0:00:04.3 Katie Berlin: Hi, welcome back to Central Line. I'm your host, Katie Berlin, and we have a very special guest with us today, those of you who are going to be joining us at AHA Con, will actually see her up on the main stage for our Keynote, but if you're not gonna be there, we'll miss you. But at least you don't have to miss our guest, Dr. Rebecca Heiss, welcome to Central Line.

0:00:27.5 Rebecca Heiss: Hi, thank you so much for having me. Oh my gosh. Thanks so much for having me on, Katie. I'm really excited about it.

0:00:30.6 Katie Berlin: This is super fun because, you have a unique perspective on our profession in that you are married to a veterinarian but are not a veterinarian yourself. And so you probably see and hear quite a lot of what we're used to talking about, but that's not your daily life in and out. So, I'm really curious to know what that's like.

[laughter]

0:00:52.6 Rebecca Heiss: Yeah. It's interesting, and it's so funny too because I think I told you this earlier when we were off camera, but I always thought that I wanted to be a veterinarian. And I had some, we can go into the whole story, but I had some pretty major, imposter syndrome, which I, not even imposter syndrome. 'Cause I hate that. I hate... Gosh, I'm gonna start this right off on a strong note.

0:01:15.7 Katie Berlin: Do it.

0:01:16.6 Rebecca Heiss: Let's stop talking about imposter syndrome like it's something that we have to fix. What garbage. Like imposter syndrome, first of all, it's like, I feel like the syndrome part is this the new hysteria.

0:01:29.6 Katie Berlin: Yes. Chalk it all up.

0:01:30.0 Rebecca Heiss: When the system is broken, it's not on you to fix it. Anyway, that little rant aside, I never felt good enough to be a vet. I was like top of my class 4.0 all the way through college and grad school and still was like, "oh, it's really competitive. I don't know if I can do it." My husband, on the other hand, for those of you that know him, Dermot Jevens, he had no doubts about it. He went straight, straight through vet school, came to the States, and was just like having fun trying to figure out where he was going to do his follow up work. And so he has given me...

0:02:04.8 Katie Berlin: I can't relate to that.

0:02:05.6 Rebecca Heiss: Yeah. I know. I'm like, he's given me this totally new perspective of like, "well, why wouldn't you? Why wouldn't you just show up and go on a tour across the US and go to all of the top grad schools and figure out where... " I'm like, "because they might say no, that's horrifying," that whole journey with him. So today, living with him, I've had this privilege of having a lot of insight into the quite, if I may say it, a quite painful world right now of consolidation and all of the major stressors that are happening in the industry, without having to live it day to day. And so that's been, it's been a very interesting space to be an observer of that. And I'm grateful not to be in it. I have to say like, I hate that because I love everything that veterinary medicine is doing. I love how you care for people. I love how you care for pets and for one another. And I feel like the

very best of the industry is getting squeezed out right now. So that's my outsider's perspective.

0:03:08.9 Katie Berlin: Well, I think it can be validating too for those of us who are in it and kind of feel that way a little bit, that med is having kind of an identity crisis right now. And a lot of us are feeling that squeeze no matter what area we work in, in the profession and seeing... Having somebody who's technically outside the profession and that you're not working directly in it is having somebody outside validate that and say, "this is what I'm seeing," can actually be a little bit of a relief I think. Because it means we're not like, we don't need to gaslight ourselves into thinking like, okay, these feelings aren't real and it's just us.

0:03:47.4 Rebecca Heiss: That's right. There's no syndrome.

0:03:48.9 Katie Berlin: Right. There's no syndrome.

0:03:50.4 Rebecca Heiss: It's real. I see it.

0:03:51.8 Rebecca Heiss: And imposter syndrome, I hate the name, but I also don't, I feel like I've seen a lot of quotes. I think Adam Grant had one recently that was like imposter syndrome means that, you're facing something that you don't necessarily feel like you have control over, that you are "good enough" to do yet. But with that growth mindset, there's no reason that you can't feel comfortable in that space. And if you're not feeling that imposter syndrome, you might not be pushing yourself. And so it could be a really good sign.

0:04:24.4 Rebecca Heiss: That's it. I love that. I often talk about imposter syndrome as this, like when we're little kids, we're looking around and we're like, "oh my gosh, there's Janie and she's falling off of her bike and there's Joey and he's falling off his, and we're all falling off bikes and it's great." And then we hit a certain age, and we look around and we're like, "oh my gosh, nobody's falling off of bikes."

0:04:42.8 Katie Berlin: Yeah. And nobody can see me.

0:04:43.2 Rebecca Heiss: Because nobody's talking about it. And so I'm not gonna do it. So I'm just gonna be the one and everybody else knows the things and I don't know the things, but I'm not gonna let them know that I don't know the things. And we end up just like not falling off bikes 'cause we stop trying to ride new bikes which is a shame. It's an absolute shame. But we've got this kind of a shared ignorance of the fact that everybody else is sitting in the same space of fear.

0:05:12.3 Katie Berlin: Yeah. This is very indicative of our first conversation where I felt like I'd met you before, but we got right into the meaty stuff and people don't even necessarily know what... You actually do.

0:05:23.9 Rebecca Heiss: Oh, yeah. Sorry.

0:05:24.0 Katie Berlin: No, it's my bad. But I, that all is really interesting and it ties into what you actually do for a living. We know you're not a vet.

0:05:28.2 Rebecca Heiss: This is true.

0:05:32.3 Katie Berlin: But that is not a good introduction to what you actually do. So would you mind just letting people know what you do do and what your areas of focus are?

0:05:40.2 Rebecca Heiss: Sure. Although I think it would be really fun to go through this entire podcast and have people guessing the whole time...

0:05:42.8 Katie Berlin: And just not say it.

0:05:44.4 Rebecca Heiss: So I'm a stress physiologist by trade. My PhD is in stress physiology and I studied evolution in human behavior. Short version of a much longer story is that I'm now a keynote speaker and I get to travel the world and help people transform their fear into fuel that they can use. So help their brains kind of work for them rather than against them.

0:06:05.6 Katie Berlin: Love that.

0:06:06.0 Rebecca Heiss: That's what I do now. Yeah. Thanks.

0:06:07.9 Katie Berlin: And yeah. We could all use that. That was a very compact way to sum up what you do. You've had to do this before a few times.

0:06:16.1 Rebecca Heiss: I'm usually not that concise, but yeah, that one I've done.

0:06:19.8 Katie Berlin: Well, before we get into the rest of our conversation, I like to learn a little bit more about our guests when we have them on. So they're people and not just voices spouting wisdom. Not that that's not important.

0:06:33.3 Rebecca Heiss: Love it.

0:06:34.1 Katie Berlin: But I was wondering, do you have, in a couple of the previous episodes of this podcast, we've talked about third spaces where right now we're Dr so and so, or we're so and so LVT, or we're, we feel like we have to be expert in something all the time and we're on all the time. And then we go home and we're a mom or a wife or a partner, and we feel we are constantly playing that role. Is there a place, a third space where you can go, where you're not Rebecca Heiss PhD or a wife where you can just be you?

0:07:07.3 Rebecca Heiss: Yeah. And I'm so glad you asked that. This is the third time you've kind of asked me this, once when we were talking initially once in a nice prep email. Thank you. And here I thought I would be prepared to answer this. And here I am tearing up again at this question because I just think it's so incredibly powerful. It's so easy for us to wear the masks of mom, LVT, vet, tech, spouse, book club member, whatever it is. And I will tell you, I fell into that trap in a massive, massive way for most of my life, even up to just a couple years ago. And I was racing from city to city, being Dr. Heiss, and here's my book and all the things, and I lost track of just being able to be, and I was very, very intentional in these last two years to create community here at home and fiercely protect it. So I have this incredible running group, my tribe, my intentional tribe of friends, that... They're a group of mentors, they're a group of friends. They are all the young wives, humans that I get to just be with. And it's a gift that I would wish for everyone on this place to have an opportunity to share.

0:08:21.4 Katie Berlin: Love that. Running group has served that purpose for me too. Met a lot of really amazing people through running. And there's something about being on a run with someone too, where you're just like, it's kind of like this for me. [laughter] Well, I don't have a lot boundaries anyway.

0:08:33.7 Rebecca Heiss: I don't either.

0:08:34.0 Katie Berlin: I'm always too personal. But there's some, I think the running really encourages that because you're not making eye contact, you're running next to someone, you're going through physical, something physically hard, and so there aren't a lot of walls up. And runners just talk about everything. Nothing's off limits.

0:08:53.4 Rebecca Heiss: It's so true. And I think part of it, I'm really gross. I am. I sweat profusely. I'm snot rocketing. Sorry for your viewers that I had to say that.

0:09:02.5 Katie Berlin: The back sweat.

0:09:04.5 Rebecca Heiss: But all of the bodily functions come out and you just become super human. You're just like, "Hey, here's all of me. I smell bad." And it's, I don't know. It's lovely. It really does break down all of those barriers that hold people apart in a false way. So I love it.

0:09:21.9 Katie Berlin: Yeah. And the farther the run, the more that becomes true. Ultra runners, oh my gosh.

0:09:26.0 Rebecca Heiss: That could be one mile from me, by the way. I could be one mile in some days.

0:09:33.1 Katie Berlin: Yes, for sure. You've been waiting all week to dish to these people because it's a safe space. That's really great. I'm glad you have that. And you're in Greenville, which is, has a, it's a really great running city.

0:09:46.3 Rebecca Heiss: I know. It's lovely. We've got the Swamp Rabbit Trail. Any of y'all that are listening that are in Greenville, hit me up. We'll go for a run.

0:09:52.5 Katie Berlin: So let's get into it. While you're speaking at AHA Con, which is in just couple weeks now. Oh my gosh. It's three weeks.

0:10:00.5 Rebecca Heiss: I know. That's crazy.

0:10:02.1 Katie Berlin: And you're gonna be giving the keynote, which is very exciting. Something you're apparently very used to, so we're very lucky to have you. Can you give us a kind of a high level view of what you're gonna be talking about?

0:10:13.8 Rebecca Heiss: Yeah, sure. Although I have to say I'm nervous for this one. I am really genuinely in my gut scared.

0:10:22.5 Katie Berlin: You are a professional keynote speaker.

0:10:23.5 Rebecca Heiss: It's just exciting.

0:10:24.0 Katie Berlin: Nervous for this one.

0:10:26.1 Rebecca Heiss: Let's reiterate that.

0:10:27.5 Katie Berlin: I love that.

0:10:30.0 Rebecca Heiss: I think so much of that. I'm trying a lot of new content with you all because I want this to feel, this is AHA Con. You guys have completely reinvented yourself. And I want to reinvent myself as well to match that energy. And, so I'm showing up with really fresh content, with a really fresh show. Honestly, I think this is gonna be more of a show than a keynote.

0:10:51.8 Katie Berlin: Awesome.

0:10:52.0 Rebecca Heiss: There is a lot of audience participation, and the high level overview of the content is just, it's simply that stress isn't going anywhere. It's not going anywhere. So how do we begin to work with it rather than fight it all the time? We'll go through a series of stories from my life, from other people's lives on how we can recalibrate our brains to respond differently to stress, how we can reframe those threats as challenges, and then ultimately how we can realign to allow stress to become our best friend and really work with it and have it help us in our performance rather than hinder us.

0:11:30.3 Katie Berlin: That sounds like a pipe dream, and I'm very excited to hear what you say [laughter] because I think the idea of stress being our best friend is something that... It sounds great. And also how, I'm really excited. [laughter]

0:11:44.1 Rebecca Heiss: I hear you, and I want to warn your viewers and your listeners. It's not a magic pill. It's still work. And listen, I like to get people excited about it because I am so passionate about this, and I really do believe we have the opportunity to create that stress is the best friend kind of situation. But it doesn't mean I can give you this pill and magically everything disappears. I still struggle with stress. We all struggle with stress. It's a reality of all of our lives. But there are definitely techniques that I think I can help with. So I'm excited for that too.

0:12:20.8 Katie Berlin: I'm in... Hearing you say that you're a little nervous for it. Actually, like one of the reasons I love that is because for anybody who has imposter syndrome about literally anything, you do this all the time and you're still, you still get nervous about it. You can spay a million dogs and still get a little nervous when you go in. I would honestly probably want my surgeon to be a little bit nervous. There's a lot resting on doing a good job.

0:12:45.3 Rebecca Heiss: Exactly.

0:12:47.2 Katie Berlin: But also ...

0:12:47.2 Rebecca Heiss: Exactly. I'm sorry.

0:12:49.3 Katie Berlin: When you're a little nervous, I feel like that's sometimes where the best performances come out. Because that energy just fuels you and that's good stress.

0:13:00.1 Rebecca Heiss: That's exactly it. We can talk about the whole U curve or of stress and performance, and if you have no stress, first of all, that's a dead person's goal. Nobody has no stress. But you don't want no stress. You want a little bit of stress to raise you to that highest level of performance. And in fact, the people that... Stress is really, it's a barometer for how much you care sometimes. If you really really care about something, you're gonna be really stressed about it.

0:13:24.3 Katie Berlin: That's so true.

0:13:24.7 Rebecca Heiss: And that's a really interesting way to think about things I think, because if you have zero stress, I'll tell a quick story. I used to climb trees kind of professionally.

0:13:34.5 Katie Berlin: That is...

0:13:38.1 Rebecca Heiss: I know.

0:13:38.6 Katie Berlin: That can't be a quick story.

0:13:41.5 Rebecca Heiss: I'm trying in my head to make this a quick story and I'm like, how do I not go into these details? I studied crows, the American Crows for a decade.

0:13:49.0 Katie Berlin: Wow.

0:13:51.4 Rebecca Heiss: And we had a marked population. And in order to get to the Nestlings, you have to climb these hundred foot tall trees, which actually I was doing right around Cornell, so I know a lot of your listeners probably probably were at the med school there, and they might've seen tagged birds. Those were my babies. So I remember climbing one day and I was up in the 120 feet above a gorge, and the wind is blowing and I'm right at the top of the tree, and I had zero adrenaline, I had zero stress response, and I stopped climbing that day because...

0:14:22.5 Katie Berlin: Wow.

0:14:22.7 Rebecca Heiss: What I realized is like that, those are the moments. If you're, if you have trained yourself to be that comfortable in this, in an actual life and death situation, it's a problem. That's when climbers die. So I quit climbing for a bit and had to return to it to get that adrenaline going again. Yeah, I think stress is a really important thing for a lot of reasons.

0:14:45.3 Katie Berlin: I'm just anxious. I'm anxious thinking about you at the top of that tree.

0:14:48.5 Rebecca Heiss: I know.

0:14:49.1 Katie Berlin: Just thinking about it is making my heart rate pick up a little bit. I don't do well with heights. I'm not sure that would happen to me.

0:15:00.1 Rebecca Heiss: Listen, give it some time. I promise you we can get you there. It's all about stress inoculation.

0:15:04.0 Katie Berlin: Yeah. No, I'll stay scared. That's fine.

[laughter]

0:15:08.5 Rebecca Heiss: Good thing.

0:15:08.9 Katie Berlin: You said you struggle with stress sometimes, and when we talked initially when we met and you had said that people ask you, they just assume that you don't get stressed out because you research stress and talk about it all the time. And you're like, "oh no." Can you talk about that a little bit? Like how your relationship with stress has changed and what you tell people when they say things like that?

0:15:32.1 Rebecca Heiss: Yeah, sure. The first thing that I would tell people is like, yeah, no, that's just a complete illusion. Just because somebody is an expert in it doesn't doesn't mean that they've got it all figured out. We're constantly evolving and growing ourselves. And my relationship with stress has gotten a lot better. When I first started studying it, I think we sometimes study the things that we need the most for ourselves.

0:15:55.3 Katie Berlin: True.

0:15:55.8 Rebecca Heiss: And I specifically started studying imposter syndrome and enoughness and worthiness and all of the, I literally have people clap for me for a living. So that should tell you everything you need to know about me.

0:16:09.0 Katie Berlin: Talk to any dietician, registered dietician about their relationship with food.

0:16:12.9 Rebecca Heiss: Exactly.

0:16:13.6 Katie Berlin: Most of it's coming out of a place of need, personal need.

0:16:18.9 Rebecca Heiss: Yeah. So I started studying stress because I found myself stressed out all the time, and I needed some management techniques. And what I'll say is, the techniques work, I'm a strong believer in science, I use science to my advantage, and I still lose it at times. And I think it's so important that people see that and recognize that. One of the best techniques I have for managing my own stress is granting myself quick forgiveness. It's like, I call it fast forgiveness, "okay. That happened. You got, you're really over the top, Beck, pull it back." How would you react if this was a friend? And really, giving myself a sort of emotional distance to look at the situation through the lens of my best friend and saying, "all right, what advice would you give to her? How would you treat this person who just lost their mind and needs a little coaching?" And that's been a really helpful technique for me. But I'm not, I'm certainly not perfect and I haven't achieved the zen stress, I'm like, "Ugh." Maybe run away.

0:17:30.6 Katie Berlin: I believe in better living through chemistry, but that might be taking it a little too far.

0:17:34.1 Rebecca Heiss: Exactly. I'm with you on that. Totally. Right.

0:17:39.2 Katie Berlin: We had a guest on the podcast last year, Steve Magnus, who's an author and performance coach and athlete. And he had said something about, like a technique that he talks about where you kind of talk to yourself in the third person, so you're like, Katie is feeling like she has too much on her plate and she's really regretting having overcommitted. And it's like that just that one switch helps make you think about it as like, if this were another person, you would give them so much more grace. Especially in the veterinary profession, we're such an empathic group. And yet we really struggle to turn that eye on ourselves.

0:18:21.1 Rebecca Heiss: And yet we are the hardest on ourselves. That's a big part of my keynote actually, is being able to create that space. I don't wanna give it all away, but that's...

0:18:30.6 Katie Berlin: Okay. We'll switch the subjects really quick.

0:18:32.0 Rebecca Heiss: You're spot on there. You're spot on there.

0:18:34.6 Katie Berlin: But it takes... It's one of those things where I think like when we talked before, I had mentioned Addison's disease, because to me, like the first thing I think of when you say like absence of stress is I think of the Addisonian dog that comes in with no stress hormone at all. And like, dogs do not typically like the dogs that we see in our like, especially higher end practices, like don't have particularly a stressful life, like they sit on the couch, and they go for a walk...

0:19:03.1 Rebecca Heiss: I mean...

0:19:05.1 Katie Berlin: And they get in the car, yeah, yes, yeah. My dog isn't even in here today, because he couldn't be bothered to come out from under his blanket that he's under downstairs while he's snoring softly in the middle of the day, like they don't have a stressful life. But when we say stress, when we're talking about them, we're talking about like somebody comes over, or like they're hungry and they don't have any cortisol to help them deal with that physiologic, help them go through the physiologic changes they need. And they need that. And stress is not only a part of life, it's essential for life. But it's really hard to think about that, when it comes to myself.

0:19:43.7 Rebecca Heiss: Well, yeah, I mean... Well, this is the interesting thing, right? I feel like humans are the, I won't say the only, but certainly probably the most advanced in harming ourselves, because we have such an enlarged parietal lobe, right? We are the only species that I know of, that really tells so many stories about what the stress means, that we end up hurting ourselves. So I'll quote Robert Sapolsky, and he's a, I call him the father of stress. I mean, he is an incredible stress researcher. And he talks about stresses as meant for three minutes of screaming terror Across the Savannah. After which, either you're dead, right, or the stressful event is over. And so like lions, for example, lions have an 84%, 83, 84, somewhere in that chance of failing when they hunt. That's a massive failure rate. So they have this massive stress response of like, "I'm hungry, I'm hungry, I gotta go hunt." And then they hunt and they fail.

0:20:48.3 Katie Berlin: And it's like ...

[vocalization]

0:20:49.3 Rebecca Heiss: And immediately, yeah, immediately what they do is they go to sleep,

they take a nap. And like, humans are like, "Oh my God, I failed. What does this mean? How will this affect my family? Will I be able to lo... I'm just like the worst person in the world." And like, it's the most bizarre thing. We've use this like classical conditioning response to shock ourselves literally, after we're experiencing stress. And it's such a bizarre relationship, but it's one that I'm working to try and untangle in myself and hopefully for others as well.

0:21:22.1 Katie Berlin: So I want to ask you a follow-up question on that, that I didn't prepare you for. So, but I'm...

0:21:27.1 Rebecca Heiss: Oh, good. I like it.

0:21:31.4 Katie Berlin: But I'm thinking about like, so the lion is like, "okay, everything's into this hunt. Like I'm all in and I'm like... "

0:21:37.8 Rebecca Heiss: That's it.

0:21:39.1 Katie Berlin: Running across the Savannah trying to catch this whatever, the hoofed mammal. And I don't want to get my geography and like, yes. And then it fails and they're like, "Oh, nevermind. We'll try again tomorrow. We could be hungry."

0:21:53.7 Rebecca Heiss: Got it. They gotta be hungry.

0:21:54.1 Katie Berlin: And they go to sleep. Yeah. But like, and that hoofed mammal is also like, "Oh my God, like what just happened?" And then they got a rest, right? They're not prepared for like another...

0:22:06.7 Rebecca Heiss: Chewing on something.

0:22:06.8 Katie Berlin: Another chase at that moment. They need to like chill out. And probably if somebody else were to chase them right then they would probably be dead 'cause they're tired. And for us, we know enough, like we're logical enough to say, "okay, I'm actually stressed out because I forgot to send an email." And it's not like an email saying, "please don't come to my house and kill me." It's an email being like, "I will get back to you about this next week." And so logically we know that this is not a life or death situation, but is our stress response the same or have we learned as a species to modulate that?

0:22:41.4 Rebecca Heiss: No, that is, when I talked about recalibrating the stress response, that whole first half of my talk is dedicated to exactly what you just hit on. Every single stress response we have is built for life and death. It's [0:22:55.2] _____ into that... It's like, "it's a tiger, that email, that thing, that thing... It's gonna kill me."

0:23:00.1 Katie Berlin: That makes me want to burn my email inbox.

0:23:02.0 Rebecca Heiss: Because our stress response, I mean, you all know this, like it's, stress is a highly conserved hormone. Like cortisol, you see cortisol in fish and you're looking at this really ancient response to predation essentially and major stressful events. So one of the reframes that I tell people is like when that email comes in to go, "it's not a tiger, right. This is not actually going to kill and eat me." But the logic part shuts down under stress, which is not super helpful to us.

0:23:42.1 Katie Berlin: Right.

0:23:43.3 Rebecca Heiss: Having that fight, flight response, fight, flight, freeze response. And we're going, "I got to email, the hit, the reply, all to everybody. And Oh my God, I just sent that. Oh, when I do... " It facilitates further stress and we end up in these very higher baseline levels of cortisol, with less acute responses to it because we're already operating at such a high level throughout the day that any little thing will trigger us and send us over the edge.

0:24:13.6 Katie Berlin: That makes so much sense. And it also makes me feel like a little anxious about going back to my email after this.

0:24:20.6 Rebecca Heiss: I know, I'm sorry.

0:24:21.7 Katie Berlin: But that also explains why, like if you're tired or you've just had a fight with someone or whatever, like you're less able to modulate that response before you go into that email inbox because your cortisol is already like...

0:24:37.7 Rebecca Heiss: Yeah, that's exactly it.

0:24:39.3 Katie Berlin: And your resources are depleted.

0:24:39.5 Rebecca Heiss: That's exactly it. You've nailed it. You've nailed it. So do like lion do, go take a nap.

0:24:44.1 Katie Berlin: Yes. That sounds great.

0:24:44.7 Rebecca Heiss: Go take a nap.

0:24:47.0 Katie Berlin: I'm going to try to explain that.

0:24:50.3 Rebecca Heiss: Yeah. I'm so sorry because I do tend to do this before I give solutions. I like stress people out about their own stress. I'm like, wait, wait, I'm doing the opposite thing that I'm supposed to be doing. It's okay...

0:25:00.1 Katie Berlin: Stress can be good. It can help us find solutions.

[overlapping conversation]

0:25:04.1 Rebecca Heiss: That's right. That's right. And it can. Yeah.

0:25:06.5 Katie Berlin: Well, and I don't know if you're familiar with the fear-free certification. And Fear Free teaching. Fear Free is a program that helps veterinary professionals learn how to create less stress and provide a more calm experience for animals and their owners at the vet. And there are other programs, too, that are wonderful. And I just love the whole theory behind that. I don't think I could work at a hospital where that wasn't the culture anymore because it's so much easier on us not to see our patients freaking out.

0:25:38.8 Rebecca Heiss: No kidding.

0:25:40.6 Katie Berlin: But one of the things that we talk about when we're talking to clients, not every client understands why it's important to give, say, your gabapentin to your cat before the visit, because they're like, "Why can't you just get it done?" "I can't pill him. I don't know how to do this. I forgot to give it to him." And we always tell them it's because the cat doesn't know that we're not about to kill it. The cat thinks every time it goes in that carrier, there's a good chance that this could be like, the last thing it ever sees. And we can't explain to them that all we're gonna do is trim their nails. But you're basically saying that we're the same.

0:26:15.6 Rebecca Heiss: Yeah. That's exactly...

0:26:17.1 Katie Berlin: Even though we know we're the same. [laughter]

0:26:20.1 Rebecca Heiss: Well, and here's why, right? You have 400 billion bits of information coming at you every single second. Think about 400 billion bits of information every single second, and the brain can't process all of it. So what does it do? It just passes most of it along to our subconscious to process. So all of those ancient instinct stories shortcuts, that helped us to survive for all those years are like, "oh, here's how you handle it. Enormous stress response." Yeah, exactly.

0:26:48.4 Katie Berlin: That's fantastic.

0:26:49.2 Rebecca Heiss: So really, it's about rewiring that ancient portion of our brain because we know cognitively, but we don't have the time in the day to go, "wait a second, this isn't a tiger. It's just a ping. It's just a ding. How do I process that information when 399 billion other things are coming at me?"

0:27:06.2 Katie Berlin: Yeah, that makes sense. Our forebrain is more of a slow twitch muscle there.

0:27:13.1 Rebecca Heiss: Very slow. Very slow, for all the good that it does us.

0:27:18.0 Katie Berlin: Yeah. Okay. Well, so then we're trying to overcome thousands of years of biology in order to not freak out when we get an unexpected email from our boss.

0:27:31.6 Rebecca Heiss: Right, exactly.

0:27:33.2 Katie Berlin: Cool. Cool. That's no big deal.

0:27:36.9 Rebecca Heiss: No big deal.

0:27:37.8 Katie Berlin: So we hear a lot about self-care, like yoga, meditation, things, eating right and getting out for a walk in the morning. Things that can sort of help to like, make you a little bit more zen. Is any of that going to help with the rewiring or do we need other methods to do that?

0:27:56.8 Rebecca Heiss: Everything will help. Yes. And...

0:28:02.2 Katie Berlin: And...

0:28:03.3 Rebecca Heiss: Yes and... All of those things are super important. Right. And meditation in particular. I was definitely one of those people who was like, "meditation...

0:28:11.0 Katie Berlin: Same.

0:28:11.7 Rebecca Heiss: That's so woo woo. That's like ah." And then of course I read the research and I was like, "oh, my gosh, I need this in my life." It's crazy powerful people just giving you that space to respond. And the rewiring that happens, literally, you shrink your amygdala when you meditate for 20 minutes a day for eight weeks.

0:28:33.2 Katie Berlin: Wow.

0:28:35.0 Rebecca Heiss: It's insane. And you grow your frontal lobe. So, I mean, that's from an Harvard study. I wanna say it's 2003. I hope can find it for you for show notes. But really really powerful. And I think that can work. And I think that in combination with some of the other more active rewiring is probably the most powerful. So I talk a lot about stress inoculation which you all are familiar. Give yourself the vaccine for stress, which means just like...

0:29:02.1 Katie Berlin: It's marvelous.

0:29:02.2 Rebecca Heiss: Oh, gosh, right. Well, there kind of is, though. That's the fun thing. The bad thing about the stress response is that it's so generalized, right? We get it for the emails or the tigers. The good thing about the stress response is that it's so generalized. So actually training yourself to respond a little bit less under certain stressors is really good at tamping down the entire stress response. So I will often challenge people to do what I call fearless challenges. And it can be as simple as walking down the street and giving a stranger a compliment.

0:29:33.3 Rebecca Heiss: That sounds a little bit like... I don't know. I think that would be easy. But if you put yourself in the situation and then you go try it, you might have this little flutter of your heart, like, "what will they do? What will they say? What's going to... " That's stress. That is literally your stress response going, "they might reject me. Oh, my gosh, if they reject me, if I get kicked out of this tribe, I'm going to die because I live with 20 other people... ". No, no, that's not the environment I live in. I'm totally safe. Even if they reject me I'm cool. Everything is safe. And so it's kind of this catching up of our ancient brain to the modern world. So I've got probably 300 discomfort challenges that are safe forms of discomfort to elicit a stress response in a way that we know isn't going to kill us, isn't going to harm us, isn't going to bring anything, but probably smiles to people's faces.

0:30:23.1 Rebecca Heiss: But still gets us kind of into that space where we can retrain our brain and layer down some things that our brain says, "Oh, interesting. I had a stress response and I didn't die today," right? So that when discomfort begins to find us and we're not seeking it, we've got new patterns, new neural pathways for that to go instead of going immediately to this is the worst thing ever and I'm going to die. It's like, "oh, I know what this means and it's okay. I'm still safe." That ping of that email isn't going to kill me this time.

0:30:54.3 Katie Berlin: So you're kind of training your brain to tell itself a different story.

0:30:57.8 Rebecca Heiss: Exactly.

0:31:00.0 Katie Berlin: Concerning stress.

0:31:00.2 Rebecca Heiss: It's just classical conditioning. I'll tell this, it's kind of a sad story, but one of my favorite experiments of all time, and I won't get into the epigenetic part of it, but they took male rats and classically conditioned them with cherry blossom scent. So they'd spray cherry blossoms and they'd shock the rats. And unsurprisingly very quickly, they developed a conditioning experience with the cherry blossom smell. So they could spray cherry blossom and these rats would display fear behavior. Their cortisol would go through the roof and they'd shake. And one of the things that struck me about this experiment is that we are both the rats in this case, and the people administrating the shock.

0:31:42.6 Rebecca Heiss: We're smelling cherry blossoms everywhere. In our emails, in our, in our day-to-day interactions with strangers. In that angry clients. We're smelling this thing that isn't going to kill us, is not going to hurt... Like being rejected, failing, all of those things aren't actually going to give us shocks unless we do it to ourselves. So yeah, that rewiring is pretty important.

0:32:06.3 Katie Berlin: Wow. Yeah. That's pretty crazy, that like the rats didn't even need to be shocked after a certain point because their bodies just responded exactly the same and...

0:32:17.8 Rebecca Heiss: No, here's the craziest bit of this. I got... I'm sorry to interrupt you, but I have to tell the end of the story.

0:32:21.6 Katie Berlin: No...

0:32:21.9 Rebecca Heiss: The end of the story is that these male mice were then mated to female mice who had never smelled cherry blossoms, never been exposed to the shock. And the pups of those mice, when they smelled cherry blossoms would shake and shiver.

0:32:36.6 Katie Berlin: What?

0:32:39.2 Rebecca Heiss: So this is literally like epigenetic transference of fear through...

0:32:45.0 Katie Berlin: Oh my God.

0:32:45.1 Rebecca Heiss: Through... Isn't that crazy?

0:32:46.6 Katie Berlin: Yeah.

0:32:48.0 Rebecca Heiss: So you think about trauma getting passed along from generation to generation. We've had immense traumas passed along from our ancestors that we're still shaking over today for no good reason.

0:33:01.1 Katie Berlin: Wow.

0:33:02.2 Rebecca Heiss: Isn't that crazy? I love that study so much.

0:33:04.4 Katie Berlin: Yeah. My head just exploded. I can't even, I can't even process how that, how that works or like the magnitude of what that means.

0:33:13.2 Rebecca Heiss: The implications on that. It's... Yeah.

0:33:15.2 Katie Berlin: Yes. I mean, especially when you think about like our work in DEIB and groups that have historically accumulated a lot of trauma that's been passed down. Wow. Well, that is a really interesting study. And also it, I'm assuming that what you're saying is it works the other way. That we can train ourselves not to administer the shock when we smell the cherry blossoms. And...

0:33:40.5 Rebecca Heiss: So yes.

0:33:43.1 Katie Berlin: Teach us to develop another, a different reaction.

0:33:46.7 Rebecca Heiss: The very important follow-up study, yes. Is that those, those pups were able to be un-induced, that's not the right word, but retrained, deconditioned.

0:33:56.0 Katie Berlin: Decondition, deconditioned.

0:33:57.9 Rebecca Heiss: Reconditioned. Some cognitive behavioral findings at those, but they're like... That is not the correct term, but I think you guys know what I'm saying.

0:34:05.8 Katie Berlin: Yeah, yeah, we do.

0:34:06.3 Rebecca Heiss: Reconditioned to allow 'em to escape that behavior. So yeah.

0:34:10.9 Katie Berlin: Really cool.

0:34:11.9 Rebecca Heiss: And not pass that trauma onto the next generation, which is wild. Yeah.

0:34:17.4 Katie Berlin: Yeah. I think we are hearing a lot right now in veterinary medicine about the power of the story. I mean, it seems like it's this, like storytelling and the power of stories is really becoming something that people are getting more used to talking about. And I know, I'm sort of a, I'm a liberal arts kid, so, I love storytelling, I love fiction, and I love speaking and oral storytelling, and I work for somebody... Jessica Vogel saying, is also a big fan of the story. So there's a lot of storytelling uh-huh right now, so my perception might be a little bit skewed. But do you feel like the idea of storytelling and the power that it carries, do you feel like that's becoming a little bit more something we're comfortable with thinking about?

0:35:01.3 Rebecca Heiss: Yes. And I'm so grateful for it, because I think so often science and storytelling have always been compatible, but I don't think we've always seen them that way.

0:35:12.3 Katie Berlin: So true.

0:35:13.2 Katie Berlin: I mean, we're talking about liberal arts and science and da da. And when we look at... I'll give a study that I... I won't give the one that I'll use in my keynote. I'll give a different one. There's a study on stress and health from 2012, and it looked at 20,000 people and

their mortality rates, based on stress and the perception that their stress impacts their health. So did they tell the story that their high levels of stress impacted their health? And the results were absolutely shocking. So individuals that perceived that their stress affected their health and had high stress died at a significantly higher rate, had higher mortality.

0:35:57.2 Katie Berlin: Wow.

0:35:58.0 Rebecca Heiss: However, those that had the highest level of stress but didn't tell the story, that stress was bad for their health actually had higher survivability than those people that had very low stress, which like hurts my head a little bit. So people aren't dying of stress, they're dying of the story that stress is bad for them.

0:36:23.1 Katie Berlin: That's crazy.

0:36:24.5 Rebecca Heiss: That's... Isn't that wild?

0:36:25.1 Katie Berlin: Yeah.

0:36:25.8 Rebecca Heiss: Yeah. Story is incredibly powerful. And so the stories that we tell, am I good, am I bad, am I worthy, am I enough, am I this, am I that? Do I have enough time? I mean, that's a big one. Time scarcity. Right. Another study, and again, I'll pull all these references for people that want them, but another study looked at people trying to solve puzzles, and they told one group, you have plenty of time to solve this puzzle. Not an issue. Okay? Take your time. You got this. And they told the other group, you will not be able to solve this problem, this puzzle in the amount of time that we're giving you. So they created some time scarcity. And of course, the two groups were given the exact same amount of time, but the ones who were told the story that they'd have plenty of time finished it. And those that didn't, didn't. I mean, at a significant level of difference. So, be really aware of the stories that you tell because those stories so often become your reality.

0:37:19.4 Katie Berlin: That makes me look differently at things like affirmations, which I like you as a big meditation skeptic.

0:37:26.6 Katie Berlin: I know. Oh my gosh.

0:37:28.3 Katie Berlin: We've had a couple of people on the podcast like Patty Casebolt last year, and a couple of other people who really have talked about meditation. Patty talked about the same study you did where your brain can transform after eight weeks of meditating regularly. And all of that kind of like eventually added up. And so I'm on day 150 of my Insight Timer streak.

0:37:52.1 Rebecca Heiss: Yeah. That's awesome. Congratulations.

0:37:54.5 Katie Berlin: Very excited about that. Insight Timer has a free version, so anybody listening who's like, I don't wanna pay for Headspace. I love Headspace, but it does cost money. Insight Timer has a free version, so. And we even have some, there are some veterinary specific meditations on there.

0:38:07.2 Rebecca Heiss: Nice.

0:38:09.6 Katie Berlin: Yeah. Shout out to Melyssa Allen for that.

0:38:12.4 Rebecca Heiss: Yeah. That's so cool.

0:38:12.5 Katie Berlin: But the idea of like, looking in the mirror, for instance, or like having a post-it on the mirror that you have to like repeat to yourself or the meditations on Insight Timer that have affirmations where you're supposed to repeat things like, I am supported, I trust my intuition, that kind of thing. It feels so odd to me. And...

0:38:35.1 Rebecca Heiss: I know, I know.

0:38:38.3 Katie Berlin: And yet you're saying that if we do that over and over, and we might actually really start to believe that, and that could have an actual physiologic effect on our health.

0:38:47.9 Rebecca Heiss: Yes. Yeah. The short answer is yes. And I know because I am the exact same skeptic, I actually have a course, I created a course called manifesting for skeptics and [0:38:58.8] _____ scientifics, right? Because I'm like...

[laughter]

0:39:00.7 Katie Berlin: I love that. I'm in. [laughter]

0:39:01.9 Rebecca Heiss: "I'm not gonna do that. Well, that is garbage." And then I was like, "oh, gosh, there's actual science here. Holy smokes." And so much of that is like you said the story, you tell and the other... Here's a good one that relates directly to physiology for you physio nerds out there. So identical milkshakes. This is a milkshake study. It's one of my favorites. Identical milkshakes. We tell one group of people, you're going to drink the indulgent shake, right? 520 calories. It's, oh, it's rich. It's going to be delicious. You tell the other group, this is the diet shake. It's the sensible shake, [chuckle] no problems. And of course they're identical in calories on all the things. And you have the same people sample them, about a week apart. And unsurprisingly, the indulgent shake is rated as tasting better and all of this, but here's the crazy thing. When people drink the indulgent shake, their ghrelin levels, so that hormone level, that hunger hormone level plummeted and stayed low. Whereas those that drink the sensible shake, their ghrelin levels didn't significantly change. So the story they told about whether, "Oh gosh, this is going to be such a... I'm gonna be so full."

0:40:17.8 Rebecca Heiss: I talk about sparring with yourself, right? The stories change your physiology, which changes your actions, which changes your results. And that's the secret. You want to talk about manifesting. Like that's the secret. It's the story that you tell is changing your physiology, which changes how you react to the world or show up in the world. And that changes your results. So, yeah, I think there's a lot to that, manifesting stuff. The... Okay, wait, one more quick story.

0:40:47.0 Katie Berlin: It's okay.

0:40:48.4 Rebecca Heiss: So let me, I'll turn the question on you.

0:40:51.2 Katie Berlin: Okay.

0:40:52.3 Rebecca Heiss: Have you ever been in love?

0:40:52.4 Katie Berlin: Yes.

0:40:53.8 Rebecca Heiss: Okay. So for the first week that you fell in love, or you met this great person, it doesn't have to be when you initially fell in love, but when you met that person, I kind of like, you could have had the worst week at work. It could have been pouring on you and you're just kind of like...

[vocalization]

0:41:12.0 Katie Berlin: Oh yeah.

0:41:12.2 Rebecca Heiss: Life is amazing. Everything is good. You're like checking your texts. You get that dopamine hit all day.

0:41:17.0 Katie Berlin: Totally.

0:41:18.0 Rebecca Heiss: Why? Like nothing changed. It's just the story that we're telling. Like we can create this honeymoon effect for our lives anytime we want. But sometimes it takes a trigger like, "Oh gosh, I just fell in love." And I'm just like thinking about love and I'm thinking about the positive things in life. And so you see all of the positive things in life rather than constantly being drawn to the snakes, tigers, lions, and bears oh my, that our brain naturally gets drawn towards. So sex and survival, that's what our brain is all about.

0:41:47.3 Katie Berlin: Right. Yeah.

0:41:48.7 Rebecca Heiss: [chuckle] And so I hate to break it down to those like very simple terms, but if you can focus a little bit more on the sex/happiness/like the good things in life...

0:41:58.9 Katie Berlin: In the end we're all rats, right? [laughter]

0:42:01.6 Rebecca Heiss: In the end we're all rats. I mean, isn't that the great take home message today? [laughter] But yeah, being able to focus on some of the more positive things. I am enough. You are enough. Like I feel good. Rebecca, you're amazing. You got this. Those create that kind of honeymoon effect that change our physiology and change our results.

0:42:22.0 Katie Berlin: Wow. It's so powerful. Yeah. And feels like maybe magic is real just a little bit 'cause it feels like...

0:42:32.9 Rebecca Heiss: I love it.

0:42:33.0 Katie Berlin: Yeah.

0:42:34.2 Rebecca Heiss: Yeah.

0:42:34.6 Katie Berlin: Just because there's an explanation for it physiologically doesn't make it feel any less like magic.

[laughter]

0:42:40.3 Rebecca Heiss: I know. I'll tell you, I realized this studying birds. This was a major realization for me because I have always been kind of a very logic driven, very science. If science can't explain it, then it's not real, right?

0:42:54.0 Katie Berlin: Yeah.

0:42:54.1 Rebecca Heiss: The magic that's garbage. And I remember for the first time seeing a budgie, a little budgerigar under UV light. And I was like, "Oh my goodness, there's all of these spots and the magnificent colors." And like, and they're a very drab looking bird from the outside, but you put them under UV. And I was like, "birds see that? What else am I missing?" What tools just because I can't see it or taste it or touch it or experience it. It doesn't mean that it's not real. It doesn't mean it doesn't exist. It just means I don't have the tool to quite see it as such.

0:43:33.4 Katie Berlin: Yes.

0:43:34.2 Rebecca Heiss: And so that's kind of created the magic for me that allows me to have that, hold that space to say, "Oh, just because I don't understand how it happens or why it happens.

0:43:40.6 Katie Berlin: Yeah.

0:43:41.6 Rebecca Heiss: Doesn't mean it's not happening. Yeah.

0:43:43.5 Katie Berlin: Well, I love that. And I have, I got this button for myself when I was taking my acupuncture certification, because that's how I feel about acupuncture is like...

0:43:52.2 Rebecca Heiss: Oh, cool.

0:43:53.8 Katie Berlin: It feels like magic and there are physiologic effects happening and physiologic explanations for why it works, but you don't necessarily have to understand them to see the benefits. And so I got this little button. It says, there's a bit of magic in everything because to me...

0:44:09.8 Rebecca Heiss: I love that.

0:44:14.6 Katie Berlin: It felt like it was a reconciliation between the part of my brain that wants evidence for everything and the part of my brain that fully believes that we cannot ever completely understand everything.

0:44:20.0 Rebecca Heiss: I love it.

0:44:21.1 Katie Berlin: And that, what fun would that be? Right. So.

0:44:22.8 Rebecca Heiss: Yeah.

[chuckle]

0:44:24.5 Rebecca Heiss: Absolutely. I love it. I love it. Getting comfortable in that ambiguity, I think is a really tough thing to do, but...

0:44:30.6 Katie Berlin: Yeah. But it's a nice, it's a happy place once you're there, I think. So.

[laughter]

0:44:35.2 Katie Berlin: It's like kind of it makes you feel like the world has like limitless potential which it does.

[laughter]

0:44:40.3 Rebecca Heiss: And so do you. Yeah.

0:44:42.6 Katie Berlin: Yeah. So but that's... So I have one more question before we wrap up because I know that there are a lot of people in the profession right now as you say who are feeling like they're a little bit broken or their environment is a little bit broken or very broken and they feel stuck and trapped.

0:45:01.7 Rebecca Heiss: Yeah.

0:45:02.7 Katie Berlin: And simply telling them to, tell themselves a different story is probably even if that would eventually work, it's going to be difficult to want to adopt when you feel like there's so many circumstances out of your control that are not changing.

0:45:16.7 Rebecca Heiss: Yeah.

0:45:17.9 Katie Berlin: And so I'm wondering like in a situation like that are there daily or regular exercises that you can do or habits that you can adopt that will kind of help you work through those tough situations that you can't always just leave?

0:45:32.6 Rebecca Heiss: Yeah. I'll give you my 3 2 1 liftoff. This is the technique that I used when I was probably in my darkest space. 3 2 1. So three minutes is to acknowledge the stressor. I think so often we try and push it aside. We try and ignore it. We're like, "oh, if I just ignore it enough or if I drown myself in alcohol or work or sex or the next person or the next," whatever that thing is that you just are using to escape, or yoga. I mean, listen, it can be healthy things too, right?

0:46:01.9 Katie Berlin: Yeah.

0:46:03.1 Rebecca Heiss: Like...

0:46:03.7 Katie Berlin: Running.

0:46:04.3 Rebecca Heiss: I'm just gonna yoga this... I'm gonna yoga this.

0:46:07.4 Katie Berlin: Yes.

0:46:07.5 Rebecca Heiss: I'm running, yeah. [chuckle] Yoga this away. Take three minutes and stress the heck out of it. Like think about it. Just allow yourself to feel all those feelings. I often tell people like, it's like trying to [laughter] trying to say don't think about pink elephants right now.

0:46:24.0 Katie Berlin: Yeah. That's impossible.

[laughter]

0:46:25.0 Rebecca Heiss: Stop it. Don't... Stop. Why are you doing that? You know? And we're doing the exact same thing. So name it name it to tame it. Name it, understand it, worry the heck out of it for three minutes. What that's gonna do is that's gonna get you past that initial surge of cortisol. Right? Now, we've survived the three minutes of screaming terror across the Savannah. Our next step is to give our power back to our parasympathetic nervous system, back to our conscious brain. So we're gonna take two deep breaths. And I teach a physiological sigh, which is simply breathing deeply through our nose, sipping in that last little bit of oxygen when you don't think you can take anymore and go...

[vocalization]

0:47:05.5 Rebecca Heiss: Really holding it for two counts and then releasing through your mouth. So two breaths. So we've got three minutes of worrying, two breaths to bring yourself back into that parasympathetic space.

0:47:16.3 Rebecca Heiss: And then one question, start getting curious. Ask any question. It can be about yourself. It can be about a reflective piece. It can be about the situation. It can be literally any question because what you're doing is you're kicking yourself out of fear and into curiosity. Curiosity and fear cannot coexist in the brain. It's this incredible little... There's no mechanism for it because for 200,000 plus years nobody ever looked at the charging tiger and went, "huh, I wonder how fast it's coming." Right? You don't get curious. You don't get curious when you're under a lot of stress, which is problematic. But we can use that to our advantage if we know about that to go, "oh, if I can just be curious in this moment, it'll force my brain to get back online." So start asking questions in those moments, and that might take you down a path. And again, take action on those curiosities.

0:48:09.8 Rebecca Heiss: I think often we get paralyzed in fear, which is just a freeze response. We talk about fight and flight. We often don't talk about freeze. Same reaction. You're just, you're frozen. You don't wanna take an action. It could be wrong. What if it's wrong? And then we have a whole nother another stress response over that. Then you'll know, good. Then you're no worse off. You're just back where you started. Take another path until it feels wrong. So curiosity really allows us to move within stress and not get stuck into that space where we do feel like we can't budge.

0:48:41.6 Katie Berlin: That's really interesting. I've never heard anybody talk about that technique before. And I really love that. And we are...

0:48:47.2 Rebecca Heiss: Thanks.

0:48:48.4 Katie Berlin: As a group, veterinary professionals are very curious typically. And so...

0:48:53.4 Rebecca Heiss: There it is.

0:48:55.2 Katie Berlin: But I'm sure it's very difficult for that curiosity to coexist when you feel like you're just in survival mode, like get through each day. So I really love that. Be curious.

0:49:03.1 Rebecca Heiss: Yeah. Be curious.

0:49:03.9 Katie Berlin: Awesome.

[laughter]

0:49:05.0 Katie Berlin: Well, Dr. Rebecca Heiss, thank you so much for spending this time. And I... Even if you had said your whole keynote this time, it's gonna be a completely different [laughter] experience on the stage at Aha Con. So I know we touched on some elements of it, but I have absolutely no doubt that it's gonna be magical and wonderful and really a fantastic experience. So I'm really excited for that.

0:49:29.4 Rebecca Heiss: Oh, thank you. Well, plenty more stories to come.

0:49:30.7 Katie Berlin: Excellent.

0:49:31.5 Rebecca Heiss: And if I can get my own stress under control about this...

0:49:34.9 Katie Berlin: Yeah. [laughter]

0:49:35.8 Rebecca Heiss: It's going to be great. [laughter]

0:49:36.3 Katie Berlin: Well, your passion for this material and for helping people understand this better it really comes through, it comes through the screen. So in-person is gonna be terrific. Where can people find out more about you, more about your work? I know you have a book. So.

0:49:53.2 Rebecca Heiss: I do. I have a book sitting behind me called Instinct. You can certainly read that if you want. You can find it on Amazon and Barnes & Noble and your local bookshop hopefully. My website is rebeccaheiss.com. My Instagram which is probably the most active is Dr. Rebecca Heiss. Just Dr. Rebecca Heiss. I was gonna say.com. And all of my courses can be found on Dr. Rebecca Heiss. So yeah, I'm very reachable. Please don't hesitate to reach out, ask me questions, find me. I'm here to help truly. So don't be shy.

0:50:23.3 Katie Berlin: You can't get away from us now.

[laughter]

0:50:26.6 Rebecca Heiss: That's great. I look forward to it.

[laughter]

0:50:28.0 Katie Berlin: Alright. Well, thank you so much. And we'll put links in the show notes if I miss any. Then and there's something that Rebecca talked about that she'd like to know more about, just hit me up. My email is podcast@aha.org. You can always ask me any questions that you want me to pass on to any of our guests. And I know Rebecca is one of the most responsive and excited and enthusiastic guests that we've ever had, and I love it. So I will be happy to relay messages if you have any. And for those of you who will get to see her again, we'll see you in San Diego in September. Thanks so much for listening. Rebecca, Thank you. And we will catch you next time on Central Line.