2021 5Day Core Section 1 Transcript

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[00:00:04] Good morning, welcome to the Frequency-Specific Microcurrent five-day core comprehensive course, this is the max. This is everything you need to know to use FSM and any kind of practice and I'm really excited about this particular course. It's my favorite. So welcome. The first thing we talked about. Well the things that are going to be

[00:00:33] In this course or pain and injury material neurologic system and visceral conditions. It is a full five days. The slides were created with me Kim Pittis and David Moyes Nick and I'm really excited about their participation. They made the course so much better. First thing we need to cover is that the FDA does not have any opinion about statements?

[00:01:03] And techniques taught in this seminar, they haven't been evaluated by the FDA. And therefore we don't make any claims about being able to diagnose cure mitigate treat her any any / or prevent any condition or disease its FSMs intention to be in compliance with all FDA regulations.

[00:01:26] The devices are different. I can say anything I want about the use of frequencies because it's a clinician sharing my experience with other clinicians in under the protection of the First Amendment. So I'm a clinician sharing my experience with other clinicians. The devices have 510 K approval in the category as if they were TENS.

[00:01:55] devices for the treatment of pain, so none of the statements made in this seminar actually apply to the devices. They applied to the frequencies. So you're at a frequency specific microcurrent seminar. What is frequencies specific microcurrent? That's a good question to start off with FSM is a new tool. You probably didn't know you needed that does something you didn't think was possible. I took that slide out of a

[00:02:25] FSM presentation on small intestinal bacterial overgrowth because that actually is what FSM is who would have thought that frequencies would be a tool you would never have thought you needed them because what the frequencies help you do

aren't particularly thought of as being possible. So let's look at the frequency specific microcurrent history frequency specific therapies were developed in the early nineteen hundreds.

[00:02:55] It's by MDS and osteopaths in the US UK and Germany and they were used by thousands of Physicians till about 1934 1910. The flexner report came out by 1917. They were thinking they ought to implement it in 1910. There were no medical schools. There is no standard of care for Medicine by 1917. The drug companies had matured there were three or four of them.

[00:03:25] And the standardization of medical treatment required that pharmaceutical medicine and standard of care became the standard of care for all medical Physicians. So medicine labeled all the electromagnetic therapies, as ineffective fakes. Drugs and surgery. We're going to be the only tools of medicine and nutrition herbs homeopathy.

[00:03:55] And the frequency specific therapies were effectively outlawed by about 1922 23 24 in there. So every medical intervention except for prescription medication was effectively outlawed any physician who use those tools

[00:04:15] Like electromagnetic therapies herbs Homeopathy nutrition would lose his license. So the device is all went in the back room or on the junk Heap and the research and history were lost. If you've ever had the job of cleaning out your grandfather's or your father's Library, you know that these books and papers where nobody knew what they meant. They were important to Grandpa or your dad, but not anybody else.

[00:04:45] So they went maybe to the rare book room and the natuopathic college or the quack museum in Chicago, but basically the research in the history were lost. The practitioners were even persecuted. Some of them went to jail. It was quite a dramatic time in the early 30s in medicine. So

[00:05:07] After everything calmed down Harry Van gelder was an osteopath and nature path from the UK trained in the UK during the war came over to the US well to North America bought a practice in Vancouver BC in 1946 that came with the machine.

[00:05:28] That was made in 1922. So he walks into this clinic and walks into the back room and sees this lump under a sheet and pulls the sheet off and there's machine there's directions under it and there's a list of frequencies with the machine. So there was a number which assumed

[00:05:58] That you would set that number to match one of these dials on the machine. So 9 was listed as allergy reactions. So there wasn't any chance you wanted to create an allergic response. So he assumed that you wanted to neutralize that allergic response and there's this is just an example of the other frequencies that were found on the list and you'll get the whole list by the time we're finished then in nineteen. So that was 1946.

[00:06:27] The machine was made in 1922. 1983 George Douglas is a chiropractor went down worked with Harry Van gelder and his clinic in Ojai, California and brought the list of frequencies home and stuck it in a drawer. You know the way you do in 1983. Well in 1993 when I graduated from Chiropractic College George bought me a two-channel.

[00:06:57] Microcurrent device and happened to run across this frequency list that was in his top drawer.

[00:07:07] So he looked at the frequency list and Harry's machine that had two channels and he said well this machine has two channels. I wonder if we could use the frequencies on the Precision microcurrent that Harry used.

[00:07:25] On that two channel machine.

[00:07:29] So 1995 when I started practice George gave me the list and we started using the frequencies together on a 2-channel microcurrent device. I had no idea still have no idea how the frequency is were derived. I got a list. There are some frequencies George has dowsed for or

[00:07:56] Dow's for using a like a kind of muscle testing and there are few frequencies that he's done that with but most of these frequencies came from

[00:08:09] That original list so I don't know how they were derived. We have an idea finally of how they are working. But the 1920s equipment was not microcurrent plugged into the wall back when wall current was just as likely to be direct current. So that's the history. It came from a British osteopath and nature path in 1946 to a chiropractor who worked with

[00:08:39] In Southern California in 1983 and from there to my office in 1995 were the frequencies were first used on a Precision Micro. So the first year we used the frequencies '95 and '96. We use them to treat muscle and nerve pain and actually in '94 '95. We treated ourselves George and I, my kids one or two volunteer patients to make

[00:09:09] Sure that if the frequencies didn't work. They also didn't create any harm '95 and '96 there were so incredibly effective for muscle and nerve pain that we decided that we had to teach it in 1997 in January 1997 was the first course that we taught to find out if the positive results were real. Like is this real?

[00:09:39] Is it a placebo effect because the walls and the clinic or pink and I'm a nice guy and I've got good hands. What is It? Before you for you decide that you've discovered something real science declares that you really have to see if it's reproducible while I work in a fee-for-service clinic. I can't do Placebo controls.

[00:10:02] So the only way to find out if it really worked was to teach it to somebody else and Naturopathic student chiropractors. Those were the people in the first classes and some of them are still using FSM. So the consider the benefits Were Real by June, we knew that the effects were real not only were they real they were teachable and reproducible. So at this point we have 4000 practitioners in 23 countries.

[00:10:32] And they tell success stories and stories of effects of the frequencies that are just amazing and then since 2099 really we've.

[00:10:46] Acquired research in both animals and humans plus all the clinical results that have accumulated and shown us that the frequencies actually do work. So that's the foundation of science. Does it work? Is it reproducible, and then can you come up with a reasonable model for it? So science starts with observation; do this and that happens.

[00:11:12] Is that a coincidence? Did it just happen do this? And that happens again?

[00:11:20] So pretty soon you find out if you do this that will happen and that's when it becomes predictive then if you do this that will happen and then you start looking for mechanisms. Why does it happen? How does it happen? But first you have to observe the effects science is a method is a method of observation and reproduction eliminating variables. Is that

[00:11:50] the only thing that could have created the treatment the effect. So that's how science works and it's worth. I really am rather science and data based. So microcurrent devices. Everybody wants it to be about the machine. So the microcurrent devices are approved in the class of tens devices current is in millions of an amp you can't feel the current. It's not TENS. It's a thousand times less current than TENS. It is approved for aesthetic use non-prescription.

[00:12:19] Option used for wound healing pain control microcurrent device is very widely. They have direct current or pulse DC current waveforms or Square wave sine waves ramp square waves. One or two channels the devices that are out there have one channel to channel. There's combined forms There's square wave sine waves, H waves, ramped square waves combined units have ultrasound.

[00:12:50] A frontal galvanic and microcurrent, but they're not usually double Channel microcurrent and they don't usually have the frequency of availability that we need most of the time and all of the microcurrent devices that are on the market. The frequency generally was an important until FSM became widely enough use that device companies wanted to be able to attract our practitioners. So now you have a lot of choices. As far as I

[00:13:19] know the FSM equipment made and distributed by Precision Distributing and made by Bio-Therapeutics in Seattle is the only equipment made in the U.S. Everything else is made in China and imported and they don't have quite the quality control that I'd prefer so we only distribute devices from

[00:13:44] Bio-Therapeutics and precision Distributing that are made in the US but if you want to buy one of the the other brands I won't call them off Brands but one of the other brands what you need is a two-channel, three-digit specific device and there are ones out there. They're usually they're made in China Post alternating or positive polarized DC. They have to have a ramped square wave where you can adjust the ramp on the front end to the wave has to be a constant.

[00:14:14] Generator 20 to 600 microamps and a screen that tells you what frequencies running so the screens make the devices more expensive, but if a frequency has a good effect or bad effect, you have to be able to tell what it was that's causing it. We use conductive pads alligator clips with wet fabric as conductors. There are various devices available. Automated programable

[00:14:44] units are available. Some of the units that are out there have apparently created their own protocols that have nothing to do with what I've created. So I don't know what they're running and I don't know why you'll have to talk to the person that took our protocols and modify them based on their own experience and there's manual frequency inputs available input units available like the Precision-Micro, which is the one I use on difficult.

[00:15:14] You'll see me use that for manual treatment tonight on when I treat Kevin's neck. It's important to be able to choose the frequency that you want to use based on the response of the tissue and you'll see that as we go along.

[00:15:32] So what do we know about just the effect of the current if all we were doing was the current and the frequencies had no effect microcurrent is really beneficial back in 1979 when it was introduced Naught Chang in 1982 at have been on the market about three or four years and they didn't know how it worked because the current is current you can't feel. So Naught Chang did this study that showed that current between

[00:16:02] And 500 microamps increased ATP production by 500%. And in Rat skin that increased protein synthesis by 70% and that increased amino acid transport by 40%

[00:16:22] That was done in rat skin. And then Seegers repeated that study in 2001 and 2002 and replicated it. Current between 10 and 500 microamps increases ATP

production by 5 times. Increased cyclic AMP in human lymphocytes invevos so these are living lymphocytes and she measured cyclic AMP; was a big thing and it

[00:16:51] activated signal transduction in between the lymphocytes now when the current got above 500 microamps the ATP production leveled off so stopped increasing and flattened out. Didn't make it better didn't make it worse. Above a thousand microamps.

[00:17:14] It actually reduced ATP production. So TENS devices which use milliamps or above a thousand micro amps. TENS devices actually reduce ATP production, which is inconvenient, but nice to know 20 days of microcurrent. Now, this is what you do. If you're a graduate student at University of Washington that needs of study needs a thesis.

[00:17:45] So this graduate student biopsied some bunnies. He was in the biology Department. I think. Biopsied some bunnies and then he ran 20 days of microcurrent at a hundred microamps. And just nonspecific. Just three-tenths of a Hertz with the bunnies front legs on one piece of what contact paper and the bunnies back legs on another piece of wet contact paper and at the end of 20 days the

[00:18:14] vascularity in the bunnies biopsy tissue had increased by 40%. Now vascularity means blood supply. And when you're healing wound blood supplies important. Now this research was done for the Aesthetics industry for you know facials. They don't care if it's published which is why it's never been published. I'd like for it to be published. This was good. So somebody is going to have to replicate this so vascularity increased

[00:18:44] by 39% now, they stained this next biopsy for collagen see the little black arrows. Those little black lines are collagen. Collagen increased by 14 percent. Elastin, which is what makes tissues stretchy, that was the most impressive that increased elastin the current increased elastin by 48 percent. Now elastin is what makes tissues stretchy.

[00:19:14] When you're trying to repair a wound you want it to be well vascularized, well a wound or an injury. You want it to have normal blood supply. You want it to be strong

the collagen increased by 14 percent, but you want it to be flexible so that it will be useful for your daily activities and require a minimum of

[00:19:42] reactivating to make it useful. So that's just the current as you'll see when you add the frequencies to it, there is a dimension added by the frequencies that is impressive. It's not just the current but the current helps so there are a couple of ways you can learn FSM one is the FSM textbook. Now this was written ten years ago, and it's completely different format than the course. This was written.

[00:20:11] With facets, discs, it's a lot more research-based because Elsevier published it. Elsevier's the largest Textbook Company in the world and everything I said had to be referenced to the extent that was possible. So that's the FSM textbook. It's a good resource. The resonance effect is the most readable book and it tells you the history of frequency specific microcurrent. It's pretty readable. Most people read it and about four or

[00:20:41] five hours and that's just a page turner. And it does have protocols and discussions of the visceral conditions and brain injuries that we treat with FSM. So you can get this on Amazon or as an audiobook or on our website frequency specific.com. But Amazon is probably the easiest

[00:21:07] You can get a signed copy at frequency specific.com/book, I would think so now clinically we have the comment. Well shouldn't you have more research before you teach this stuff? And that was a good point but one had to argue that the frequencies are declared even by the FDA. The devices are declared to be low risk the frequencies either work or they don't work.

[00:21:37] If they don't work, they just have no effect, side effects have been transient. You just need to observe the precautions and contraindications. And I promise you that you will hear every

[00:21:52] side effect negative effect that I have ever created you will hear about it. It is not possible for you to have made as many mistakes as I have made. That's how I learned all this stuff. And if you do anything, I don't know 200,000 times in 20 years. You

probably ought to be good at it. Right? So that's I promise you that I will warn you about every side effect that I've ever seen even once or twice so

[00:22:22] Do you will know all that by Sunday night?

[00:22:27] So fortunately for us medicine is pragmatic. So efficacy first mechanisms later. We used willow bark for hundreds of years. And then we used aspirin as after we purified acetylsalicylic acid. So we used willow bark and aspirin for hundreds of years. They didn't understand prostaglandin chemistry until Upjohn developed Advil in 1970.

[00:22:54] Nobody knew about the prostaglandins but Upjohn to on had to find out how ibuprofen worked. So that's when we found out about prostaglandins, but that didn't stop us from using willow bark and aspirin so that's how medicine works. The clinical response is where it all starts. You do something and something happens to a patient. So we started off with a list where there was a word,

[00:23:24] inflammation and then a number, 40 Hertz

[00:23:29] Okay, what is this do? Inflammation. Well, we assumed it was to neutralize inflammation not cause it. And that was helpful because that's what it did. It reduced pain redness swelling all the symptoms of inflammation but it didn't do anything for range of motion. Didn't do anything to increase how much something moved unless the movement was restricted by swelling. There's a frequency for fibrosis and scarring.

[00:23:56] Frequency for fibrosis or the frequency for scarring dissolves Scar Tissue increases range of motion doesn't do anything for inflammation or pain unless the pains caused by the Restriction of motion. Frequency for Hemorrhage appears to stop bleeding and brand-new injuries and will stop pain or reduce pain in the menses it by stopping bleeding it prevents bruising in new injuries. So I had

[00:24:26] both so my hips replaced and I didn't bruise and that's not possible. But it was the frequency to stop the bleeding that reduce the pain after the surgeries and prevented the brusing but it has no effect on inflammation except I guess if you reduce the bleeding you might reduce the future inflammation. There's a frequency for shingles

and herpes that we've used since 1998. Reduces pain, eliminates the lesions done do anything else. It is not good for

[00:24:56] any other thing except shingles and herpes. It's effective enough that is pretty much Diagnostic. And then there's one frequency combination for kidney stone pain. So far, It's been effective in every case, but it's not useful for anything else. It is pain along a nerve root. But unless that pain is caused by shingles, it just doesn't do anything.

[00:25:26] So in 2003 2002 well 2001 I started teaching in Australia in 2002. They started FSM blinded animal FSM animal research at University of Sydney animal research Department. Vivian Reeve was the researcher in that department and her 18-year career was

[00:25:57] researching anti-inflammatory drugs in a standardized mouse model for inflammation. So the standardization was they painted a specific concentration of arachidonic acid on the mouse's ears and the mouse were measured with calipers. So this is a mechanical measure of the swelling in the mouse's ears. Then you do something. You inject them with Toridol or you give them to

[00:26:27] The mousy equivalent of two Advil and then you measure how much the swelling goes down. Well in this particular case, they ran 40 Hertz on channel A reduce inflammation 116 hertz on channel B to address the immune system because arachidonic acid causes an immune system reaction that follows prostaglandin pathway Lipe-oxygenated pathway and the first 10

[00:26:57] Mice they did there was a 70% reduction in swelling and the arachidonic acid. And Vivian looked at the data about 2:00 in the afternoon and she said y'all go home. Well people on Australian don't say y'all so she said can't do the Australian accent. But she said we're going to do this differently tomorrow because in 20 years of doing this I have never

[00:27:27] Seen a prescription or non-prescription drug that reduced inflammation by more than 45 percent. So it's 70%, you guys can't be trusted so somebody's not being objective. So the next day everybody came back in and the people that were measuring

the mice were in one room people that were painting the mice were in another room with the door closed and the people that were measuring mice were in the Next Room.

[00:27:57] People that were treating the mice were in the room after that and Vivian, dr. Eve went in and turned the machine away from Wayne Riley who was treating the mice those are graphite gloves, which we used to use and he had hold of the mouse's tail and the Scruff of the mouse's neck. So he's not touching the ears. That was the other thing and Vivian put in a placebo frequency. Like the machine was off.

[00:28:27] Well, actually 40 Hertz on A and nothing on channel B. So that's how it worked.

[00:28:34] With all of that precaution, there was still a 62 percent reduction in Lipe oxygenase mediated inflammation LOX mediate an inflammation is what is involved in virtually all chronic disease. There was a 30% reduction in cyclooxygenase or COX mediated inflammation and you've all heard of COX-1 and COX-2 Inhibitors that reduce inflammation in joint disease and

[00:29:04] cardiovascular disease while the problem is that they take the COX mediated inflammation Celebrex took the COX media to inflammation below normal, and it also inhibited the cyclooxygenase that was necessary to rebuild the blood vessels in the stomach and the kidneys and the heart so COX mediated.

[00:29:33] Drugs like Celebrex were taken off the market and then reintroduced with big warning boxes on them and at 30% reduction and Cox mediated inflammation 40 and 116 is equivalent to prescription Toradol. Toradol is what anti-inflammatory they use after surgery by way of injection.

[00:30:02] And because it only slams down the inflammation by thirty percent for two to six hours. It doesn't have the side effects that Celebrex does or that the other LOX mediated inflammation drugs do so you get a much stronger anti-inflammatory response, but it's shorter-acting and it gives the body time to get on top of

[00:30:32] Response without causing side effects. It's a pretty amazing outcome. And that was in 2003. That's when we found out it's a four-minute time-dependent response.

So half the effect is there at 2 minutes the full effect is there at 4 minutes and that's important to know. So at that point, we changed all of the automated protocols to run the frequency 440 Hertz for

[00:31:02] Four minutes half the effect is present at two minutes. The full effect is present at four minutes. So that's this one then they found out that no other frequency even off of our list. So just the nonspecific microcurrent devices that are out there, they didn't produce any reduction in inflammation. They do other things but they don't reduce inflammation. Our frequencies from mineral deposits and bone. No reduction. Our frequencies for what we call the intermate trauma paralysis allergy reaction. No reduction and swelling. And the channel B has to be specific to. So 40 Hertz on channel A and 355 the frequency for the skin on channel B, you could maybe guess that the skin was involved since they painted arachidonic acid on the skin, but that gave no reduction in swelling.

[00:32:02] So the agent that had of swelling that had to be addressed was the immune system 40 and 116 was the only thing that worked in this mouse model of inflammation.

[00:32:16] Then we had into 1999. We first treated 25 fibromyalgia patients with a history of spine trauma specifically most of them auto accidents and neck injuries. So we did 54 patients with a history of trauma average chronicity was nine and a half years or the range of 1 to 50 years. I had 25 of these patients when I did a ground rounds at NIH and I said to them

[00:32:45] We've done this.

[00:32:48] 25 times they come in with their pain at a 7.4. They leave it a 1.4 and nobody's going to believe it unless we have something objective. So this pain pattern was characteristic 24, 25 pain patterns were virtually identical they all had hyperactive patellar reflexes and they had specific dermatomes that were hyper sensitive when you measure them with the pinwheel.

[00:33:18] They all look the same in terms of symptoms and then we found that only one frequency combination reduced inflammation or reduced pain. 40 Hertz to reduce inflammation and 10 Hertz was the frequency on the list for the spinal cord. It was in the

paper published paper it says it was trial and error wasn't trial and error. It was 40 Hertz from the list and 10 Hertz from the list and the body is polarized positive at the top, negative at the bottom.

[00:33:48] We found that out from Becker. So we hook the contacts up at the neck, contacts at the feet polarized it positive. Now. This shows the patient uncovered. But obviously, you'd put the roll into the patient's knees and you'd cover the patient up with a nice warm fuzzy blanket.

[00:34:08] And they came in with their painted an average of a 7.4 with a range of a for from a five to a 9 and it went from a 7.42 to a 1.3 in 60 minutes goes from the feet up, recedes from the feet up. It would last any place from two hours to two weeks. And there was no patient it didn't work on. 100% of the patients had pain relief and 58% of them,

[00:34:38] 58% of these 54 patients recovered within fibromyalgia within four months and stayed recovered. Now, the recovery was individualized the important thing was 40 and 10, which would keep the pain below a 4 that FSM in the office. Some of them required a home unit to keep their pain down all the time below a 4 they had Physical Therapy reconditioning supplements.

[00:35:06] And 13 of the 54 patients. They didn't relapse, they discontinued treatment before they could recover. It took four months to recover at roughly one or two treatments a week with the home unit. These 13 patients discontinued treatment for reasons not related to treatment side effects. Which actually means if you're, one way to interpret that is, if your pain is going from a

[00:35:36] 7 to a 1 in 60 minutes.

[00:35:41] And you've been in pain for 10 years when your pain is a 1 who are you? So FSM has the ability to create an identity crisis that is unparalleled in medicine. It's quite a thing when your pain goes from an average of 7 to an average of 1. So I think that had something to do with it. Some of them mentioned cost, some of the mentioned time.

[00:36:11] Either way, so that's what we did and I took this information to NIH and I gave a lecture and said, okay, we've done this 25 times somebody measure what we doing. Terry Phillips came up and said you send me a drop of blood on blotter paper and I'll tell you what they had for breakfast. It's like, okay, so he sent me the blotter paper. I called a patient who we had treated the year before.

[00:36:41] unsuccessfully. She had spine surgery and the pain then generalized to the full body. So I called her and she came in and I told her we'd need to do a little finger stick. And her blood work came back just as I was leaving to give this lecture at IFM. So I made this Slide the night before the lecture, but when I handed

[00:37:11] handed the list with this original data

[00:37:15] to Jeff Bland as he was coming out of the hotel.

[00:37:19] He looked down at the list and I had the idea that I had something special when his hands started shaking. And I said Jeff, I don't know anything about cytokines. There's no medical school in 2000. This was before Google. So there wasn't any Google. How do I look this up? And he said wow call Michael Rough. He's working with Candace Pert at

[00:37:48] George GW George Washington University in Washington DC call him and see what he has to say. So I called Dr. Rough and I said Dr. Rough, Dr. Bland said to call you and I have this data and I don't know what it means. And he said yeah, Okay, sure, what are the numbers. I said well, interleukin 1 goes from 392.8 down to 21.4.

[00:38:17] And it got really quiet and I said dr. Rough. He said what time frame I said about 90 minutes. He said whoa cytokines

[00:38:28] change really slowly and when they change they change over months not that period of time. Who did your data I said Terry Phillips, the same guy that does your data. He said that's amazing. So he said keep me posted on what? Oh, I know. He said well cytokines are hard to change and I said being new to this. I said, no, they're not they all change like that. He said what?

[00:38:58] I said well interleukin-1 10 TNF-alpha interferon gamma CGRP interleukin 6. They all drop like that. They drop by factors of 10 and 20 times in 90 minutes. And he said wow, I don't know what you're doing but it's unheard of so keep me posted. So we kept him posted as we work to get the paper published. And the other interesting thing about this is the cytokines

[00:39:28] all stop in the normal range. So I took this data to the speakers' dinner that night. I had my little

[00:39:36] piece of paper from NIH folded up and David Permoter asked me so, did they measure substance P? Substance P is produced in the spinal cord. So if they

[00:39:52] Reduce substance P, then you've you demonstrate that you are treating the spinal cord. And I said well funny you should mention. Substance P went down from 132 to 10 in 90 minutes. That's a factor of more than 10 times as P-value has three four five, zeros, but you never published more than three. So substance p is made in the spinal cord. So we do know that 10 actually addresses the spinal cord. We've got one piece of data that tells us that

[00:40:23] And it's unequivocal and uncontroverted. Now the other thing that happens with these patients is they get pretty stoned and endorphins are what you create when you run, and they call it the runner's high. Well, endorphins make people floaty and very pleasant. You can call it, they feel stoned. They get to the point where they don't want to open their eyes and they don't particularly want

[00:40:52] to talk. And the endorphins go up by a factor of more than 10 times from five to eighty-eight and it's pretty impressive. But that leads us to the change in prostaglandins and the change in endorphins are why we do not run FSM on patients known to be pregnant. Tens devices can't be run through a pregnant uterus FSM has an additional

[00:41:22] Contraindication to tens. It doesn't matter where on the body you put it 40 and 10 and 40 and anything reduces cytokines, but it also reduces LOX and COX inflammation or prostaglandins dramatically. The problem is that there are certain prostaglandins that are required to maintain a pregnancy and you don't get to choose

which ones you're going to reduce. There's a chance that you're going to reduce the prostaglandins that are required to maintain a pregnancy.

[00:41:52] So, 40 Hertz May reduce one of those prostaglandins. So, we don't do that. The other thing that's a little harder to appreciate ahead of time, is that FSM raises endorphins. So for an adult, that's just fun. It's just fine to get Mom's stoned have her sleep and then do well the rest of the night and feel kind of

[00:42:21] giddy, that's good. However, in a fetus the firing threshold in the centers of the brain develop their firing threshold is set at certain times and Fetal development. So what may be a temporary Spike for the mom may hit the fetus at one of those sensitive States and development. Where they

[00:42:51] set the threshold for what makes this happiness cell in their brain fire. What sort of endorphin level does it take to make that happiness part of your brain fire and if there is a spike that gives a very high amount it can affect whether or not that child feels happy.

[00:43:21] from normal amount of stimulation if that threshold is set artificially high. So we don't want to do that. At eight weeks when pregnancies discovered there really isn't a fetal brain as we know it. There's nervous system tissue, but it hasn't formed into a brain and they're not setting thresholds until about 12 or 16 weeks. So, we don't use FSM on patients known to be pregnant. We've never had an adverse report

[00:43:51] but the risk is theoretical and unknown. It's okay before the pregnancies discovered in about 8 weeks. So it's not like you have to ask every patient as she's pregnant. Although you should find out is she pregnant and how far along is she? Well, I might be. Well, okay, I might be as different than I missed my period twice. So there's that. Now the other thing that goes up is cortisol.

[00:44:20] And that was we looked at it and it's like well, it's not a stress response. It was linked to the increase in endorphins. Look at the endorphins. They go up. So there's Proopiomelanocortin endorphins beta Lipa troponin that goes to Beta endorphins and there's ACTH. So if you look at the cortisol curve and the endorphin curve,

[00:44:52] the cortisol legs endorphin by about 20 minutes and that's about right. So it's not a stress response. I didn't publish the neuropeptide Y data but it's not a stress response because neuropeptide Y goes down and cortisol follows the endorphins neuropeptide Ygoes down and neuropeptide Y follows the

[00:45:18] sympathetics

[00:45:20] So the data shows that the cortisol elevation is a side effect of the endorphins going up. Now, what's interesting for the patient's is the pain goes from an average of a 7.3 to an average of 1.3. This is dramatic in these patients and there's kind of nobody it doesn't work on. If they come in with their pain elevated due to fibromyalgia from spine trauma, this will take it down. This P-value has six zeros

[00:45:50] We only published three. The statistician is British, and he said that publishing six zeros is showing off. So we only published three. That was his perspective. But the three zeros is incredibly significant. Now you notice that there's this one line here.

[00:46:13] It didn't change. There's didn't have any inflammation didn't have any rise in endorphins. Well, that was our control patient. The control patient had fibromyalgia was diagnosed from fibromyalgia, but she really just had myofascial pain in her neck and low back and the sleep disturbance was being caused by poorly managed menopause. So she only had 8 out of 11 tender points. No Central sensitization.

[00:46:43] Normal patellar reflex. No indication of central sensitization. She just had a wrong diagnosis. So we treated her for 40 and 10 and it didn't work didn't do anything. So we treated her with the protocols for myofascial trigger points. Her pain went down and so that we actually had a control patient more or less by accident. We found out over time that frequencies dissolves scar tissue in those

[00:47:13] mature Burns. We did a burn unit study at Mercy Saint John's in Springfield, Missouri and

[00:47:24] Roger Huck felled and his team Bart flick arranged it. He is the developer of the Silver Lon. Silver nylon fabric they used in the burn patient. And then I did the

microcurrent treatment. So the PTs measured the patient on Monday and Friday. This is one of my patients that didn't, I couldn't get through the scars in his hand. He had failed graphs and his scar

[00:47:51] tissue was an inch thick. So this was after his surgery to re graft his hands. And anyway, every patient out of the eight had statistically significant increases in range of motion and

[00:48:12] The PTs measured them Monday and Friday. I treated them Tuesday, Wednesday, Thursday. They were measured the following Friday and Friday for three weeks and then once a month for two months. And then the abstract was presented at the Pacific Rim burn conference, but surprising to me, dr. Hockfield didn't use any of the data. So I basically don't have anything published out of this week's worth of work. But we knew it worked

[00:48:42] and so we could use it when we treated a burn patient in Taiwan. This was three years chronic full-thickness burn and a 20 something-year-old. He got burned in a fireworks accident at an amusement park and so his elbow was stuck in 15 degrees of flexion, and I treated him for scar tissue for about an hour and you can see that the scarring has lightened up in color a

[00:49:11] little bit and his elbow is now straight. It's hard to appreciate the range but it was about 15 degrees of flexion before treatment and it was completely straight. So, okay. So we did that. That's what living data we have. So how do frequencies and microcurrent do this? Well, science starts with observation. So what observed effects do you have that you have to explain.

[00:49:42] There should be a reasonable model. You know. Wow this works, it's magic. Yet doesn't quite cut it. So the observed effects are what? Well, the tissue changes immediately. The tissue softens and it goes what we call Smush. Immediate changes in sensation that the patient and the practitioner may both feel. So the sensation is sometimes it gets warm sometimes everything.

[00:50:11] in the area relaxes. It's going to be different with different things that you're treating. Okay?

[00:50:18] And that stops when the frequencies finished so there's tissue softening. It's like the air gets let out of a balloon a little bit and this stops when the frequency is finished and then there are lasting effects. Well, how do you explain that? How does science explain the observed effects?

[00:50:40] Well, the short version is the human body is a Quantum biological system. Now, you've heard this Quantum business before. Newtonian physics describes large objects quantum physics describes molecules atoms and subatomic particles that make up bio chemicals and chemicals.

[00:51:03] Molecules atoms and subatomic particles are held together by electromagnetic bonds. Every bond has a frequency at which it resonates. That's just physics. So this isn't something magic for FSM every bond, chemical bond, mechanical bond, electrical bond has a frequency at which it resonates. Okay, so,

[00:51:31] why is this a Quantum system? Well, Newtonian physics describes large objects like your body, like a rock.

[00:51:43] But Newtonian physics, they found out falls apart at the molecular level molecules atoms and subatomic particles don't behave the way that larger objects do. So, they had to develop a different kind of physics to explain the behavior of small particles. Molecules, atoms, subatomic particles. Well, your body is a large object.

[00:52:13] So your body as a whole follows the rules of Newtonian physics, if you fall off a building, you're going to accelerate that 32 feet per second per second before you hit the concrete.

[00:52:27] And you'll hit the concrete with a force that is determined by your acceleration and your mass and that determines the speed and that determines the force with what you hit the concrete but the molecules atoms and subatomic particles in your body obeyed different rules. They are held together by electromagnetic bonds and every bond has a frequency at which it resonates.

[00:52:57] So for example, this is insulin. That's what it looks like as a protein. That's citric acid. That's what it looks like as a protein. When you describe what the bonds do, okay.

[00:53:15] Now, hold that in your mind and add this fact. How does the body communicate inside of itself? How do you apply these frequencies in one place? And they act in a different place? Well, water lines the gel inside your cells. So we used to think the cell was just a bag filled with water. Yeah, not so much.

[00:53:43] The cell is lined with a gel and water molecules are attached to that gel with the oxygen pretty much attached to the gel and the hydrogen atoms flickering.

[00:54:02] in between the spaces. So the oxygen is here and the hydrogen atoms do that. So they flicker. Right? As just part of movement. Hydrogen atoms have an empty electron in their outer shell. It's plus it's - an electron. So there's a whole and the outer shell and when it flickers because the water molecules are held on the g

[00:54:32] in the same place. When they flicker that holes always in the same place. It creates a structure inside your cells that is very much like Silicon. So computer chips are a semiconductor when they're made of silicon and or germanium.

[00:54:57] And they are semiconductors because there is a hole in a very specific place that allows a controlled flow of electrons through the tissue. Now this may seem a little esoteric but it helps you to think about how current flows in your body and we start with the theory those of you that want to just jump right into the where do I put the leads in how do I fix shoulders and necks? At some point

[00:55:26] somebody is going to ask you how does this work? And there are some of you that want to know that so that's why we're doing this first. So electrons, and let's say copper wire, travel really fast. Because there's two electrons missing and the outside shell of coppers. When you put a bunch of copper ions together and they make copper wire the current just jumps through the holes and

[00:55:56] that's how copper wire is a conductor?

[00:56:00] Ceramic is ceramic and it's set up so that all of the electrons are filled. There's no space. There's no empty electron shells when you make an insulator, so the insulators like you have an electric fence those things those are ceramic. There's no place for an electron to move. So when the current gets to the insulator just stops.

[00:56:29] Right, it can go through the wire but it can't go through the insulator. That's how current works. So

[00:56:38] you have semiconductors which are in between. The current flows along a constrained path at a particular rate, and that's how you make computer chips. They make semiconductors that are put in certain places and they take advantage of this controlled current flow and they send the electrons down these little painted

[00:57:08] copper wires and they get to the semiconductor and that's where all the business of your computer is conducted. Well in your body water lines the gel inside cells and form structures that act as a semiconductor. So the short version is your body is an electromagnetic system that looks solid. The cells function as a semiconductor Network that conveys current, charge and

[00:57:38] information. Okay? Now bio physics is the science that explains these observed effects. There's lots and lots and lots of information and biophysics but these are the ones that I've used to build our mechanism of action on. Albert Szent-Gyorgyi is a PhD biophysicist who's active in the 1940s, 50s, up to

[00:58:08] 1980s. His paper in the 1980s, molecules do not have to touch each other to interact. Water can form structures that transmit energy. That was published in 1988. I think 1990 or so Robert Becker published The Body Electric where he showed the body is an electromagnetic conducting system and the perineurium the covering on the nerves is a DC system. It's

[00:58:38] Direct current system like Microcurrent that conveys information throughout the body and creates healing. So he wanted to find out how it was that a salamander grew back leg. So if you cut off the back leg of a salamander, in two weeks or three weeks, I think the salamander grows back a leg. If you cut off the tail it grows back a tail. Where's the blueprint that tells it - grow back a

[00:59:08] leg, grow back a tail. And then what's different between a salamander, that will grow back leg, and a rat, that will not. Mammals do not grow back a leg. If you cut off the leg of a rat you end up with a three-legged rat. If you cut off the leg of a salamander you end up with a salamander that's three-legged for about two weeks and then overnight and over a couple of weeks it grows back a leg. How does it do that? Well, he eliminated all the

[00:59:38] possibilities. Took out the bone, took out the blood vessels, took out the nerve, took out the covering on the nerve. Long story short. The current flow changed and the directions for how to grow back a leg

[00:59:56] disappeared when he took out the covering on the nerve. The perineurium. Hmm. That's a DC system. The nerve is an AC system. You have that action potential the flows down the nerve that makes the muscle twitch and all that stuff. That's an AC - Alternating Current. There's a there's a pulse. But the blueprint for how to grow back a nerve, how to grow back a leg

[01:00:26] that's a DC system or Direct Current system that is contained in the covering on the nerve. Interesting. They didn't know that before Becker did that work. Then Jim Oshman did sort of a review of all the biochemistry that we know about energy medicine as called "Energy Medicine the Scientific Basis" the second, as good as the first edition was the second edition is a page.

[01:00:55] turner. Tt's just really good. All parts of the living Matrix set up vibrations at many different frequencies. These are large even gigantic and scale. I think I started with Becker. Read that one when it first came out in the 90s, then read Oshmans book in 2001 and then we read the second edition when he spoke at the Symposium. He's been speaking at our Symposium since 2003. And then

[01:01:25] last year, we had Gerald Pollack from Seattle Washington University. At contact with water-friendly surfaces, water molecules shed their hydrogen ions and organized into orderly lattices. So the fourth phase of water is his book. He also wrote about called "Cells Gels and the Engines of Life" which will change your idea about cellular biology forever

[01:01:55] So what's resonance? So the title of my book is The Resonance Effect. Well, what is it? Resonance is the tendency of a system or a bond to oscillate at large amplitudes in response to some frequencies and not others. So they found out in the Seventeen hundreds that at the resonant frequency, very small forces can produce very large amplitude vibrations. They found out that a company or a battalion.

[01:02:25] In of soldiers marching across a bridge in step could accidentally

[01:02:34] hit

[01:02:37] the frequency that holds the bridge together. Every structure has a frequency at which it resonates. The bonds that hold it together form a particular pattern and all of these men marching in step collapsed abridge one time and the Seventeen or eighteen hundreds. So as a result armies, which hate having men fall into the water,

[01:03:06] and hate to have to rebuild bridges. Army's made it a habit to

[01:03:14] break step when they get to the front of a bridge they do that to this day whether it's a concrete bridge or a metal bridge just in case so that's the power of resonance. You can collapse a bridge.

[01:03:31] The Tacoma Narrows Bridge got swaying in the wind in a mild wind storm. And because it was so flexible. Eventually, it hit a resonant frequency with the bridge itself and the bridge formed a sine wave and simply came apart. Wasn't a hundred mile an hour wind, it was 20, but it got

[01:04:01] The bridge swawing at the right frequency and the bridge simply came apart. That trick when a singer sings a note that breaks a lead crystal glass. That demonstrates the resonance frequency effect, because the singer has to sing a very precise note that matches the frequency holding lead atoms together in the

[01:04:31] 70% LED Crystal Matrix only works with lead crystal, doesn't work with silicon. It's LED. Where that frequency that binds the lead atoms together is within the range of a singer's voice. LED atom bonds vibrate with this singers note if it is precise

and sustained. So it has to be there correctly and then it has to last long enough that the lead atoms vibrate against

[01:05:01] each other and simply come apart.

[01:05:06] So you take this concept of mechanical resonance and apply it to biological resonance. Drugs and nutrients act like keys and a lock.

[01:05:21] to change membrane receptors. So this is how cells work. Let's say you have a little piece of pathogen associated molecular pattern. That's what a PAMP is. It's a it's a piece of a bacterial cell wall. So a pathogen Associated molecular pattern lands on this receptor. That modifies.

[01:05:48] kinase is inside the cell that modifies transcription factors that change genetic expression that change micro RNA and messenger RNA that create proteins. That is the biological answer of that cell to the pathogen. And in this case, it's pro-inflammatory cytokines.

[01:06:14] But the chemical the biological fragment lands on this receptor and binds like a key in a lock. It just matches is what the receptor is meant to bind to every cell has them. The surface of a cell is covered with thousands of these protein receptors.

[01:06:38] So frequencies act like your key FOB opening that lock with an electromagnetic signal. Frequencies appear to change membrane protein configuration and cell function electromagnetically with a frequency-specific signal. So this signal changes the receptor.

[01:07:00] The frequencies act as if they change cell signaling because they change the cytokines they act as if they dissolve the scar tissue cross-links with a frequency because there's only two frequencies that make that scar tissue soften. It's not inflamed. It's the frequencies for scarring and sclerosis and fibrosis. That's what changes scar tissue right and it does it with a signal.

[01:07:31] Now we have a published paper. We have a set of frequencies that works and shingles. Their channel A channel B. There A/B pairs and we published a case in

2010. Successful treatment of shingles in the ophthalmic branch of V in an 85 year old man. This is the bald head of Dr. David Simon's. He and I were married for the last four years of his life and in

[01:08:01] 2007 in the summer, we were at a meeting together and he said you have to treat my scalp. It's just itching and driving me crazy. I said, what is it? And he said well, the dermatologist says is actinic keratosis and I ran the frequency to reduce inflammation, which is actinic keratosis is inflammation in the skin and it made him worse. Well, if you reduce inflammation when there's an infection, it makes it worse, so I took the contact

[01:08:30] off his head and looked at the pattern and he had shingles in ophthalmic branch of V.

[01:08:38] So it took four hours I treated him for one hour. He was out of pain. We got back to our room that night. I treated him two hours that night and I treated him 2 hours the next night. The pain went away in that one hour and never came back. I treated him for four hours because

[01:08:58] shingles and the ophthalmic branch of an 85 year old man does not get better. Virtually 100% of the time it becomes postherpetic neuralgia and it is what they die of and it's what they died with. Had no return of pain that lesions were gone in 48 hours. And in 2010 when I published his obituary in Practical Pain Management, I asked them if they would

[01:09:27] publish single case report? Said it depends on the case and I said well how about shingles in the ophthalmic branch of V? It was Dr. Simon's and they said oh my God shingles and the ophthalmic branch of V never gets better. I said, well it did this time. So that's how we got a published case in shingles. Was pretty exciting. So biologic resonance is how we operate. Frequency acts as if it changes membrane protein

[01:09:57] configuration and cell function electromagnetically. So it acts as if it disassembles the virus capsid. We're still trying to figure out a way to test this but clinically even with the virus mutating it acts as if that's exactly what it does because the virus just comes apart. Now, in order for this inflammation data to be possible

[01:10:24] inflammation has to be present in the tissue not only as a biochemical phenomenon. It has to be present as an electromagnetic pattern that can be changed by resonance.

[01:10:37] Cytokine levels all stopped in the normal range. The frequencies appeared to change cells signaling. Cytokines and prostaglandins are all created by the effect of chemicals landing on this receptor. The fact that we can reduce inflammation even in the presence of an infection says that this resonance signal is actually even more powerful.

[01:11:06] Then biologic signaling from a piece of the viral, of a bacterial

[01:11:14] fragment that lands on that receptor.

[01:11:19] So you can't throw out the data because it doesn't agree with your model. We have a model that says that cells respond to chemical input. Well, we have to add the concept that cells respond to frequency input. You can't throw out this data. This is data. You can't throw out the data because it doesn't match your model. You have to change the model. So it includes the possibility that the data is, correct.

[01:11:48] Not only that but there is a frequency that increases secretions that we tested. I had to give a lecture on the endocrinologic effects of Frequency Specific Microcurrent in fibromyalgia. So we did salivary hormone testing 2:30, we did a control then I treated David's Zabba between 2:30 and five o'clock and my salivary estrogen

[01:12:18] 2:30 was 1.7. I was on oral estrogen replacement. I was well post-menopause probably four years and I was taking Estrace. So by five o'clock my salivary estrogen was 1.4. At five thirty, it was 1.4.

[01:12:42] And then between 5:00 and 5:30, we ran concussion protocol which included the frequencies to increase secretions in the pituitary and that didn't do anything to estrogen between 5:30 and 6:00. We ran the frequency to increased secretions in the and the ovary and at 5:45 I was

[01:13:05] fatigued, nauseous, exhausted didn't feel well. Asked David Zabba if we could try to stop the experiment because I felt crummy. He said no you made me keep it on my testicles for 30 minutes so we are going to keep it on your ovaries for 30 minutes. That's just the cost of research. It's like okay fine. So at 6 p.m. My estrogen was 37.1. Well, you don't have to be a mathematician to figure out that that is statistically

[01:13:35] Significant so it's 6 o'clock. We change to treating my adrenals which everybody was interested in and my liver, God bless it,

[01:13:46] reduced my salivary estrogen from 37.1 To 1.7. Then we treated

[01:13:54] my nerves. I had nerve pain down my leg and the salivary estrogen say stayed the same. So the only frequency that increased salivary estrogen was the frequency to increased secretions in the ovary.

[01:14:10] And so increasing, so the secretions and the ovary, the ability for the ovary to secrete estrogen has to be present in this tissue. Not only as a biochemical phenomenon that can respond to hormone signaling from central regulatory hormones in the brain that come down to the ovary and say hey, secrete estrogen. It has to be present as an

[01:14:39] electromagnetic pattern that can be amplified by the frequency to increase secretions. The frequency changed cells signaling to increase estrogen in this case. You can't throw out the data because it doesn't match your model.

[01:14:58] Now,

[01:15:00] how would frequencies create lasting effects? Well, you have to think about what

[01:15:10] creates lasting effects in any sort of chemical system. Water for example is completely stable as ice. But that depends on the surrounding environment. It's completely stable as a solid as ice as long as the surrounding environment is zero degrees centigrade. If you add energy to the system, it's completely stable as the liquid between let's say 1 and 99 degrees centigrade.

[01:15:39] As it reaches 99 degrees centigrade, so in between 1 and 99, it's completely stable as a liquid and then at 99 degrees of becomes completely stable as steam, but it depends on the external environment as long as the external envronment is a hundred degrees Centigrade. You have steam. You have humidity. You have water as a liquid. So the correct frequencies operate kind of the same way. They create

[01:16:09] Instantaneous changes and change the state of the tissue kind of like water goes from ice to liquid to steam. And these changes can become permanent when the patient's metabolism attitude and mechanics support the change in state. Right, so you can get rid of inflammation in a tissue pretty easily but the patient's metabolism attitude mechanics have to support this change in state or it won't

[01:16:39] last. So there are two cases that

[01:16:47] illustrate this and they walked into my office within weeks of each other. So this is how I learned about these cases. Everything that you're going to learn in this seminar about frequencies is something that I've done in my office for good or for bad every mistake, every positive effect has been created by me or one of my students with the effects of consistent frequencies. So these will

[01:17:17] translate into your practice. So these two stable State cases walked into my office within about two weeks of each other, just I think so, I wouldn't miss the point. So this first one was the 54-year-old woman secretary. Her pain was between a six and a seven. Was about seven years chronic. It was in her neck and upper back, coming from I thought the disc and facets and the muscles. She was sedentary as a secretary. She didn't exercise much and she

[01:17:47] sat all day as a secretary. And at the end of the treatment, her pain went from six or seven down to a one or two which usually engenders their cooperation. And so the end of it I said, I need you to do some exercises as part of your recovery. So when you are sitting at your desk and you're typing, you know about once an hour,

[01:18:17] just roll your shoulders and I want you to sit with your belly out a little bit which will move your neck back so your ears over your shoulders and you can still get

all your work done. And you just need to like set a timer or something. So you need to get some oxygen into your shoulders about once every 30 to 60 minutes. She said look, I'm a very busy secretary. I worked for three busy Executives. I've got three secretaries that work under me.

[01:18:47] I worked very hard all day have worked hard to get where I am. And I don't want to mess this up by losing focus and so know I'm probably not going to do those exercises and I don't like sitting that way. It just makes my tummy look big and I'm sorry said like this and it's like well your facets and the posture create additional. Okay? No exercises. Okay. Well, then your muscles are really kind of dehydrated.

[01:19:17] And I know you don't drink much water. So I what I need you to do is drink four ounces of water an hour. You need to drink about eight glasses a day, but that's just sipping on water throughout the day. And she said yeah. No, I'm not going to drink water it if I drink water I have to go to the bathroom of have to go the bathroom. I have to stop working and I'm not going to stop working. So I'm and I don't like water it's like well, you don't have to like it you just have to

[01:19:47] Think about it, you know, you can put flavored tea in it. You can decaffeinated flavored tea you can put a little bit of juice in it. So it's not just water you can drink in all those flavored fizzy waters without sugar in them. You can do that. I don't want to drink water. I drink coffee during the day that has water in it. Well, yeah, but it also has caffeine and while yeah caffeine keeps me awake so I can do my job, but it's it's dehydrating you.

[01:20:17] Really? No water. Huh? Now not gonna drink water. Okay. Well, the other thing that muscles, that make muscles relax and get rid of the knots in your muscles that are making the pain in your shoulders is magnesium. So magnesium malate and a little bit of B6 and that really helps the muscles to relax and creates a good environment form and most of us can assume that our diet is deficient in magnesium. And she said,

[01:20:47] I've read those articles in Reader's Digest and Parade Magazine. I know that those supplements you seller just so you can make money. They all end up in the toilet and they don't do me any good and I'm not going to get ripped off. So no.

[01:21:04] Okay, so show how are we supposed to get you better? Well FSM, you're really famous for this. So I'm you're going to fix me. It's like okay, so I treated or twice a week for six weeks. Every time she came in a pain was between a six and a seven. Every time she came, every time she left. It was down around a one or two. It only lasted for about 24 to 36 hours and then it would come

[01:21:34] back always came back to a six or seven. And she was actually, in every single time, she came back twice a week for six weeks. Every single time she came back I treated her we had the good response and

[01:21:54] we had the same conversation. She wouldn't drink water. She wouldn't change your posture. She wouldn't do exercise. She wouldn't take supplements. And so we were able to create no lasting effects. She was kind of irritated with me and let me know what and I said, well, you know, it's kind of hard to bail out a boat while somebody still shooting holes in the bottom of it. So I need you to do your part to maintain this. "No, you were supposed to fix me." Okay, so that was her.

[01:22:25] About a week later, two weeks later, this naturopathic student came into the office. Now, he was 48 years old. Male. So there was a hormonal difference. His pain was between a five and a six but it was 30 years chronic not seven years chronic. He developed his hip and groin pain in the muscle and tendon from running hurdles in high school.

[01:22:52] He created a muscle injury back then and he just had this hip and groin pain since he was a teenager and somebody told him about FSM. He came in with his pain five, six, maybe seven on a bad day. He was sedentary as a naturopathic student. He sat 36 hours a week plus all the studying time at home. But, he had a macrobiotic diet. He drank two quarts of filtered water a day. He took supplements. He exercised daily.

[01:23:22] and he meditated. Well, I treated him once, his pain went from a 6 to a zero. Came back in it was a four and it went to a zero and then he canceled his third appointment.

[01:23:38] And I saw him a year later and said Robert, how are you doing? And he says I'm doing great. pain went away. It never came back and I had school so I didn't keep

my third appointment but it never came back. That's really cool. Well, he already had the stable state. There was already there the support that he needed to keep his muscles pain-free and working normally. So his pain was reduced permanently to a zero to a one.

[01:24:08] That was it. So will the treatment lasts? And this is the last slide before we go to break. To create a stable state and human system. It's complicated. And it's what you already do. Whether you're a physical therapist or nature path or an MD or a chiropractor what we deal with in Physical Medicine is biomechanical factors. Ligamentous and tendinous. Joint instability. Disc bulges that create

[01:24:38] inflammation and changes in muscle tone. Leg length and equality. Poor posture. Overpronation. Muscle imbalance. Right that'll create problems in the neck. The poor posture is why that lady had pain in her neck. Her neck was constantly forward and her head was tilted back. So she had faucet and disc generated pain that made the muscles tight. The tight muscles is what we thought we were treating. We ended up needing to correct your posture. She wouldn't correct your posture so that took

[01:25:08] care of that. So that's biomechanical factors. There's general deconditioning. In general. Like you just don't get out and exercise enough. And then there's segmental stabilization. So strengthening specific segmental muscles in the pelvis, the hip, the spine. Those can be conditioned with exercise. There's general health comorbidities like diabetes or autoimmune disease or gluten

[01:25:38] sensitivity right? Those general health issues that create inflammation and interfere with repair. Nutritional deficiencies in our culture are usually insufficiencies of everything except calories. It tends to be antioxidants essential fatty acids minerals, especially magnesium and potassium vitamin D and methyl folate and methyl B12 methylated B vitamins. Emotional stress.

[01:26:08] If you're sympathetic sore predominant, there's no way you're going to repair tissue because the sympathetics are in control their job is to just keep you alive. And that means repair issues are put on hold. Toxicity, organic chemicals, and heavy

metals. Allergies, especially gluten that cause the gut to leak and create inflammation and immune system activation, but you can also have allergies

[01:26:38] To milk soy corn and dust. There infections. Viruses like lyme and EBV. Bacteria I guess is a is a, would be lyme. Mold infection. Lyme disease, which is a spirochete kind of bacteria. Dysbiosis and the gut can cause immune system activation leaky gut. And parasites. So the patient has

[01:27:08] has been sick ever since she went on that mission trip to South America.

[01:27:12] And every six weeks her spine acts up. Took me two years to figure out that what she had was a parasite.

[01:27:21] That she got on that mission trip to Venezuela. I sent her to a GP and said she's got a parasite put her on whatever you want to put her on for two weeks and then wait a month and then put her on it again. Once we got rid of the parasite her back pain went away and she'd had recurrent neck and back pain for 8 years. And I was treating her once or

[01:27:51] twice every six weeks. And I finally noticed the pattern and we figured out it was a parasite. Once we got rid of the parasite she had a stable state. So the stable state is what you're doing already. FSM allows you to create a new state that will then take advantage of what you're doing.

[01:28:13] To create a stable state in the patient. So simultaneously operating in every treatment. You have the effect of the frequencies that change the state of the tissue. The effect of the electrons to increase ATP. The fact that if the patient is hydrated

[01:28:34] the tissue is a semiconductor that conveys the current and the frequencies all throughout the body.

[01:28:42] And the patient's stable state that maintain the changes in create health. So in each condition that we talk about, each one of these the stable state is going to be different. Okay, so whether or not this course is going to be approved Continuing

Education Credits. We will give you daily sign-in sheet. Fees May apply from your organization or your state. We'll give you a certificate at the end

[01:29:12] that says you completed the course. When you sign in the morning and sign out at night, we get an electronic copy of that and we can send you that record. But this course may not have credits for your profession. Some professions are very particular and we have a limited staff and there's no way I can apply for CE credits in 50 states and 12 countries for 8,9 different professions.

[01:29:42] So we give you the material that you need to submit and we let you do it. That's the best we can do for right now.