Mind & Life Podcast Transcript
Willoughby Britton - When Meditation Causes Harm
Original Air Date: October 22, 2021
Retrieved from: https://podcast.mindandlife.org/willoughby-britton/

Opening Quote – Willoughby Britton (00:00:04): Meditation, just like medication or food or exercise, has different effects on different people. The field needs to understand that measuring adverse effects is a science in itself, and it has to be done in a very specific way. And a lot of the things you learned about measuring benefits, don’t transfer. In order to have a better science, we need to start paying attention to individual differences. So I want to make sure everybody’s experience gets heard and validated and also brought into, looped into, the research so that we can make sure these practices are benefiting everyone maximally.

Intro – Wendy Hasenkamp (00:00:45): Welcome to Mind & Life. I'm Wendy Hasenkamp. This week's episode I consider somewhat of a public service announcement. You know, we hear in the media almost exclusively about the benefits of meditation—how it can bring positive change to your mind, your body, your life... And it most certainly can do those things. But we don't usually hear about when meditation leads to difficult, unpleasant, or even harmful experiences. These can range from perceptual changes to anxiety and panic, and rarely to more serious emotional and cognitive issues.

(00:01:24) So today I’m speaking with clinical researcher, Willoughby Britton, who’s been an absolute pioneer in investigating these kinds of negative outcomes of meditation. She was the first, and is still one of the very few researchers to really dig into these experiences in a rigorous way. And she’s moving the field forward by helping us understand how these experiences can show up for practitioners, who might be most at risk, how frequent they are, and their impact on people's lives. In our conversation today, we get into all of those issues, as well as how she came to be interested in this work, and how the field needs to change, to better understand, track, and address these sometimes challenging experiences.

(00:02:10) I really encourage you to listen to this episode, especially if you teach meditation in any way, but even if you just practice yourself, or people you care about practice. What we're learning is that these experiences, at least the mild forms, are likely more prevalent than we've realized as a field. So it's incumbent upon us all to learn about them and be prepared to help if they arise. At the same time, I do want to stress this information is not meant to scare you away from meditation, and I hope it doesn't. As you'll hear, Willoughby herself still believes that these practices can hold huge benefits for people. And so do I. But as a field and a community, we also need to be realistic, and stay educated about potential harms. And I should add, if you or anyone you know is experiencing these kind of difficulties related to meditation practice, Willoughby has a project dedicated to helping folks in these situations. It's called Cheetah House, and you can find a link in the show notes along with lots more information about Willoughby's work.
Lastly, I just want to say that I think it's taken real courage to shine a light on this kind of shadow side of meditation—experiences that have sometimes been easier to ignore, to sweep under the rug, to explain away. And so I deeply appreciate Willoughby's efforts to bring these issues into the light and into the conversation. Okay, I hope that you find this information valuable. It's a pleasure to share with you, Willoughby Britton.

**Wendy Hasenkamp (00:03:50):** Well, I'm here with Willoughby Britton. Willoughby, thanks so much for joining us. It's great to have you.

**Willoughby Britton (00:03:54):** Yeah, thanks for having me.

**Wendy Hasenkamp (00:03:56):** I've been really looking forward to having you on the podcast because you bring what I think is a kind of a different perspective on the experience of contemplative work. And I think it's one that's not often highlighted perhaps as much as it should be, in the media and the way these things are applied. So I'm really excited to get into talking about your work. But before we do that, I'd like to start a little bit with your own personal story and how you got interested in meditation to begin with.

**Willoughby Britton (00:04:25):** Yeah. I mean, I think like a lot of people I was one of those kids that just had a lot of questions. I think at a very early age I was asking things like, is today tomorrow? What's looking out of my eyes? I was really fascinated by questions of consciousness, and my parents really did not know what to do with me. And I think how I intersected with meditation specifically... This is a fast forward now to my college years, I had a friend in college that committed suicide. And it was a very terrible, traumatic, devastating experience, and I really had no idea how to work with that. And medication was just not something that I wanted to do. And my dad sent me a book by Jack Kornfield, A Path with Heart. And the first half of that was all about just various kinds of difficulties that come up in the mind, and it just really resonated with me. And I think I carried that book around with me like a Bible for, I don't know, a decade. That was my gateway drug, A Path with Heart. [laughter]

(00:05:43) And then I had a sort of dual life for a while. So I was a neuroscience major. I was still always interested in the same question, which was, what is consciousness? What is it for? What are we doing here? Very basic questions. And somehow I thought that neuroscience would answer those questions. And so, I was a neuroscience major in college, but strangely enough, neuroscientists at least at that point, really did not want to touch consciousness at all. It was kind of like a four letter word. And so, I double majored in philosophy. And I ended up actually going to India, to Dharamsala, and studying Tibetan Buddhism and going along more religious orientations to ask the same questions. And they had a lot more to say about consciousness than neuroscientists did. So I had this sort of dual life.

(00:06:39) And then I came back from India and I worked at the National Institute on Drug Abuse, in Baltimore. Because one way to alter your consciousness is with drugs. And so, I tortured rats for a while, and had a lot of ethical dilemmas around that. And actually there was a very important moment when I was working at NIH where we were sacrificing the rats. And I was making little beds for them. And one of my colleagues was preparing the guillotine, and we overdosed them with Nembutal, and their eyes start to turn clear. And I was having this really powerful moment with like, okay, whatever the animating principle this animal is, it's about to disappear. And I was having this strong sense of, where does it go?
Where does it go? And I said to this colleague, "God, where does it go?" And she said, "Oh, they go in the freezer in 215."

**Wendy Hasenkamp (00:07:49):** Oh my gosh.

**Willoughby Britton (00:07:50):** And I was like, "Okay, I'm done. This is the end of my time at NIH." And I remember Googling consciousness all over the internet and I ended up, I kept getting this link for Tucson, Arizona. And I was like, what is...? And I kept avoiding it. And eventually I clicked on it and I was this huge consciousness conference. And so I was like, I feel called to this conference; and I went. And that is when I discovered that there was an entire world out there of scientists who were interested in asking these questions. And even better, there was a school, the University of Arizona, that was very open to answering these types of questions, and that I could actually go there.

(00:08:37) And so, that was how I ended up at the University of Arizona. I did my degree in clinical psychology, and actually specialized in sleep—which was a "legal" way that everybody alters their consciousness every day, and it also happens to be involved in practically every part of health and well-being and everything else. And then I ended up doing my dissertation on the effects of meditation on sleep.

**Wendy Hasenkamp (00:09:09):** Very cool. And then, so now you've spent your more recent career studying some of the negative side effects or outcomes that can happen with meditation practice. So what drew you in that direction?

**Willoughby Britton (00:09:22):** So actually that first study that I did on meditation and sleep, started that trajectory. So I think like many people, I had very universally positive expectations that meditation was relaxing, it's a kind of relaxation technique, it must improve sleep. These were objectives measurements of sleep, and it was going to be one of the first studies to demonstrate empirically, objectively with brain waves, that mindfulness meditation improved sleep. And I spent 200 nights measuring people's sleep. And when it was all said and done, the meditation group had every index of cortical arousal that you could imagine. They had less slow wave sleep, less deep sleep. More faster brainwaves, so more awakenings, more Stage 1. And not only that, it was actually correlated 0.8 (a very, very strong correlation), the more you meditate the more cortical arousal. So I was pretty horrified when the data came in and actually, it seemed like such the wrong answer that I didn't publish it. For many, many years I just sat on the data. So there's my first confession. [laughter]

(00:10:55) And then during that time I was on a meditation retreat and I was telling a teacher about the findings. And the teacher said, "I don't know why you psychologists are always trying to make meditation into a relaxation technique. Everyone knows if you meditate enough, you stop sleeping."

(00:11:18) So that really shocked me. And I thought, one, what other assumptions are we making? [I was] somebody who had really no training in the history of, or where these practices come from, what they were originally designed for, and just kind of buying into all the marketing without really any critical analysis, and applying that to my science. So what other assumptions are we making? And then the second question was, what other information are meditation teachers sitting on that we should be asking them, as researchers? And so, that was really the beginning of the Varieties of Contemplative Experience study—which was really just going to meditation teachers and asking them, what types of challenges have you observed in your students? And what do you do about it?
And so, there was one other thing that happened in between, which was when I came to Brown to do my residency, there’s a very famous inpatient psychiatric hospital, Butler Hospital. And while I was doing my residency, there were two yogis that had become psychotic on retreats nearby. And they ended up in this hospital. And so, I thought, wow, two in one year seems like a lot. So I went back to the same teacher and said, “Have you ever seen meditation-induced psychosis?” And it was clear that that was not a surprise. That they knew about that, too. And so then I was like, okay, we really need to sit down with these teachers and really mine their wisdom, and find out what they know.

And so, in 2007 we launched the Varieties of Contemplative Experience study, and went to various meditation center—that I knew and had practiced at, so I had already had some connections—and simply asked the directors and various teachers there, what types of meditation-related challenges have you observed? How do you make sense of them? What interpretive frameworks do you use to interpret them, and appraise what they are? And then how do you respond?

So, what was interesting about that, was that the teachers would begin to talk about their students, but then they would very naturally slip into, "Well, when it happened to me..." And so, actually many of the teachers that we interviewed, thinking that they would be speaking as teachers, actually ended up as subjects talking about their own experience. So in the end, we had 60 people talking about their own experience, and 60% of those were actually meditation teachers.

Wendy Hasenkamp (00:14:14): Oh, wow. I didn't realize that.

Willoughby Britton (00:14:16): Yeah. I mean, we had a separate set of interviews with teachers and other experts that were being interviewed as experts, so they spoke about others.

Wendy Hasenkamp (00:14:24): Right. And also I know that you, at some point in this trajectory, developed an organization, a home for people who are having these kind of really difficult problems related to meditation, where they could come and stay called Cheetah House. Can you talk a little bit about that? And how did that layer into your research questions and experience?

Willoughby Britton (00:14:46): Yeah. So the history of Cheetah House is on the Cheetah House website, so people can go and read the longer version. But basically, so I am faculty at Brown University, and we have one of the oldest concentrations in Contemplative Studies, I think ever. And so, we have courses at Brown that have meditation labs in them. So students get credit for learning types of practices, and it's extremely popular. And so, what ends up happening, and this is back in 2008, was that students would start to get really interested in contemplative practices, contemplative philosophy, and they would leave Brown and they would ordain, in India. And then they would come back to Brown and they'd want to go back to school, but they'd be celibate. They wouldn’t do drugs. They were not taking intoxicants. They would be silent for a lot of the time. They're studying Sanskrit. And Brown wanted to put them in the dorms. Where nobody's celibate or abstaining from anything. And so, basically, I have this old Victorian House that's about six blocks away from Brown campus, and has a couple extra floors on it. And so, I was in a position to be able to create a space, a community space, where students that were either moving into or out of some kind of monastic lifestyle would have a place to have community and have their lifestyle supported.

(00:16:29) So that was the original Cheetah House vision, was to support Brown students. But the idea was pretty popular outside of Brown students. So other people who were interested in sort of transitioning or living a semi-monastic life could do that here. And then when we started the Varieties of
Contemplative Experience study, we would be interviewing people and they would say, "I just got out of the hospital. I'm living with my parents. I'm 27. I can't work yet, but I don't really want to be in the hospital either." And so, it also just kind of became an organic transition for people who had had difficulties. A lot of them met the first criteria, which was that they were transitioning out of monastic life, just in a fairly traumatic way. And so, some of them had been on retreat and just needed time to integrate whatever they had experienced. And so, Cheetah House provided a residential space for that for about five years. So I'd say between 2008 and 2015 people could live here, and have their practice supported or have their integration supported. And there's lots to say about that type of model and how... It's a great model, but it was unfeasible. And so, Cheetah House is now entirely online, it's international. And we meet in Zoom rooms like everyone else.

**Wendy Hasenkamp (00:18:10):** And so, that first study that you mentioned, the Varieties of Contemplative Experience, what did that reveal? You said it was really in-depth interviews with about 60 folks who were reporting these difficulties...?

**Willoughby Britton (00:18:21):** So I think we did a little over 90 interviews. So 60 of those were people talking about their our own experience. And then there were 33, I think, experts, or people who are either teachers or clinicians or both. So that yielded 3,000 pages of transcripts. So we're still working on what those are, but we did publish a sort of overview study in 2017 in PLOS ONE, where we basically published two code books. Code books are ways of organizing qualitative information. And so, the first code book was phenomenology, which are, what are the possible challenges? And we arranged that in seven domains of human experience. So things like affect or emotions, bodily or somatic experiences, cognitive experiences, sense of self, conative or motivation, and social, perceptual, things like that.

**Wendy Hasenkamp (00:19:32):** Just to give a flavor maybe, can you give some examples of these kinds of experiences?

**Willoughby Britton (00:19:35):** Yeah, yeah. So I think probably the most common one that I think most people can relate to are changes in perceptual sensitivity. So things like, colors get brighter. You start to notice the clock ticking on the wall. There's certain kinds of... Just, you become more sensitive, in a multimodal sensory way. And I think this is also a good example of some of the, why appraisal became such an important part of the interview and the study, because perceptual sensitivity is pretty awesome. It's one of my favorite parts of practice, is that you get a little kick in sensory... it's called hypochromia. Everything gets richer and certain colors get richer. The sound dimension can be really cool when you're in nature and you hear all the birds and you hear the river and you hear the wind, and it's how lovely that is. And how quickly that can change when you come home to the city, and you hear every car door slam. And when the truck goes by, you feel it vibrating through your body. Same exact experience, but now suddenly it's very unpleasant, and can be interfering with your ability to function.

(00:20:58) And so, what one of the main take home lessons that we learned from that study was that no experience is really inherently adverse or negative. But that the valence can really flip at any time. And so, you have to really watch, it's not a stable trait of the experience. And so, the same experience can flip valence in the same person. Similarly, the same experience or similar experiences can be appraised as positive or negative by different people depending on their cultural context, or their goals, or their orientation of definitions of well-being. So that was a very tricky part. And I think one that is especially apparent in meditation studies and research, because meditation has many different goals and many different contexts that it's being practiced in.
(00:22:01) But when I wrote this second paper, it's an under-appreciated dimension of harms monitoring in general—that there's lots of side effects of medications that can flip valence very easily. For example, when you take cold medicine, like the kind that makes you sleepy, that's not the intended effect of the drug. It's meant help you with your congestion. And it's considered an adverse effect when you take it in the morning when you're trying to be awake. But a lot of people take antihistamines and these types of drugs on planes so they make sure they sleep to their destination, or they just use them at bedtime to sleep better. And so, again, same exact experience. The phenomenology is the same, and whether it's desirable or not can change within the same person. So, a really, really important piece of that study. And I know I digressed into that-

**Wendy Hasenkamp (00:23:03):** No, no problem.

**Willoughby Britton (00:23:03):** ...and I can go back to the phenomenology, because that's a really important piece of the other things that happen. So perceptual sensitivity, that's a really common one. The ones that tend to be appraised as more unpleasant are things like anxiety, panic, fear. Those were the most common. And I would say in all of the work that I've done in different populations, continue to be the most common. So of things on the anxiety spectrum... You know, emotions can get louder or softer. So you can see increases in emotional liability, emotional reactivity, just every emotion can be sensitized, just like your senses. But you can also see the opposite happen. So you can also see a loss of emotion, emotional blunting, more kind of flat, loss of motivation, types of things. On the more serious side, we have seen people develop symptoms that clinicians would categorize as psychosis or mania, and often require hospitalization.

**Wendy Hasenkamp (00:24:21):** And those are more rare, you said?

**Willoughby Britton (00:24:23):** We just recently did an epidemiological study, so we have a better sense of some of the frequencies. With the Varieties project, it wasn't set up to really measure frequency. So within the 60 people, we can get a sense of, what's relatively more or less common. And again, I'm sort of drawing from two different populations—one was the people that we recruited in the Varieties project, which were primarily Buddhist meditators from the three different schools of Buddhism, and then within Cheetah House, we get a steady stream of meditators from all various types of programs and products. And so, it does seem like the people who end up having psychotic reactions is maybe one in 50. Compared to, all the other ones tend to be more dysregulated arousal, perceptual hypersensitivity, pain syndromes, anxiety, panic, and dissociation. Those are much, much more common.

**Wendy Hasenkamp (00:25:25):** And when you say one in 50, do you mean one in 50 of the people that you have been working with? Or of anyone who would meditate?

**Willoughby Britton (00:25:33):** Yeah. So when you get to the questions of frequency, just a general rule is that the frequencies are going to radically change depending on how you measure them and what your denominator is. So in response to your question, one out of every 50 people that show up at Cheetah House, that sign up for a consultation at Cheetah House, have had some kind of psychotic symptoms.

**Wendy Hasenkamp (00:26:01):** Okay.
Willoughby Britton (00:26:01): Yeah. But that is not in any way a reflection of meditators in general. So make sure people hear that.

Wendy Hasenkamp (00:26:08): Right. These are already people who are having issues.

Willoughby Britton (00:26:11): Right.

(00:26:11) – musical interlude –

Wendy Hasenkamp (00:26:31): Do you have a sense of the mechanism of any of these issues, given all of your prior work in neuroscience and thinking about arousal systems and... particularly since anxiety and panic and fear are such a common experience around meditation, what is your sense of what's going on there?

Willoughby Britton (00:26:52): You know, when I initially started this I thought, oh man, I'm going to have to have this entire new research agenda. It's going to take 20 years to figure out why these things happen. But I actually think the mechanisms that I've been studying for the last 20 years for the benefits, are the same as for the adverse effects, just in some ways overtrained. And so, I did write a paper about this called Can Mindfulness Be Too Much of a Good Thing? And it takes on the idea of the inverted U-shaped curve where anything, when taken to an extreme, will start to have diminishing returns or trade-offs.

(00:27:44) So I'll give you an example, actually, from my own research. So I spent most of my time in meditation research looking at, how do mindfulness-based intervention specifically, how can they be used to improve mood disorders, dysregulated emotion problems like anxiety and depression? And I focused a lot on prefrontal control over the limbic system. So that was kind of my main jam for 20 years, and got lots of grants to do that. And it looks like certain types of meditation practice are pretty good at strengthening prefrontal control over the limbic system, and that will really help people will be able to regulate their emotions. There's lots and lots of converging data for that, which is great. But what if you keep going? What if you keep training, and keep regulating... What if you overregulate your limbic system and your amygdala? Is that possible? And so, then I found, I discovered that if you look at the neural correlates of dissociation, which is one of the things we were seeing as a result of meditation, and is characterized by a very flat effect—people are not experiencing their emotions as strongly—it has almost identical neural correlates to what I was touting as the mechanism of all the benefits, which is very strong prefrontal activation, and consequently a down-regulation of the limbic system and the amygdala.

Wendy Hasenkamp (00:29:22): Interesting.

Willoughby Britton (00:29:23): So that's one possibility of how somebody could become dissociated and blunted. In terms of anxiety... You know, I think we came up with 59 separate categories in the Varieties project. So it's possible that we have 59 mechanisms to work out, but I don't think so. I think a lot of them come together. So for anxiety, I think one of the places to look is the insula cortex. So if you look, often we talk about the insula cortex and interception as being like, you can never have enough body awareness. And if you pay attention to your body and do body scans and focus on your breathing, and really just bring attention to the sensory dimensions of your experience, then everything will be better because you won't be engaged in thinking as much. That's kind of the model that I was taught. But if you look at the RDoC criteria for anxiety (which is sort of the NIH's plan to try to map out all the ways we can
biologically map certain states and certain problems), you'll see that insula activation is highly correlated with all kinds of different anxiety-related issues. Anxiety, panic disorder, flashbacks, are all associated with high levels of insula activation.

(00:30:54) And we know that having very strong interceptive accuracy, doesn't always pan out to be more beneficial for your well-being. It can often be associated with anxiety proneness. And we've heard a lot from now, there's a whole kind of movement in trauma-informed modifications and trauma-informed mindfulness that if have a trauma history and you're prone to anxiety, that doing body-based meditation practices might be contraindicated. That the more time you spend focusing on your body, that can really amp up the insula and kind of amp up all of your emotional intensity. Which it sort of makes sense that, if you're having anxiety, where does that exist in your experience? Well, often in the midline of your body. It's probably not in your hands so much, in your feet. But it's somewhere between your chin and your waist, and often in the midline. And then often we're taught to focus on our breathing, which is right in the midline of our bodies. And so, for a lot of people, focusing on the breathing is very calming. But for people who already have anxiety in their bodies, putting your attention right where the anxiety is, it just amplifies it. And it amplifies it not only in our experience, but also in our brains. Because we're basically increasing our sensory representation, and intensity. So there's another possible mechanism.

Wendy Hasenkamp (00:32:35): Yeah. And is that similar to what you would think, too, about perceptual sensitivity being increased?

Willoughby Britton (00:32:42): So I have a whole bunch of different models. Actually the first... So here's my second confession. My second confession is that I ended up marrying my co-author, Jared Lindahl. And the way that that happened was that, his dissertation was on experiences of light and luminosity in both Christian and Buddhist contemplative practices, which is super cool. One of the side effects that we documented, one of the first ones within the Varieties project was experiences of light and luminosity. So these little—in Tibetan they're called tigles, and in Theravada Buddhism and they're called nimittas—where there's these little lights, or like, stars.

Wendy Hasenkamp (00:33:28): You see with your eyes closed, or?

Willoughby Britton (00:33:31): Eyes closed, eyes open.

Wendy Hasenkamp (00:33:32): Okay.

Willoughby Britton (00:33:34): Some might call them hallucinations, but they're a very well known phenomenology. And so, Jared and I got together to write a paper about, why would meditation cause these experiences? So I took the neurobiology on and Jared took on, how do the various different traditions make sense of them? And what do they mean? So in that paper, and you're going to have to have so many links to different papers...

Wendy Hasenkamp (00:34:02): Yes. We will link to all these, which is great.

Willoughby Britton (00:34:05): So that was the 2014 paper on meditation-induced light experiences. We come up with a theory called homeostatic neuroplasticity. And so, the idea behind that is that there are certain dimensions of meditation practice that mimic the dimensions of sensory deprivation. So for example, we're sitting still, so we have a kinesthetic deprivation. Our eyes are closed, or we're having a
fixed gaze. You don't tend to look around very much. You're in a silent room, hopefully. And then one of the most important parts that we added was, that concentration itself has a "sensory gating" effect. And so, I think when you concentrate on something, so let's say you focus on the breath, your attention is going to this one dimension of your experience, this one sensation. But it's actually blocking out everything else. And that blocking effect actually has sort of a sensory gating effect. And so, based on what we know from sensory deprivation studies in animals and in people who have... The military actually did some amazing sensory deprivation studies actually with Donald Hebb, and they were very well funded. So we know a lot about what happens in sensory deprivation in humans. And so, what happens is the brain tends to have a certain level of stimulation that it likes—sort of a set point of stimulation. And if you block that, it will counteract that by up-regulating itself.

Wendy Hasenkamp (00:35:49): It'll like create it, but on its own.

Willoughby Britton (00:35:51): Yeah. I mean, if you think about, if you go into a dark room for a long enough period time and then you say, "My eyes adjust." And then you walk outside, and it's very bright. That's a very good example. It will up-regulate itself. So when you concentrate and you do these other sort of forms of pseudo-deprivation, all the areas of your brain that were getting gated or blocked, are going to up-regulate. And so, that could be any area of the brain. So we tend to notice that in sensory ways, but there's no reason that it couldn't be an emotional dimension of the brain where you would have disinhibition of the limbic system—and that would manifest as flashbacks, sudden flooding of emotions. We described it in this paper as, when you have gating of the visual system, the first thing you have when you start to have an up-regulation and sensitivity is, colors get brighter, perceptual sensitivity, all the fun stuff. But then if you continue to have this deprivation, you start to have hallucinations. Because basically, the up-regulation of the neuron actually will start to spontaneously fire, eventually will spontaneously fire, and that will be experienced as a hallucination. And that's what we're seeing basically, that these nimittas and these tigles, these starlike light processes, are basically (and this is across traditions), it's a sign that your concentration's getting good.

Wendy Hasenkamp (00:37:36): Hmm, wow. Because you're so narrowed, and blocking it, yeah.

Willoughby Britton (00:37:40): Yeah. And because your brain is showing that you're basically really good at blocking your visual systems' input. So that's another idea—that with a lot of concentration practice, you can start to see these disinhibition type, analogous to visual hallucinations, but in different systems. We also see motor spontaneous firings, which show up as ticks, convulsions, jerks, things like that. So again, this is just an informed possibility.

Wendy Hasenkamp (00:38:18): Yeah. This is a little bit of the sidebar, but it's making me think of—is this the same mechanism for tinnitus, when people have a ringing in the ears? That's also a hallucination, right?

Willoughby Britton (00:38:30): So, yep. So tinnitus is another one of the more unpleasant side effects. So people tend to have auditory hypersensitivity first, where they notice the clock ticking, and then it generalizes to this sort of spontaneous firing of auditory neurons, and causes this ringing. So yep, that is a general thing that happens. And I think, in addition to the homeostatic neuroplasticity, which is a very general kind of concentration-based practice, there have been a lot of studies on non-habituation, which is also called sensitization. So typically when you have repeated stimuli, the brain tends to habituate, it stops responding to them. But we know that in meditators, that habituation process doesn't always happen. Meditation itself can prevent habituation.
And in the book *Altered Traits*, there's a quote from Richie [Davidson] who says, "Oh, habituation makes life dull. And non-habituation keeps things fresh." But there was a study actually done by Sara Lazar's group at Harvard where the stimuli that they were experimenting with were actually electric shocks. And so, meditators did not habituate to electric shocks. And they interpreted that as, they kept the "freshness" of the stimuli. And I'm thinking, wait a second, some things you want to habituate to.

**Wendy Hasenkamp (00:40:05):** Right. That's not necessarily something you want to keep the freshness of. [laughter]

**Willoughby Britton (00:40:09):** Yeah. So that's another possible mechanism to keep an eye on, is this non-habituation. If you look, it's often portrayed as being this really beneficial thing, and I think it can be. But if you look into the clinical literature around non-habituation, it tends to be something that is associated with a lot of psychiatric issues. So it doesn't tend to be a very positive thing to cultivate.

**00:40:35** — *musical interlude* —

**Wendy Hasenkamp (00:41:06):** So, now fast forward a little bit, and you have two more recent papers continuing this line of work. One in particular, getting even more rigorous and looking at how we can evaluate these types of outcomes in a more systematic way as we're delivering these interventions. Do you want to share some of those findings?

**Willoughby Britton (00:41:26):** Sure. So I think the first paper, which was called *Defining and Measuring Meditation-related Adverse Effects in the Context of Mindfulness-based Programs*, was really a replication study of the Varieties project. And I think it came out of the question that we got a lot, which was, okay, the Varieties project occurred in meditators often doing long retreats, and who were Buddhist. And how does that transfer, or does it transfer, to the secular mindfulness programs? And so, we basically took the code book from the Varieties project and at the very, very end of a randomized clinical trial—it was actually a dismantling study looking at mindfulness-based cognitive therapy, and then comparing that to focused attention only, and open monitoring only. So there were kind of single practice, eight-week programs. And then at week 20, so the very, very last thing we did was we asked them, we basically read them the code book, and asked them if they had had any of these experiences. And we were very careful to have them grade them, or rate them, or appraise them themselves. And not call them adverse effects. But rather say, did you have any changes in your perceptual sensitivity? And if they said yes, was that positive, negative or neutral? We called that valence. So when it was happening, was it positive, negative, or neutral? And then we also asked a separate question, which was, what was the impact on your life? Because sometimes you can have a really negative experience in meditation, but it ends up eventually becoming really healing or really positive. So we wanted to make sure that we separated out those things.

**00:43:22** And so, while I was thinking about that study, and designing it and collecting the data, it just became apparent that... There was actually a study published this year, a meta-analysis by Miguel Farias where he went through 7,000 different meditation studies, and he found that only 1% of them even mentioned adverse effects.

**Wendy Hasenkamp (00:43:46):** Exactly, yeah. This is such an important issue that your work raises is that, usually this isn't even asked about, right, in all these studies?
Willoughby Britton (00:43:55): Right. And I mean, okay, here’s my third confession. [laughter] Third confession is, often you have to have some kind of statement about adverse effects in your studies. And so, I never measured adverse effects. I just assumed there weren’t any, and no one ever said anything. So I would just make a statement, like "There were no adverse effects in the study." And that's what everybody does. And now, fast forward 10 years, I'm horrified that I just stated there are no adverse effects, but I actually never measured them. And that's actually exactly how we've been doing things.

(00:44:31) And so, I think that part of the impetus behind this paper was, the field needs to understand that measuring adverse effects is a science in itself, and it has to be done in a very specific way. And a lot of the things you learned about measuring benefits, don't transfer. So I think everybody wants to talk about the results of the paper, but I want to spend a lot of time focusing on Table 1, which was 24 different guidelines on how to properly measure adverse effects. And one of them, most importantly is, don't assume that your patients or your research subjects are going to spontaneously tell you that they had an adverse effect. In fact, they're not. In fact, they might even lie. So you need to, we have to be systematic. You have to ask each person. The person who's asking the questions needs to be somebody other than the teacher.

Wendy Hasenkamp (00:45:28): Because there's a pressure to report positive stuff, yeah.

Willoughby Britton (00:45:32): Yeah. We want to be the "good meditator," we want to please the teacher. We also definitely don't want to tell the teacher that whatever they're doing is harming us. So it needs to be an independent person outside of that, or at least a questionnaire, which actually helps a lot with the face-to-face problems. And you also don't want to ask people... And again, I've done this in my own—I'm a mindfulness teacher—a classic situation is that everybody comes back for the week and you ask, "Did anyone have any challenges this week?" And it's like crickets. Because nobody's going to announce it in front of everybody else. So it also needs to be private.

Wendy Hasenkamp (00:46:12): Yeah. I feel like there's also a sense in that context of feeling like, "Well, I must not be doing it right." Or, "I'm a failure because I'm having these issues." And so, that's also... There's a shame around it or something.

Willoughby Britton (00:46:23): Well, and it's sort of just like, it's this echo chamber that reverberates and strengthens itself, because people have never heard of adverse effects. And so, they're like, "Well, I've never heard of this before. Therefore if I'm having it, there must be something wrong with me, and I'm doing something wrong. So I just won't say anything." And the teachers have never heard of it either. And so, that's one piece.

(00:46:43) Then the next piece is that you need to ask specific questions. You can't just ask... So in our study, and this is sort of the first result, was the first thing we did is we asked them, did you have any unexpected, unpleasant, adverse effects as a result of your meditation practice in this program? And most people, when you ask them an open-ended question like that, they say no. But then when you follow up with specific questions, then it changes. So you can't ask open-ended questions either. I think the open-ended question underestimated the frequency by about 70%.

(00:47:28) So in terms of the actual sort of numbers... which I will say again, don't focus too much on the numbers. Whenever you see a frequency, I think the most important information to know right now about frequency is that it's not zero. That any study that's looking at meditation-related adverse effects
is finding some, and the exact numbers are going to depend on a lot of factors. So don't focus too much on the exact numbers. So with that major caveat, I will now recite the numbers.

(00:48:05) Which is, the first number was, did the category replicate? So did the person report that they had had a category from the VCE [Varieties] project as a result of their meditation practice in the context of this mindfulness-based cognitive therapy program.

**Wendy Hasenkamp (00:48:24):** So, was the same stuff coming up for the Buddhist meditators and these [practitioners]?

**Willoughby Britton (00:48:28):** Right. But we didn't say anything about valence. So, were people having perceptual hypersensitivity? And it doesn't matter whether it was positive, negative, or neutral. Whether it was the best thing ever or the worst thing ever. It was just, was the category present? And so, we found that 83% of the sample (and you can check the numbers on the paper, but I think it's... it was a very high number), experienced at least one category from the Varieties project, and that more than 80% of the categories in the VCE project replicated. So that first point is: many of the same experiences that are being reported as potentially challenging in advanced meditators or people in Buddhist retreat settings are replicating in the context of mindfulness-based programs. Fortunately, some of the things that did not replicate where the more serious experiences related to psychosis, delusions, and mania. So they did tend to be milder and shorter in duration.

(00:49:40) So the next category was, what percentage of people had a negatively valanced experience? And I think it was about 58%. And by the way, a negatively valenced experience—I do not consider an adverse effect. Or as a clinician, I don't worry about that. That's just like a transient negative experience. If you're not having that in your meditation practice, you're sleeping. [laughter].

(00:50:10) But I think more importantly is, how is your practice and the experiences in your practice affecting your life off the cushion? So I'm much more interested in the category that we looked at, negative impact. And I think 38% reported an experience that had some kind of negative impact on their life. And that included anything that was a change in behavior. So, "I didn't want to meditate anymore. I wanted to meditate less. I had to change my practice. I had to take an aspirin." A really common one was, "I didn't feel safe to drive."

**Wendy Hasenkamp (00:50:48):** Because of perceptual issues?

**Willoughby Britton (00:50:50):** Well, "I felt a little spaced out and a little kind of, not 100%. So I took a walk around the block a couple of times." Or, "I had a friend pick me up." This happened actually on the retreat day. And by the way, I never knew about it. I was one of the teachers, no one ever told me that they were walking around the block, around Brown, trying to sort of "sober up" after the retreat. No one ever told me that. I had to find out after an independent person interviewed them.

(00:51:24) And then the last thing was that we were trying to find some conversation with other studies, particularly around psychotherapy. And so, there was a very famous study by Crawford in 2016 that they asked people about "lasting bad effects" from psychotherapy. They didn't define lasting bad effects. They just asked people if they'd had them. So we use those same words, but we just decided to really define it. Although, it was unclear exactly what "lasting" was. So we decided to give three different definitions. So: at least a day, at least a week or at least a month, were our three levels of lasting. And then a "bad effect" was anything that had a negative impact on life or functioning. And so, we ended up
with final numbers of 6-15% had lasting bad effects. Which by the way, is almost identical to what the Crawford study and subsequent studies of adverse effects in psychotherapy have found.

**Wendy Hasenkamp (00:52:32):** Interesting.

**Willoughby Britton (00:52:32):** So we loosely, tentatively concluded that the rates of lasting bad effects in mindfulness programs are in the same ballpark as what we’re seeing in psychotherapy. So that was another sort of take home message.

**00:52** And I think probably the most important message that I think is not going to change so much—like it's not as dependent as the frequency numbers—is, what were the exact experiences that were coming up? Kind of as clinicians, as meditators, what do we need to worry about? And the answer was largely, dysregulated arousal. So we're seeing anxiety, agitation, involuntary movements, perceptual hypersensitivity, kind of on the hyper arousal side of things. Flashbacks, traumatic re-experiencing. And then on the dissociation side, emotional blunting, just feeling spacey and checked out, and having some disturbances and sense of self.

**Wendy Hasenkamp (00:53:46):** Hmm. Which goes back to your original work on sleep, right, with the more arousal...

**Willoughby Britton (00:53:51):** Yep. So insomnia was also one of the hyper arousal symptoms. So based on that, I was able to—or actually, around the same time when that data came out, another friend of mine, the director of the Mindfulness Center at Brown, Eric Loucks, he gave me the challenge... He's like, "Okay, I want to measure adverse effects in my randomized controlled trial." But he really didn't want to burden the participants. And so, he gave me the challenge of: you have to make a questionnaire that is only 10 items long, and they have to be PROMISE items, (which is the Patient Reported Outcome Measures from the NIH toolbox). So they have to be validated measures that are already out there. And so, I created a 10-item scale with those parameters. So they're all validated items from the PROMISE toolbox. But they were also based on the most common and also the most problematic categories that came up within this mindfulness-based program study. And the reason I'm telling you this is because that is the questionnaire that Simon Goldberg used in his study. And so, we can maybe transition over to that study unless you have-

**Wendy Hasenkamp (00:55:10):** Yeah, yeah. That was a more large population-based study, right?

**Willoughby Britton (00:55:13):** Yeah. And you can interview Simon and Richie about the backstory behind that. But I think, again, we don't really know... I mean, everybody asks, what is the frequency of these meditation-related adverse effects? And we really don't know. And one of the problems is because of the sampling, of the denominator. And so, our study doesn't help because we sampled people based on, have you ever had a meditation-related adverse effect? So it was 100% in our study, that's not going to help. Some of the other studies—there's one by Marco Schlosser and [unclear]—they did multi-country online questionnaires, but they sampled regular meditators. And I don't know if that was something that was very specifically defined, but I think it was more than once a week or something like that. And so, within whatever a regular meditator is, within regular meditators, unpleasant or adverse effects were reported, actually in both studies, by 25% of meditators. So within that sample, we have a kind of a hit rate of 25%. But if you sample people who have more practice experience, you're going to elevate the numbers. And so, I'm guessing that Richie and Simon wanted to get the most
representative sample, which is basically anyone who's tried meditation even once. That's pretty representative.

(00:56:58) Yeah, so Simon reached out to me and asked about, "How do we measure these things correctly?" Which is really great, because I was like, "Oh, I have so much to tell you." And I spent hours just filling his head with everything I learned, and all the pitfalls, and also, I had this questionnaire pretty much ready to go. So he used that questionnaire. And I'm not quite as familiar with the data from that study, so you have to double check me on this. But I think that there were a couple of things to learn. One, just to notice that the way that meditation was defined by the National Health Survey, which is a lot of different kinds of meditation. It's not just mindfulness or Buddhist meditation, so it includes Christian forms of meditation, and also all the app use and that kind of thing. So it's a very, very broad definition of meditation, and we haven't looked more closely at which types we're talking about. So just want to put that caveat in there.

Wendy Hasenkamp (00:58:05): Okay, yeah.

Willoughby Britton (00:58:06): I think one of the things that came out of that study that was pretty surprising was, based on the epidemiological sample, about 50%, I think it was 49%, of the sample had meditated at least once. So I mean, we've all been watching these various National Health Survey numbers over the years. And there was one in 2012, and the numbers keep jumping, right? But now this is the highest one so far. So, half of the population of the US has tried meditation at least once? Wow.

Wendy Hasenkamp (00:58:41): Right. Based on this survey. Yeah.

Willoughby Britton (00:58:44): So that was a finding that I thought was pretty striking. And I think that half of the sample, about the same amount, had also reported at least one negative experience from meditation. And again, I'm not sure I care that much about unpleasant experiences, because I think they're pretty common. But we did ask about impairment. And so, 10% of that sample reported that they'd had a meditation-related experience that had resulted in impairment in functioning. So I think when you're talking about numbers and you do an epidemiological sample, I think that they're a little bit more reliable. Especially because there was more than 500 people in the study.

Wendy Hasenkamp (00:59:32): Right.

Willoughby Britton (00:59:33): So 10%. And then, the other number that I remember was, how many people have impairment in functioning that lasts more than a month? Which was kind of my definition of what harm is, or lasting bad effects. And that number was 1.2%. So again, the numbers are not zero.

Wendy Hasenkamp (00:59:57): Right. I think, yeah, it's clear that's the main take home, is this is happening in communities of people who are practicing. So how do, now stepping back, knowing this—and I feel like you've really shined such a light on this important piece of this experience that, like we've been talking about, is just not reported often, but people may be struggling with it silently—how do you balance that kind of caution or awareness with your general thoughts about the benefits of contemplative practice? How do you think through that?

Willoughby Britton (01:00:32): I think, this U-shaped curve paper really kind of takes a model that can accommodate both the benefits and the adverse effects. And it's really just that... I think when people first interface with my research, often it's like, you're saying meditation is bad, or something. It's a very
black and white, either/or kind of thing. And it's like, no, there's room for everybody here. It's more like a diversity approach where meditation, just like medication or food or exercise or whatever, has different effects on different people. Of course it does.

(01:01:14) And that, in order to have a better science, we need to start paying attention to individual differences. In fact, in order to have an ethical science and an ethical practice, we need to start paying attention to individual differences. And so, I think, yeah, I mean, there's always been an ethical dimension to this and this has been something that has sort of carried over from my practice. But it started to bother me that we have historically reported our results in forms of averages. And that, especially in treatment studies where, if your treatment group is a standard deviation better than the control group, then you say it "works." And you're sort of only representing a certain subgroup of your sample, who are kind of the privileged subgroup—the people who got better.

(01:02:05) But in every study, there are people that didn't get better. And there are people that got worse. And in some ways the use of averages, I mean this is going to be a strong statement, but it's kind of like, it's a form of systemic oppression and silencing of certain perspectives and experiences. And so, to some extent I want to make sure everybody's experience gets heard and validated and also brought into, looped into, the research so that we can make sure these practices are benefiting everyone maximally.

(01:02:38) — musical interlude –

Wendy Hasenkamp (01:03:05): You've been now offering trainings, too, for clinicians and folks who are teaching mindfulness or applying mindfulness in their work, to try to get them aware of this and have them start measuring it?

Willoughby Britton (01:03:16): Yep. So I partner with David Treleaven, who wrote the book Trauma-Sensitive Mindfulness, and Jared Lindal, who specializes in the history and cognitive science of religion and really brings in the sort of Buddhist piece. We offer a 20-hour training called First, Do No Harm. And we've given that training to most of the mindfulness centers all over the world—so UMass, UCLA, UCSD, all throughout Canada, all throughout Europe. And we also do custom versions that are shorter. So if your organization is interested in getting trained... And we're actually training The Nature Conservancy right now.

Wendy Hasenkamp (01:04:00): Oh, great.

Willoughby Britton (01:04:01): Yeah. So we offer trainings for different groups. Also apps. So one of the other findings from the Goldberg study, so this was the epidemiological study, was that when you get big numbers, you can actually look at risk factors. And we found that trauma history, early trauma history was a risk factor. And was app use. And I think most people now, their introduction to meditation now is through apps. And the fact that that's a risk factor for adverse effects, I don't think it's surprising because there's basically no teacher and no supervision and no help. And also no tailoring.

Wendy Hasenkamp (01:04:47): Yeah. No individual [customization].

Willoughby Britton (01:04:48): Yeah. But I think at Cheetah House we've had, in 2020 we had 20,000 people visit. So 20,000 unique visitors to the website. And then in 2021, we're seeing about 5,000 or
6,000 people a month. So there's definitely an interest. And I'd say, it used to be that the main people that asked for help were Goenka retreatants.

**Wendy Hasenkamp (01:05:19):** Which is a very intense style of meditation retreat.

**Willoughby Britton (01:05:23):** Right. So people who go on very intense retreats where you're meditating 15, 16 hours a day, that used to be our main group of people. And I'd say that they're still coming, but we're also getting a lot more app users.

**Wendy Hasenkamp (01:05:37):** And that's really interesting because app users, I would assume, are not meditating that long per day. So it's not necessarily a duration-related factor.

**Willoughby Britton (01:05:48):** Well, you'd be surprised.

**Wendy Hasenkamp (01:05:50):** Really?

**Willoughby Britton (01:05:50):** I think it's a huge range, and that's actually the next set of research that we want to do is just... So I'll just back up a little bit, just in terms of the narrative arc. When we published the Varieties of Contemplative Experience study, this was basically the first big study on meditation-related challenges, the lab phone started ringing. And I was running a clinical trial at the time and we actually had to turn off the phone, because it was starting to interfere with our research. And it started ringing and ringing. And I started talking to people—one a week, two a week, three a week, four a week, it started climbing. And to the point where I actually had to create a nonprofit and start training staff to start handling the volume of people that were requesting help.

**Wendy Hasenkamp (01:06:42):** And that's now Cheetah House?

**Willoughby Britton (01:06:43):** That's now Cheetah House. And we run two support groups a week, right now I think we've had people from 26 different countries check in with us. We have consultations, lots and lots of videos, and content like that. I mean, we're still growing but it's definitely... we're having a hard time keeping up with the volume.

**Wendy Hasenkamp (01:07:11):** Yeah, wow. I have a question coming up when thinking about the rise in app use, and the lack of a teacher and any kind of customization or working on a personal level. What's your sense of the importance of working with a teacher? And then also, how do different teachers contextualize these experiences based on the tradition? Because I know sometimes in certain forms or lineages, really difficult experiences can just be viewed as "part of the path" or, you just kind of power through it. And so what's been your experience with that perspective?

**Willoughby Britton (01:07:50):** So, yeah. So I think backing up, and this is actually, there's a big section in the Varieties paper about how different Buddhist traditions appraise different types of challenges. And it's by no means a consensus. So for example, with the nimitta, with the star-like lights—some traditions are like, "Don't worry about it, don't focus on it, you're not special." Kind of Zen. Just like, don't make anything about these experiences. They call them makyo. Other traditions would be like, "Oh, you have the nimitta, this is very important! Now forget about the breath. Now, focus on the nimitta." It's a big deal. And then there are certain types of experiences in certain traditions that require medical treatment, and meditation is not the way forward. So it's a big range. So that's traditional Buddhist textual support.
Now, you've come into, let's say America... MBSR or Spirit Rock or IMS or any of these Buddhist centers or pseudo-secular Buddhist-derived programs. And it's not entirely clear like what context you're in. So when you go to Spirit Rock for a retreat, are you in Theravada Mahasi style? Which lineage are you in? Because different lineages even within the Theravada system have different viewpoints on these different [experiences]. And so, often they have a mishmash of different types of teachers from different lineages, sometimes even Tibetan teachers. And then, which one did you sign up for? As the participant, do you know which lineage you're in?

So I think that that's a really confusing place that we're in, because I think that meditation is this confluence of religion (clearly very firmly on the religion side), and then there's also the psychology, secular, neuroscience, medical side, and then there's everything in between. And there's a spectrum of appraisals that go with these experiences. And so, I think it's an unsolved question. I think you're asking a hornet's nest of questions. Because it's just, how do you appraise these things is not a simple...

And so, we actually have two other papers that I can refer you to. One is called *Progress or Pathology*, and we actually interviewed the teachers. Let's see... *Progress or Pathology? Differential Diagnosis and Intervention Criteria for Meditation-related Challenges: Perspectives from Buddhist Meditation Teachers and Practitioners*. So we did ask the teachers in the Varieties project, exactly this question, how do you tell the difference between, or how do you appraise these experiences? And where's the line? Where do you say, "Keep going. I know it's hard, but just keep going. And this is part of the practice. This is part of healing." And when do you say, "Ooh, yeah, no. Stop. Do something different." And we were hoping that we would get this amazing consensus statement. And that is not what we found at all. There was absolutely no consensus at all. And so, we basically have come to a place of pluralism.

But also, from the ethical standpoint, one that really is client-centered or person-centered, which is that—to some extent, it's not the teacher that makes the decision by themselves. You really need to consider what the goals are of the person whose experience it is. You can tell them, "Oh, don't worry. These panic attacks and fear are part of the third stage of X X path in the Buddhist model." And they're like, "I don't care. I don't want to have panic attacks. I came here for peace and calm." So I see this happening a lot where the meditation teacher often misapplies a kind of Buddhist or spiritual lens and says, "This is part of the path," or "This is expected," or "This is part of awakening." And the person is like, "Well, that's a total mismatch for what I'm doing here." So I think that that's a really important place that we need to pay attention to. And that's a really big place that we unpack in the trainings. And actually we're about to do another training at the Barre Center for Buddhist Studies, where I'm sure we'll spend a lot of time unpacking this very issue. Because having your experience misunderstood, and in some ways dismissed, by the people who are trying to take care of you, is a form of secondary traumatization. And I know the teachers are, this is what they've been taught, and they're trying to normalize it. And so, it's just like, it's with all good intentions, they're traumatizing people. So it's a really, really important question.

So the first paper is *Progress or Pathology*. And then there's another paper that we wrote, it's called *Challenging and Adverse Meditation Experiences: Toward a Person-Centered Approach*. And we wrote that with my personal rockstar, Lawrence Kirmayer, who basically the creator of cross-cultural, transcultural psychiatry.

Willoughby Britton (01:13:39): Yeah. So that one is in *The Oxford Handbook of Meditation*. (All of these are available on my Brown website.) That one talks a lot about the issues of appraisal and that... You know, I see a lot of times people go into the appraisal kind of mindset, and they end up sort of having this philosophical question about what is, and isn't an adverse effect. Meanwhile this person is freaking out. And so, I think we need to ground this discussion in compassion. It's a very, very difficult philosophical question, but I think the ethics of making sure the person is cared for and needs to lead the charge.

Wendy Hasenkamp (01:14:22): Yeah, absolutely. So do you have kind of take homes or advice from all of your work and from this perspective— both maybe for teachers of mindfulness or contemplative practice and for people who are practicing?

Willoughby Britton (01:14:39): I mean, I think one of the places that I have ended up... And this whole journey has been very surprising, like I asked, are there adverse effects of meditation? And then that ended up being an incredibly complicated question. So just the whole thing has been a maze. But I think one of the places that I've ended up is, I spend a lot of time teaching people how to interact with spiritual systems, spiritual or meditation systems. Because I think that often they don't really know what they want. And the promises and the claims are very elaborate, and also kind of vague. And the people making the claims are very compelling, and they're really likable. And so, there's just this kind of magnetism, but it's not really that well thought out.

(01:15:39) And so, often people end up jumping into a practice very intensely with a lot of expectations about what it's going to do for them. And they never really checked in at the beginning, and maybe made a list of like, what does well-being mean to you exactly? How would you know that this practice is taking you in the right direction? And just really write down what your goals are, and where you're not going to compromise. And so, for example, I see people who, when I do this exercise with them and I say, "What does well-being look like to you? What is your goal? How do you want to be? What does better look like?", they say, "I really want to feel connected to other people and the world." And I'm like, "Well, what practice are you doing?" "Well, I focus on my breathing." For how long? "Oh, hours and hours and hours a day. I focus on the feeling of the changes in temperature in my nostrils." I'm like, "Okay. So how is that making you feel connected to other people? Do you even see any other people?" The practice and the goal are such a mismatch.

(01:16:54) One thing I think people don't really appreciate is how many contemplative practices there are out there. Mindfulness has only one of a million different kinds of practices. And it can't do everything, despite all the hype. It has a very specific set of things that it's really good at. And it's really good thing to have in your toolbox. But if you're looking for connection with other people, focusing on your breath might not be the one to do. And so, I think that's where having a teacher, or a guide of some kind, is helpful—to help you match your practice to your goals.

(01:17:31) But I think more importantly is to make sure you have your goals, and to not compromise on them. And to feel confident to say, "Yeah, this isn't getting me where I want to go, I'm going to try something else." Because I think there's a lot of power dynamics, and authorities, and various ways that people lose their agency when they step into these systems. Even MBSR, even secular systems, they default to the teachers, they default to the goals of a much deeper Buddhist ideology, and they sort of forget themselves. So I spent a lot of time at Cheetah House and in the support groups—people kind of feel like they need to come back to themselves again and sort of start over, and try to interface with
practices in a way that is actually going to meet their needs. And one of the things they say that I'll just end with, that they came up with on their own was, asking themselves the question, "Is my practice serving me, or am I serving my practice?"

**Wendy Hasenkamp (01:18:30):** That's great. Well, this has been wonderful. I really appreciate you taking the time. And I so appreciate all of your work in this space. I think it's so important for the field, and as these practices continue to be taken up in our culture. So thank you, deep bows of gratitude. And yeah, just thanks for being here.

**Willoughby Britton (01:18:49):** Yeah, thanks. Good to see you.

**Outro – Wendy Hasenkamp (01:18:57):** This episode was supported in part by Inspera Health. Show notes and resources for this and other episodes can be found at podcast.mindandlife.org. This episode was edited and produced by me and Phil Walker. Music on the show is from Blue Dot Sessions and Universal. If you enjoyed this episode, please rate and review us on Apple Podcasts, and share it with a friend. If something in this conversation sparked insight for you, we'd love to know about it. You can send an email or voice memo to podcast@mindandlife.org. Mind & Life is a production of the Mind & Life Institute. Visit us@mindandlife.org, where you can learn more about how we bridge science and contemplative wisdom to foster insight and inspire action towards flourishing. There, you can also support our work, including this podcast.