain stem via the vagus nerve, this can come from a spiritual crisis, psychological crisis, immune modulated, we have seen this with map cells, activation signals, people with autoimmune systems, and toxic and emotional exposure.

Sometimes despite our best efforts, we can't seem to reboot our own brain and reset after we have had some kind of trauma. So people use prayer, meditation, yoga, exercise, counseling, trying to shake things off and it just doesn't always work. I want to remind you that I think the greatest disservice we do is for school aged children who are supposed to be running around and we take away P.E. and physical activity. Kids need to be running around to activate their Cortex. That is how they heal with overwhelming input that they are not able to manage yet or co-regulate.

We are taking that away and we are asking children to sit down, be quiet and pay attention. They are not designed to do that. That can be a concussion for children when they can't move this kinetic energy out of their body. So Van Gelder, we talked about him, he had a concussion protocol. And he said, you have to start with everybody with this. This is where we have the overwhelming input come in. Then this ties into the way we think about the vagus nerve now. He wrote the process of healing. His model was that any kind of trauma that happens concuss in the brain stem and the nervous system. The medulla coordinates all of the traffic in and out of the brain. Nothing gets in or out unless it goes through the medulla. So remember also we were talking about core, visceral, autonomic signaling and those of you who know about nuclei and the ascending tracks, and where we end up with pain amplification, this is where it all ties in.

Clinically, Van Gelder was seeing this and putting it together. Now we have the science behind it. This is where we have the regulation of the autonomic brain system through the peripheral nerve. You don't get a vote of what it happening with the vagus nerve if we don't have a way to regulate or co-regulate. The vagus nerve is talking to your brain about what is going on in the organs. And they are saying this is what happened and then they say we have a problem. We are releasing epinephrine and then we get the chronic stress result. Without having the ability to regulate and co-regulate, this is where people get into trouble.

The other thing that happens is people end up with a concussion or chronic pain, something terrible happens, you end up with hormonal problems. We have 100 questionnaires to figure out if we would be sick with a chronic illness. There is an allergy reaction that is regulated. It is so interesting that we have all of this histamine mediated problems that are coming up. Van Gelder was talking about that reaction. Think about it. Histamine is a transmitter and there are multiple types. One of the things it is responsible for is alertness. So all of you that are not falling asleep right now while I'm talking, you basically have BLUT mean and histamine that are allowing you to stay alert. Antihistamines make you go to sleep.

If something bad is happening, histamine will be released. It was a problem getting released in myofascial points. So it begins in the medulla. That's where the nuclei are and the ones that have to do with social engagement. This is where we have the two way communication. So patients just seem to respond so much better in recovery when we released this processing part of the brain. Any time there has been anything that has happened, which is all of us for the most part, one way or another, we run the standard concussion protocol and it is a really safe way to evaluate how people respond. There are times when we would just run the protocol. People would say, you know, I still have my pain but I'm different and I'm dealing with my pain differently. Sometimes this just changes people's perceptions of themselves and the world. We always run this at least once on everyone.

Then I developed a protocol called shock trauma. It is a prolonged time that we run trauma to the medulla. It ended up being a magical treatment for a lot of my young athletes when where dug through and found

out they had mild head injuries but they didn't have loss of consciousness so they thought it was no big deal. For a prolonged period of time, which we never did before because there was concern that it might basically resonate with the sensitivular nerve and cause people to be dizzy. I made sure they didn't have that problem. Then their shoulders, whole body was relaxed. There are so many cases where the kids just changed. I never had to do any manual therapy whatsoever. It is standard concussion protocol and shock trauma and their pain just melted. This is where we deal with the brain stem.

There are other brain tissues we can use. This is controlling the story of myofascial pain. I might have worked on the trigger points of the body over and over again but then it would come back. As soon as I ran the micro-current and modulating the brain stem in the medulla and resetting the brain structures, it was a game changer. It went away and there was no myofascial pain. So they started showing up after I got much better at this.

We have protocols that can address true traumatic brain injury, mild, moderate, severe. We are working on someone in the hospital right now that had a severe brain injury and was in a coma and was doing so much better. When people have orthopedic disuse or dysfunction because they have been splinted for a long period of time, this is where we have a problem issue with the motor sensory Cortex. And then people start using new patterns to use their body. It just doesn't DPOE back to the old way. We have protocols to help support that.

I will tell you right now that an early fascinating case when I started getting involved with the military, I was working with Dr. Peter Demeetry who wanted to get the demonstration going with the military. He had a friend. This is Alan Swigirt. He was saying you are telling me all of these stories and I will bring you online. Come down to FLR where I want to take over your clinic for a week and then I want you to demonstrate with all of these patients to see what you are doing is really happening. A.J. was supposed to be an easy person because he had a chronic shoulder problem that no one had been able to fix. He would get a little relief from laser and it always came back. When he got into the clinic, remember the detailed history? I did that detailed history.

Turned out, he had a stroke four years earlier, didn't really tell anyone except family. He coded at the hospital going in for an MRI at the right shoulder because no one could figure out how to get rid of the shoulder pain. Now we know he was having TIA's and that is what the shoulder pain was. He ended up in a coma and then three months of rehab for loss of function. So really, really debilitated. He continued to have right shoulder pain and neurological deficit. Didn't talk about the other neurological deficits, just got on with work and did it. So when I did my exam, he had no reflexes. He had lots of sensation on the lateral side of his body, on the right. He had a limp, loss of range of motion in the right shoulder.

What we did was the standard concussion protocols for 25 minutes and then the shock trauma protocol. Although A.J. didn't sleep, maybe 3.5 to 4 hours, chronic sleep deprived, just miserable with his life style.

So when we started shock trauma on him, he fell asleep and everything started relaxing. He was sound asleep on the table, snoring. We let it run. I ran it for his cerebellum. When he woke up, he had full motion of the shoulder and the pain was gone. It was all in his head.

On day two, he still had the same results. And then I started getting a buy in with the life style changes. We repeated the protocols and then of all of the crazy things, all of his reflexes comes back. Which is supposed to be medically impossible because we are four years out from all of this. All of the big institutions he went to said there is nothing we can do for this.

On day three, we did all of the central nervous system protocols again and then I had Pete Demeetry go into another room with him. And the avasia is a wave form. It is one protocol that is nonrepeating. The brain cannot accommodate to it. We had a problem with the motary sensory Cortex. If you can't feel it, you can't find it. If someone is numb, they can't tell you they are numb. He had lost sensation of the area. I used this non-repeated frequency. You will feel the entire voltage. I said don't come out until he has his feelings back. I felt confident because of the other changes I would seeing.

He got back all of his sensation on the right side of his body and had full range of motion. That was three days in Jacksonville, $3,000, with everything, hotel, airplane, food, all of that, treatment. They have spent $300,000 on this man's care after his stroke where they were trying to do rehabilitation. This is what we can do very quickly. A.J. has his own micro-current device that he runs for himself now and he is able to take care of himself. He has been doing great since 2016.

And then the final cord. This is part of the central nervous system and it drives all kinds of pain complaints including fibromyalgia. And pain from spinal injuries, and chronic pain in general, wherever it may be. One of my cases was demonstrating that people had things that should be peripheral pain, jaw pain. TURPZ out it was coming from the spinal cord. You have noxtious input coming in and then it converges and the brain can't make sense of where it is coming from. When we have spinal cord pain, that frequency is 10. This is the 40 and 10, inflammation on the spinal cord.

There is a rhythmic decrease when you run this on people with spinal cord inflammation. In the abscess of someone having a disk or bone or longitudinal limit pressing on the cord causing actual stenosis or a herniated disk, getting completely smashed, and you go to surgery, we don't do anything about spinal inflammation. But large diameter nerves fail first. We end up with an inflammation. It is in text books on neurology but there was no way to treat it. Now there is. This is all of these things that we want to be thinking about the spinal cord. This is why I start with the central service system.

So, 40 in the cord. Any time people have tight upper back muscles, tight shoulders, quads are tight, ham strings are tight, everything is tight, we can polarize the spinal cord positive all though some people prefer alternating. So we check to see people's preferences on polarized

and alternating. This is where we put the positive leads at the neck and then we put the negative leads at the end. This is where you can put this on the lower abdominal area, C12, L1 area.

We ran it down to the feet but we found out that you can just do it to the abdominal area and it gets rid of the food pain. These patients had similar complaints. If you go back and ask the question if they had a cervical injury, most of the time they will say they forgot about it. They will get pain, like mid-scapular, right here where nobody can find. That's because of the disk there. They will have arm pain, leg pain, and telltale for sure, immediately pea thinking spinal cord and that is bilateral hand pain. They will tell you it feels like my hands are swollen but they are not. I call it sausage fingers. They will have been told bilateral carpal tunnel or planter fasciitis but they don't get that. It is coming from this. They will have failed surgeries because it is the neck driving it.

The pain can be from a 5 to a 10, it fluctuates different pain sensations. And these are the patients that doctors are like, I have no idea what is wrong with you. I don't know how to help. We are doing better on this but right now, we have something that when it can coming from inflammation in the spinal cord, we have a consistent reliable way to get rid of this.

The mechanisms that happen, I'm involved with a member of North America science society, starting in like 1999/2000. I was involved with the American board of science surgery and all of these big people that were doing all of the writing on this, and Charlie Ray, all of these people, I got to have conversations with them. I went in all of these spine lectures. The reality is if you have an annular tear, there are people who have very high concentrations of PLA2. If it leaks out, it is neuro-toxic. I used to say it was like battery acid but I don't want patients stuck with that image. That's the way you think of it. Anyone with a higher level of PLA2 genetically, they are more likely to get a severe low back pain.

The image will be read as normal but they have an annular tear. It is a neurological injury that is coming from a chemical, PLA2. This is where we have the problem with the spinal cord and the nerve getting exposed to the PLA2. It is highly vascularized and it spreads. It decreases the captivity of the lateral tracts. I told you the large diameter nerves fail before smaller. This is where we have the thing that is chronic that is contributing to central sensitization. We can have it in the neck and back. When it is set up, we have chronic pain that is spreading out.

Most of these patients don't get images because they don't have any frank neurological symptoms. If they do, it will show a bulge or an annular here but it will be read as normal because it is not that big of a deal because they will look if it is pressing on the thecal sac or the cord. They are looking for these big ugly things they can operate on and they are not thinking of the chemical injury. The problem is MRI's are done when you are laying down and not standing. So I will collaborate the MRI findings with x-rays. I want to get standing, lateral, and then

extension and the lumbar spine as well. I look at the MRI with the x-rays and say maybe it looks mine when they lie down but as soon as they load, they are slipping.

We are looking for the story behind the story because now with micro-current, we can do something about it. Once we know the information, these are the set ups we use. This is where your conducted materials would go on the bounty. Treating from the neck to the lower abdominal, to the feet. You can use towels with conductive materials inside. We create this pattern. This is where we treat the central service system, the rain and the spinal cord. You will see these setups live on the videos we set up for you. So you can see on a live person how it gets set up.

Here's the good news. These programs are preprogrammed and press and go. This is what they are using in the integrative medicine clinic. They are getting great results. Now they are just used to getting people out of pain. If you start using FSM and all you did was the standard concussion protocol, added shock trauma for people without vestibular issues, and then apply the frequencies for the spinal cord, you would help so many people suffering from pain. It turns out when I had the worst cases, no idea what to do with, battlefield acupuncture is not seined, whatever. We never made it past the three protocols and they got the results. I didn't have to treat anything downstream except for some of the disks on people. This is what made all of the difference. This is where it is easy if we just started with this.

Now with your breath in, you can exhale. I'm really big on people learning how to breathe diaphragmically. One of the first myofascial treatments is to treat the abdominal muscles and get people so they can start breathing diagrammatically. It is not uncommon when people have had a lot of trauma that the obliquus go into lockdown. All of you in the Air Force, you have a whole another issue. That is because your physical fitness is determined by how quickly you can do sit ups which has nothing to do with true physical fitness. But people getting injured in their backs and abdominals because of the set up.

And Dr. Huynh, I'm wondering if you would unmute again and speak to the abdominal you did in your clinic last week.

So I have a patient who has PTSD and she came in with back pain. This is a patient that Shannon has helped me work with her because she has had prior trauma and very -- one of those patients that is sensitive to any types of treatment. She went from not being able to leave the house to not running her own business. One complaint was back pain. Shannon taught me to palpate her abdominals, and feel how tight they were. We taught how to breathe, really expanding her diaphragm and helping relieve that. I think within 2 minutes of doing that, went from 6 out of 10 pain to 3 out of 10 back pain from that one technique. Pretty amazing.

And back pain is usually coming from the front of the back which is the abdominal. So the back is the last place I look for back pain. It is a very powerful but we want to look at how our patients are breathing.

I'm going to talk about the spinal cord a little bit in this case. This is the young lady that I saw very long time ago. I ended up with a 10 year follow up with her.

She was referred by her grandfather who asked if I would be able to help her. He was doing great and he said, do you think this micro-current could help my granddaughter. She is disabled and in a wheelchair. They said she had RSV. That is tricky in kids. It responds and behaves differently. But I was willing to see what happened. She had the diagnosis when she was 7-8. She fell and hurt her knee. She had severe leg and foot pain. That's why she was in a wheelchair. She couldn't go to school. Her mom is now at home and can't work and we have this young child and all of the family depressed and the kid that can't run around anymore and she is gaining weight. When she comes in, she is in a wheelchair. I get the history from her mom and find out that at children's hospital, they diagnosed her with juvenile RA and then you can have a zero negative and it is still a problem but I thought considering her age that they put her on chemotherapy agents. Her mom was concerned about the drugs.

I was examining her left foot and found it to be profoundly sensitive. When I checked it for RSV, there was no RSV. So it was like, they are calling it that because it is highly sensitive but that is not what is showing up. I did a neuro exam on her. She had hyper-sensation in some areas but everything else was normal. I started asking about all her injuries. Her mom said she has had multiple falls, loss of consciousness on one of them and she was having seizures after that when she collided with another kid. Her doctor said don't worry about it. She will grow out of it.

There was another time that she went off of a 5 foot wall on her bike and she broke her arm. I asked her what the doctors said about this and she said they never asked. So they didn't get the history. And I was very specific with the mom. Now it was like, we have all of this trauma with this kid. I ordered imaging. I wanted the cervical MRI and extension like I talked about, followed my own protocol. I said, this is what we are going to do and I went ahead and treated her. Standard concussion protocol. I did just the 40/10 for the cervical trauma fibroid. I thought maybe this is from old neck injuries. She got really relaxed and sleepy. And 45 minutes into the treatment, I checked her feet again and they didn't hurt. So she let me touch them and she is like, yeah, they don't hurt. I finished out all of the protocol. She sat up 90 minutes later but she nearly jumped off the table because in her brain, it was like she knew she was okay. She got up and walked out of the clinic pushing her own wheelchair.

I had a few crying moments on that one and had to practice getting in check because I was so upset that no one had got the history on this kid and what the family had been through. That being said, without micro-currents, there probably wouldn't have been too many things we could have done to help this. The good news is when everything came back and the mom came back with all of the information, I got to look at the imaging. It was clear she had a minor loss of her c-curve. That is super easy to get

back in people. We do that with manual therapy techniques and getting the stabilizers on. I only treated her two more times.

Her mom -- I said check with the doctor about taking her off the drugs. The mom decided to take her off the drugs and when she went back to the pediatrician, they never even asked how they got rid of her pain. So it was like whatever. They went on with it. She got back in school, lost weight, playing sports. She only had a few minor flare ups. Her grandmother got her a home device to use just in case. And then years later when she graduated from high school, she graduated with honors, stayed pain free, she got to get her into her dream college, and she followed up with me later.

So this is a little girl whose life could have been wrecked along with the whole family. So when we got her back, the whole family got their life back.

So we are going to take a little break right here. And then any questions on those cases with what we are talking about treating the central nervous system? Do you repeat the treatments or is one treatment sufficient?

Usually with chronic pain, we have to repeat it. For as long as this child had been injured and doing so poorly, I was very surprised that after three treatments she was basically done. There have been other people where I call them a one and done. I never know when it is going to happen. There are other people that I think should be pretty easy and they have been complicated because of perpetuating factors. So here is my rule. I have a three appointment rule.

I need something dramatic to happen in the first three appointments to know that I'm on the right track. That is typically what we see with doing the micro-current combined with the manual therapy. And then it the rehabilitation is on the patient. They are responsible for being on the treatment team to change life styles, start working on whatever maladaptive, psychological things are going on for whatever might have happened in childhood, getting more exercise. This is where we ask people to start on their part. Which is really what this young lady did.

People who are willing to take their health and lifestyles seriously are the ones that will have more sustained, once we remove the interference, so the body can heal itself. It goes back to the body needs no help, only removing the interference from the communication in the central nervous system.

If we do not have an FSM unit, how can we obtain one? One o of the reasons I'm offering my online class for free is all of you who really want to do this, we are not doing this live so I can't do the practicum. Anyone who wants to start with this in the practice, you have to go through the full formal training and have the certificate to say you are trained or go through a military training program.

Then you can go to memtechnology.com. Or if you have access to custom care, old blue boxes, accutron that you would bow able to use

because you are informed on contraindication safety use and set up. Those are how you can get devices.

What is the cost of the unit?

Once you are trained, you have to have an account to get in and see the pricing on them. The professional units are $24.99 and then the wellness units is $199 and then you add in the accessories and shipping. Doctor Huynh, I'm going to ask you another question.

How many devices do you have?

Do I personally own or use on people at Walter Reed?

How many do you personally own?

I have seven.

Okay.

Walter Reed, years ago, they had ordered precision distributing. We have like eight of those or maybe ten. We do have quite a bit of the provision distributing. We don't have the Tens unit yet. We discovered that after we purchased a bunch of precision distributing. I would recommend them because you can program up to -- how many programs?

91 on the wellness, and 999 on the pro. They are really easy to use and less expensive.

Precision distributing, you can only program up to about 60. And it is cumbersome to try to program different ones for the patients you will see at the clinic that day.

If you are in a facility with the, we all use the equipment we have. The spinal cord protocols will be on there, the standard concussion protocol and the brain protocols will be on there for sure. Everything I'm talking about will end up being on the devices. Anyone who has access to them in one of the facilities. If you are at Scott, Egland, anyone who -- probably not anyone here from Nellis. We have them at Walter Reed. I guess we need to call around and see who has stuff on the shelves.

We will dive into nerves now. We are going into peripheral nerve systems. FSM is great for easing nerve pain. It is sitting on top of the nerves and irritating it, you will have to get that off, whatever that is. If people have herniated disks and they can't wait out the body reabsorbing it, we will still run micro-currents to keep the nerve function as healthy as possible and the pain down before people have surgery because they do better after surgery if we can get the pain down.

You will see when you go in on the bonus material, the three videos I put together for people to look at I had someone with upper motive neuron, needed surgery. I send her back for a milligram and we got her out of pain but she still had to have surgery. We have to look and see what is happening to the motor nerves. When people have other symptoms.

I know all of you have reflex hammers and you have pin wheels or a paper clip. But go back to this. We have to start doing regular neurological evaluation YUGZs. I treat this to anyone who will listen. I teach a neurological class, beginning to end. You can do a good examine in under 10 minutes and get tons of information. It is the only way to track what you are doing. You do the exam, you know what you got, changes in reflexes, loss of muscle strength, then you run the micro-current and see what changes.

That's what we did on A.J. if I needed objective findings and a way to track what was happening in way that was something other than, how are you feeling. I'm looking at how you are changing neurologically. For all of you doing manual therapy, you are thinking about the pain, we had this whole thing where no one knew about the referrals and they were trying to make it a nerve problem except it wasn't, and then we swung over into everything is myofascial and then you have cords that go back to the brain. There is never a time we take the myofascial tissue out.

Remember when people have shoulder pain, be thinking C3 and C4. Deltoid, we know it is C5. If there is something going on in the bum and in the hand, forearm, be thinking C6, C7. If it is pain in the top of the tow, L5. Heel pain, S1. Not always a bone spur. And then cranky because of an S1 annular tear. Any time someone has bilateral, hip, shoulder pain, history of spinal stenosis or any type of problem, a neck injury and they get diagnosed with fibromyalgia, be thinking of that. If people have 200 trigger points, it is not in one area. It is my o fascial. It is usually both. And never uncouple these. I treat the nerve first and then the myofascial tissue.

Typically what happened is the nerve got irritated which means you had an easier tear because you had movement. And then you have referral pain and the muscle is sending information into the afferent nerves, irritating the spinal cord and irritating the brain. There is no way that this is how I treat all of it. So here's the frequencies when we are thinking about the peripheral nerves. It is 396 for the nerve root.

When we get down to the sacral place S, s1 to s5. Down to back of the leg, the ham string, baby toe, bottom of the foot. Those are all of being by the sacral nerve. We are always worried about the sacral nerves being affected because we can interfere with the motor and sensory nerves and now all of a sudden, we have a bladder and a bowel problem or reproductive organs. Service system as a whole is 45. And then I'm always starting with the core 10.

We treat the nerve pain problems from the spine to the end of the nerve root. Positive again on the spine, wherever f that nerve root comes out and then you put the negative leads where the nerve root ends. So you have to know where it ends. We are usually on 40/396 to get the pain down for 5 to 40 minutes. We don't know the timing. You don't have to worry about over treating as long as they are hydrated. If you undertreat, it may not be that it didn't work but you didn't give it enough time. So sometimes you park them in a procedure room and let the frequencies do the work.

The devices will become an extender therapist for you so to speak. They can do a lot of work that you wouldn't be able to do. Anyone with ham string, sciatica, sacral nerve issues, neurogentle issues, this is where I'm thinking inflammation in the sacral nerves. This is if we were treating shoulder pain. Anywhere from had C3 to C5 and then under the arm pit, we are catching the nerve roots. Positive on the neck.

This would be the set up front to back. You can use sticky pads, or the conductive material, you spray it with water and put it on the body. All of these work. You will see it in the videos I have given you access to. If we are dealing with lumbar pain, low back down to the knees, anything down to the L3 nerve roots, and then down to the feet for L4, L5, S1. You can use multiple bio-energetic devices. We are getting two hours of treatment done in 20 to 30 minutes after we modulate the central nervous system. This is where we combine all of the devices to get this done. They are adding in acupuncture for emotional trauma.

There is a great way of dealing with old emotional ruminations and clear it out while he is doing acupuncture and then he combines with the other protocols. This is where you can use multiple devices. You heard Dr. Win say she had seven devices. I think I have ten devices with everything that I have, all of my devices. This is where we run multiple devices. There is an OBGYN that had fabulous hospital data on getting women out of the hospitals quickly after C-sections and not using narcotics after.

We need to talk about this libe. Chronic and acute issues of the vertebral column. The exercises, rehab, having surgery, bracing acupuncture will work well. We don't have a lot of modalities for the chronic back pain issue we have in the United States and neck pain that is going over looked and underdiagnosed and missed. Low back pain is not a diagnosis. You have to get to the bottom of where it is coming from. And usually it disco genic pain.

This was the great thing at hanging out at the North American Spine society. They had to change the name because the. This is where all of the brilliant people that were doing all of the early radiology from the 1980s and Nick Bata that did the lumbar spine, we were able to have the discussions of what was going on. When you have disco genic pain, the myofascial pain will show up. You have the same mechanism irritating the local nerves and tissues. Trigger points are in the brain.

This is where we can do a clinical evaluation. We don't have to send people out for imaging. If it really hurts when you flex forward, rotate, vibration applied and it feels better when you go into neutral or extension, you want to think that it is disco genic pain. That means SMG happened to the annular disk. If you remember the article that came out 15 years ago that basically said he pulled people off the streets and imaged them and there are all of these people walking around with no chronic pain but they had bulging disks and herniated disks.

This is where the insurance companies got on top of it and said herniated disks and bulging disks don't call low back pain. Now we know about the individualization and genetics, and people with higher levels

of PLA2, they have a higher level of inflammation. These are the people with minor things but huge pain problems because of what the PLA does and they are more sensitive to it. Herniated disks and annular don't cause lower back pain except when they do. Same with spinal stenosis. This is where we have to check with the actual person.

For those of you who may not have seen imaging, I read my all my own imaging. An annular tear is when you see a white dot on the T2 images. Anything that is fluid lights up. When you see the white dots that is an annular tear. This will be read by most radiologists as a completely normal MRI except this person has low back pain. Charlie April figured it out because all of the people sent in for MRI's with low back pain, kept having this white dot. So they did disco genic exams and they figured it out.

This is a 23-year-old female in a wheelchair, pretty disabled. She is on narcotics, can't work or do anything. She is told she is too young for surgery. You basically have to do a fusion for this. And I'm thinking, you are not too old to have your life ruined and be on disability, narcotics, chronic pain and not able to have a life. That's okay but being able to have this problem fixed and getting back to your life and being able to work because you are 23 and going through surgery and it is lumbar surgery, doesn't make sense. In the end, she had surgery, went back to work and she did great.

We have people who have gone through the surgeries that have gone back to doing half marathons, triathlons, all of it. Surgery runs well on the right patient for the right reason.

Now you can do a clinical evaluation. If you go into extension and you rotate towards the painful side and it really herds, it is probably a joint. If it go to the contralateral side, it is the pain. I will stop for a moment because I see a question or a comment coming in.

Think annular tear in patient with chronic back pain after acute injury and unremarkable MRI.

I totally agree. This was a game changer at the Air Force when I taught the doctors how to read what they needed to look for when the clinical story wasn't making sense for what the patient was complaining about. Dr. Ross was reading his own films and he was referring people out and then he reads the films and they all have annular tears and he is like, it is just like Shannon says, they don't get recorded. So he went to the radiology department and said will you bring up so and so’s film and take a look at it with me. So they brought up the MRI and he said is that an annular tear? And the radiologist said yeah, we see those all the time.

Think about that. Yeah, we see them all the time.

So they don't report it.

Any imaging report that is really short and doesn't actually create an image in your head when you can read it, to recreate the images, is an

incomplete report. If they say no bulging disks, age related degenerative changes that is not an imaging report. I encourage you all to take a peek at your own images. We have a radiologist willing to do a class with us.

All of these pat RPZ have been mapped out. They did these early on. They did saline injections and they consistently saw the referral patterns. These also mimic what the referral patterns are for my o fascial pain. You will have to set joint pain and also you will end up with a secondary my o fascial pain because the nerves get irritated.

Whatever you do, stop moving the area because my nerves are being irritated. The tissue splints to keep you from moving. Remember I said there are places where people have increased pain after micro-currents, this is one of the places. We get rid of the nerve pain and the JOIPT pain and then the tissues go wow, I can move now because there is nothing there except that they have a bone spur or they have something in the joint with the ligament in the complex.

Then they go just far enough and they irritate the nerve again and then the whole thing flares up. This is where we can get rid of it and then we teach people a home exercise program and staying in the safe zone of movement so they don't flare themselves up. The set-up is the same, front to back, side to side. The pads and electrodes can't touch each other. Cover the area where it is the neck or low wherever you are having the problem.

Now we will talk about the myofascial system. Myofascial mimickers. I have a one hour class on this. All of my colleagues are only thinking of this tissue because they were told there is not a nerve problem with this and no one got to learn about the spine. They are just thinking about the end tissue. This is where we get into these circular problems because the myofascial tissue becomes dysfunctional because it is irritated because you have any of these core nerves, disks, ligaments, whatever problems, and then they are not working correctly. Then you get more dysfunction and that dysfunction leads to more dysfunction which leads to more problems with the spinal cord and nerves and brain. This is where we have to treat the whole thing.

It is not enough to deal with whatever the end problem is. We have to see the whole story. With that my fascial fichu, it is with artery because you are highly vascularized. I hope none of you have blood phobias. This is a fasciotomy after a rattlesnake bite. They had to deal with the tissue swelling. You can see what a bloody mess this is. That would be a new injury we were addressing. The fascia 142 is affected by chronic inflammation, hardening, and scarring. This is where we want to really address preventing this kind of myofascial scarring by addressing acute pain and injuries.

The model is, it will heal in six weeks? Well, can we get it to possibly heal without interference? This is where the biogenetic devices come in. We never run a scar frequency. They are programmed the way the protocol needs to be for whatever the problem is. We just use them for whatever the new injury is whether it is muscular skeletal, joint, wound or post-surgery.

We will talk about my favorite muscles, the transverse abdominals. This is where people EBD up with back ache and they have belly fat. But it is a loss. We are successful in knitting that back in men and women. I remind everyone in the military, we had a really high percentage of males, probably from the sit ups, that had a diastase S at the bottom. You can see the body builder, you can see he has that large distance S. This is the split in the Linea alba.

And then with women, we want to be thinking about it after child birth. That was one of the first cases I did that turned heads. The lieutenant colonel I think who had the baby had been doing all of this physical activity trying to stay in shape while she was pregnant. She had this torpedo where the belly button was because she had given herself a significant diastase S. And she had a forefinger diastase S while she delivered. She wasn't breast feeding. We put the device on her and taught her how to transverse the abdominous correctly.

And we came back 12 to 18 hours later to check on her, she sat up and was able to act her and the diastase S was gone. The stomach was almost flat. We stood her up and she was able to do the same thing. And Dr. Crawford was like, this has such an empath of readiness. So remember all of the other things that are around a diastasis. We have to be thinking about nutrition. If you don't have the building blocks for collagen, it is hard to build collagen. So we have to have a good protein source and vitamin C. What does micro-current do? We have the se KREEKZs for the GROUBD factor but then increased synthesis, amino acid, transport and signaling. These are all of the things that contribute in a positive way.

We have gone through the whole wiring diagram for how we will treat the physical body. This is where we will start with the central nervous system, then the peripheral nervous system, go into the spine, and then the myofascial complex. This is the bread and butter of what we do where we can change it. Then we have the other population that is suffering from emotional factors. To be human is to have emotions.

For way too long, especially in my generation, most of us for different reasons lived with some very dicey situations, just the way parenting got done in certain situations, and schooling, and also with work, it was like leave your problems at the door, leave them at home. Nobody was supposed to have any feelings or emotions or anything at work. There is a proper way to deal with it. To say that you can separate it from who you are as a human being with everything else, we know better now that we can't do that.

There is a frequency for emotions and it is 970. This was Van Gelder's frequency. You can combine it with any injured tissue. Also we have frequencies when we use the organ frequencies, we treat it like traditional Chinese medicine. Those of you doing acupuncture know that with each of the elements, we are thinking about emotions and each of the organs have an emotional component to them. We think of the lung, that is grief. When we think of lingo with the past, that is the colon. Hurt feelings, the bladder. Fear, kidney. And then rumination and worry, the

stomach. You can see when we have all of these frequencies and we can combine it with the emotions, it is really helps to soften this.

I know doctor Huynh loves to run the micro-currencies while she is doing acupuncture treatments. It actually lasts longer and works fast. If you can't fit someone in for weeks, then you have something with the frequencies that is more sustaining.

I will give you one more case here and then we will talk about [indiscernible]. This was a woman that was intubated with joint pain, sciatica, she had for 3 years. I did what I say I do and got the story behind the story. She was legally blind. Happily married only one surgery, appendectomy. She was shy and super modest. When her chiropractor hadn't been able to help her, she said go see Shannon. She also has some other therapies. I went through her history and the psychological history, with some of the complaints of pelvic symptoms. She said that her mom had and she burst out crying. I said I know for sure we had a problem here.

Whenever this happens, I stop writing notes and I make complete eye contact with the person and completely present and I turn away. If they are uncomfortable with eye contact, I look down or let them look away and tell the story. And say I'm listening to you. She said, it is really hard to tell me. But I really feel I need to tell you. She had been through ritual abuse at the hands of a cult to which she and her parents had been caught up in. I know this still happens and you know about the trafficking and other awful things that continue to happen.

Fortunately, she had a therapist who specialized in this abuse. But she said they would terrorize the children at night and they often used [indiscernible]. I didn't ask for any details, I didn't know it but the category she gave me was a nine. I didn't want her to be traumatized, because a lot of times doing talk therapy traumatizes. So I stayed around the edges and I didn't want it in my own psyche. So I said this is probably PTSD from what she has been through. She had all of the signs and symptoms of it when we go through the criteria for PTSD. She just never, ever felt safe. She had terrible nightmares. She didn't sleep. She usually couldn't go to sleep until the sun came up and that was because of the nighttime terrorizing they did with the kids.

Then I talked about her modesty. She never wanted anything to show. She had persistent pain and she hurt everywhere. She did not want to over exaggerate her symptoms. The big problem was the shame. She felt what happens was her fault. So what I did was II did standard concussion protocol and protein the emotional frequencies right away. And then I used the cycle called super stress. Then her pain went from an 8 to a 2 in an hour. Her pain had gone down before but it came back. I was glad that it was down but I knew we had a lot of work to do.

She came back in and said she slept really well for several days after that treatment which means I think she finally meant that she fell asleep at 3:00 in the morning and slept for 5 hours. Her pain went down and she had less anxiety. So everything was moving in the right direction. Now we are addressing the nerves. We did run standard

concussion protocol again. Sometimes you have to do it over again. I started to do some gentle manual they [indiscernible] in dealing with the [indiscernible]. I was super careful because I was treating her in a public region.

So we were super careful. She did great. I had no sciatica. On the last three treatments, she is telling me that she finally had quality sleep for the first time. She had this big wedding coming up and she needed to wear this dress and she hosted a bridal shower for the bride, things she didn't think she was able to do. She said her hope was restored and she never wanted anyone to know but she said I need to tell my story. And that's why she let me publish her story. So the treatments that we ran, finally, I was holding off on this. I really wanted her more stable before we went in with the big protocols.

Barbara Harris is an MD in Texas. She worked with the military. She had the protocol when she was working with the military folks. We did more manual therapy, we treated the nerves, joints, emotions, and then she continued to get better and better. What was amazing to me is I used to be in a big 3,000 square foot clinic until 2011 -- no 2017. I'm really feeling for the people in Louisiana as Ida is coming through because I lost everything in that storm. So I had this big 3,000 square foot clinic with this interdisciplinary theme, lots of activity. She is in this wonderful room. It was amazing when she fell asleep. She has never fallen asleep FSH in her life outside of her own house.

There was something in the studio and I kept checking because I was concerned if she would be triggered by the male voice. At that last treatment, she said I really, really feel good. So complete shift. So I checked with her a few times and she came in and after that, she said, yeah, I want you to present this case and get it published. So after a year, her pain is still a 0/10. She is able to figure out any aches and resolve them herself. She has sleep quality. She is able to fall back to sleep if she wakes up.

Only occasional intrusive thoughts and she can tell herself she is safe. She enjoys going out. This is one, she knows that if there are cockroaches or bugs in the house, she can get them out of her house. And her husband and her, started having sexual intimacy again. She left me that day and wrote to me and said most importantly, I now feel that life is worth living. I know that my life matters. I wake up happy to be alive. I get excited when I think about the rest of my life. I am grateful for the opportunity to have a full life. I have joy and peace and hope. I want to share my love and my life with others. I know that I am becoming exactly the person I want to be.

So this is the power of being able to address every aspect of being human beings and what people are going through, no matter how long. What happened to her was chronic limbic system hijacking. People get scared to death. If you have someone with a history of ACE's which she had had in spades and they can't feel. Their special senses are activated and they are ready for things to be wrong. These are the patients that. Going back to the person who was asking about the voice and the healing power of it, if you hear the difference in intonation in my voice when we think about

even people putting a smile on their face, well, what are you so happy about?

You can hear the intonation in my voice to know that something is wrong. This is where your patients that come in and they kind of jolt you, you can just get jarred by the way they say something, this is typically what is running in the background. These are the patient that you keep them out of pain and then they get off the table and say you are my best friend. And they go out and talk to your front office staff and they are like, wow what just happened? That is what pain does to the psyche. We cannot separate it. We want to remember the emotions and get the trauma history. You still have to treat with a standard concussion protocol, and even shock trauma. This is a brain product center. If we calm that down, we can do better.

The reason I have the lizard on the picture here is remember that they go into the scared and they just check out. That is part of the emotional trauma. You can see when people are checking out on you. We used to think flight or fright. Most of you probably know about Stephen Porgs and the Paul Vagal theory. You basically have this nerve that is two directions. It is the organ telling the brain this is how things are going on down here. And then the vagus nerve communicates what is going on down to the organs and body. You better get ready to run away.

This sets off all of the hormonal epinephrine in the brain, managing blood pressure, cortisol and the rest of it. So the thing we missed the most but it came up yesterday in the work shop we were in are the adverse childhood events. We have known about this well over a decade and longer from the CDC study. And we are not implementing it. So I will do a rallying cry to all of you. You have the form, download them. Use the original 10 questionnaire or the 23 or 24. But we have to start asking the question. This is when Dr. Fell itty was running a weight loss clinic and found that even though people did phenomenal, they had a 50% dropout. He found out that there was childhood sexual abuse and the weight gain was a coping mechanism and the fear and depression was like don't come near me.

So Dr. Anda, they teamed up and enrolled 17,000 participants from 26,000 patients at the San Diego Kaiser clinic. This is what is important. These people us. This is you and I. These are not people hurting from socio economic hardship or poverty. These are people who are working, they have healthcare, jobs, and three-quarters of them are college educated. They only did 10 questions, 3 categories. They were looking for abuse, neglect, violence, mental illness or someone incarcerated. This came out from that study survey. Only 36% had had an ACE. 4 or MOUR, having three or more, the big number. And so that's nearly 20%. This is the questions and how the persistence were. I won't go thru this. But physical abuse and substance abuse were among the biggest percentage of people having adverse childhood experiences followed by separation, divorce, and sexual abuse.

We start stacking this and we see a lot of problems. A military has one that is 15 questions. There are specific things that happen for people that are in combat. This is how common it is. They did another one

in 2018. And they selected data for three years. It was the behavioral risk surveillance system. 23 got published. Now we have 3 years on top of this where we know about it. They had the data early from that PRF. 38% zero. 24% one, 13% two. These are big numbers. What we know for sure, when they looked at the chronic disease that people had, the top 10 problems from depression, substance abuse, chronic pain of any kind, diabetes, obesity, chronic disease, this is where they saw the correlation of what happened. This is the chain going up for people where we have disrupted neuro development.

The rally cry here is we really have to ask, I will tell you how we can ask this but we have to because anyone with an ACE score has 2 to 3 times the risk of chronic pain. You see how it gets set up. If you look at the impact and see we have this window of time of neuro development with the brain. It changes the brain permanently. Then what we have to do is go for resilience in order for people to understand what happened and to adopt other behaviors and be able to mitigate so that when they regulate, it sets them off, they are reregulate. We have to have a way to do that. The brain adapts to whatever is happening.

I thank Dr. Huynh for sharing this. People who have had a lot of ACE's. They end up going into the military because what they never had was the family. One of the things you get when you join the military is a family. There is a code of honor. One thing that people do is you are a part of a family and your people that you are with are going to take care of you for the most part. You have reliable people, rules, and structures, and not too many surprises. Most people had no structure, no family, no co-regulating, no one to rely on. So we need to go back and ask these questions. At every single base, the training was chronic pain of 3 or more.

I went ahead and gave these to you. I will make the rally cry. Please, please, please start using these with your patients and start introducing it. You can get the story behind the story. Here are the simple questions. This is when I do my practice and everything. I immediately get in rapport with the people I had never met before when demonstrating intake strategies.

Because of the 80 % with kids, you want to know what happened when people were a child. So did you have pain when you were a child? If they did, they are already telling you that something was wrong. The majority of people who have pain on there are letting you know, you already need to have your antennas up.

The next thing is what's the worst thing that has ever happened to you? And it will tend to send you down a number of alleys because of the way they are answering it. No one has ever genuinely asked them potentially, tell me about what happened to you. Patients get interrupted within seconds or minutes by most of their doctors. The doctor wants to get the story in order. That's not the way the brain works. We are story tellers and everything is relational. What is happening right now may bring back memories. We need to slow down and take the time to see how it fits in the frame because that is part of the story.

When you ask them, what is the worst thing that ever happened to you, what do you mean, physically or emotionally? Now I know there's both because they have to choose. And I will say, you can choose either one. So asking them, the way the brain works, it is not did anything bad ever happened to you, because if that's the question, they will say not really, my childhood was fine! This forces the brain to go through the catalog of everything that might have happened. Now they are having to go through the catalog to figure out what it is. Now we have a history percolating.

Then you can start having a conversation and have an ACE questionnaire. I say, I don't need to see how you answered it, I just need your raw score. Then they are able to maintain privacy, and then they can decide if they want to talk about the score. If they say which one, physically or emotionally, I will say tell me what you want to tell me about.

And then if it is the physically one, then it is like what is the most emotional thing that ever happened to you and now it is both and we have opened up a conversation. The brain has gone through a catalog. What is going on there is relational to that. You can say, you had that when you were 4 or whatever. Now you can put the story together for them. It really when you can tell the story back to them. And it is like, of course you have the anxiety because of X, Y, and Z. Those are the questions that open the gate.

I would like to bring Dr. Hunyh back on to talk about her experience a little bit and then we will do a Q and A really quickly. And we will wrap this up.

Yeah, in my experience in working at the clinic for over seven years, I realized in order for chronic pain patients to have long-lasting heal, we have to engage them and work on the modifiable life style factors, nutrition, sleep, stress management, exercise, relationships, all of those. It is really important that the first visit, we were able to help reduce their pain immediate immediately. That gives them confidence and hope. It helps to lightly engage with us, knowing we can help them.

About 5 years ago, when I started doing micro-currents, I was doing acupuncture for a long time but it was hard for patients to come in for a follow up. Sometimes we would do one treatment and then wait six weeks because the demand was so high. I was looking for something that could make the acupuncture treatment last longer. I discovered that the Cleveland Clinic used micro-currents in their therapy. And kids don't like needles. So I went up there and learned micro-currents. I will say combining the two is like magic and that's what patients say. It's magic.

And the neuropathic pain that Shannon talked about, much easier to reduce pain with micro-currents the first time, with the first visit. And the treatment does last longer. I know for pediatric patients, they prefer micro-currents over acupuncture. The nice thing is the machine is available for patients to purchase if they want to or they can purchase their own. One patient realized that a military patient like Shannon

said, studies show that a lot of the patients come in with adverse child experiences.

We need to ask about them in order to prevent pain chronicification. I was seeing patients early on, definitely, I was want to know if they had a high ACE score. Because if they do, there is a high risk of the pain becoming chronic. I would put in the interdisciplinary approach much earlier on. I would not wait on high ACE patients. A lot of patients have GI issues. And pain is an inflammation state. I talk with my patient about their diet, nutrition, how to maximize that. That's why I use the MSQ. It is something patients can fill out in the waiting room and then I quickly scan if they have a GI issue. We address that.

Our military patients, majority of them have vitamin D deficiency. Think of the uniforms they wear made to block the sun. Rarely do I see a patient with the right vitamin d. The pain clinics require all doctors before referring to a pain clinic to check the vitamin D level. There are studies that show supplementing with vitamin D reduce pain, that alone. I love to combine them for all of the reasons I mentioned but the time I could spend to talk about my patient life style.

Thank you. You have just been a joy to collaborate and work with. I'm so glad we get to do that. And I'm hoping there will be more in the D.C. region. So these [indiscernible].

Shannon, we can't hear you.

Can you hear me?

Can you hear me?

Yes, Shannon.

Okay.

I got kicked out. We are close to 5:00. Just to close -- can you still hear me?

Yeah.

Okay. The thing came up again. Just to close this out, remember a patient is allowed to have more than one thing wrong and usually does. Where we are seeing the pain is not always the place it is coming from. We want to make sure we are addressing that central and peripheral nervous system, especially with FSM to help so much. This is the opportunity to push the abilities as practitioners and health folks. You can incorporate and use concepts and technology. It is uncomfortable at first when we are learning but it is extremely satisfying what you learn. And I saw that over and over again at the airport bases when they got the results.

I want to thank everyone for participating in this work shop. And your interest in the Resonance Revolution. Online classes are available. And in the other handout I gave you, I have the information on how to get

to the class. It shows you actual videos of treating people in a classroom and showing you all of the set ups and other information about micro-currents. And anyone who would like to take the class, you also have the information on where to email and what to tell me. I will get you set up with the online class if anyone wants to learn this. If you have any other questions that we didn't get to, please feel free to email me.

Any last minute questions? We are 2 minutes over. Any questions, feel free to ask me. Thank you for the kind words. I'm glad all of you enjoyed this.

Let's see. Thank you, can you show us the handouts again or can we download them later, if someone can answer that question. We have an email if anyone needs anything. I don't think we have any more questions.

Thank you all. Doctor Huynh, thank you so very much for contributing and talking about your personal experience and personal medicine side with acupuncture as someone who has worked in a military pain clinic. Thank you so much.

Thank you to our host, Troy. You were amazing as you were last year. I appreciate this very generous invitation in being able to present. Everyone have a great rest of the week and enjoy your other workshops. Then we can go ahead and sign out.

Thank you so much for that. Ladies and gentlemen, this concludes the micro-current work shop given by Shannon. Ladies and gentlemen, we will leave the room open for another 15 to 20 minutes. You can chat and ask questions. Don't forget to download any items from the files pod.

Thank you, have a great day.

Thank you. I will stay right here if there are any questions that come in.

Shannon, can you share your experience in using micro-currents to help with long hauler syndrome with the COVID? And also your thoughts in terms of, there is literature and the role of micro-currents?

So the first question was on long haulers. So I actually developed with two other physicians for developing protocol for preventing and easing the symptoms when people had COVID. They seemed to be very successful. I took care of a lot of patients that had COVID with telehealth and using nutrition and anything that we needed to do medically on the micro-currents.

Then with long haulers, we had a specific protocol that had to do with the mitochondria. If you want to look it up, there is something called the cell danger respond, Navio, I think is the doctor. The mitochondria from under threat of infection or other things, it stopped producing energy in the way they normally do in ATP and then we have signaling where it spirals in the body. People are stuck in the stage where normally we are sick and go to the cage. It is protection, intended for you to get away from the tribe, get away from people.

The immune system is such an energy hog, there is no energy for anything else. We get stuck in these and then there is a whole series of immune signaling that happens with the front line immune system that even from exercise will get activated. I tell people do not exercise when you have COVID. You can't get your body hot and burn it out. It doesn't work. It is counterproductive. And then when people are in the military and they are you find to exercising their way out of things, it is the wrong thing to do for Covid-19. And the micro-current addressing the cell danger response has been very effective. We have had a lot of good results. My brother just left. He got severe Covid-19 last year. I thought he was going to die and we did all of the interventions and turned it around but he had long haulers. And now it is completely gone. He is a different person.

I know doctor Huynh, you have had some success also. So yes, there are frequencies for that. They are available for anyone that gets micro-current devices when I'm involved in doing peer to peer. They are automatically loaded. I think it may be hidden on a key note. That's the first one.

On the second one, Havana syndrome, which we started seeing -- well, number one Havana Q where we had a subset of people that they didn't know what it was. They thought it might have been a chronic wave and then there was talk that it was these high frequency devices that were reading people's devices to get data. And then it was no, it was a high frequency wave form coming through. We truly don't know where the technology comes from. There was concern it came from Russia. Basically, our Americans and the CIA has been hit with it and also some Canadians.

They think there might have been a talk outside of the White House. CIA people had a variety of symptoms conflicting with a brain injury. When they did an MRI on people with this syndrome, they say it is somebody's brain looked like they had a traumatic brain injury but there is no sign of it. Meaning it didn't happen. So it is happening to the brain tissue without there being some kind of a knock to the head or head injury. Fortunately right now, burns who is the head of the CIA, they have put a lot of effort into it. We had bipartisan agreement on the Havana act which is helping American victims that are afflicted by neurological injuries. I can't remember the word.

Basically, it is that we have the neurological assaults that are happening. They don't know where it is from. They have poured a lot of resources now. I don't know if anyone there is seeing it. I would assume with the funding that has been agreed upon that funding will come in. The thing is we will be able to treat it with micro-currents because it is a traumatic brain injury.

One thing we do so well is to treat traumatic brain injury. And there are things to help restore the tissue between functional medicine methods and doing the currents. That is my opinion. Are there patients coming in? People are like this last year saying something did happen and they are pouring funding into it. A lot of people who were told they were

lying and that it didn't happen. Which is not uncommon for the beginning of a new syndrome.

Thank you, Shannon.