Introduction to Meditation and Trauma

Welcome to this interview on the Biology of Trauma Summit 3.0 where we are talking about the trauma disease connection. I am your host, Doctor Aimie, and in this interview we're talking about the role of meditation.

Now, everyone that I have talked to has found meditation difficult, which is why I wanted to have this interview on the summit. And what we talk about in this interview is how the meditation can actually help us control our state.

So state control. What state are we talking about? What we're talking about the emotional state. We're talking about your autonomic nervous system state.

And so let me share with you the three states of the autonomic nervous system in light of meditation as we go into this interview, because we have three states of our autonomic nervous system.

In the middle here, we have parasympathetic, which is where we are, our best selves and our best health. And this is when meditation will actually be easy.

And we want and actually what we're going to learn about in this interview is that it actually meditation helps keep us in parasympathetic longer. So it will build your muscles to stay and be in parasympathetic.

Now sympathetic. The Stress Response. This is when we will notice that our thoughts are just on that hamster wheel. And this is where meditation can be helpful to bring those thoughts.

Notice them, become an observer of them, and then shift them to parasympathetic as we don't give them the power to pull us back into story. And talk about more about story in just a second.

Now, the trauma response is different, of course. And if you've been listening to the other talks, you know that the trauma response happens when our bodies get overwhelmed while they are in the stress response.

And we go into this place and this is where meditation will be by far the most challenging. But one of the values of one of the values of meditation is that it helps us get out of the story.

And of those who take the 21 day journey, that is what surprises them the most. They are used to talking about the story. They're used to going into the story.

I mean, that's what we're supposed to do, right? Something happened in the past and we need to talk about it. And here they come into the 21 day journey and we don't go into the story.

We just go into noticing the sensations and helping the body move through those sensations, making the body feel safe enough, creating a felt sense of safety, and then creating a felt sense of support, and then creating a felt sense of being able to expand and open up safely in order to be more present for life.

Observing Thoughts Without Judgment

And in all of that, we stay so much in the present moment and just noticing what's happening right now in my body, is there a knot in my stomach? Is there a constriction in my chest or my shoulders?

Tighten up here? What is happening to my body? And when we put attention to that, guess where the story goes. It loses its power. It loses its relevance.

The story is in the past, and I'm in the present moment and I'm noticing what's happening to my sensations in the

body. And I am responding to those so that I'm not just noticing, but I'm responding to those.

So I'm hoping that you are going to consider taking the 21 day journey with me and let me share with you where you would find that on my website. Trauma Healing Accelerated dot com you will come here and there will be information about the 21 day journey up here in the corner.

So you click on the 21 day journey. Now what I want you to see is that the changes that happen for people as they experience, as they go into this form of meditation, as they go into this form of somatic work where they're actually experiencing changes in their daily physical pain, a decrease in their GI symptoms, a decrease in their sleep issues, a decrease in anxiety, a decrease in depression.

Because we are staying in the present moment and we're learning how to work with the body sensations rather than going into the story where we just get stuck in that loop.

So I'm so excited for this interview where you're going to learn about the value of meditation in order to help us get out of that story. And for this interview, I have invited my friend Ariel Garten, and she is the co-founder and CEO of Muse, a leading consumer neurotechnology and meditation company with a background in neuroscience, psychotherapy and art, Ariel is dedicated to bringing easy to use and accessible tools for wellbeing to the masses.

Her unique background has taken her from working in neuroscience research labs to owning a fashion design label to being the female founder and CEO of a Silicon Valley backed brain computer interface tech startup.

And she has been asked to speak around the world on happiness, meditation, how the brain works and empowering women in business. She is also the host of the Untangled podcast, where she guides audiences on how to understand our brain and how it works so that we can improve our life.

I'm so excited to start with this interview and dig into this material and help you learn how to become an observer and change your relationship with your thoughts through meditation.

I have been working with people with, you know, this trauma response for so many years. One of the common things that I see is that it's so hard for people to meditate.

And so from your experience, why is it actually hard? Why do people find it hard to meditate? What what does that even about? So a lot of people have misconceptions about meditation.

They imagine that you're supposed to sit there and your mind just goes blank and then you've meditated. The reality is our minds never go blank. I think it's frankly harder for your mind to go completely blank than it is to like levitate.

This is not a realistic expectation and the process of meditation is one of actually just observing your thoughts. Notice thing when your mind moves away onto a thought could be traumatic or otherwise than choosing to bring your attention back to something neutral like your breath so your observing your breath, your mind wanders from your breath you notice in your return.

So once you realize that your brain's not supposed to be quiet, then you can move to the next step of how do I actually meditate? Which is the observation.

Now for a lot of people, it's very easy to get caught up in those thoughts. You're thinking about something, you bring your attention back to your breath.

You continue thinking, you bring your attention back to your breath. And those can be incredibly long periods of thinking. And for people with trauma, for example, the act of simply thinking while you're sitting there alone watching your thoughts can be even more terrifying.

So the most important thing to remember in meditation is it's so key to feel like you're not doing a good job at it. Be

nonjudgmental with yourself, be nonjudgmental with the process and follow the process and you will be meditating.

I find that that really is a principle for all trauma work, right?

From Body Sensations to Present-Moment Awareness

Like I feel like there can be this paralysis with perfectionism and I don't I don't think I'm doing it right. I really don't know how to do this. And so I'm not going to do it at all.

And we don't even get started because there's that. I think the shame and it can bring up so much of our trauma stuff just around not knowing how to do things.

And so I love that you are just putting that out there like you're not going to do it perfectly. There really is no perfect way to do meditation and we can start with just noticing.

And what are you finding as people start to move into that place of noticing? What are the things that we know are starting to happen in the brain that actually are really helpful for us?

So once you begin to notice your thoughts, you begin to move from this shift of being inside of your thoughts and caught up in them to being able to actually observe your thoughts and then make choices about them.

So most of us just go into the world in autopilot. We have thoughts in our head and we presume that because the thoughts are there, we should be thinking them or supposed to think them well.

With meditation, you focus your attention on your breath. Your mind wanders away from a thought, and then in that moment, you have the choice to actually move your mind elsewhere, to observe that you're having a thought and rather than just following it, just because you can choose to move your attention onto something neutral like your breath.

Now, with somebody with trauma, for example, that becomes incredibly salient because your thoughts and I know I've had trauma myself, you know, those thoughts are very sticky and easy to get caught up in.

And when you learn a modality that allows you to recognize you're having a thought, this is not reality, it's a thought, and then gives you a tool to move your mind away from that thought.

Those are your first steps to freedom. And I feel like that's also the value with practicing that with our thoughts, because then we can move into doing the same thing with our emotions where it's almost easier to say, okay, I have a thought and it's up here.

My brain, I can see that it's a thought. Practicing, getting into the practice of observing our thoughts, and then we can move into observing our emotions in the same way so that we're no longer being driven by the emotions that are coming up from our body, but just being able to observe them and then make decisions about them precisely.

So in the same way that in meditation we observe our thoughts, our mind wanders, we choose to put our attention elsewhere and say, even though that thought seems so compelling, it seems so real and true.

It's just a thought. I can make a different choice in trauma. We have a lot of emotion that floods our body, and in meditation, what we do is observe our bodily sensations.

And so you might have an emotion starting that feeling of anxiety where your chest is tightening. You start to feel this and then your thought triggers your feeling, triggers thoughts, triggers feelings.

Well, in meditation, you stop and say, okay, well, I observe that I'm having sensation. We don't call it anxiety or fear. We don't give names that have stories associated with it.

It's sensation. And you can name the sensations that you're having in your body, and in doing so, disempower the connection between those sensations, a.k.a.

emotions and the thoughts that they trigger and the memories they trigger. And over time, you learn that you can just sit with the experience in your body without creating a story around it.

So for myself, in my trauma, I would always when the trauma was triggered, I would feel like there is somebody putting their hands on my shoulders like this.

It was like, I'm sorry if I'm triggering anyone with this at all. And, you know, it's okay. I was completely safe. Even in the trauma when the situation happened, I was safe.

But I was left with this visceral, physical memory of it and all the feelings associated with it. And for several years I would sit with that feeling and not work with it properly, and the feeling would just come and I'd get freaked out.

I get really afraid because the sense of fear happens in my stomach and in my chest. So I'd feel afraid and then I'd have all these thoughts at once. Oh, no, this feels so awful.

Even if reminds me of the trauma which then heightens the sensation in the body in a feedforward. This may sound very familiar to you. And again, if anybody has been triggered by this, just take a few deep breaths.

We've all been completely safe at this moment. These are just triggered thoughts and feelings. And one day I had this aha moment that although I was feeling these sensations in the here and now, they were not real.

I wasn't actually in any danger. I was in my house completely fine. I was safe, and I brought the observation of those sensations into my meditation practice and I felt all the stuff that I would normally feel.

And instead of letting it drive the cycle forward, I thought feeling, thought, feeling. I felt all the stuff. And even though my brain was about to go, Oh no, this is awful, and bring back the images.

I said, This just is what is this is just some sensation in my body. I'm here, I'm safe. It's okay to have this feeling. It doesn't mean anything to me right now, even though in the past it was a real situation.

That situation is not here right now. My body doesn't need to rehearse this. I can change that story and it doesn't serve me anymore to have this feeling.

How Meditation Rewires the Brain

And in that moment I was able to disconnect the physiological sensation from the trauma, and it was just physiological sensation. And I observed the thoughts coming up and I was able to move from a place of observation, say those are some thoughts, but they don't serve me right now.

That's not actually happening to me here and now. And in doing so, start to unwind the trauma. And I, you know, after that, get the physiological sensations happening.

And I could simply observe them and say, this doesn't actually need to matter to me in this moment anymore. And that was like I say this now, it's like, oh my God.

That was. Huge. And so this practice of meditation allows you to recontextualize the feelings and the thoughts that are triggered from that traumatic situation, which no longer serve you.

Today. What you landed on is so much of the value of being in the present moment and getting out of the story that can come up. And the story comes up, like you say, with the body sensations and with the thoughts, and it becomes this loop.

And we rehearse the story so many times that it it feels like it's present reality. It feels like we are right back in that place. And to be able to have the tools to observe and disconnect from that story and say this is just a sensation in my stomach right now, yeah, this is just a pressure in my chest.

This is just something happening to my body right now. I can look around me and see that I am safe right now, that that is not happening right now, even though my body is having sensations right now.

And then what it allows a person to do is to focus on those sensations and what can I do right now in the present moment to stay out of the story, out of the thoughts that don't serve me right now, but just how can I support my stomach?

How can I bring in a sense of expansion to my chest rather than the tight constriction that I feel right now? And what I have found and what you're describing is that that's what changes.

That's what changes are thought, emotion, thought, feeling, cycle, because we're able to kind of stop it right there and say, no, this is just a body sensation.

I don't even need a label for it. Like you said. Like, I don't even need to label it with, oh, I feel anxious, which means this and, and label it with meaning and tags and feelings and emotions.

It's just, it's just a sensation or it's just the thought and wow, the power. I feel like the power that that gives us to take back control over our life from what has been driving our life.

Yes, yes, yes, and yes. So we move around life when you have trauma with a habit of rehearsing these things and we rehearse them because we think it's there to keep us safe.

This rehearsal and what we don't realize is that the thing that hurt us is elsewhere. It's not here right now. All we're carrying around is the memory in our minds and in our bodies.

Those have memory. All we're carrying around is the memory of it. And we continue to replay that memory in an effort to keep ourselves safe when the threat doesn't necessarily exist any longer.

And what we're doing when we do something like a meditation practice is we are shifting that habit. We are literally rewiring our brains to go out of the habit loop of trauma and into a space where we have control, we have agency, we have choice, we're in the present and we've rewritten the story for our body and our minds.

It doesn't mean it didn't happen. It just means we don't need to feel it again. And I'd love to dove into the brain and exactly why this happens. Let's do that.

I love I love talking about the I mean, there's so much that we have been able to measure quantitatively with meditation so that we know that this just isn't what we would maybe say. Woo, woo.

Right. Like there is there is actual changes in neuroplasticity and the brain waves and everything with with meditation. So let's dove into that. Sure. So the or of trauma in the brain rests in something called the amygdala, which many of you have heard of.

It's a little part of your brain that's always there, scanning for danger and meaning to keep you safe. So the amygdala scanning the environment and finding anything that may have a hint of danger to it, which could be a real danger like a fire right in front of you or a not real danger like a stain on your pants when you're going into an interview or an email that you sent off.

Things that we just perceive as dangerous. It also responds strongly to images in your mind of that danger. So thinking about a fire might make us very afraid or images that we see in the world which are not actually dangerous to us.

They're just a picture of a thing that we perceive as scary, like a snake or a spider. So in trauma, your amygdala becomes hyperactive at the moment of the trauma because it perceives that you're in very, very great threat.

It imprints the experience of trauma very strongly. It imprints the experience that you had during that trauma. And then it believes it's its job to keep you safe by representing that trauma to you over and over and over again.

And in the normal course of our lives, our amygdala is taking notes as we go all over the place. But it knows how to have salience to those notes. It knows how to properly store and organize them in trauma.

That system of regular encoding and retrieval is disrupted and it is hyper encoded, not necessarily as the situation was like. We don't remember all of the things around us necessarily, but we will remember the crux of the trauma in painful detail.

And again, if I'm triggering anybody at this moment, just breathe deeply, know that you are safe in the here and now. So the counteracting force of the amygdala is typically the prefrontal cortex.

So the prefrontal cortex is the front of our brain and it's the part of our brains that are our higher order processing. It's responsible for our inhibition.

Our organization are planning our overarching cognitive abilities like metacognition and the prefrontal cortex is typically able to regulate the amygdala.

So it's kind of like the amygdala is the little child in the prefrontal cortex is the parent. So the amygdala, the child might see a shadow on the wall and get very upset because it's very afraid of it and it can't properly discern if the shadow is scary.

Not the threat, not threat. It just knows that there's something fearful. So it sends you all of these thoughts about the fearful thing. It's like there's fear, you know, danger, danger, danger.

It's just constantly sending you to thoughts and it sends you all the sensations that triggers the sensations in your body associated with it. So you have the sensations of fear.

And then this sensations of fear reinforce the thoughts, which then create more sensations of fear, basically telling the system, we feel scared in our body, there must actually be something wrong, which then creates more thoughts around it and causes more sensation around it.

Now, for those of us with a good, strong relationship between our prefrontal cortex, it's properly developed. We're in the daily world living our normal lives.

The prefrontal cortex would step into the situation and look around, kind of like the parent and say, actually, we're okay. It's just a shadow on the wall.

Everything's fine, turn on the light. Oh, right.

Using Breath and Practice to Regulate State

It was just a shadow in a trauma experience. What can often happen is that the prefrontal cortex becomes dysregulated relative to the amygdala, and it becomes less able to actually comb it down.

It's like the little child just can't hear the parent say everything's okay, or maybe the parent is even absent in that situation. Now, when we engage in something like a meditation practice, there's research that demonstrates that a long term meditation practice can quiet the activity of the amygdala and even in some cases, decrease the size of the amygdala.

So we're seeing like real structural change in those fear response systems of our body and mind and it's been

shown that the projections between the prefrontal cortex and the amygdala become stronger so that the prefrontal cortex is better able to look around and say, actually, everything's fine.

Amygdala, I know that was in the past, but it's just the past. We're here now so we can begin the process of unwinding this hyperactive response and gain control of our lives.

And this is, I think, the what a lot of people can relate to when we're talking about the prefrontal cortex and its ability to bring in logic, because in the moment when a trigger happens and the body is like, whoa, dangerous signals.

Coming up, the logic is gone. Right. And we I've even had the experience where I try to use logic, but it still doesn't calm the body down. Like the body's just like, no, no, no, that's fine.

You, you know, you live up in your palace, up in the brain, up in that head, like you don't understand what's going on down here. And there can be such a disconnect between the body, the autonomic nervous system, the amygdala and this prefrontal cortex.

And so the ability to have tools to strengthen that connection, I feel like this really is one of the important tools then for a mind body connection is being able to help even.

I think that even when those triggers happen, if that connection is stronger, it's going to be able to kick in faster. It's going to be able to still bring some balance to.

Well, have you considered this? Can we turn on the light? Can we can we do this? That will actually help break our pattern of just automatically going into that place of panic and overwhelm and then the shut down with the trauma response.

Yes. And the prefrontal cortex also is the seat of your higher order processing and metacognition. So the ability to actually observe your thoughts, that's the nature of the prefrontal cortex.

So when we practice meditation and we practice being able to not be inside the thought but rise above and see that you're thinking that is one of the biggest keys to undoing the trauma response, because instead of being inside of it and being like, Oh my God, this is awful, you can jump out and say, Huh, I see that I'm triggered.

What should I do to calm myself down? And then you can bring in a breathing practice. You can, you know, stroke your body gently, whatever for you, as calming and meditation works not just on the level of the brain, but also on the level of the body.

So in a meditation practice, you are breathing deeply and as you've probably talked about with some of your other summit participants, the breath is such an incredible tool to regulate the body.

So as you breathe in your heart rate increases, as you breathe out, your heart rate decreases. And so that's why breath patterns with long extended exhales actually slow your heart rate and signal to your vagus nerve that everything's cool.

We can move into rest and digest into parasympathetic nervous system and to increased vagal tone. And as you breathe deeply, your diaphragm is actually connected mechanically to your vagus nerve.

And again, the vagus nerve is the nerve in your body that turns on your rest and digest your parasympathetic nervous system. So as you breathe deeply, you're literally tugging on that vagus nerve and then stimulating it to bring in the relax and the release response.

And so this is stuff that I don't know. Are there studies showing that a meditation practice shifts your body into that parasympathetic state more often?

Yeah. Or I'm trying to think of, you know, if someone is is trying to meditate when they're in the fight or flight. Right.

And they're in that, you know, rapid thought process and they're in the stress mode.

Is that is that when it's difficult to meditate and the meditation practice will help them move to parasympathetic, or is really the idea of the meditation practice to meditate when you are in parasympathetic and that will strengthen your parasympathetic so that you'll end up spending more time and staying longer in parasympathetic and not being pulled to the stress and the sympathetic response.

So the answer is yes to both of them. Both are important components of how meditation can help trauma. So in a meditation practice, you sit for five, ten, 20 minutes per day, whatever your comfort level is.

And that's like going to the gym. But for your brain, for your meditation. And there you practice observing your thoughts, moving your mind away, calming your body, observing your sensations, and you're doing this with, you know, typically pretty neutral thoughts or neutral sensations.

You might have stuff that comes up great, you know, then you're learning in that very safe 10 minutes of the container of your meditation. You're totally safe.

You're learning how to deal with those thoughts in a relaxed way. Then when you are triggered in the real world, you have the tools that you've practiced.

You've built up the muscles so that you can now know how to move your mind away. You've built up your prefrontal cortex. You know, it's now stronger and better at doing this thing.

And in the moment you can bring in your meditation practice, because the act of a meditation practice is saying, okay, in this thought, let's bring it out. Focus on my breath, mind.

Go away from the thought, you know, calm down, calm down. So the meditation practice itself in the moment of crisis, can be a very powerful tool to bring you out of your thoughts and into the present moment.

I'm thinking of how many places that this could be utilized, right?

Starting a Simple Meditation Practice

Like a lot of people are experiencing anxiety and panic at work and being able to have this tool that says, I'm going to even just take a few minutes right here and do a meditation practice in order to make sure that the rest of my day goes better.

And I'm not caught in this loop for the rest of the day while I'm at work or I mean, there's there's so many different examples of in the day being able to bring in this tool.

And it not just be, Oh, it's only something that I do in the morning or it's only something that I do in the evenings. But it really can become a tool that we can pull out at at any time.

Right. Exactly. Because the meditation practice has taught you to notice. So, you know, you'll do your ten minute meditation in the morning or the evening, you know, your big one.

And then throughout the day you've been taught to notice so you can notice. Oh, I'm feeling kind of anxious right now. My heart's feeling ramped. I'm observing, I'm having some thoughts, and that's a great time to then bring in a three minute practice while you're sitting at your desk to then calm your body, move your mind away.

And on days when you're super round, you might need to do that several times within an hour. But that's okay because, you know, you'll start to rise and then you'll do your meditation practice.

Then you might find yourself rising and then you do your meditation practice. And over time, what you're teaching your mind and body is that it's okay to stay down here.

You know, and over time you'll find, what was this start to be this and then this as you retrain your mind and body towards under standing that you can have control over your own state and accepting those moments when you can't, but knowing that you have tools to ultimately pull yourself back.

Yeah, I think that sense of losing control and not knowing when I'm going to get back to a place of control and regulation and that everything's going to be is part of the fear that gets caught up with that trauma response.

So for those people who are listening and maybe they've noticed and I really want to speak to the people here who have maybe tried meditation before, but they've noticed that maybe it actually disconnected them from their body and just put them in their mind.

And and they've lost the practice because it was hard and they and they didn't really know how to actually form this mind body connection with the meditation.

How do people get started with a meditation practice that will actually help them be embodied and strengthen their mind body connection Where would you tell people just to start?

So start with a one minute practice. And in that practice all you need to do is sit in any position that's comfortable. You can lie down, you can sit whatever works for you, follow your breathing, just follow your breath going up and down.

As soon as you feel your thought, move away. Notice it and bring it back. If paying attention to your breath causes some anxiety because for some people it does.

Totally okay, totally normal. Choose something else. So you might have heard of mantra, a meditation. A mantra. Meditation, in secular terms is simply a word or phrase that you're focusing on.

So you could choose a phrase like, I am safe, I am safe, or the sky is blue, the sky is blue. And then when the thought or feeling arises and you start to get ramped up, just move your attention back on to that phrase.

I am safe. I am safe. So know that if you get a little bit of thoughts or a little bit of feelings, that is completely okay. What we're learning within this practice is that we have thoughts and feelings and that's fine, but we don't need to create stories around them.

These thoughts and feelings don't mean what we used to ascribe the meaning to them. It's just what it is. You know, I would have clients would have anxiety attacks and at first it's like, oh my God, my heart's doing this.

I'm going to die. This feels so overwhelming. And then over time, you know what your anxiety attack is like and it's kind of predictable. You know, first you feel some you're feeling here, then here, then you get sweaty.

Then you have all these thoughts and you can meet different situations. But the course of it is always generally kind of the same and now instead of being caught up in, Oh my God, this is awful.

It's okay. I'm having some feeling, I'm having some sensation. Oh, I know. Next is going to go to the chest. Yep, that's the chest going. So here's a take seven more minutes or so.

Right. And sitting through it, this is annoying, but I know what it is. And then all of a sudden, all of the power that this thing has held over you has dissipated because it's just some sensation.

They're just some thoughts and you know that you have the power to shift them. So as you describe this, like for me, I get a lot of hope, right? Like this is for me, this is what is the healing journey and being able to move towards this, exactly what you're describing, where we don't need to go into the stories anymore, we don't need to attach the stories to our present moment sensations.

We can understand them.

Muse Neurofeedback and Closing Thoughts

We can know that they're going to pass. We can have the tools to navigate them. We're not stuck anymore. We don't have to keep reliving the past with the present moment sensations.

So for you, as you look at the big picture of what you hope that meditation will accomplish for people individually and globally, what would be what would be your vision for what is possible?

I mean, my, my so the thing that I've always deeply believed in and passionately cared about in life is helping people understand that the thoughts that have in your head don't need to drive your life.

And I'm somebody who existed with some pretty terrifying thoughts in my head and for a period of time I would get really caught up in them. And I would think that because they were there, it meant that I was a terrible person and it meant that I might do these things and it would be awful or these things might happen to me.

And over time, as I was able to shift my relationship to my thoughts and put them in place and make different choices around the thoughts that I had, those thoughts got smaller and smaller and smaller to the point where if one of the thoughts ever came back, I would just look at and say, Oh, you're one of those types of thoughts.

I know what you are. I'm not going to buy into you and then go on with my day in a world that was, you know, could have seemed very uncomfortable and scary and overwhelming, became a world that was just what it is.

But sunshiny days and people in it in life, because I was able to take control over the thoughts that were in my mind and the sensations that they produced and accept that sometimes they arise and that's okay to.

Tell me about Muse and how it actually helps with the meditation process. Sure. So I talked about the fact that I had trauma and had difficulty quieting those thoughts.

It wasn't actually till building and then using Muse that I was finally able to establish a meditation practice and learn new skills effectively. So that muse does is it's a slim little headband that actually tracks your brain, heart, breath and body during meditation and is able to give you real time feedback know when you're meditating and when your mind is wandering.

So you actually are hearing what your brain sounds like during meditation with a soundscape. When you're focused on your breath, it's nice and quiet because you're doing the right thing.

When your mind wanders away, you hear, Sounds like rain. And that's your cue to say, Oh, your mind is wandering, come on back. So while you're meditating, it's kind of like having a little coach or a little guru in your pocket saying, Yeah, you're doing it right.

Yep, you're doing it right? Nope. Come on back to the breath. Come on back. And for somebody with Trauma eight, it helps you really establish the practice and be it makes it safe to sit there with your own thoughts because now you're not actually thinking your thoughts.

You're not hearing your thoughts. All you're hearing is the sound of rain. When your thought comes up and then the cue to bring your attention back to your breath.

So it becomes a much easier and much less anxiety provoking way to start your practice and really effective. There's over half a million people around the world that have used means to start their meditation.

Mayo Clinic has done multiple studies with it. Their doctors on the front line use it during COVID to deal with burnout, anxiety and stress. So it's been a tremendous tool to help both establish a meditation practice and, deepen one, especially in the face of trauma.

And I'm curious, how does how does it actually measure whether you're focused on your breath or focused on the

meditation or if your mind is wandering?

Obviously, there's something that's changing in your brain that gives it those signals. What is it that's changing? That informs it? You're you're off.

Yeah. So Muse has EEG sensors on the forehead and behind your ears. So just like an EEG when you go into a hospital or a clinic, this is the same thing, but a very slim little form factor.

And it's tracking your brainwave activity. So when your brain is focused on your meditation, it has one pattern of brainwaves and then is your mind wanders off into thought.

It moves into a different pattern of brainwaves. The MUSE detects that change in brainwave pattern and then reinforces you gives you neurofeedback to come back to the brain with pattern associated with meditation, thereby strengthening that state.

Thank you so much. Thank you. I love the hope that this brings that we are not stuck in stories, that we are not stuck with what we've been. But we can actually move into a different relationship with our body, a different relationship with our thoughts.

And I invite you to take the 21 day journey with me in order to do just that, you do have the ability to purchase all of these recordings in order to be able to watch these videos at your leisure so that you're not stressed and trying to get and fit everything in, but you're able to just have them at your disposal so that you can listen to them, watch them at your own time, at your own pace, and rewatch them as many times as you want.

During and after this summit, please remember that you can still invite friends, family, colleagues, whoever you feel would get value out of this information.

And once again, I'm your host, Dr. Aimie, for this summit, The Biology of Trauma Summit 3.0, talking about the trauma disease connection and your path forward to freedom.