Myofunctional Therapy – What it is and Why You Might Need It
Speaker: Joy Moeller, COM, RDH

The information provided in this presentation is for educational and informational purposes only. It is not a substitute for – nor does it provide – professional medical and/or dental advice to diagnosis or treatment any condition. Always seek the advice of your physician, dentist or other qualified health care professional for any questions you may have regarding a medical or dental condition.

Scott: Hello, everyone! Welcome to the Functional Oral Health Summit. I am Dr. Scott Saunders, President and Co-founder of Healthy Mouth Media. Today, it is my privilege to be speaking with Joy Moeller. Joy is a myofunctional therapist and also a registered dental hygienist. She is an internationally recognized speaker, teacher and trainer. She has lectured prestigious venues throughout the world—major universities. She is a former associate professor from Indiana University School of Dentistry. She has been practicing myofunctional therapy and seeing patients on full time or close to a full time basis at her practice in Pacific Palisades, California. It's a great privilege to have Joy with us here on the Functional Oral Health Summit. Welcome, Joy!

Joy: Thank you.

Scott: So why don't we start by acquainting our audience with the basics of myofunctional therapy because as I'm sure you're aware, the awareness among the public and in some cases, among oral health care professionals, the awareness of what myofunctional therapy is and what it does, is not real high. So, maybe start with the basics. Could you tell us first of all, what is myofunctional therapy?

Joy: Okay. Well, it was defined in the 1920s, long time ago. It's basically a therapy getting the tongue to rest in the roof of the mouth and teaching people how to chew, breathe and swallow correctly, which some people just take it for granted that they know how to do that correctly.

Scott: This can be a learned skill?

Joy: Well, it's like we distorted that skill because we've gone off track with many things in our lives starting with infants. What we do is we put, in many cases a pacifier, baby bottle or sippy cup which cause the tongue to rest on the floor of the mouth, rather on the palate. The roof of the mouth is the house for the
tongue. What we've done is to encourage it to go down with artificial infant feeding, as well as baby food, where the baby has not had a chance to develop the proprioception with their tongue. And as a result of all this, we've deformed our mouths.

Scott: So the mouth does not develop properly, the oral cavity volume, I'm guessing is usually too small or the tongue may feel too big. The tongue is really an important organ and you emphasized that in your discussions and lectures. Could you tell us a little bit about the role of proper tongue development and of course, keeping the tongue toward the palate, rather than toward the floor of the mouth which is the unfortunate direction we're taking?

Joy: Correct. Well, the tongue is actually an organ and it's composed of eight different muscles. They can all work independent of each other, and so we need the brain and the tongue muscles to coordinate. It helps with speech and proper development of the volume of the oral cavity and also the rudder to the spine because it's connected to the hyoid bone in your neck and so it will cause things to deform if it's resting forward. If you think of it logically, your head weighs as much as a bowling ball. Everybody's picked up a bowling ball, so we know how heavy it is. If your tongue is resting down and forward, it's just enough to pull everything forward.

Scott: We know how critical spinal health is to a big part of the holistic health sphere, if you will. Chiropractors are all about aligning the spine and the energy that goes through the spine. I really like the way that you put it that the tongue is the rudder to the spine. I think that that can be a really good take away message for our audience. Proper development and use of the tongue. What percentage of the population would you say enjoys proper development of tongue / oral cavity volume vs. those who might need some kind of myofunctional therapeutic intervention? At what age would you want to evaluate that?

Joy: That's a good question, Scott. When I first started in this, I would say the percentage of the population that needed this was very low. It's increased so much lately. We don't know why the problem has gone worse, but we have a feeling it's a combination of genetics and epigenetic where we've been changing and also, iatrogenic which means that things have happened to people out of just not the right knowledge, like extracting a lot of teeth and trying to line up the teeth straight and then wearing headgear when we should be developing the face forward.

Scott: Right. Iatrogenic, for those of our audience members who aren't familiar with the term, is a Greek root meaning caused by the doctor, unfortunately or treatment fortunately.

Joy: Yes, it's not really a doctor's fault because they've been taught in traditional university courses that is the normal way to do things—to straighten teeth - but some people have found that it has caused a lot more problems than the advantages of doing it. Long term, mainly with the airway.

Scott: Sure. Oh, yes. The airway is so critical and the development of the airway in parallel with the tongue and the oral cavity volume. It's really important to get a handle on that as early as possible. Is that a fair statement?
Joy: Yes. I have a little picture here. I don't know if you see this but if the tongue is not resting in the right position, it falls into the airway. The red part there is the airway.

Scott: Okay. We can see a partial obstruction and that has to do with snoring, which of course relates to sleep apnea which we're going to be talking about here and also a major theme here on the Functional Oral Health Summit.

Joy: Yes.

Scott: What age would you recommend that parents have their children evaluated by a myofunctional therapist? We can talk about getting in touch with resources later but would it be the earlier the better?

Joy: When I first started, and it's 37 years ago—a long time ago—it was thought that when a child reaches six or seven, that's a good age to start because a lot of kids have tongue thrust naturally when they're born. But lately, we've been working earlier and earlier. As a matter of fact, I see a lot of babies now and I like to counsel pregnant women so that they know that last trimester is very important to help develop a healthy baby. So the babies are born full-term rather than preterm birth, because we now know that if a baby is premature, 80.6 percent will be born with sleep apnea.

Scott: Wow, that's a shocking figure.

Joy: It is. So we're thinking of treating the mother in that last trimester so that the child will be born healthier. If the mother is not breathing, a lot of mothers are waiting until they're in their late 30s or early 40s to have a baby, and then they gain, you know, with pregnancy the last three months a lot of weight and then that's hard so then they start mouth breathing and having difficulty and then that could lead to - There are three new studies out of China, with premature birth and all..

Scott: Yes, there's a lot of good information just coming out now and some of the books written by some of our other speakers are focusing in on pregnant women who have undiagnosed sleep apnea, upper airway resistance syndrome [UARS] or other sleep-disordered breathing that tends to be accentuated during pregnancy. Is that true?

Joy: Yes. Well, you're gaining weight, can't sleep comfortabaly and toss and turn. You have fragmented sleep a lot of times so it's all causing problems; whereas, it used to be you're 19 or 20 when you had your child and it was much easier. I think people now are gaining more weight and eating more processed foods. We're having problems with our diet.

Scott: So even before your baby is born, that is a good time to get yourself to someone who can evaluate the way you're breathing, sleeping and the health of your airway because all of that is going to be impacting the baby even before the baby is born is what I'm gathering.

Joy: And your diet as well.
Scott: Yes. Sure.

Joy: So that pregnancy even. I think it should be even before you even get pregnant. Like I think in high school life education should be focused on that: how to have a healthy baby.

Scott: Yes. I couldn't agree more.

Joy: The problems with sleep apnea which is just so horrible. A lot of the teenagers are texting a lot all day and drinking Red Bull. They sleep in school. It's a major problem that we have.

Scott: They're having fragmented sleep themselves at night and just not getting enough sleep and not enough oxygen to that developing preteen or teen brain. Yes, we're seeing the results of that too. So assuming the baby is already born, I'm thinking that you might want to say a few words about the importance of breastfeeding and how that impacts on good oral cavity and tongue development.

Joy: Yes. Well, it's a Suck-Swallow-Breathe mechanism where the tongue goes up to the palate and back which is so important. We're finding that a lot more infants are born with tongue-ties and lip ties than ever before. So that should be really addressed at birth by someone who really knows how to release the ties as well as teach proper function immediately after.

Breastfeeding is the best because when the baby breastfeeds, the pressure of the tongue is going up and back and forming that palate to be the proper width and proper height. So it's not high narrow palate like that with the bottle feed, because the roof of your mouth is the floor of your nose. So to think of it logically, if your tongue is not resting properly in the roof and pressing up and back when you swallow, then everything will collapse. A high narrow palate is one sign of sleep apnea. I have a little schematic here that shows this. If the tongue is up here and the palate is nice and wide, the teeth have room to come in but if the tongue is down, you could see how the palate collapses.

Scott: Yes, everything is very narrow. Unfortunately, the lower picture, picture B is more what we're tending toward nowadays with increasing incidence. So more and more--

Joy: Right. That's with infancy. Then a lot of times when the tongue is not there, child finds her thumb or gets attached to their pacifier and overuses it or put other things like collars, cuffs or sweatshirts, find something to put in your mouth.

Scott: Blanket. I'm having a flash of the Linus, the Peanuts' character, with a security blanket jammed into his mouth there.

Joy: Yes. Then the tongue, when you do that a lot of times people think it's pulling the upper jaw forward but most of the time, when they do that they're pushing the lower jaw back.

Scott: Oh, I see.

Joy: So all you have to do is do a little experiment. Scott, try this. Open your mouth,
take your index finger and push in on your chin. Can you feel how that closes your airway?

**Scott:** Yes.

**Joy:** So it’s pretty serious. One of the jobs of the myofunctional therapist is to eliminate habits like what we do is positive behavior modification. We get them to replace the thumb with their tongue. We give prizes and it's fun. We have a good time together. The timing is really important for habit elimination to make sure that there's not a brand new baby coming and other emotional problems like a divorce that's happening at the same time.

**Scott:** Yes. What would be the optimal age to be working on eliminating those habits?

**Joy:** Well, at birth, actually. It’s funny because I used to wait until the child was two and a half to three and give them prizes. But now, I’ll educate parents because they think it’s cute when the baby finds their thumb. So we just have them put little sock on there [the thumb] and they forget about it a couple of days. As long as they're being held and breastfed and have their needs met, they won't need it. It’s just a habit.

**Scott:** Those little brains were learning all the time even before they speak. I mean they’re taking in all this information and they can form good habits even before they can talk or communicate.

**Joy:** Yes. I think it’s really hard when they are like 18 months old because they have a mind of their own and they’re not going to quit very easily. So you have to wait until their cognitive ability. It's sometimes two and a half and sometimes not till four or five years old, unfortunately.

**Scott:** Yes, the terrible two’s from what I understand are very difficult and probably a difficult period to do any kind of conditioning or teaching that’s going to take hold.

**Joy:** But with habit elimination, I think it’s critical to know if you can convince the child that they’re doing something and even though it feels good, it’s not good for them. They can decide to quit themselves. It empowers them the rest of their life. They will know that, if something feels good but it’s not good for me, I can decide not to do it. It's very, very good for their emotional state.

**Scott:** Yes, empowerment from a very early age. That's a really good thing.

**Joy:** Then replacing the habit with the tongue and with lip seal. Our goals in myofunctional therapy are to get the tongue up and get the lips closed all the time, breathing through their nose, in the absence of allergies or structural interferences like tonsils, adenoids, turbinates or other airway problems. If we can get them to get their lips closed and their tongue up and then teach them that the only time their teeth should touch is when they swallow. A lot of kids want straight teeth so what they do is they start clenching at a real early age. If their airway is having difficulty, say they suck their thumb or got sick at school. A lot of kids are going to preschool at the age of two or three, and all of a sudden, they’re with all these kids and they’re getting runny noses. Mom is weaning them off the breast, so they’re not getting the breast milk and they get
sick. So they start mouth breathing and their tongue drops. Even after they feel better and they're not sick anymore, their brain thinks their mouth is their nose. So that sets up a whole pattern of mouth breathing, the dark circles. When you breathe through your mouth, you have more allergies and you start this whole dysfunctional patterning where you think that you have to get big breaths of air. I know you’re having Patrick McKeown on here too. He's amazing.

Scott: Yes, really good discussion with Patrick on nose breathing and that whole approach.

Joy: Yes. He teaches with the AONT with our teaching association here. So he’s great. He's great.

Scott: Yes, he is.

Joy: Soto get the child to remember that nose is for breathing and the mouth is for chewing, eating and talking.

Scott: A good core principle—tell me if this is accurate or not—is the nurturing good development of the airway and in parallel with that, development of the bones of the face and making sure that the development of the upper jaw, maxilla, lower jaw and mandible is such that they're developing in as far forward a position as possible as opposed to, you look at some of these kids and they've got these profiles where their lower jaw is back here. That's because of impaired development of the bones of the face to do all these things that we're talking about. Is that correct?

Joy: Absolutely, Scott. We really need to be proactive and notice the relationship of the upper jaw to the lower jaw. Is the upper jaw in and the lower jaw out? The upper jaw should be over the lower jaw. A lot of kids feel like they want straight teeth and so they go like this. They're making their teeth straight. But if you look at this, if your teeth are edge to edge, then the back teeth are not going to meet. Upper teeth are bigger than the lower teeth, so they need to be a little bit over like a cover on a pot over the top and also forward.

So many people put so much emphasis on straight teeth but it's actually the airway which we're looking at the most. Breathing education is part of myofunctional therapy. So we include that in our treatment. You cannot do one without the other. This is how we are a little different than oral myology. Oral myologists mainly look at tongue thrust, rest position of the tongue and lipseal, and they work with allergists and ENT’s to make sure that the airway is open. But we change the function, more than just behavior modification, because we teach the patients how to breathe with the right volume of air, not to over breathe (some people over breathe), and to use the proper muscle, the diaphragm. I’ll show you a picture of the diaphragm. The diaphragm is a giant muscle that goes like around your waist. It's almost a giant. It goes all the way around.

Scott: It's almost umbrella-shaped. Is that correct?

Joy: Yes. Your lungs are here and this is the diaphragm. When you breathe in, your diaphragm should expand just a little bit. That way, you can get air. The diaphragm is almost like a fireplace bellows that will pull the air all the way down...
to the bottom of the lungs so you’re getting full lung capacity.

Scott: That’s an interesting picture.

Joy: So when you breathe through your nose with small breaths in and small breaths out both through your nose, you’re actually getting more oxygen. You’re getting an anti-allergy effect because there’s like enzymes in your nose that breathe it. You’re also getting heated air, cooled air and more oxygen into your bloodstream.

Scott: And you’re also picking up more nitric oxide, which Patrick will riff about ad infinitum among that and how that enhances how the oxygen goes into and out of your red blood cells and to the tissues where it’s needed most, rather than being supersaturated which is the position that a lot of people are in and kind of a state of chronic hyperventilation because we’re so inured to the whole philosophy of everyone take a deep breath and that’s something that I guess we’re slowly unlearning.

Joy: Yes. So I’ll just real briefly give the kids little exercises to do where we make a game out of it. With the Buteyko breathing and the breathing education we do. We have them take small breath in and small breath out through their nose. We do nasal hygiene too where we teach them to clear their nose, but they hold their breath and their lips are closed. It’s not really holding their breath because they breathe in and out then we have them take steps and then when they finally need to breathe, they breathe through their nose. It resets the medullary part of your brain. So then their brain goes, "Oh, my nose is for breathing. My mouth is for eating and talking.

Scott: These are the centers of your brain that work automatically and they pretty much know what they’re doing if we can work in concert with them.

Joy: You know, my background is dental hygiene. So I worked many years in that field. I taught it to different dental schools. Periodontal disease is much more serious than we think because we know it’s related to heart disease. What I found with myofunctional therapy, once you change the breathing and the position of the tongue, periodontal disease will be a thing of the past. I feel very strongly and I’ve been an OCD [Obsessive-Compulsive Disorder] dental person forever with flossing and brushing, having your teeth cleaned every three months and being meticulous about what you eat. But once my patients are getting their tongue resting in the right place and breathing properly, I found that the biofilms on their teeth change and their bleeding gums will improve to the point where the bone actually will regenerate.

Scott: Wow!

Joy: It’s very exciting. Very exciting. You still need to have your teeth cleaned, and brush and floss, but to have the airway working properly--Well, because the bacteria in your mouth need air to live. So it’s just logic plus if your tongue is pushing against those teeth 500 to 1000 times every day, you can see what it’s going to do to the ligaments and the bone, because the bone is paper-thin in between your teeth.

And also orthodontics are-- People get their teeth straight and if their tongue is still resting in the wrong place, resting against the teeth, and you’re still mouth
breathing, you haven't fixed the reason why the teeth got crooked to begin with.

**Scott:** Right. That's get to the whole basis of functional medicine or functional oral health, which is what this Summit is all about that is getting to the root of disease—getting to the root of a developmental disorder that impairs craniofacial development that does not have the jaws as far forward as possible and which all feeds into airway, the airway being more constricted and going along with the whole periodontal disease and tongue conditions. So getting to the root of what's causing this problem is really an optimal approach for our audience members to be to be focusing on.

**Joy:** Absolutely.

**Scott:** What I'm envisioning, Joy, is that this is no easy task and we're trying to educate patients that, you know, our mantra here at Healthy Mouth Media of courses is do your own research. That is a formidable task because the dental, oral, medical and healthcare consumer is basically a pretty savvy individual and capable of going online and Googling this and that. What we'd like to try to empower them to do is to sift through some of the myriad of misinformation out there; there's also a lot of really good information out there.

The role that we sometimes like to envision for the oral and medical healthcare consumer in our audience is the captain of the healthcare team. I envisioned that it does take a team and that's something that I don't think that many healthcare consumers are familiar with. You have to have the primary care doctor, primary dentist, myofunctional therapist, orthodontist, periodontist, ENT and all of these members of the team and having the healthcare consumer be conversant with interrelating among this interdisciplinary team that inures to the benefit of overall good health. Do you have any suggestions on how the oral healthcare consumer could best approach this and to cultivate that team awareness, which I don't see happening to any great degree in your typical healthcare delivery system here in our 21st Century healthcare system, especially in the United States.

**Joy:** Right. I know in Brazil, I've been down there a few times and myofunctional therapy has been around a long time. It was sad because some of the same people that I went to my first class in myofunctional therapy in— I went to Florida— with Dan Guyliner, he passed away in '91, but some of the Brazilians were in the same classes. They went back to Brazil and because they had more socialized medicine at the time, their theme was "Progress and Prevention" and looking at the cause of problems, so they took this theory about myofunctional therapy and they blew it up into a regular respected PhD program and all of their speech pathologists are trained in this and they work in teams.

When I was there, at Sao Paolo University, they had a huge room with the myofunctional therapist, the ear, nose and throat doctor, nutritionist, functional dentist, speech pathologist, you know everybody in the same room and there were about 10 different professions, including the radiologist and everybody. They all look at this patient, that people lined up and went around the room, and then at the end they all collaborate and come up with a treatment plan. I've been to Mayo Clinic because I've lectured there and they try to do a similar thing, but they don't have all the pieces of the puzzle yet. I think because of the consumer demand for treating the cause, there's these little groups of teams I
know. I have different teams I work with and I work with the orthodontist and the osteopath doing cranial work, and I do some nutritional work myself. I like to work in a team with the surgeon, ENT, allergist it's hard though. It'd be much easier if we could all be in the same office together and then the patient would just go around and come up with a treatment plan that is working on the cause. But it isn't like that in the United States. So it's hard to know where to start, and I think the consumer has to be very wary of everything.

Scott: Yes, healthcare is very much a siloed approach here in the US. Unfortunately, I think it's incumbent upon the healthcare consumer to be an engine of change in fostering more of a team approach, and that's difficult because let's face it, healthcare consumer in the US is basically inured to that paternalistic attitude where the doctor tells them what to do and they do it.

Joy: Yes. Also I think our insurance system is completely out of control but I am looking at it in a positive way because I'm feeling like years ago when I was young, we never had dental insurance. We had insurance if you went into the hospital but if you wanted to go to the doctor if you were sick, we have to pay for that visit; or the dentist. My mother always had a slush fund for dentist because she was like a dental fanatic.

People had a tendency to take better care of themselves, instead of trusting that the drug from the doctor will fix them. Now, it's like you'd go in healthcare--Our insurance rules everything, if you're lucky enough to have it. I mean look at what's happening in our government now. It's a game. I think it's better if people take responsibility for their health.

Scott: Oh, absolutely.

Joy: They don't want to pay all that money for all the drugs and all because they have a drug card and the doctor writes prescription. They feel like it's their right to take the medicine and the medicine will fix them, instead of looking at why am I sick.

Scott: Right. It's also kind of a dependency on the system, on the insurance coverage and these wonderful, billion-dollar a year blockbuster drugs whose ads are bombarding the consumer as they're sitting, watching TV and the personal responsibility aspect that you're describing, which is a very good point has pretty much gone out the window. So one of the things we're looking to do with this Summit is to re-empower the health care consumer because the system right now has had a disempowering effect and encouraging the healthcare consumer to take his or her power back and say, "Wait a minute. I want to know what's at the root of this. I want to treat the root cause of whatever problem I've got. I don't want to just take a pill and re-empower myself." Taking responsibility for that is going to cut down on the cost, especially (as you make an excellent point) with dentistry, most of that is out of pocket because dental insurance really does not cover a lot, even if you have the best dental insurance. It's maybe $1500 to $2,000 a year and they tell you just how and where you can spend it at most. So again, we have--

Joy: Yes. It's confusing to people. I think this is why I love myofunctional therapy because we empower the patient to take control of their health. We do that by step by step teaching them how to have better function in their mouth with
chewing. Chewing is critical. People don't chew enough in our country and that's because they were given baby food. So they learned at a very early age; all they had to do is swallow and so they reach for processed foods. When you don't chew, your jaws don't develop properly so they get smaller. Even if you go to a dentist that grows everything forward and wider, if you don't change the function of chewing and breathing and making your tongue manipulate the food in your mouth and resting your tongue in the right place, everything's going to collapse.

So even the best ENT and the best allergist, they get rid of the allergies and that high narrow palate, expand the arches, get rid of the tonsils and the adenoids. Opening the airway is not enough. I'm sorry to say, that unless you change the function of getting your tongue in the right place, your lips closed, breathing through your nose and chewing your food at least 20 times before you swallow it, reaching for not the orange juice but eating the whole orange. Not the apple juice or the applesauce but biting into that apple and chewing it, at least 20 times. We've lost the game. We've lost it because it's going to be another let's just put the finger in the dyke and not look at the cause.

**Scott:** So it’s a conscious education process. Of course, that’s another goal that we're trying to accomplish with this Summit to--

**Joy:** It's education but it's also neuroplasticity. What we're doing is getting the brain--

**Scott:** Ah, you said the magic word, Joy.

**Joy:** We’re getting the brain to look at the 58 different muscles of the head and neck and getting the brain to have those muscles function properly. It's not an easy task. It's not just a couple of exercises. A lot of doctors, especially, and patients, both want to minimize the treatment for myofunctional therapy. They say, "Oh, in six or eight visits, you'll be fine." It’s not enough. People need to be followed for at least a year; otherwise, just like the orthodontics didn't hold and like the expansion-- No, all the things that we’ve done, the myofunctional therapy is going to relapse as well.

**Scott:** If you don’t correct the underlying problem, yes, the orthodontics and oral cavity volume will relapse. So once again, getting to a functional medicine perspective and to the root cause of disease and--

**Joy:** And getting them breathing through their nose, with smaller volume with the right muscles. It's a major part and also to stimulate all those muscles in their head and neck to function properly.

**Scott:** Right. Just staying with the neuroplasticity theme for a moment longer, for years, it was a core belief in the medical profession that once the neurons, the nerve cells and the brain cells, were fully developed, that was pretty much all she wrote. You couldn't change or regrow them. They couldn't regenerate.

In the last couple of decades, were finding out that that's really been a misconception and that through education, through training of the musculature and the nerves that go along with the musculature, we can actually effect a change in the nerve cells and the muscles. The nerves can modify themselves such that they are retrained to go along with the good habits that we're
instituting in the muscles through myofunctional therapy.

Joy: Yes. You develop new neural pathways and it takes time, patience and dedication. The patient has to be willing to put the time in. I see a lot of patients who've had jaw surgery. I had jaw surgery myself when I was younger. It was experimental at the time and everything went wrong except I didn't die. But I have a patient right now I'm working who's had seven jaw surgeries. Seven—maxillary mandibular advancement and nobody has looked at the function of the tongue. I've been working with her and her pain patterns are much, much improved. She's finally starting to really breathe now because again, if you open the airway and you don't change the function, everything will relapse because the new neural pathways haven't been developed. They look good instantly, you'll feel better, but it doesn't hold.

Scott: They don't keep firing together if you don't get to the root cause. The neurons that are failing to fire together for a long enough period of time do not wire or maybe better put, rewire together. So just out of curiosity, how old is this patient?

Joy: She is 58. She has a lot of immune system problems as a result of all the surgeries and medications she's on as well.

Scott: So even a patient of that age can benefit from myofunctional therapy.

Joy: Oh, I have an 80-year-old I'm working now. He's doing great. He didn't want to wear a CPAP, and I said, "Well, I can work with you, then you have to get another polysomnography test (a sleep study) again. If they show you're normal, then you can get rid of it. He did. He was very dedicated. He had a tongue release and he did the breathing training. He's just doing great.

Scott: Good for him.

Joy: Well, he's exercising better too. He had a hill by his house, and he said he could only walk up half to the hill and now he runs to the top.

Scott: Oh, my goodness!

Joy: He's in his 80s so.

Scott: Breathing through his nose the whole time I hope.

Joy: Breathing through his nose

Scott: Good. So how do patients find myofunctional therapists? Where do they start to get a myofunctional therapist on board when they're looking for optimal treatment for their child or for themselves?

Joy: Well, in my practice, I have several therapists and a breathing educator. We play didgeridoo. We do a lot of things here. I don't charge anything for the first visit because a lot of people don't know what it is that we do. So we feel like we're an educational facility more than anything here. But to find a good myofunctional therapist, you can go to the AOMT website. That's the Academy of Orofacial Myofunctional Therapy. You go to www.aomtinfo.org. That'll be a thing. Find a
therapist.

Scott: Okay, good.

Joy: And the IAOM, that's International Association of Orafacial Myology have a website too. Some of their therapists have been trained in the breathing education and other things as well.

Scott: Good. We'll be putting these URLs up as visuals for our audience members too--

Joy: Or you could Google it too. Just Google myofunctional therapy. A lot of people call themselves myofunctional therapists and they really have just looked down the internet and YouTube and found some exercises. So you have to be careful. I think if you go to the AOMT, not because I've taught all those people but-- I've taught more than half the people in the United States doing this, but at least go to the AOMT. They've had exposure to more dysfunctional sleep, apnea and tongue-ties. We have 105 hours of studies that we encourage them. We're working on accreditation through university. There are nine people on the Board. So that would be a good way to start with me.

Scott: So the AOMT website is probably our audience members' best bet to find someone who is an appropriately qualified myofunctional therapist.

Joy: Yes, qualified. A lot of people are doing Zoom and internet telepractice because people live in small towns where there isn’t anyone. Half of my patients that I see I've never even met in person. It works. It’s not as good as seeing you in person, especially with little kids but it works fine. There's people not only in the United States but all over the world that are having breathing, swallowing problems, chewing and tooth problems and sleep apnea.

Scott: Yes. We'll get to myofunctional therapy and sleep apnea in a moment, but I think it's important to point out, well correct me if I'm wrong, patients can work directly with a myofunctional therapist or does that have to be done in conjunction with a dentist?

Joy: No, it does not have to be done in conjunction with the dentist. Some myofunctional therapists are dentists themselves, physicians or pulmonologists. We've trained a lot of ENT's, different people. Sometimes they have their sleep techs train in this. We've been training a lot of sleep techs, physical therapists, occupational therapists, speech pathologists, dental hygienists but right now there's no law saying you can't do it, so you can. But we try to have somebody with a science background that could be an asset.

We do train dental assistants but they have to have the dentist with them and then the dentist is taking the full-- I feel that you really need a science background. The dentist will take the responsibility for that patient. A lot of hygienists do it on their own. It's fine. It's been in the American Dental Hygiene scope of practice since 1992, and so there is no law that it says you can't do it, so you can.

Scott: Does that ever get sticky in view of the fact that dental hygiene practice in the United States, anyway, there are very few states that allow dental hygienists to
practice independently. If a dental hygienist is doing oral myofunctional therapy, in addition to dental hygiene, how would that work?

Joy: As long as you see it, because dentists have not been trained in myofunctional therapy in their school programs, so they cannot supervise a hygienist doing myofunctional therapy if they haven’t learned it themselves. So I give the analogy like say you were a hygienist working for a dentist and you decided to open a candy store, would it be against the law to open a candy store? It wouldn't be, right?

Scott: Right. Sure.

Joy: Get a business license. Anybody can start a business. It's a free country. So until there are laws saying can’t do it, then you can’t.

Scott: I see.

Joy: As far as getting insurance coverage on this, there are codes and ways of getting some coverage but it's tricky and it's even harder now to get insurance to cover it, but if the patients have like a cafeteria program or something like that. It will cover this. What I do is I teach my students to use the research studies, you know the research out there. I know there are some-- Stanford has championed this with many, many studies. This study came out and this is a great study showing how if you get your tongue released, that's called the lingual frenectomy.

Scott: That's relieving tongue-tie.

Joy: Yes, relieving tongue-tie and doing myofunctional therapy both, you can see how the posture will change.

Scott: Yes, the posture is very important there.

Joy: That's like four months. But also, a new study came out from four universities. It’s called a meta-analysis. They've looked at every study of myofunctional therapy out there, and they found that it's been proven to reduce the sleep disorders by 62 percent in children and 50 percent in adults. The AHI numbers were less.

Scott: That is amazing. AHI being Apnea Hypopnea Index which is how often you stopped breathing or don’t breathe enough during any particular period.

Joy: Yes, right. And also showed that it helped the oxygen levels go up.

Scott: What journal is that published in, Joy?

Joy: I think it was in *Sleep*. Yes, *Sleep* which is a very respected journal.

Scott: Sure, and you can look all these studies up in PubMed. Some of them I guess you’ll have to pay for; some of them would be more open access than others.

Joy: Yes. This is from the University of California, Los Angeles. That’s where I practiced in Los Angeles. And Stanford, Portugal, Argentina and Buenos Aires.
So it's four schools that did this.

**Scott:** Major teaching centers international in multiple continents. So really pulling together all this research from multiple studies.

**Joy:** Yes. It's basically showing that myofunctional therapy is adjunctive. We cannot say that we fix sleep apnea. We look at the muscle functions and we work on that but we have to be very careful because it's an emerging field when it comes to sleep. So we work with the ENT's, sleep specialist and dentist that are doing functional dentistry, and it helps everybody work better and the osteopaths doing the cranial work. You know we work with them.

**Scott:** So let's talk in a little bit more detail because sleep-disordered breathing is just-- Would it be fair to classify it as an epidemic?

**Joy:** Oh, yes. It's definitely an epidemic.

**Scott:** So much as if it's undiagnosed and what is the key role for myofunctional therapy and therapists in diagnosing, maybe not diagnosing per se, but working with doctors, dentist, ENT's, whatever to diagnose and once it's been diagnosed, the myofunctional therapist's role in managing sleep disordered breathing and sleep apnea?

**Joy:** Yes. Many of my students are now working with sleep physicians where they have the rooms. They sleep them with the bed for the sleep studies and then during the day, they fold up the bed and make that room into myofunctional therapy room. So the idea is to get the diagnosis first with polysomnography which is the gold standard. I know a lot of doctors now are going to home sleep studies. A large part of that has been approved for a lot of insurance testing but you get the diagnosis. Sometimes though, even if the patient feels exhausted, they're not sleeping, the study will show that they're fine but they could have what they call you UAR which is Upper Airway Resistance, where they're waking up, they're having fragmented sleep. So I ask a few questions. I usually do screenings, and I teach my students to do sleep screenings on all myofunctional patients and the Epworth is the one that most people are accepting, you know, physicians. Because in order to get a sleep study, we need to have a screening showing that there's a possibility of having some problems.

**Scott:** That's a sleepiness index, correct?

**Joy:** Yes. I like the BAERs for children. I ask some basic questions in my patients. I want to know if they have trouble falling asleep; that's called insomnia. That's really important because that's a clue. Also, we want to know how many times at night they'd get up to go to the bathroom. If it's more than once, then that's a problem. Then you want to know if when they wake up in the morning, are they tired and if they know if they snore or not or heavy breathe at night. If a child snores more than three times a week, they definitely should have a sleep study. That was from the University of Chicago, Leila Gozal, okay. Very important. She's a big sleep specialist there.

**Scott:** What is that person's name again, Joy?

**Joy:** Leila Gozal, and her husband is this David Gozal. He's the President of the
American Thoracic Society. They both work at University of Chicago. When I spoke there, I said how do you determine if they need a sleep study? She said, "Well, if they snore more than three times in one week, they definitely should have a sleep study." But you also have to look at their behavior. Do they have ADHD issues? Are they mouth breathing? Do they have the dark circles under their eyes? There's a lot of ways to determine if a child-- It's their behavior, learning at school, they're having trouble, you have to look at this.

Scott: Are the learning disabilities, the ADHD. Are they bonafide disease entities in and of themselves or are they more signs or symptoms of something going on in a deeper level?

Joy: You know, I have a son who had ADHD. I took him everywhere for help. He had headaches too. He had his tonsils and adenoids out at three. I'm sure if he would have been diagnosed on the spectrum with today's world, but we didn't have that diagnosis.

Scott: The autism spectrum?

Joy: Yes, I just kept taking him from doctor to doctor to doctor to doctor to try to get some help for my son Bryan, and it turned out I took him to a neurologist, psychiatrist, just everybody under the sun. Lots of tests and what they finally said was they could do an exploratory procedure because he had terrible headaches. His head hurt everyday and jaw problems, TMJ pain. He was just a little boy. They wanted to do brain surgery on him.

At the time, I started working in a very proactive dental office in Cardiff, California by San Diego. The dentist said, "Before you do surgery, let me take a look at him." He had just taken a course in myofunctional therapy. He said, "His tongue's in the wrong place." I said, "What! Nobody's ever said that his tongue was in the wrong place." He said, "I'm going to make a little bite piece for his mouth to help it widen, and I want you to see an osteopath that does cranial work." So I did everything he said to do and within three weeks, his headaches were gone and then within three months, his teeth started straightening out and all of his ADHD issues were gone. He could focus. He also had developed "failure to thrive" they called it, because he was really so little and he wasn't growing. All of a sudden, he started growing like a weed and was eating two meals at a time. So it was really interesting. He played catch up.

Scott: Did he have sleep issues as well?

Joy: Oh, yes. He didn't sleep well. Well, the ADHD, they have restless leg where they move their body at night, toss and turn, wander around and grind their teeth. These are all symptoms of sleep disorders. He definitely had apnea. We didn't have that diagnosis back then. It was unheard of.

Scott: Right. I'd like to revisit one thing, Joy, in that vein, talking about young children and the need to do sleep studies, polysomnography, which is the overnight sleep study. That can be a formidable challenge for the healthcare consumer, for the parent acting on his/her own behalf or most particularly, on a child's behalf because the way that I understand it, especially that the pediatric community is not really on board with doing sleep studies on kids. Is that accurate?
Joy: Things are changing very rapidly. If the parent demands it, we have to do it that they're suspect of airway problems. A lot of parents will record their child’s breathing at night and demand the sleep study. Even if they get the diagnosis of sleep apnea, which is just one AHI per hour would indicate that they have sleep apnea for a child; 5 for an adult but 1 per child, because it’s very serious. When they stop breathing, sometimes they stop for 20 minutes and then their brain doesn't develop properly and they can die like sudden infant death.

Scott: Yes. So?

Joy: So they will do it if the parent will demand of this. What the treatment, the current guidelines for sleep, is they look at the adenoids and tonsils and take those out. That's been proven with CHAT’s study, Children’s Hospital Adenoidectomy Tonsillectomy study. If the child has breathing problems, you should take the tonsils out if they are enlarged up to a certain level, but that study only went for six months. So I challenge it because there are other studies that show, even if you get the tonsils and adenoids out if you don't correct the behavior, the problem will return.

Scott: Yes.

Joy: So it's not treating the cause. I have my own hypothesis on sleep. There are four stages of sleep. Stage one and two is a very light sleeping; Stage three, you’re getting into the heavy sleeping; and then there's REM, which is fourth stage. That's when you dream and you get that real deep rest that your body needs. I have a feeling or my hypothesis is, that your brain wants to keep you alive. It's going to keep you in stage one and two, which is a very light sleep, if your airway is occluding. So it's not going to let you go into deep sleep. It does things like it's called "enuresis" where you make more urine. You get up to go to the bathroom at night so you don't allow yourself to go deep enough into sleep. You also will have restless leg where you kick or flail your arms around inappropriately in your sleep or some people get up and they have nightmares where they walk in their sleep (sleepwalk) or talk in their sleep. The body, it will create grinding. They’ll grind their teeth so that they stay in a lighter stage of sleep. They don't get the rest they need. When they wake up in the morning, they’re tired. That's a good sign that there's a problem. They have trouble falling asleep because your brain is going, "Don't fall asleep. You'll choke. You'll die." Even if they slept 11 hours, they're exhausted, just really tired and they'll fall asleep in the afternoon.

Last week, I had two patients that came in--new patients. They looked at me with these sad eyes and said, "All I want to do is sleep. I can't sleep. I'm not sleeping. I just want to sleep. Can you help me?" It just breaks my heart. They’re on CPAPs, medications, sleeping pills and they have done the sleep hygiene, have all the dark and the cold. Sleep hygiene is one area that is very important I think. We train our students to learn about sleep hygiene and be able to transfer that information to the patient. No caffeine and don't exercise right before you go to bed and just--

Scott: Keeping electronic devices away from the bedroom and not having any blue light.

Joy: Having it very dark, very quiet and very cold. To sleep in a cold room is better
than a warm room. It's real interesting. That does help to a degree for some patients, and not to eat right before you go to sleep. Now, you really need to be careful. I know in Los Angeles, the street lights have different kinds of bulbs in them, that LED that is very bright. The city of Los Angeles changed all the light bulbs because they were cheaper and because they were proving that they cause less burglary because they're so bright. But now, the birds are waking up at two in the morning.

Scott: Oh.

Joy: And making noise. So in summer time, a lot of people like to sleep with the windows open and between the noise of the birds and the light of the LED, you've got to get room darkening shades and have a quiet and cool.

Scott: Just with the LED street lights tend more toward the blue end of the spectrum, yes.

Joy: Yes, blue lights so.

Scott: Which is of course the kind of blue that keeps humans and birds awake. I never would have guessed that. That's interesting and that's a real telltale sign that they have an influence on multiple species, including birds and humans.

Joy: I want to talk a minute about the relationship of temporomandibular joint pain and sleep apnea. They're all kind a related, because what happens and I've seen this over and over again and I've been doing this 37 years--almost 38 years now. A lot of people when they can't sleep on their back because their tongue [makes a sound of choking, they're mouth breathing, their lower jaws down and they're snoring, and their wife or husband goes like that, "Hey, turn over!" So they roll onto their side when they sleep where their stomach to try not to snore so bad, so their tongue falls to the side so they don't snore. However, when you're on your side, if you've got any problems with airway and your jaw, you're pushing your jaw to one side and it's causing the disc to slip in your jaw joint. So the temporomandibular joint pain is usually a pinched nerve or a slipped disc.

Scott: I see.

Joy: So we have to get our patients to sleep on their back, but if they have sleep apnea it’s really hard so.

Scott: That's tricky, isn't it?

Joy: It's very tricky. Dr. Derek Nordstrom, who I know you--

Scott: Another one of our Summit speakers, really, really good talk with him.

Joy: He came out with a good statement of elevating the headboard, the size of a brick, so that your tongue, if you are on your back, will fall forward. I have my patients do this or get a hospital bed so that they can stay on their back and it won't hurt their jaw and their tongue will drop down, rather than choking them in the back, until their muscles are strong and the soft palate, uvula. We work a lot with those muscles in the back of the throat.
Scott: So myofunctional therapy can be very helpful if patients have temporomandibular dysfunction.

Joy: Right. We are functional specialists. We look at everything. Everything that they're doing, I look at. If the adult has had a problem with nosebleeds, because if you've had a problem with nosebleeds, you don't want to blow your nose. You're afraid that it will cause nosebleed. So your nose is always stuffy [makes a sniffing sound], and if you're in a polluted area, you're going to get-- It's the body's natural response to make phlegm in your nose. We also look at heavy glasses. If somebody's wearing heavy glasses and they are pinching right here on their nose, they can't breathe. So we train our students to look at every single function and how it affects the airway, chewing, swallowing and habits.

Scott: What other conditions can myofunctional therapy be used for and within that whole spectrum of sleep disorders, TMD, TMJ. What else can you do?

Joy: Also nutrition. If you're not chewing, you're missing the enzymes that break the food down, because digestion starts in your mouth. I know dental hygienists are trained in both pharmacology and nutrition quite a bit. So we know that the first stage of digestion is in your mouth. If you're not chewing enough, the parotid gland which is right behind the masseter muscle, when it's functioning right it's pumping enzymes into your saliva to break the food down. That's why if you take a bite of a cracker, it'll melt in your mouth because the saliva is working on all that wheat. Without that, the food goes into your stomach and the digestive juices (the acids) have to work hard to break that food down. Sometimes the food will lay there a long time. Then if you’re mouth breathing or snoring at night, you're [makes a choking sound] bringing up that acid, called acid reflux.

Also, if you're not swallowing the correct way, if you're tongue thrusting, your tongue is coming up this way, the whole peristalsis or movement of food will go the wrong way, instead of coming down, it's going up. So it's fighting. It's fighting and all the muscles. Acids can live on there also. If you are tongue thrusting or resting your tongue against your teeth, it causes scallops and if the mouth is too small for the tongue, it causes scalloping on the sides. If your teeth have a sharp cusp and your tongue is resting against that cusp, it could lead to oral cancer. Everything in the oral cancer field has gotten a lot worse because of the HPV virus being involved. It causes more problems. So now we have oral cancer or tongue cancer on the increase. It's much faster than any other cancer and it's increasing. Oral cancers is horrible.

I've had two patients with it recently, and it's just been a nightmare for them because they remove part of the tongue. That's another thing that myofunctional therapists can do is to help rehabilitate the muscles after cancer. Also, we can detect it. I have my students use a little flashlight that will show any abnormality. It's called the Oral ID.

Scott: Yes, I've seen that.

Joy: So we can actually see any early stages and have that checked before it gets worse. So myofunctional therapy can be preventive. It can be used as a treatment and we can be the principal educators for people with sleep disorders as well as with orthodontic problem and early growth and development.
Scott: Why don't we see more orthodontists and myofunctional therapists working together or do you see that on the rise? I mean ideally, I would think that with the perfect storm to have a myofunctional therapist working in an orthodontic practice.

Joy: Yes. I think it is changing very rapidly in the last five years I think. I'm getting many, many more phone calls from orthodontists wanting to meet me for lunch, where I used to have to go after them, they're coming after me.

Scott: That’s good to hear.

Joy: It's really good. The orthodontists are slow to change but they are coming around. I go from USC to UCLA, Stanford, UOP, UCSF. I'm all over California. NYU, we go to NYU regularly.

Scott: You’ve got both Coasts covered, haven't you?

Joy: And Chicago, you know, Northwestern and-- So I think it is changing. There are usually at least two or three orthodontists in my class, and that seems to be a trend now where they bring their whole staff a lot of times because they don't have a time to do with therapy. I know in Japan, many more orthodontists have two or three myofunctional therapists right in their office. So it's changing. It just depends. Every country is different too. I do a lot of international work. Australia is becoming more aware, I know and China now. We're going back to Hong Kong, but they've just put it into their position statement—myofunctional therapy, that pulmonologists are putting it into their position statement. In Japan, every hygienist is trained in myofunctional therapy.

Scott: Same with Brazil. Is that not right?

Joy: Brazil, it's the speech community. They don't have dental hygienists in Brazil.

Scott: I see. Okay.

Joy: Dental hygienists I think are key people, because we're comfortable in the mouth. We know nutrition, study pharmacology, we are used to working with dentists and orthodontists. I think a lot of different specialties need to be involved. The physical therapist now are doing so much with posture. Once they learned that tongue is involved with posture, they go, "Woo, this should be in my program." That's cool.

Scott: Yes. The light bulb goes off.

Joy: The occupational therapists, they are functional specialists. They look at the way of the body, how you chew, swallow, and feed. Feeding problems. I have an occupational therapist, and I'm actually working on his patient right now. She's just, every day she comes in, "Oh, my gosh! I have this patient with stroke and that patient. This will be so helpful, and speech pathologists work hand in hand with myofunctional therapists here. Speech pathologists are taught swallowing as it relates to dysphasia and choking, but they never learn a lot of the myofunctional-- what we call "stage one swallow." When they learned it, they go, "Oh, my gosh! This should be in every speech program." So hopefully, eventually I think it'll be its own profession, but I think right now, we need an
army of people. We need everybody to learn myofunctional therapy and be aware of it. If they're not going to practice it, they should at least find people to refer to because it's so critical. It's one of the most critical missing pieces in healthcare ever—the tongue.

Scott: Yes. I--

Joy: Tongue-tie too. You forgot to look at the tongue-tie because the research is showing that if you don't correct tongue-tie at birth, the chance of them having sleep disorders at a later age is very good. No, they almost always will.

Scott: It's very important to have someone who knows how to identify the tongue-tie. That's one of our other speakers, Dr. Alison Hazelbaker, a lactation consultant.

Joy: Oh. She's great. I know her.

Scott: Bonnie interviewed her. Actually, they recorded two interviews for the Summit, and she points out that you really need to have someone, such as a myofunctional therapist who could look at the lingual frenum and assess how bad the tongue-tie problem is, and to have a qualified expert who is really qualified to correct the problem. That can be very tricky situation, can't it?

Joy: Yes, you can. Alison was my student and very bright, very bright. She wrote a book on tongue tie and has like many, many different ideas on how it should be handled in infancy and how they're sometimes not a real tie. It's called a “faux tie”.

Scott: Right, all the more.

Joy: It is hard to identify we have guidelines now. I know Dr. Soroush Zaghi. He's a sleep specialist and an ENT from Stanford. He graduated at Harvard Med School, UCLA for five years as head neck surgeon as ENT and then went to Stanford to become a sleep specialist. He and Dr. Audrey Yoon, who is an orthodontist, came up with a functional classification of tongue-tie where what you do is you put the tip of your tongue up to the roof of your mouth and open as wide as you can, then put your tongue on the floor of your mouth and open. You get a ratio between the two. Actually, when you put the tip of your tongue up, you put it on the back of your upper two teeth, measure that opening and then put the tip down and open. It should be at least 80 percent.

That's one way of categorizing. They looked at 1000 patients for categories of tongue-tie. So this would be normal [points at figure 1] and category two [figure 2], three [figure 3] and four [figure 4]. You can see how bad it is and it's like that. It's really tied. What happens sometimes is there's a posterior tongue-tie where the tip can go up, but back of the tongue can't go up. So the soft palate collapses, and that's where you get the snoring and you're airway starts collapsing.

Also with TMJ problems, if you put your tongue in your cheek, your whole jaw shouldn't shift. If it's tied, you're [demonstrates shift]. So whenever you move your tongue, your jaw shifts and that disc slips. So it can help many, many things. The problem with getting your tongue released is you must do therapy both before and after. If not, it will reattach and then it reattaches with scar
tissue.

So the best way is to work with a myofunctional therapist for at least one month prior to doing the release and then after the release, you will re-pattern all those muscles, nerves, arteries and everything, the neural plasticity. You have to see them overtime. Now for baby’s breastfeeding, it's a lot easier because that tongue is moving constantly. So it's easier as a baby. I know in Brazil, they passed a law: all babies at birth will have their frenums inspected. They found 21 percent of all babies in Brazil right now do need a lingual frenectomy or a labial. Sometimes, it's the lip, the buccal area. I find that if the buccal ties are there, the teeth will come in. Instead of getting that nice, big, wide smile, you see pulling in on the sides.

Scott: If that muscle attachment is not correct, that can apply abnormal forces?

Joy: Right.

Scott: So it's very important to have that evaluated at an early age, and once the diagnosis of what degree of tongue-tie has been made, having a qualified.. Now is an ear, nose and throat doctor, usually the best qualified to do a tongue-tie release?

Joy: No. it's just somebody who's had extra training. I know of the way Dr. Zhagi does it now. It's so different, because he'll open it up and then have a myofunctional therapist doing exercises, and then he can find every single attachment. It's called the "functional frenuloplasty" which is different from a frenectomy, but I don't question some pediatric dentists and oral surgeons do it, and some general dentists with the laser will do it and some pediatricians do it with scissors. It doesn't matter. As long as I get the results, I'm happy. I've had two frenectomies myself. It made life-changing difference for me, because I was able to sleep much better.

Scott: It's good to hear. Finally, Joy, before we wrap up here, of course the Functional Oral Health Summit is reaching out mainly to the oral and medical health care consumer as our audience member, but our audience also comprises a number of healthcare professionals, midlevel dental and medical professionals and dental hygienists. We hope that there are more than a few myofunctional therapists tuning in to the Summit; on the medical side, nurse practitioners, nurses and physical therapists. Suppose a healthcare professional wants to get training in oral myofunctional therapy, what kind of background do you need? What is the best way to seek out training and how would you go about becoming a properly qualified myofunctional therapist?

Joy: Okay. The best thing to do is to go to the AOMT website and look at the qualifications. We prefer physical therapists, occupational therapists, dental hygienists or speech pathologists. Those are the four professions that we prefer to train. We do make exceptions. If the doctors want to come and get training along with the-- A nurse practitioner would be fine as well. But if the doctors want to come with, we have a lot of teams that come you know. We have four classes. The breathing education with Patrick, and then we have the introduction which is a four-day class. That gives you enough information to get started. We do some breathing in that, TMD and sleep. We have a special course in temporomandibular joint, sleep apnea problems and posture. That's taught by a
couple of sleep specialists, TMJ specialists and physical therapists. The last class we teach, there are four classes together, altogether is on frenum inspection, how to determine it, and then we have live surgeries so they can see it.

Scott: So looking for tongue-tie and demonstrating how the tongue-tie can be released.

Joy: Yes, right.

Scott: Again, that's www.aomtinfo.org, correct?

Joy: Correct. I know the other organization has some classes as well.

Scott: Just out of curiosity, Joy, what is the approximate percentage of people seeking training through the AOMT programs from the medical side, as opposed to from the dental or dental hygienist side?

Joy: I'd say it's probably-- It's almost half and half now with the ENTs. We get a lot of medical-- I'd say, it used to be like a third dentist, a third speech and a third hygiene, but now we're getting probably just a blend of everything. We had chiropractor in our last class.

Scott: That's great.

Joy: She isa pediatric specialist and was just really excited because she does a lot with infants, tongue-ties and all that. So yes, I mean we have all different-- Acupuncturists came, several of them. They were really interested too. So we just get our kind of a smattering. Every class is a little different. Sometimes, it's more dental; sometimes, it's almost all speech. It just depends. We move around. We give classes in different areas. We're going to Estonia next month and I'll be speaking at the World Sleep Congress in Prague, which will be amazing. Really good doing the workshop there as well.

Scott: That's great. So you're getting buy in from multiple specialties and from multiple countries. That's excellent.

Joy: In multiple countries. Yes. China is very, very big on myofunctional therapy because they used to eat rice and vegetables. Now, they're eating McDonald’s and have a lot of air pollution there. They're genetically predisposed to maxilla that’s back anyway so they're having a lot of sleep problems.

Scott: So lots of work to do over there, especially with the one-child law having been rolled-back.

Joy: Yes, definitely. Babies are dying there. It's really sad.

Scott: Oh, man. Lots of work to do.

Joy: Oh, yes.

Scott: Is there anything else that you want to bring out, Joy?

Joy: Oh, I think that we pretty much captured the gist of what I do. My philosophy is we need to train as many people as fast as possible to do this, so that we can all
work in a team with different physicians and dentists that understand function. If we don't, I'm afraid that we're going to have major problems in even face extinction. So it's frightening to think about.

Scott: Kind of almost a matter of life and death. So bring everything together into our culture--

Joy: Yes, especially our children. Teenagers have their cell phone and they’re like texting so their posture’s already bad. They’re not sleeping right. They have the new sleep disorder called "anticipatory texting apnea" where they go to sleep and they text their friend and then they fall asleep waiting for their friend to text back. The brain doesn't let them go into the deeper stage of sleep, because they’re waiting for their friend to text them on the cell phone.

Scott: So the Smartphone is keeping them engaged and the engagement is keeping them from getting the proper sleep they need. I don't know. The tech companies are all about engagement now and we see that's impacting something as critical as sleep. So maybe a whole new field of study or syndrome, so I guess we have to stay tuned and see where that leads, and yet another job for the growing population of myofunctional therapists.

Joy: Right. Yes.

Scott: Joy, thank you so much for being with us here on the Functional Oral Health Summit.

Joy: Thank you.

Scott: Folks, we've been speaking with Joy Moeller. She is a myofunctional therapist as well as a registered dental hygienist. She is an internationally recognized and sought after trainer, teacher and lecturer. She coordinates training programs through the Academy of Oral Myofunctional Therapy. Their website is www.aomtinfo.org. There is a wealth of information at that site. We've covered a raft of topics today, some really good information for our Summit audience members. Joy Moeller, thank you so much for being with us here on the Functional Oral Health Summit. It's been a pleasure speaking with you.

Joy: Thank you, Scott.