Please stand by for real-time captions.

Welcome. We would like to inform everyone that the sign in sheet, course handout and the agenda are available in the files pod. You can download them and we will be starting in a few.

The handout and the course agenda are all in the files pod and we will be starting in a few minutes.

I will give it another minute for people to join the room and then we will be starting soon.

All right, it is 8:31 and we will be starting.

Welcome everyone to osteopathic manipulation workshop [Indiscernible - static] with Dr. Jay Sandweiss. I would like to mention a few housekeeping items, we would like to inform you that this session is being recorded. If you haven't done so please make sure that your microphone is on mute. Dr. Sandweiss will be answering questions during the Q&A portion of the training. If you have any questions for the host [Indiscernible - static] you can put them in the chat box as well. Otherwise, Dr. Jay Sandweiss will address your questions regarding the presentation during the Q&A portion. In the notes pod you will see the video links [Indiscernible - low volume] which you will have to access for today's training. Please note that you will have to open the video from a different browser and you can only access them today until 6:p.m. Eastern Time. If the video is not opening from Internet explorer please try to use Chrome. While watching the videos [Indiscernible - low volume] we will keep the room open and we ask everyone to remain signed in to AdobeConnect and stay on the line while watching the videos. From the files pod you will be able to download the agenda, speaker's bio and course handout, Dr. Sandweiss was very nice and prepared a handout for everyone which has the information of today's presentation, and lastly the CME/CNE sign in sheet. Please remember to sign and return sign in sheet and should be sent to Mr. Spencer by September 9, 2020, if you would like to receive CME credits. In a few moments I will be adding his email address in the chat box. In addition, screenshots will be taken to confirm attendance for the workshop as a documentation for CME. If you are logged in and not using your full name please sign out and signed back in with your first and last name. The week following the training you will receive an e-mail survey evaluation [Indiscernible - low volume] your answer is invaluable for the future funding and planning of the [Indiscernible - low volume] Pain Skills training. Remember there will be survey you'll need to complete in the CME [Indiscernible - low volume] website in order to retrieve your certificate. The survey from our program and CME are two completely different items. Also it can take 3-4 weeks for you to receive your credits and once your credits have been assigned you will receive an email from the system.

Before we proceed to the workshop let me share with you some information regarding our speaker Dr. Jay Sandweiss.

Dr. Sandweiss has been teaching health-related courses since 1979. His audiences have included medical doctors and osteopathic physicians,

chiropractors, [Indiscernible - low volume] therapies, registered nurses and other health professionals. He teaches nationally and internationally for numerous organizations including multiple presentations from the Academy of Integrative Pain Management, the American back Society and American Academy of Medical Acupuncture. Dr. Jay Sandweiss is board certified by the American Osteopathic Association [Indiscernible - low volume] and Osteopathic Manipulative Medicine. He is also board certified in medical acupuncture [Indiscernible - low volume] by American board [Indiscernible - low volume] of medical acupuncture and he is extensively trained in the field of osteopathic and applied kinesiology and applied nutrition in Chinese medicine. In teaching his seminars he has the ability to integrate a wealth of information into a focused practical model.

Without any further due let me introduce to you Dr. Jay Sandweiss.

Good morning, everyone, nice to see you. I will share my screen here and then we can go on with the presentation.

I will click share my screen. And

Screen.

All right and now, I want to go ahead and do this.

Just a few seconds because Dr. Jay is still loading.

I have the start screen sharing and should I just put Share here?

Yes, okay.

There you go.

And now, I believe everybody sees this light here?

Yes, Dr. Jay.

Are we ready then?

All right, well welcome, everybody. Thank you for coming, I will speak now for a little over an hour and half and I think we take a break at 10 minutes after 10 a.m. There will be a break and then you are going to have an opportunity to see two professionally made videos that I am sharing with you, the first one is a cervical spine video and the second is low back and pelvis. I think you will enjoy the fact that it was done with models and it shows you how I actually treat people in my office and in fact it was filmed in my office room one and you'll see how I put together osteopathic manipulation put that medical acupuncture, with and without elect Nichols stimulation, and how I integrate manual muscle testing and functional medicine in that so I am hoping you will enjoy that and that we will all come back and have question and answer period in the last 15 minutes.

I gave you PDF handout and at the beginning there are some essays and pearl sheets, thank you again and I want to thank Pain skills for letting me have this opportunity and I am very honored to do this and I want to thank Carla and Amy that told me about this. I hope that by the time that I am done today that you will feel like you learned some new principles and also that you will have some very, very discreet, specific skills you could even use in your office next time you see patients. I've gone ahead and given a copy of all my slides and also these essays so hopefully you will like it so let us get going here and what I want to do is first start out with a few intro slights to get us all in a good mood. This I think is a very apropos' s slide and has been quite a time for us in America unprecedented for us and our time at least and when someone sent me this photo I said, hey, this is about it.

This is a picture of me wearing my Walter Reed short. I just completed the third year of doing a three-day course for national capital pain initiative, it was wonderful. I wish you could've been in person but it went pretty well virtually. I want to dedicate this particular talk to my father Sherwood, known as Woody and that is my dad there, he is now 91 years old and real quickly for you doctors out there make, you will appreciate the short but important story, which is that two years ago in July he was diagnose with acute myelogenous new leukemia. AML and they gave him about four months to live and they said he had bad kidneys and the only thing we could give him was the chemo drug Dacogen because anything else would kill him. Well because his son is a Dr., and I wanted to do everything possible for my dad, I said is there a reason you have not done on bone marrow and look for rare versions? And they said you know even if we find that there will not be anything to offer him and I said please do that. They did a bone marrow and sure enough he had ID H1 mutation and it turns out they had just in the last month released a drug tips over that could treat successfully ID H1 mutation versions of AML. Well they said why don't we start with Dacogen and that worked a lot and that we could use the salvo if we have two so they gave him one dose and he went into respiratory failure and then at that point, he spent 93 days in the hospital and almost died about five times. And finally in November two years ago they gave him a pill that he would swell everyday salvo and he has been in complete remission so there's a lot of lessons to be learned there and first my thankfulness and my father is still alive and in great mental health, but we have to advocate for our family and friends and sometimes people just will take the first option and what I hope to bring up today in my lecture is that many people when they are in pain, they go and seek out the first option.
I just treated this weekend a bit of Desert Storm who happened to be a guy that had just come by our house to get wit and it turns out he threw his back out so I came in Sunday and treated him and he had a herniated disc in his back by my example and by doing osteopathic manipulation techniques that I will show you in this slideshow, and by using electro acupuncture principles, he stood up and had much better posture and said that his pain has been reduced 70% from one treatment.
Wonderful guy and just talk to him last night and he said I just cannot believe that actually helped me. What had he been given before? Appeared her ibuprofen so I think now there is a whole new movement which I am delighted and because I have been doing this stuff for now 42 years.

This will be the 42nd year that I've been treating patients with complementary and alternative medicines and then for 32 years I've been doing it as a board-certified osteopath but what I have seen is that with acute life and death stopped I love allopathic medicine for trauma, for heart attacks, for detached retina said there is nothing that beats modern Western medicine but with many chronic conditions or non-life-threatening conditions, I have found that osteopathic manipulation get medical acupuncture and some of the other principles of functional medicine work better with less side effects and are healthier for patients with non-life-threatening chronic problem so there is my dad Woody. This is me in front of my office in Ann Arbor and this is how my office looks right now, the hydrangeas come out really nicely in the summers and I work out of the house that was converted into an office and I like to put this New Yorker cartoon up because it is pretty much summarizing my practice. I am the Dr. Saying, unfortunately your plan covers only doctors who couldn't possibly help you in any way. So I have had the unique opportunity to just have a cash practice. Meaning, I have not worked with insurance for 32 years, patients pay me and I give them an insurance form with codes and I say good luck. But what I have now is about 90% of people who have a primary care provider who they go to for basic exams and maybe some lab work but they all say whenever I actually need to have someone figure out what is wrong with me, and actually work out the door better, I come to you even though I have to pay out-of-pocket and do not get much back. I want to encourage you to be the best healer and best Dr. you can. And I think medical school if the Sergeant basic training but how we become healers is what we do after we get out of medical school.

This is Joseph who was a founder of the Harvard medical program which is now the integrated structural acupuncture program. This is Joe, he is a Harvard physical medicine rehab Dr., MD, and I helped teach his course that he does every year and I bring the osteopathic manipulation, the manual muscle testing and functional medicine and show how it can be integrated with acupuncture for physicians. I was saying last week to the people at Walter Reed, you know, I love, love those signs that I've seen in some of the military bases that say, think acupuncture first. I think that is phenomenal. I would like to amend it though and say, think acupuncture and osteopathic manipulation first because by the time we are done with this program that I am presenting, I hope you will see that osteopathic epilation blends incredibly well with medical acupuncture.

I had to put this because I love humor and I actually give lectures on laughter medicine and believe it or not there is a lot of good medical data that shows if you laugh 10 or more minutes a day, mercifully like from your diaphragm, 20 known medical benefits will occur. And I hope to give this talk more often and I've done about two or three times at conferences but it is a combination of standup comedy with science of laughter medicine and so, all over my office I have things like New Yorker cartoons and I try to tell jokes to my patients. I get the endorphins flowing and cheer them up and here's a guy out at the beach and I'm sorry I could barely hear you that ocean behind me, is and that the truth that people now live on their phones and now instead of just going out in nature and being in nature everybody just has to take pictures and show people that they were actually in nature.

A couple more funny slides and then I will introduce you to my personal family and then to my mentors and that we will go racing into the course like I said I think by the time you are done hopefully you will have been entertained which is always nice, not bored and have a bunch of material. I like this one of the Mona Lisa when she was like sheltering, starts with the toilet paper and then the mask slowly you see the deterioration and we all know that in Italy they have quite a time there during the worst part of COVID.

This is my family, three years ago I add the honor of being asked to actually officiate my son's wedding and that is my son Elijah and he is right arm is his wife Heather and left arm is my wife Sue and we had our 34th wedding anniversary on Sunday. And to my right is my daughter Isabel, who will be 25 years old soon and lives in Spain and teaches English there. This is Isabel when she was traveling in Australia a couple of years ago. This is Elijah and he was a coach under Jim Harbaugh and Don Brown at Michigan last year he was the defensive coordinator of Howard University football team. And now, he is a linebacker coach for the Texas Longhorns, and so, a week from Saturday they will open up as you know the big 12 is staying open and obviously, we will see what happens. But this is my son Elijah. And as you start to develop the skills of being able to actually get people better, were travel some people note that I love entertainment and I love performing artists and not that I do not treat everybody who comes, but the nice part is when you teach treat performing artist to get opportunities in this was a New York backstage after Jeff Daniels performed to kill a Mockingbird.

And this is NFL football player Jay you Cresson who I developed a great relationship with when he was here at University of Michigan. And a lot of you out there listening to this I am assuming some of the people in this crowd are already acupuncturists who have taken the homes course or some equivalent but I find that when I have athletes who have inhibition weakness of muscles as part of their complaint, often people will comment with a problem with pain in their shoulder, weakness in the rotator cuff muscles, from trauma, and be it football or basketball player or any kind of athlete, this is a protocol I often use and get great success.

I personally like to do oscillating frequencies 4 to 15 hertz on a device and it will jumps start week muscles into five over five strong muscles. Often athletes will injure their hamstrings or as they call it I pulled my hammy, and so this is just another football player been treated for hamstring problem. I like this New Yorker cartoon particularly this year they should modify it and it says same thing every September. Here is God, in his throne in heaven with two angels talking and same thing every September, he begins to doubt the existence of man, then football season begins and he snaps out of it. Now we are going to have a kind of interesting hybrid of a football season.

Now I want to introduce you to my key mentors and this is John Peter Barack, considered to be the pioneer founder of visceral manipulation and some of you may be familiar with that term and some not so I will tell you quickly, he is a brilliant French osteopath who started to experiment and perfect inability to feel the internal organs and glands of the body for lack of motion and mobility and motility disorder so John Peter

said, look, osteopath and chiropractor have been treating the spine, the facets and all these very important things, but what about all the other organs that are attached to the spine and pelvis etc. Through fascial ligamentous and tenderness connections? I learned from him that often a very difficult shoulder problem where person is trying to get that frozen shoulder fix, often there is a restrictive liver or someone has a constant problem in their neck in their scaling, many times on that side they will have a dropped or ptosis of the kidney on that side. What he shows is very, very elegantly and anatomically is that if you look at the organs and how they are attached into the spine and pelvis you will understand why a lot of chronic sacroiliac problems could be stuck Seagram in the bowel and that opened my mind incredibly in made me a much better healer when I started to evaluate restrictions in the viscera as part of my exam. And so, he has some very incredible techniques, and I will be showing you some pictures of some of his techniques for diagnosis. And what he does is calibrate his hand to feel things and uses the hand as a very valuable instrument. And I think that we need to keep that in medicine, that more and more doctors are not touching patients, they are not getting information from skilled palpation and are relying more on ultrasounds and CAT scans and MRIs and it is getting to the point where patients often are never examined. They are talk to and then sent for diagnostic tests, and they do not have the benefit of a doctor actually feeling what is wrong. So, this is John Peter Burrell French osteopath.

This is the man that change my life and I gave you in my PDF as I said essay and then some pearl sheets and then a copy of all my slides. I really hope you will read the essay that is the very first part of the PDF I gave you because it tells a story of how I injured my knee and I was not able to get any help, any real diagnosis or effective treatment until he met Dr. George Good hart and after suffering from a knee and living in the Orient in Okinawa, I actually lived across from Cap Anson and studied karate with Mr. She will bunch, I had a knee problem and I came back from Asia and nothing was helping it and Dr. Goodhart five minutes diagnosed meet with inhibited Sartorius and popliteal is muscle and he fixed it with his techniques and my knee was instantly better. And at that time, I knew this is what I want to do with my life. I owe a lot to Dr. Goodhart and he is the genius who realize the value of applied kinesiology that if you used manual muscle testing, in your office, it is really a form of functional urology. You can, without any expensive equipment, diagnosed many, many things by just doing manual muscle testing and then applying techniques and seen it if you could rivers inhibition patterns.

This is another mentor of mine, he will be 92 years old. He is also still sharp as a tack and he probably has forgotten more than I have ever learned in my life and this is Fred Mitchell Junior. And his son Kai Mitchell. Fred's father, Frederick Mitchell, is considered the person who created muscle energy technique, MBT, probably the most widely used osteopathic epilation system by physical therapist and MDs taking courses in osteopathic medicine. So Fred is a million, brilliant osteopath and he is a master of muscle energy and a master of cranial osteopathy and he also happens to be one heck of a jazz musician and he became my

mentor literally the first class I took it 1984 at Michigan State and I have had the good fortune of being able to teach courses with him and his son at Cleveland clinic, Henry Ford University of Michigan and many rehab clinics and we teach muscle energy weekends, four of them we teach cranial and he has taught me so much about what it is to be a true osteopath.

Sometimes our teachers are our patients and in fact most of us learned so much from trying to help patient and I want to also dedicate this talk to John Lane who here is jumping at the dunes. John was an incredibly dynamic guy and I got a phone call back in 2016, I believe, that he had been diagnosed with ALS down in Florida and he was living halftime in Florida and halftime in Michigan and he had been given the diagnosis ALS Lou Gehrig's disease. And so the family called and said good to see him and figure out if you think there's any other explanation for his symptoms? John came to Michigan and I took his story and I said, look nobody really knows what causes ALS, we just know ALS has these syndromes, these things that happen. And it has a diagnosis but no one really knows the cause. I said that to see if there is any reversible things we could identify. So sure enough when I do these tests for degenerative neurological diseases, I have an algorithm. That algorithm is so absolutely assure that this is not toxic that the person has not been poisoned by mercury, led, arsenic, cadmium or some kind of other talks and. That they have been exposed to. Because that is neurotoxicity causing degeneration and I like to order extensive nutritional work to make sure they are not having a nutritional neuropathy. I checked autoimmune very carefully but then I also look for infection, particularly tick-borne disease and in his history he had been bitten on the lake by a thick and about two months later is when he started to notice his arm having a problem and by the time I saw him he was already having difficulty talking etc. And this had progressed. Was about eight, nine months since he had been bitten by the take. While the long and short of it is that I ordered test and it turned out that he had positive Ligia and a plasma so he had Nero Ehrlich yells as an and applies Moses which I tick-borne diseases of the worst kind and unfortunately even though he saw one of the best people on the East Coast who specializes in this, he ended up dying of a tick bite and the family were apologized to by the doctors in Florida that said we are so sorry without it was ALS, yes, it appears he had to disease. So I want to say a lot of you listening to this are probably East Coast people and you probably know more about Lyme disease and associated tick diseases than me, but again, like my father, I said let us touch him and see if there is something else. My whole approach in my practice has been to follow the advice of Andrew Taylor still and Sutherland, dig deeper. They always said dig deeper.

So I dedicate this to John and he passed away from being bit by a tick on his leg but I always want to tell the story so when you have a patient come to you and you decide they have ALS, maybe they do whatever that is. But I really hope that you do testing for Ehrlich yet Chapa nieces and Babesia and Bartonella and Lyme disease the proper way with at least a Western blot test and a plasma and assure yourself that they do not have a neurological to disease. Another mentor of mine you see his picture later that I learned so much from his Thomas Myers who was a rover who

went down his own path and develop anatomy trainee and he did enormous amount of dissection and what he recognized was that all the acupuncture channels actually exist in the body, continuous fascial planes and bony landmarks and he made an analogy that the system is like train tracks and train stations. That muscles and fascia's go from one bony landmark, which is the stop where the train stops, and then they go along the tracks which is the muscle fascial plane and stop at other train tracks. That it is fascinating how he was able to dissect and keep the continuity of acupuncture channels.

So now I want to show you what I think is true preventive medicine. When my kids were born, this is what I did for them. When I was studying with Dr. Viola Fryman, she taught me that you can do more for someone's life by fixing problems and traumas that occurred during labor and delivery then you probably can do any other time in life. We all know that a baby is born especially if born vaginally that a lot of things happen and that babies had is put through some pretty rigorous pressures. Most babies are born occiput posterior and as their head comes out of the pubic bone and you first see that had appear, things could happen at the cranial base, including condyle or compression. The occipital condos can get smashed, what does that do? It affects the hypoglossal nerve coming through the little hole there in the condo the jugular foramen is formed by a little suture, it is a connection between the occiput of the temporal bone, and write their makeup that junction is the jugular frame and and so what comes through the jugular foramen, cranial nerve nine and 10 and the jugular vein. Think about the problems of the newborn. Tachypnea of the newborn, tachycardia of the newborn, well what if something was to irritate the vagus nerve? That is a nerve that has an influence on the heart and the lung. What about babies having colic? Well we know that vagus nerve travels to and affects the bowel so many babies who are diagnosed with tachypnea, tachycardia and colic early on could be treated early at birth but very gentle, we are talking about grams of force, releases of compressions at the cranial base. This is something I have done hundreds of times, and those parents that are aware of this usually will ask me, can I bring my baby to you or will you come to my house and treat my baby? And so many children that have swallowing, Latino problems could be treated this way. We know that tongue has [Indiscernible - low volume] nerve 12 and the cranial nerve nine helps with pellet and coordinating of swallowing so these arches basic neural anatomical traumas that occur to the head at birth that this is me treating a baby doing what is called condyle or decompression payment

Now here is a joke but not funny, I sometimes in my lecture say I wonder if this baby is thinking, I hope this is evidence-based.

Here's another baby and when you do the Viola Fryman full baby physical in the newborn nursery, you literally examine them from head to toe and you try to release any restrictions. The babies love it and they just go into bliss. The parents love the fact that the baby does not cry and sits there and just seems like they are getting happier and happier. Here I am doing a decompression of the sacroiliac joint. Peoples late in the will a lot of time sideband and sometimes there is a subtle restriction of one another sacroiliac joints of the sacrum itself could be a little compressed payment in the few cases where I have actually treated babies

that were born in homebirth breach, boy, do they have compress sacrum's and they came up but first and they need a letter treatment ride wait for if they had a breached delivery. This boy's name is Harrison and his parents have been seeing me since they were children and their parents came to see me when I first opened my practice. And this is a grandchild so wonderful, one of the things about getting older and having a practice of 32 years as you get to know families.

He was born on December 24th, Christmas Eve. Guess what? That is when I was born. And they named him Harrison because his parents are complete Star Wars fanatics. They used to go every year to Las Vegas and compete in the Star Wars custom competitions and one year this young boy's dad one as a best Darth Vader and his mom was the best Princess Leia.

People come to comment musculoskeletal conditions and this is the list of the types of things that I think can be often successfully treated, completely successfully treated without needing drugs or surgery. I had a guy come in yesterday and he is a wonderful guy and he almost became a professional NHL hockey player and he is quite -- his son plays hockey's and also quite a golfer any hurt is over me said oh man, I should've seen you sooner and this was literally yesterday and he was here, and after I did strain counter strain, treated his neck and arm and did acupuncture for him, he was like 90% better and he had week rest extensors with [Indiscernible - low volume] condyle the end of the treatment 45 minutes later rock-solid five over five strength without pain at the elbow. Did not need ibuprofen and did not need a steroid shot and did not need surgery, needed just good skill treatment of a comment musculoskeletal problem.

I like this light which most people have by now have seen. I always joke that this is why I will never starve or people who do musculoskeletal Mendelsohn because this is how our society has become. People drive to work in flexion and they go and sit on a chair, there are different chairs, ergonomic and not, often their computers are not placed at a good position for him and they said there bent over looking at a screen and that we all wonder why they have their various problems. We know they had ways 12-14 pounds on most people. That had is hanging forward putting tremendous pressure on the strap muscles and there is usually pronation and then the scapula are forward and protracted. And what happens is that the person starts to get thoracic outlet problems and brachial plexus problems start getting numb fingers and then this is a whole lot of the problem. One of the things I think is necessary is, after you treat a patient, or during the process of treating a patient, you have to give them what I call counter exercises. I found out what people do in their life and how they live and what they do with their posture and I say, look, you do this all the time and you have to get up frequently, at least once every half hour no matter what and do the stretches and move around and counter what you have been doing, because otherwise you will go back into your pattern.

John P Amaral wrote this book on trauma with Allen Crabbe year and I believe this is a very true statement and it also explains posttraumatic stress disorder both psychologically and what is trapped in the body and nothing is forgotten, nothing is isolated, everything accumulates,

everything is recorded and as you get better at doing osteopathic manipulation you do what is called listening and you listen into the body and you can actually sometimes feel things and say, did you have a car accident 10 years ago? Went you were eight years old, did something happen to your left shoulder and you can get to the point honestly where you can feel injuries and you can feel how old they are and feel the doors of force that are still trapped in their tissues and sometimes people have filled out their forms and they will have not written anything about a motor vehicle accident and I will put my hands on their neck and I will say, I am sorry, but you did not write anything about having a car accident, your neck feels exactly like someone who had a whiplash, are you sure? On the set, oh my God yes, when I was 20 had this really bad car accident and someone hits me ninety miles an hour from the back, how could I have forgotten that? But I knew it because their tissues told me it was true.

Outlet as talk about how we can approach things holistically. This is from applied kinesiology and this is known as the Triad of health and Dr. Goodheart was big on saying that there is no problem that is one-sided and that every time a patient comes to you there is a biochemical component to what is going on, a mental emotional spiritual problem, and structure and it really -- they all affect one another so let me give you a quick example. Structure, say someone something literally complaining about their low back and they have their hand on their sacroiliac joint. They are bent slightly forward and say, oh my God, my back and cut my sacroiliac a cannot stamp straight into picked up a box and I had been in agony, okay, would get history and it seems like something has happened to that part of the body but I will tell you that the vast majority of those people have adrenal stress syndrome. Those people were in accident looking for a place to happen. Often went our adrenal glands are going constantly over and over, this phenomenon occurs that is known as ligament stretch adrenal. What that means is that paradoxical event occurs at joint. Normally if you stretch a muscle and a joint it is supposed to receive information to contract the muscle and protect the joint. So, right as you reach the limit of a range of motion of a particular joint, there should be a protective mechanism that tightens the muscles that prevents it from dislocating or tearing ligaments are joint capsules. When people have been under constant adrenal stress, something happens the opposite. When they stretch a joint to its limit, suddenly everything inhibits and they then tear or enter that part. That is wanting to know. Often people who have adrenal problems also do not have great diets. They drink a lot of caffeine and sugar. They sometimes do not eat properly and when they do eat they will eat fast foods and hydrogenated oil etc. Etc. So they are having a stress under adrenal because they are not eating good, whole nutritious food and they might have deficiencies often B complex, C and certain minerals and that they have this overproduction of these catecholamine which are floating around and having toxic effects on the joints. This person who is so-called bent down to pick up a piece of paper and could not stand up, if we would've tested them right before that event, they probably would've had a week's notorious muscle possibly a chrysalis because those are linked to the adrenal glands and they may have exhibited what is called ligament stretch reaction where you test the muscle and it is strong and you stretch some ligaments in the area and

it will we get or we can markedly piping stretch, that is a chemical site and the adrenal stress side. Toll emotional there are so many possibilities and many people have stress and let us face it, especially now we have COVID. We have the economic stress and we have things going on. You people in particular dealing with protecting our country and finally getting the message, okay, Peck erects that you are going to Afghanistan. This is a very huge stress and people handle their stress in different ways and let us face it there is always going to be stress and the key is can you stay centered? Can you find a way to breathe and stay centered and stay calm in the face of stress? But many people bring their mental and emotional and spiritual stress into their body. I want to give one or two examples about white someone might develop a low back problem and please indulge me here.

Often when children are growing up, the parents are kind of anxious and waiting for them to start toilet training in the sense that they are sick of changing diapers and they would really appreciate it if their child would start or stop having bowel movement in their diaper and learn to control the sphincter. And we note that occurs at different times in different children and for different reasons and it can vary markedly when a child is toilet trained and can say I need to go to the bathroom and have a bowel movement without doing it in their pants. Well try to imagine a hypothetical situation where it'll Johnny, he starts to notice a grimace on his parents face every time he has a bowel movement that he is getting a little older, there is this look or the parents talk and he picks up energy that my parents are not very happy. They do not seem to like me or love me when I in my pants. And then Johnny, who wants love and affection, says, you know what? I just felt I could squeeze my buttocks together and I can prevent the bowel movement from coming out by squeezing my skeletal muscles. It is a brilliant moment where he realizes I do not have sphincter control, but I have skeletal muscle control so now Johnny just created a loop in his body that says, if I squeeze my butt cheeks together, and I do not let a bowel movement come into my diaper, my parents smile and they like me and they tell me what a good boy I am. Now keeping a tight that is a good thing. Well that is a person who will unconsciously have a tendency to tighten their buttocks all the time when under stress. And that person then is going to deny that area of the body blood and oxygen and it will follow the law of John Sarno who was a brilliant physiatrist who wrote a book Healing back pain. His theory was that most of our to chronic pain is caused by unconsciously clenching muscle, cutting off the blood supply to the area being clenched, and now creating actual physiological is can you. Think about it, if you tighten your buttocks all the time, you do not let blood flow freely, it will start to hurt because there is ischemia. Some people clinch their jaw and always clenching their teeth and they get TMJ problems. But the idea is we do not plan it. We unconsciously when under stress tighten a part of our body and we might pull her upper trees he is up and we have stress and we have shoulder pain in the upper trip but the idea is early on that child learned that keeping tight tension in the buttocks was good. That leads to smiles and love. Later on that child whether a boy or a girl, might have constipation, hemorrhoids, and renal fissures, that whole area of the pelvis becomes blocked of energy because there is a D program that says it is good to do that. Let me give you one other common example. Some families are not real big on children crying.

It varies from culture to culture, family to family. When a child cries naturally he cries from its diaphragm. It just has a full cry an emotional release. Try to imagine a young child, maybe a boy, crying, for good reason, he fell and got hurt or something, and one of his parents goes, stop crying. Stop crying, be a big boy, we don't cry. Well to not cry you have to tighten your pre-tracheal cash is in your throat and tighten your substernal stresses and freezer diaphragm and say, okay, I will not cry. What does that do? A suppressed cry across time tightens all of these fashions in the throat, in the esophagus, sternum and of the diaphragm. Later on what do these people have? Gerd, they have constant sore throat and swallowing issues. They have problems with breathing and maybe asthma, so I will move on now but I just want you to appreciate how powerful these things are. The reason I bring it up is that when I teach courses for physical therapists and people that just do mechanical techniques, I say, you have to realize that this person made or may bring to you many things that are going to bring back these problems and I am not asking you to be a psychiatrist or psychologist, but be aware of the fact that maybe the reason that they are having this issue constantly in their diaphragm and their chest with ribs and thoracic problems maybe the reason that they have problems in their pelvis is that they are actually unconsciously clenching things that go all the way back to their childhood. This gives us an opportunity because it means that we can do whatever techniques we are going to do with acupuncture and manipulation that we might offer the patient an opportunity to explore the space scene who is skilled on that. When we come upon muscles that are weak if we test a muscle and at that moment it seems inhibited, there are what are called the five or six factors of the intra-vertebral frame and at the top N stands for nerve the nerve supply or the innervation to that muscle. And so, if a muscle is weak that is innervated by C56 in the shoulder maybe the shoulder is the complaint but maybe the troublemaker is in the neck at C-5, six where the nerve root exits. We are going to track down why there is an inhibition by going back to the source of innervation. And you can also stand for nutrition, and L is neural lymphatic and you need to have proper and adequate inflow and lymph drainage in every area of the body for to work properly stasis works to dysfunction and envy is neurovascular and you have to have free-flowing blood flow to areas and as I said in the previous examples if you get vasoconstriction, or you get anything in or impairing blood flow to parts of the body, you get decreased oxygen and decreased nutrition to the parts. CSI, cerebrospinal fluid, very important that the cranial mechanism in the cerebrospinal fluid flow goes freely throughout the body. And AMC stands for acupuncture, Meridian connectors meaning the acupuncture system. What Dr. Goodheart realized was that when he did his muscle testing of all major muscles of the body, that one or more of these factors is usually the explanation of why that muscle was testing inhibited and weekend at that moment. As soon as he supplied the technique to restore function in those five, muscle instantly got its strength and it is quite remarkable.

Sol Andrew Taylor Still, 80 Still was an 80 and he saw his wife and child die of the meningitis epidemic in the 1800s and got depressed from it and he felt why is it I am a Dr. and unable to help them? There different stories that to how this happened and he also met grams lightning bone centers who passed through where he was living and so he

got to see these British bone centers and he also met some Chinese people who he saw do these strange things which I believe for acupuncture and Chinese bone setting. And then he went deeply, deeply into anatomy and felt that there has to be something better that the Dr. should be able to find where the body is stuck and unstuck it and let the body's own innate healing take over payment so when once asked, what is osteopathy, Dr. A.T. Still, is the study of mine, matter and motion? This is a very important concept in osteopathy that we believe motion is life, when motion stops, bad things happen. Think of a flowing river, as long as the river flows, things are fine. If something blocks the river flow, it starts to up the water gets congested, you get bogginess, just as the blood is not flowing down the leg, okay, blood clot, whatever, you start to get gangrene. Motion, all joints were made to move and they have ranges of motion and as soon as you stop those ranges of motion, things start to happen, pain and dysfunction. When you go to osteopathic medical school, you learn four basic principles and these are usually on the board exam for osteopaths. Some people say this is what distinguishes osteopathic philosophy from allopathic philosophy and now things fortunately are getting better. I've noticed a lot of the young MDs are drawn to osteopathy and they tend to want to take courses in manipulation and the neuromuscular stuff, but also there is a lot of holistic concept than when I was a medical school. But the osteopathic say the body is a unit and the person is a unit of body, mind and spirit so you're always dealing with this trying person and not just looking at a gallbladder or a neat but this is a person, a person with a history and this is a person that has a socio-, you know sociological background, they come from a family, they have genetics, they have feelings and thoughts and how they live their life and they have the job they do and what they eat, you have to look at the whole person. Really huge is the body is capable of self-regulation, self-healing and health maintenance. The idea is the body is evolved over millions of years and as meant to take care of itself. You do not have to tell your eyelashes to stop growing. They know when to stop growing. When you cut yourself, immediately messenger say, hey, we are bleeding, send platelets there and stop the bleeding and now send more nutrients there. Now repair and now start to form a scab and grow new tissue. We have all these mechanisms to heal ourselves, but we are not perfect and every once in a while, in fact a lot of times, we need a little help, just like we need help from our friends.

So the idea of the osteopathy is you do not do something to someone. You let it be, you find where it is stuck and you give it a systems and say, there you go and it is like jumpstarting a car. You are a good neighbor and you come by with the jumper cables and you start them up and they go drive on the highway and recharge the battery and there you go, now that person could go and drive off. The Doctor comes in and figures out where things are stuck and now I do want to be naïve and obviously if someone has had huge trauma and their unconscious and have to take the by ambulance and go up to the OR, those are extreme cases and those are for cases when we can save lives. But I am talking about chronic conditions that are not life-threatening and often you just need to turn back on be self-regulating, self-healing mechanism.

The third extremely important thing in osteopathic medicine is that structure and function are interrelated. And that often if somebody has pain or cannot move their shoulder, there is a specific reason, and you have to restore proper structure and functional relationship and then the body loves you for that and it will work. Until the fourth one basically obviously derives from the first three which is if you are going to design a rational treatment of a patient, you want to design it on those principles, that the body is a unit so you will address all three parts of the person, mind, body and spirit, the physical, the chemical and the emotional. And you are going to respect the fact that this body is capable of doing some self-regulation and you will look at structure and function and see what you can do with your skill set to restore it.

This is another conceptual picture, and a group of doctors met years ago to say, what is the purpose of manipulation? And they came up with this sentence which is the goal of manipulation is to restore maximal pain free movement of the musculoskeletal system and postural balance. Now imagine this button is a thoracic vertebrae and that the button is the spinous process and say T6 or T7. And it is sitting between the scapulas. So the hands of the scapula of the strings are the rhomboids say or middle trapezius is. This looks like it is in balance and most patients who come in seeking help are out of balance. They come in and say, oh, I am in so much pain on the left and it is so tight will look at the button. It is moved so there has been a rotation of the vertebrae and when the spinous moved to the left the body of the vertebrae usually rotated to the right and look, shortening of the origin insertion on the left. You can say well there is your problem and let me give you a trigger point injection and let me put in trying needling there and let me do stem and let me stretch it. So everyone goes to the left side and says, wow, yes, there is where the pain is and there is where the shortness is, but look at the string that let go. That string led to the normal string pulling it into tension.

That leads off to the yin-yang paradox of tightness creates and weakness permits asymmetry or weakness crates and tightness maintains a symmetry and what Dr. Goodheart thought was that first weakness occurs and if you think an acupuncture terms, there is total vocation and sedation and there is except and deficiency and the idea is that a deficiency, a lack of tone and function occurs in the muscle, for some reason, when it stops working, all these things happen.

A very common thing to illustrate to you is the tight upper trapezius. So many people have a trigger point and tension in their upper trapezius but guess what? 90% or more of those people have a week latissimus dorsi. Platysma's pulls your shoulder down and takes the tension out of Europe a trap in the upper trap pulls your shoulder up to your ear and if you're latissimus dorsi what does your upper trap do? A cannot help itself but comes up and shortens and tightens. So often people come in and they want treatment of their upper trap pain and I don't blame them but often you have to test the latissimus dorsi with the muscle test and find out why the latissimus dorsi is inhibited, treat it first, and then go clean up the upper trap. That is what I call a complete treatment. Treat the antagonist of the agonist that is in pain.

So these are osteopathic manipulation systems or techniques that on their own each work and have tremendous benefit and when you go to osteopathic medical school, and this is not a complete list, but I would say these are the most common things that are taught in DEO school, to DL students, and these are the things that are often on the board exam and so there are myofascial release techniques and direct and indirect and in my coming slides you will see countless examples of me performing myofascial release techniques on the body, on the spine in the extremities that are coming up soon in my slides. You will also see it in my videos. And then muscle energy technique, string counter strain which is very effective to take and I will show you that. And then these other techniques which you can read. These are some of the key approaches and each one has its strength for which it really does tremendous things like was that it is always good to have a toolbox field with many tools. In the old expression as if all you carry in your toolbox is a hammer, everything in life will look like a nail so if you are a good carpenter you will have saws that you will have hammers and screwdrivers and you will have sandpaper and you will have precision tools and you know plane and then you can do some really elegant carpentry so the key is across time, if you're really interested, is to definitely learn at least three or four of these so that as you approach a musculoskeletal problem you are able to get the best results. Now osteopathic used to call the problem that they found lesions. If you look at the old literature that says there is a lesion in the Belfor and there is a lesion in the rib, now we know that the word lesion often is thought of like a skin lesion like leprosy or something gross on the skin. So I am not sure exactly why it happened but somewhere in the 60s, I believe, the osteopathic' s got together and said we need a more elegant definition and a more specific definition of what it is that we find in the body that has demonstrations of dysfunction and what we want to do is say when we come with our palpatory and other diagnostic tools, and we find a problem in the body, we have to give it a name and what is it that is wrong there so they came up with the word somatic dysfunction and I want you to note this is an ICD-10 actual medical diagnosis. In fact there are 10 somatic dysfunction regions, ICD-10 diagnoses and there is somatic dysfunction of cranium, cervical, thoracic, rib, lumbar, sacrum, upper extremity, lower extremity, abdomen, so you can say I examined the patient , I did a set of diagnostic techniques and determined there was somatic dysfunction in that region and that is your diagnosis.

They could have low back pain, but you might also say, and somatic dysfunction of lumbar sacrum and pelvis. As our three other diagnoses of why they have low back pain. Now when you try to describe somatic dysfunction and you are doing your office note or trying to explain to another practitioner what is it that you found, there are two approaches. One is to try to give a description in space of how that part of the body is no longer in symmetry. Or you described the motions that were lost due to that dysfunction so you can either describe what that body part will not do motion wise or the motions that are free and available can be described and then the ones that do not move or described. So we have the motion palpation approach where you say this body part does like to rotate to the right but it resists rotating to the left and it does like

to flex but it resists extending and so forth and so on. Or you can say what or when I did my test on Belfor it seemed like it was site and tip to the right and rotated to the right and forward bend in space relative to L5 before below it so you are describing in space how it looks and/or its emotional loss or freedom. And there are six different motions that osteopaths look at and it is very important to note that three of these are rotational motions that occur about an axis and the other three are transitory motion so in space, and I will try to let you see me here and let her know if you can but if I have my elbows on my hips, what I bow to you I am forward bending , I am flexing and when I bend backwards I am extending so I am flexing and extending. When I tipped sideways and tipped sideways, I am lateral bending or side bending and when I rotate my body I am rotated. Well flexion and extension are really rotational motion that are occurring along a transfers access through me and it is after someone shot me with an arrow onto my side and I am flexing and extending.

Side bending, AP access occurs where an arrow shot into my test and I am side bending and rotating around that axis and if there was an arrow going from my head to the ceiling and I turn on that access, that would be rotation. Now anterior posterior translation is literally like opening and closing a dresser drawer. You can glide forward and back, lateral translation you can glide straight to the side and straight to the site without side bending, and suffer the content is you can come up on your toes or you can stretch a joint or you can compress it so it is traction or compression. Inhalation and escalation is an enormous body motion when you inhale most structures move away from the midline and when you exhale they move into the midline. So now I want to tell you but the concept of barriers because once you go to do techniques in osteopathy, you make certain decisions of whether you will do it direct action technique or indirect action technique. Now look at this picture, the dotted line represents a neutral. So say that last night I could turn my head to the right and to the left equally, so I could go all the way to the purple on each side and that is the physiological barrier, but I woke up and for some reason I cannot turn my head to the right without pain. You could say only have a torticollis or a right neck or acute spasm, I laugh because people use the expression, I slept wrong last night and a person is 55 years old but last night they made a mistake and they slept wrong. But anyways, moving along that person can no longer move a full range of motion. So you can see in black there, there is a restrictive barrier. Any technique that goes up to that barrier tries to push it back to the purple is called the direct technique. Anything that operates away from the barrier, that lets the body's own physiological reflex mechanism operate to reset the nervous system by, let's say, turning down the tone of the gamma system so that the muscle spindle cell tone is down etc., Those are called indirect techniques. You give the body an opportunity to heal itself. Depending on the situation and depending on the patient, you may want to use a direct or indirect kick think and probably the most classical thing you could think of is a chiropractic adjustment or what osteopaths call a high velocity low amplitude rest or wet physical therapist called mobilization level for and those are usually direct techniques and you find a barrier, you have the patient relax and you play a short, quick dress Victor to try to push the barrier away. Muscle energy techniques operate at the barrier have the

patient I symmetrically fire muscle and stretch through that barrier. Strain counter strain and functional release techniques are usually done away from the barrier.

There are different kinds of barriers. When you are evaluating your patient there can be a very big gross biomechanical barrier. Analogy is you are driving down the road and there's a train older there and have a choice to drive around the boulder but say you want to free up this road and you would have to get something that had some pretty good forces and you would have to either get a lot of people or get some kind of high-level device and trait that boulder other the weight so sometimes you have to actually use certain amounts of forces to free the path. Here is another kind of barrier, but in osteopathy there is a complete system of treatment call the respiratory circulatory model. In this model with think of the fact that there is impairment of venous and lymphatic return to the central circulation or a problem with arterial flow through artery, arterial and capillary. So Gordon's think is a D.O., he spent his life coming up with techniques to free up the movement of fluids in the body and this is a very, very effective and powerful technique particularly to do for hospitalized patients and bedridden patients. And I cannot begin to tell you how much these techniques help people with breathing problems and respiratory problems and leg edema. That is that you have to find a way to release. And this is an example of a tree that fell and knocked down wires and sometimes you have to work on the autonomic nervous system and we know the cervical and sacral areas are mostly the parasympathetic areas of the thoracic with its chain ganglia and splendid outflow is one of the sympathetic and so we have these different syndromes where there is an impairment of the neurology and finally you can be driving down the road and there is a flock of sheep. Now do you plow through them? I don't think so unless you are a really bad person, you could probably honk, honk, honk and clear them. To me that is like acupuncture and that is like homeopathic medicine, that is like nutrition and what you’re doing is using a more gentle subtle approach to get things out of the way without having to use tremendous force. So we call that the metabolic energetic way of clearing the path. I through this and because say let's face it one of the big push is now is to get us to have a healthier society and to not have the supersize concept. I don't know how many of you saw the movie Supersize me or Supersize with a guy literally studied what happened to his body by always asking for a big drink and to eat fast food. But here is just a funny slide but we are trying to work our way back to the person before the guy with the big giant Slurpee.

When we examine people osteopathic leak we try to listen with ears that hear, okay? Dr. Goodheart says listen with ears that hear. Look with eyes that see.

In touch with hands that feel. Where was talk about do you see the forest from the trees? So we listen and get cues and then we observe the patient and we look at how they work and how they get up and down from a chair. Look at how they get onto the table and off and a lot of things can be observed about the person just with your eyes. And then, we as osteopaths, touch the patient and learn a set of skills with our cans. To find asymmetry, tenderness, restrictive motion and tissue texture

changes. So those tissue texture changes could be variations in heat and cold and sweat whether there is increased or decreased suitor motor activity but there are certain hallmarks to the body. Whenever there is a problem you will feel there are tissue texture changes and there will be some restricted motion and they will be in asymmetry and tenderness and these are what we call the hallmarks of the palpatory findings of somatic dysfunction. These were the emotions that we look for that I mentioned earlier. A couple more things that are just more for you to get a conceptual idea of where osteopathic medicine is coming from, and then I will go straight to slides that will show you techniques. Okay, here is a normal area of the body and there is the center with the. And earlier I told you if a person turns their head to the right and left and there is not a problem there is rather a smooth kind of curve and first it is very free left and right and then as a person keeps moving in one direction there is a bit of a resistant and finally reaches an end. Both ways but it is pretty equal [Indiscernible - low volume] the beauty about learning osteopathy and the patient and motion testing is when you come across part of the body that has some somatic dysfunction, look at this drawing, the tone has already gone high . It is not where the white dot is but there is an increased tone and out when you turn right, a very quick abrupt sense of resistance occurs but when you go in the direction that isn't a barrier, it complies, and it complies. So the hallmark, the homework of somatic dysfunction is that when you motion test something, you have your fingers on the area, you move the body in one way and it says, no, no, I do want to go there make it tightens up on you. The other way? Yes, I will go this way. Tissue should go both ways without any setting resistance so that is how you know it is there.

When you have a patient come to you and they have fatigue that they want you to be there Dr., Dr., I am a 30-year-old man. I have been feeling really, really tight for the last three or four months another know what my problem is and I know if I am depressed, like I used to run and I get tired really quickly and I do know is something wrong with me, please test me. Take the history and you look at them and you say you know what, let us get some blood work and I will start with scene if you are in. And I will check her thyroid and maybe you’re B12. I'll get a urine test that we will get a basic set of 1013 profile. That test comes back in the patient has a hemoglobin of 9.5. It is a man. And you go, 30-year-old men are not supposed to be in it and you notice that the MCV is like 78 which implies a small red cell. You say I will get I'm studies and sure enough you have no ferritin and low iron and high iron capacity and you see the patient and you say you figured out why your tired, your in. And are deficient but are you done? No, how did a 30-year-old man certainly lose iron? He did demonstrate, we usually don’t do this but I will do a colonoscopy, bingo the person has bleeding polyps or maybe worst case scenario, they have colon cancer at a young age. So now we have gone from a screen to a scanned, to a definition of the medical problem. Patient said, I am fatigued, you found out they had anemia and then we found out they had iron deficiency anemia and finally he found out the anemia is due to bleeding in the colon and then you send them for a colonoscopy in the snow the polyp and the person gets put on iron, boom, boom, boom you do good medicine. What you have been a good Doctor if you said you are in. And I just want you to take iron? And you did not try to find the cause. I think that is pretty bad because that person

still has the polyps or maybe colon cancer. Guess what? If you look at this slide, the one system that I have seen really neglect it is the musculoskeletal system. If a patient walks in and they say, my back, it is really sore, after ruling out with legs and making sure they do not have an anchor is him or cancer, he say yes, you have inflammation, why don't you take ibuprofen and put ice on it? That does not really explain why they have back pain. You did not took their lumbar or sacroiliac the pain generators that are making them have back pain, you're just saying, take iron, take this thing, take Flexeril, and back in the old days, here some Vicodin. Well how does that help the patient? How does that discover the problem? What I want you to know is there is a systematic approach and osteopathic medicine if that patience is my back hurts and you say, okay, let us examine you. And I will tell you right now that some of the more difficult problems come from the neck. To come from the head. They come from a short leg or a foot problem and if you do your completed exam you will say, yes, you are feeling pain in your low back and it is inflamed now and I'm happy to help you neither give you two Merrick or maybe you will use some inset, but what I think has caused this is -- and you can very specifically give the somatic dysfunction that were found in that exam. Now you have identified the cause of their back pain.

These again are techniques. And all the techniques can be divided into passive or active. The patient lays there and you do that technique for them during that process or they are engaged in it. You do direct or indirect. So muscle energy techniques, myofascial techniques, strain, counterstrain technique, high velocity, couple of more things and now I just want to move into the actual slides of letting you see the techniques used to find and treat somatic dysfunction.

Biochemical side of the triangle and I want you to know I had this guy who came in to see me, engineer and someone told him to go see Dr. Sandweiss and you have this rib giving you pain and I intuitively felt there was something I want to test on this guy and he had very gray hair and her ready scene five People First back and I said do you mind if I do some blood work? Yes, okay I'm here for my rib. Sure, enough he had really sky-high tissue trends glutamic antibodies. It turns out when he got scoped eventually, he had documented severe classic celiac disease. This guy had been running marathons and getting low iron, low zinc, a bunch of things and came to meet with the musculoskeletal problem but what actually fixed and was finding out he had celiac and getting him off of gluten and getting his nutrition restored. A woman came to me 20 years ago, CEO every morning she woke up and her hands were stuffed and could not knit and wanted to make things for her grandkids. I ordered food sensitivity studies. The only things that came out were chocolate and green beans. She was really upset. She said is that what you are trying to tell me, chocolate and green beans? Never heard from her but six months later I get a bit of a card saying I finally decided to try out what you had done and she eliminated chocolate and green beans and more chocolate than green peas and within a week or so her hands moved and her pain went away and she had what I called food arthralgia, food sensitivity arthralgia’s. When people have chronic pains, you have to look at what the chronic or daily things that they do every day is a human being and usually that is where the goal is and that is when

importance like to look here. This light says people sleep every day or at least they tried to and have to make sure they are getting restful restorative sleep and do they need a job clients or CPAP but they need to get sleep with that. Are they breathing with their three diaphragms? Are they eating quality food and are they digesting and absorbing that food? Do they exercise and get movement? Do they need work with their posture? What if they are thinking and feeling about and do they need to do therapy or some type of mindful meditation to get their head and mind and body connected? And then are they always involved in something that flows energy and fluids?

This is a picture of a young boy. On the left he was in a lot of thoracic pain and he is a star basketball player and now he is at the IMG Academy and now he is I think 16 and this is when he was 13 or 14, tall kid. This other x-ray is six weeks after treatment. He was having pain and the parents had only taken him in and they kept doing x-ray saying we will just keep taking x-rays and if it gets bad enough we may have to down the road to something and put in some rods are may have to wear a back brace but after doing osteopathic manipulation and deep myofascial techniques, six weeks later that was the result. This tells me area, J, supply, get going. Here's a guy who had severe spinal stenosis. I told him you know your back is so horrible. I do know you might need surgery and he was a farmer. No doctor, can we do something else? Well I noticed you have a real unleveled end of your sacrum and put this he left in your shoe. All his pain went away and his MRI looked exactly the same and he still had spinal stenosis but no longer had pain which makes the point that it is important to realize that things can look terrible on an x-ray but it is whether they create inflammatory cytokine and whether they are or are not functionally dealing with gravity that can make an enormous difference in their quality of life. This shows you complex relationships between the hyoid bone and when I said is you get better at manipulation you look at more subtle things in your toolbox, sometimes you have to fix the hyoid bone that has all these muscles, the red arrow shows that there are connections from the hyoid into the skull and into the jaw and tongue, down into the sternum and all the wait with Oma high-yield in this little horseshoe shape bone can be get traumatized during accident and the dysfunctions all over the body. This book is fabulous, Jean-Pierre Barral, Trauma and this is an article I wrote with Daniel Pinsky about how acupuncture and manipulation works together and it was in Hanley and golf, bells is publishing and if any of you want copies you can contact me.

This slide is in that article and it shows that for years chiropractors in osteopaths have been treating the spine in an attempt to improve organ function and you will going to a chiropractor office or old traditional osteopath that he was a, if you treat T-3 or T4 you will help the lung and if you treat the four or five you will help the large intestine. These are actually acupuncture point too and be 13 bladder, 13 is the point, associated point for the U point for the shoe and moved and there is this shoe point on the back of these are called sometimes the house of associated point's and these are points that an acupuncturist would put into effect that particular Meridian and Oregon but when you do manipulation of that you also affected so for years practice and osteopaths have been doing manipulations of the spine and seeing people

improve in function of their organs but also acupuncturist have been putting in needles and my argument is why not do both? You get a double dip. This is what I call the list and again I will not read all of these because you have these handouts, but these are the things that I have tried to do personally for patients or refer patients for to get better with their problems. These are things that I have seen and help people get better. And if you are doing osteopathic manipulation, these are the key advance bullet points of things that are often the game changers and if you fixed the three diaphragms of the body and if you fix the stuck viscera and if you've fixed duress strain, look at the cranial TMJ and fix these dirty half-dozen, six dysfunctions in the lumbar and pelvis and treat nerves, these tend to be the Big Kahuna things that make people go, oh my God, whatever you did now my pain is gone or my function has increased decreased radically. You have that pelvic diaphragm that descends and widens whenever you have a deep breath. You have a thoracic diaphragm that we are most familiar with and notice how the so asked muscle come up and meet the pleura of the diaphragm so that is where walking meets breathing and then you have the cranial diaphragm which is the 10 term cerebellum and every time you breathe your head slightly, slightly widens when you take a breath in and it narrows when you breathe out and it turns out that every time you take a deep breath, these three diaphragms should all do the same thing. And then when you exhale they should all do the same thing and for a wide variety of reasons, you know, post episiotomy, trauma, etc., These can stop moving or they can paradoxically move and it is a pumping up and down of these three diaphragms that act as a way to bring venous and lymph back to the central circulation. This is a technique for filling the dryer and here is Jean-Pierre Barral motion testing a liver for restriction. These are schematics and I do not have time and when I taught my Walter Reed course last week, I taught the theory of facet restriction and how these are known as type II somatic dysfunctions where one facet on one side will become restricted and it will lose its ability to either open and flex or close and extend. And by knowing the laws of the facets and putting your thumbs on the transfer’s processes, you can figure out which facet is stuck and not moving and then you can apply an appropriate technique.

This is a great book written by my friend and classmate Michael Savage her, and for those of you who doubt that there is evidence based to manual medicine, this is a beautiful book and it takes each part of the body, gives you diagnostic and treatment techniques and then references about studies.

Now I will show you what I do in my practice. These points are famous and acupuncture and these are bladder 23 almost every Chinese medicine, almost any problem says, and put in bladder 23 and putting kidney 23 and why? Because we say at that belt line, and then, that is where the study stores Chang or lifers and the kiddies are kind of the reservoir or bank of life force and so often there will be dysfunctions at L2, El Tri and here is acupuncture but what I find is a lot of these people when I muscle test the quadratus lumborum that will have a week quadratus on one side and a tight one on the other side. And so, here is a technique, if you find somebody has painful transfers process on one side and tension, this is a strain, counterstrain technique where you passively

shorten that part of the erector spinae by lifting the leg. This is a short lever technique and my fingertip of my right hand is on the tender spot and I bring the hip up into that spot until they say, hey, does not hurt anymore. I am passively shortening the tissue, waiting 90 seconds and releasing and resetting the spindle.

Because I do a lot of functional medicine, I also, on all these cases if they are chronic, look at the need to give them things to do. So in the bottom if somebody kept having back problems and kidney problems from a Chinese medical model, are osteopathic or Western medicine model, I will look at the need for Romagna and I will look at adrenal gland formulas and ginseng tubeless etc. And these are things that often help people that have adrenal stress syndromes from the Chinese medicine standpoint, kidney, Ching and Chee deficiency. The common issues that people have put them there was a, oh my back is really we can always feel like he could go out and in men they might have low libido or erectile dysfunction. Often when the kidney is low, people have more of a susceptibility to getting a sore throat and getting fatigued nine getting your problems and tinnitus. Some of you listening to me who have already done acupuncture curses will sake yes, yes, yes, of course. Further people I hope you can hold your incredulity and just believe me that there are these associations or consolations of things that go along with these points. Now here it goes, now I've got about 15 minutes to show you the actual osteopathic techniques that I use to diagnose and treat. And then, when you watch my videos after the break, you will very specifically see systematically how I address any problem in the cervical spine. I believe that is a 57 minute video and that you will see the low back and pelvis and that is like an hour and four minutes. And then we will meet back for question so here goes in this technique is called listening and I put my hand on top of Haddonfield where my hand is being pulled. Percussion was developed by Johnston, you gently percuss from T1 down to the sacrum, feeling for which levels of the spine seemed to be dull to percussion and they represent the chronic areas of restriction. Then you take the pads of your thumb and finger tips and you run them up and down, feeling for skin Dragon feeling for valleys. When you take the same pressure and you slide down the skin and wherever suddenly your fingers are stop like stickiness or dragging us that is usually a sign that they or yes, of a chronic somatic dysfunction or if you feel Valley and those of you acupuncturists out there might know that this is how we find out acupuncture point and it is a hole or a Valley. Then repeated side bending and what you do is push down and in this case I will keep pushing his right shoulder down, one, one, one, now will pretend I'm pumping at a well and puppy water and as I push his shoulder down it induces right side bending. And you don't see it here but I take my hand and I start at T1 and push his shoulder and then ago to T2 with my left hand and push his shoulder and then I just -- every time say, does he easily side band to the right or when my fingers are at a certain level, T7 or eight, two I noticed an abrupt stop to side bending? This is scanning for restriction of facet side bending. This is a closer picture, so you start at T1 here. You work your way down and you just repeatedly do the same sideband and see if the spine will sideband there and you're looking for places it will not do that. And then you have him folded his arms in front and rotate the person toward you and do the same thing and you start at T1 and you go all the way down to L5 and rotate the

persons trunk towards you and you're trying to find at what level in the spine does he resist rotation?

So now, if you are doing a pure functional release technique, what you do is you note all these planes of motion that I mentioned earlier. You find the area that was stuck in your exam, you monitor those tissues and here I am monitoring it with the fingers. And then you induce the six planes of motion that were all free for that patient. When you put that person in a place in space where you stacked all six free motion, an amazing release occurs and under your fingertips you feel a melting.

You drag your fingertips down the skin looking for restriction. And you can thermally scan the skin pick you will feel heat are almost feel a sense of pulling. This is a technique where you can calibrate your hand to do that. Here is how you hone in on a thermal protection. I will show you a couple of techniques. I told you that myofascial can be direct or indirect. You put your hands on an area you think is restricted and push up towards the head down to the people to the left and right and clockwise counterclockwise. Feel with the tissue does. If you do direct technique stack up the things the body would not do and slowly increase until you feel a slight release or melting. If you do indirect you go in the directions that are compliant and let the body unwind itself. The same with this technique. Sometimes you will do a downward dog. Stand behind the person and as you slowly stick your hips back you pull down and directly released a specialist. This is what I was talking about. You look at the position of the [Indiscernible] whether one is one port more posterior not. You are asking the person to flex the lumbar is. What happens? Those processes should go to cherry interior initiative open. If for some reason the muscles are tight and the extensors that side will not go forward. It will stay backward. When you ask them to slump it will stick out at you. Here is an example. If you have them lay on their stomach you are looking for the relative position. This is a schematic of the results when you put your comes on vertebrae and asked people to flex or extend. With ERS you have them slump. This is a stated muscle energy technique. This persons L2 is being held back by extensor muscle and rotator inside Binder muscles on the right. I am trying to stretch those muscles. My goal is to get him to be able to side been to the left flex and open it to the right and rotate to the left. Every time I have him in the position of barrier I say push your shoulder into my. That side bends him into the right. Then think about pushing back to the fingertips. That is an isometric contraction. Is in is that is done I take him further. And, we complete the technique. Here is finding a FRS. Have the person extend. If one side comes back in the other sides did not decide that did not is stuck forward. This is a technique for treating it. Now, I am pretty much going through the slides. We have landmarks and look for the hip crest tight and trochanter height. We put our thumbs on the posterior and to forward bending test to find the stuck side of the hip. We have them do the stork test with a razor journey and see if the joint is free for the PS I asked to move backwards. We have them sit and been forward. This is for sacral restriction. We want to see if there leg length is normal. We have them bring their legs up raised their hips and drop them look down and say are the link links to same or is this a short or long one? We want to see where the anterior superior iliac spines are. We want to see if the flare has occurred where one hip

is flared in or out. We use the Naval as a midline guide and say our thumbs equally apart or, is one flared in or out? We want to know if the cube is sublet slated. We use our Palm and wrist crease of course, after explaining everything with models, we look straight down and see if the pubic bone is level or one side is high. We want to know if there are they are at the same height or if there is a share of the pelvis. We put our thumbs on the bones and ask if one is higher than the other. We look at the Siegrist tuberous laxity. We have hip crest, Perrone, leg length, here you see a short right leg. We look at the inferior lateral angle of the sacrum. It is a good landmark because there's hardly any tissue even on abuse people. This is how you find the ILA, you feel it stochastically and look to feel if they are posterior, and fear or superior. What is being evaluated is the sacrum. Here is the lumbar's checking to see if there is normal position. You can check the hands dream tension. Here you look at the helped flare out at the external position.

Here is a technique for an in fear pubic having them push their need into you and you guiding it forward. This is a technique called shotgun. They push against your immovable arm and usually the contraction of the inductors will reset the peeps. These are techniques for stretching out and getting flares of the pelvis resolved. This technique you pool with a short quick pull for a right of slip pelvis. These you have seen. This is a unilateral sacral correction. And of course, I am whipping through them because of want you to see that for every dysfunction you discover there is a specific technique that will restore function and get the restriction removed. Muscles can get stretched and strained string counterstrain. Jones found the point on the front and back of the body that would be tender. Usually the patient does not know it is tender. The patient I told you I saw the other day from Desert Storm he was bent over. He had a L5 a very tender point. Here are the posterior points. This is the process and you find the tender points and passively the most into to the point wait for 90 seconds and released them slowly the patient does nothing but let you hold them. I did this technique on the vet and he came in bit forward and left standing up. This is the second lumbar. These are pictures were just getting you with your eyes of how you can release. This is a good technique for releasing telephone paying. Tell bone pain. This is a form for releasing tension. You have your myofascial techniques. These are accurate to acupuncture points. These are John’s points and you always have myofascial trigger points. There is a certain carryover use different techniques for different things. If he hurts on his sternum I told them up to the point to release the tenderness in the sternum. More counterstrain. Many people who have been in accidents or people who have chronic stress you hold their head like a football and take all the weight off. It is a wonderful technique for getting rid of stress up near the shoulders. And more. Here is a diaphragm release where you slowly release under the ribs. This is a muscle release again, slow thoughtful technique for releasing [Indiscernible] now, the last part, myofascial. You can unwind fingers that have been injured. You can unwind the upper extremity. You can take the elbow and released the radius during the technique I call the firehose. Release the rest directly or indirectly. Basically, you motion test and say which way the rest will go and which way will it not go. The person lives on the side and you can move the scapula up and down and glided superior and inferior posterior and unwind the scapula. Use their

arms as lovers. Here you are releasing the tri-substation directly. Releasing the separators with direct technique. These are intricate techniques for improving elbow flexor. Getting your thumbs another side of the biceps tendon and have they slowly extend the arm while you release the fascia. Great technique for people with tension in their elbow. This is a form release. Pretend you had a stick in your hands and you go down the arm. Taking the entire facial tension out. These are the need techniques. You bring the hip and foot into balance. You release the ankle mortise display. You can bring the Dallas back after. This is an important position to treat the popliteal space. Released the hamstrings tendon the puppet tells thoughts and say it a branches. Then you can put your finger pads gently on the sciatic in glide and do nerve gliding between the bellies. Treat the abductor fascist. Cheap the TFL iliotibial band fascist. I'm sorry we had to race through quickly. I think we are close. I was supposed to end at 10:10 and it is 10:11. If I'm correct it will be a break and people will go to the link and watch my videos. The links will help you see a high-resolution. We will meet here at 12:15.

Let me add a few things. We want to make sure that everyone remains signed in to AdobeConnect and connects to the audio. We will be meeting here at 12:15 and Dr. Sandweiss will answer your questions. It was generous of Dr. J to share with us his high quality videos. If you like to see more of his videos feel free to contact him. I will put his information in the chat box. So you can chat with him or send him an email. I have here on the notes pod all the links you will be using for the video. You would just need to open a new browser to watch. We will meet back here at 12:15. Thank you, everyone.

Thank you and see you all at 12:15.

The event is on a break. The session will reconvene at 12:15 EST]
[Captioner on standby.]

Recording stopped at 10:11 EST. Participants are now watching videos and will be back by 1215 EST.

I am ready anytime anyone has questions. We officially start at 12:15. Feel free to ask your questions and I will stay till these 12: already. 12:30 PM.

Sounds Mac [Silence]

Welcome back, everyone. We will give it another minute and Dr. J will start answering questions. You can also raise your hand if you would like to talk. You can also use your microphone.

Thank you for your question, Matthew. The football hold, yes. I wish in this case that I could have been there to show you. Literally, you get a hold of the person's head. You have your hand cup like a chinstrap and Tecate into the side as if you are trying to secure a football. Hopefully you have a table that will go up and down so you are not scratching your shoulder. You find the point in the thoracic. Just off the edge of the finest or a little out into the lemon area. When you find the tender spot and the back of the neck about T-1 through T3 and get a hold of the head

secure it and took it under your arm. Then tell the patient that I know it is scary to let go of the weight but I'm going to hold your head and will not drop it. I will not let it be stressed. New can feel whether they are holding their head(recording started 12:16 EST)and not letting you have the weight or if you could feel the weight of their head go limp. When they let you have the whole head in your arm you then play with a little bit of extension and turning rotation. There will be a point at which they say, I feel all of the tension and pain gone. That is when you hold it for 90 seconds. It will feel like the greatest thing. It is it for once that they do not have to carry the weight of their head. Usually people hold their head in front of their body a lot or people who have had a whiplash and have always carried tension there. Phenomenally effective good technique. Thank you for asking the question.

Are utilizing a booster to elevate the right side of the thorax?

Depending on how high the problem is as you start to see it get hired to 24 45, I will sometimes put a pillow into the chest. They lay prone and I will put a pillow under them so they are going into the extension from their chest. Then I hold the head. I do not want to try to crank their head with the chest flat on the table. It will pinch their neck backwards. As you get past T-1 into two then you start to bolster by putting a pillow across the chest.

Yes, the landmarks are to find the tender point. Literally they lay on the table and you take your finger and press on the T-1 spinous. And between T1 and T2 and T2 and T3 and ask if it is tender on the process ligament. Then you go off to the side on the edge left and right. Then you go a little further out onto what you might call the midshaft of the transfer processes. And then when you find the tender point with the finger that is the location you will monitor. Then bring their head backwards and then chest depending on which thoracic and free monitor that point. If you get way down then you will have to put their arms over their head and bring them back with the upper extremity and the head brought back into extension. You're welcome. Great questions.

If you would like to use the microphone you can unmute yourself.
I you unmute your microphone you can ask your question directly.

When you have people that have changed anatomy from cervical surgeries or chronic injuries and they are 60 or 70 years old, what techniques do you limit yourself to? Obviously knowing that you would not use it BLA or other direct techniques?

Great question. I tailor it to each case because obviously when you see them in your office physically and you have done a history and you know if they have hardware or osteoporosis sometime some type of disease any figure out risk factors and a general sense. I usually use of functional relief and strain counter modified to their body. Instead of how it looks in a slide you create the passive shortening of tissues for their body can do. Then I do indirect myofascial unwinding. I will have their neck in my hand or whatever body part and real slowly move in a direction of downside side. And I always continue to follow the path of least resistance. I keep emphasizing for more use of the tissue and relaxation.

You will almost never get in trouble that way. Often with those people I would do acupuncture in the area. Level discount, ear, and correlation point. Where I know the area of pain and use some of the various systems. Microsystems. I will mostly never do direct invasive technique into something like that. It is pretty effective.

Where if they have Roger bone or I have had people with their first rib reset years back for a thoracic outlet. They have no first rib and chronic whirlpool pain. Then you treat what is and often it will help them. I hope that interest that.

It does. Thank you.

While I'm waiting for the question, here it is. Are we finding the path of least resistance when manipulating the scapula as in your photo?

Yes. When you see the picture that is my son Elijah lying on his side and me moving his scapula. The technique was a favorite of Dr. Freedman with babies. I did not tell you all about that I tell you about the dog at one of her big things is to have the baby on their side in the fetal position and with your little fingertips move the scapula indirectly up down side to side and unwind the scapula. It is amazing how much strain you can get out of the neck and shoulder of the baby. What you do is once you have a grip, there are several different groups in the photo, and you sheared the scapula of towards the year and slide it down towards the hip. You see which way goes the easiest in which way resist. If you want to do direct good to the first edge of the Bay Area barrier stay there and add increased more and more pressure or more ounces to pound square inch slowly until you feel a melting yield. Village grip you take it up. Then you take it towards the spine and away from the spine. Do whatever likes to do. If you are doing indirect every motion you would take it in the plane it went easiest and keep stacking them up until it waits to naturally unwind itself. If you want to do direct traction and twist the ball board style you would take it up to a barrier, hold it there, good to the next barrier and keep putting a little more pressure into the barrier until you feel a sense of relief. The process by which connective tissue changes the tooling is called creep. The process that creates to it is called hysteresis. Hysteresis is the breaking of bonds and release of energy that happens when you add energy into the connective tissue system. You in due which creates creep which has a new resting link. You can go either way.

If the patient has acute problems and are very sensitive he almost always only do indirect. Because it always feels good and does not put pressure on things that are inflamed. If it is just an old chronic type thing than often mixing direct and indirect is a great idea. With bladder 13 and 16 in order to safely avoid pneumothorax what oblique direction do you insert?

I usually have my fingers there I do not go deep in that area, but I am usually inserting at an angle from our side in. I start lateral and go in Intel I feel the first resistance in the tissue. Inferior thought of encouraging the bladder to flow downward. The needle is not parallel to the body but coming in from a slightly superior oblique down into the

point that there is a 10 gentleness to it. It is not going straight and perpendicular there is always a tangential sense that it is in parallel to the body. Not parable -- it will never penetrate and.
Good questions. I want to thank you for those who attended. I do want to say that you see up in the corner my email address and website. I welcome you to visit it and I welcome you to email me with questions. I know that Dr. seen him I have been answering questions for Imad and he was in last week's course. It has been a wonderful exchange and creating the relationship to that. I do not know you people who tuned in bed feel free to contact me. If I can help in any way I would be more than happy to.

Thank you Dr. J. Once again, I put in his email address and website in the chat box. Feel free to contact him for questions on the video or if you have any questions. Thank you so much.

Thank you. What an honor and I appreciate the opportunity.

Thank you, Sir. We're glad to have you.

Thank you, everyone.

Should I stick around or closeout?

Closeout. [Event Concluded]