Opening on Identity and Integration

And I think on the more implicit side is creating a context in which the person can start to see a possibility of a different version of themself. And what, where's the gap between where you see yourself now and this other possible version yourself?

What could we do to, to close that gap? Where are things that we can. Start to embody or things we could start thinking about that, that create the bridge between, you know, between this, this version over yourself that you are suffering with now, and another version, of yourself, That you can potentially envision.

Welcome to the To Curious MD podcast. I'm Dr. Ali Ahmed. And I am Dr Surya Rapan. With the wisdom from holistic, alternative, and these conventional medicines, we are here to challenge the status quo.

We're curious about the connectivity and complexity between diverse fields of knowledge as it relates to consciousness, chronic illness, mental health, resilience and beyond.

learning more about the art and science of healing, or listening to stories of extraordinary healing. You're in the right place. Let's dive in. Welcome to the Two Curious MDs podcast with your host Dr.

Alia Ahmed and Dr Surya Rahman. Today we have Dr A. Z. A. Alsup is an artist, neuroscientist, and psychiatrist who researches social cognition, music mindfulness, His artistic research and clinical work are guided by the belief that decoding these tools will provide a better understanding of how social groups function and offer insights into treating mental suffering and enhancing the evolution of society at large.

AZA studied biology, jazz, and philosophy at North Carolina Central University, who says you can't do all three. Kids, are you listening? I received his graduate training from the Harvard MIT MD PhD program and was an Emerson scholar at Berkeley College of Medicine.

I'm mouthful. He completed clinical training in psychiatry at Yale with a certification in psychedelic assisted therapy and research. He's currently an assistant professor at Yale and Howard University and Director of the Center for Collective Healing.

He is also a medical director of The Rest Crisis Center. Dr. AZA has co-founded several companies that combine arts, science, spirituality, and community building to drive social change and facilitate the healing process.

Welcome, Dr Aza. We're so delighted to have you. Thank you for being here. You're welcome. Yeah, thanks for having me. Excited to have the conversation.

Absolutely. Get to know each other a little better. So just so our audience can get to you a bit, I'm just going to start right at the origins. You've been called a physician, scientist, and musician.

How do you introduce yourself when people ask?

Medicine, Music, and Becoming AZA

So what do Yeah, it sometimes varies depending on the context, but more and more I introduce myself as an artist and physician scientist, like in that order, because I think more, and I want to embody the values of an artists in how I approach my work as a physician scientists and how approach in my life, I thing in general.

And so that more more is the way that I introduced myself across all contexts. But I still think it's still a process in terms of how these different parts integrate within the various structures and confines that I have to navigate in

these different systems, which I think reward and devalue different parts of myself.

And so I mean, that's an ongoing process. Absolutely. I feel like I want to ask the next question. Was there a moment early on that made you realize that medicine and music could be part of the same thing?

Yes. And so, I mean, these things have always been passions of mine from as early as I can remember, and I always had exposure to these different ideas.

I think in a very tangible way I first found out or I had the idea that these could fit together as a first year medical student. There was a conference on music and the brain.

It was run through the neurology department. There's a guy there called Goshfried Schlag, who did a couple of studies in music for rehabilitation of stroke.

And there were some other people there just presenting on these different ideas. I was like, OK, that was the first time where the connection between the biological implications and potential health implications of music were made clear.

But I didn't really have any training pathways that made it something that I felt like I could do or access in that time. And so I would say it wasn't until residency in psychiatry where I really started to integrate myself as an artist and myself, as a physician scientist in the work that was doing both as, uh, a resident, but also as.

And what was that like? Who were your partners in that? How did you find your way to that, Malia? I'll let you. Well, I'm curious. The word that you used was integration.

So how did bring that integration into, you know, coalescence or, integration is always to make something whole. And I am curious about how that actually evolved.

So I think it certainly started and continues to be an internally driven process. And so like, the more that I can reconcile and integrate those parts of myself, I found that external pathways became more visible or accessible by which I could then integrate them in my career.

but it took me first stepping into that identity through my intentions and through words and my actions before there was very clear career pathways for that integration.

And so I think that internal process of saying, okay, I know these two things are inside of me. How do they fit inside me, first? And how do I find the courage to embrace Especially, I think, embracing myself as an artist because it is a very vulnerable, role.

And I thing to embrace it in the context of being a physician scientist within an academic context, also requires stepping outside of the box to some extent.

Although there's so many doctors and scientists that are musicians and have had that training, it still somehow seems to be this thing that is not more widely embraced.

It's like there's a corpus callosectomy. Like there is a split between the two sides. You go to work, it's severance. So you can't be a musician here, you cannot be doctor here.

When you talk to so many doctors and scientists, they are artists, like they've played music as kids. They love to play their music. even if they don't feel like they can be as active in it because of their career choice, it's something that they have training in and something they actually really enjoy.

And so yeah, I think that internal integration really has created a pathway now where my career can support that process in a way that it didn't really feel that way in the beginning.

When this occurred, when this idea of integrating these two things, was there something going on in your life that triggered that effect? Or was it just the academic exposure that you described?

Was this more of a personal, like, I need to do this because it's a personally driven cause? I think it is a coalescing of both processes. A lot of this process really came to, I think, a head or to like a change point in med school, to coming towards near the end of medschool.

And so I, think in my personal life, like going through different changes and my family, and I really wanting to come to a better sense of who I was as a person and like my identity and what I wanted to do in the world.

coming towards the end of med school and being like, okay, I have to really, like this is going to be my career. What is it that I really want, you know, and how can I do this?

And, do I, have what it takes? I had the ability to pursue both of these things that have continued to pursuit up until that point. But I realized that for me to really continue to pursue it, it would require me, to kind of embody these things in a new way.

And that was actually when I became AZA. That was me making a decision of really embracing who I was as an artist, as a core part of my identity and something that I wasn't going to be willing to give up in order to be considered like a serious doctor or a scientist that was really going to have to find a way to make these things fit in an explicit way.

And so I think those different parts of just my own self-development and that process of self actualization and self realization that I was on, and obviously there's a huge spiritual component to that as well.

Naming, Community, and Self-Realization

But that pathway and how it converged with the change in You know, going from my PhD back into medical school and realizing, all right, I'm almost done with this, like really long process.

What am I really going to do, you know? With this. And then like I said, yeah, was going through like a divorce at that time. There were changes in my life, personal life also happening that I think all kind of like converged, at, that.

So what is the story of your name? And does this come in at the time as well as you described? Yeah, and so, you know, it's like in that process of becoming an artist and figuring out like, what did I want my name to be?

I wanted it to something new and the power of that, but I also wanted to kind of be linked to who I had been before. And so my middle name, which was, my parents were going to make it my first name but then they felt like it might be too something my kids might make fun of me for or it might just be something that biases people against me.

So they gave me the nice Greek Anglo-Saxon name, I guess, Steven, right? But Azariah was my middle name and it means God has helped. And from that idea and concept, I was really thinking about this idea of life cycles and our ability to recreate ourselves.

And so it's like going from A, Z to A. In some ways, as you recreate yourself, there are all these core parts of you that just come back around kind of to the surface, but maybe in a new form.

This was my way of symbolically trying to embody all those ideas and concepts as I figured out who I wanted to be as an artist. Wow, that's just a beautiful narrative about yourself and again the integration of yourself as your identity and then the symbolic representation of that with the letters, right?

It makes so much beautiful sense. There's a lot of thought that you've put into that. naming of yourself. So when you did, was there kind of like a coming out moment?

What was that like to kind come out with that? And then I'm thinking you were in the thick of medical training. Who

was your community? How did you reach for that because we can't do things like this, these big internal changes that lead to external changes.

It's really interesting when we were both asking a similar question that there's an internal and a corresponding external aspect to it and you beautifully brought it together how it starts internally and then it shows up externally.

So we know that this active process happening and so there is a crucible. Who is your crucible? as you were going through this? Yeah, I think certainly my family, you know, both my kind of family of origin, but then my extended family and the community in Boston that had both artists as well as like a few really great friends in the medical program and then the graduate graduate programs that I was in there.

And then my church community, I've been a church musician pretty much my entire life. So I as music director at a Church at that time and co-directing some youth choirs and things like that.

That was also just a beautiful space to be able to kind of have that acceptance. And there wasn't just one moment, but it's like, some of my very first close friends, I kind showed them some my original music when we were going through this process.

They were just really, really encouraging and validating of like yeah, you've been doing music your whole life. You've always loved music. It only makes sense for you to be an artist in this way.

And I'd already been a professional musician at the time, just hadn't put out any real original music or go in that sense. I think the decision moment was, what am I going to do in the hospital?

To what extent would I go by this name in a hospital setting as a medical student? And so I feel like that was the testing ground. And I do remember being in my first rotation after I started going by this name and had started working on my mixtape and what would be my 1st album, which came out the end of that 30-year medical school choices.

The first day of the rotation, everyone was kind of going around saying their name. It was my turn and I said AZA. It was okay. Like there wasn't this huge, like in my mind, I had built it up to this thing where it's like, i'm going to have to, have this like long conversation about it, or I'm gonna have, to like defend it in some way.

And it was just like AZA. I was like oh, okay, how is that spelled? A-Z-A. Oh, Okay. All right, AZA, nice to meet you. I just kept going and it was like, that was it, right?

And then like there would be people who might ask me like oh, like is that your, you know, how did you come up with that name or, ask for the background of it and I'll say, I can tell them about my music and things like that.

And even how I described it I think in the beginning, there was a bit of self-consciousness and like. There's so much that went into the process. of me becoming AZA that it can sometimes in a very superficial interaction like an introduction it, can be difficult to really summarize like this is why this, is my name right so I've always struggled with like okay what's a easy way to say why I'm called this but give the depth to it, but not have to go into the complexity and nuance that is also underlying that.

So those are some of the moments I felt like after a while I just became normative. Basically, by the time I was in residency, everyone knew me as AZA.

And today, only people that really call me Steven are like my really like family who've known me for like a really long time. My wife who's known from since I was 12, you know, she'll, reference me in that way and close friends.

But most people don't even know that as my, know my original name in the sense. such a beautiful story into identity that I think we can see that and patients get better, right?

There's a sense of new identity and I'm curious to know how do you apply what you've embodied and what do

experience through this integration with patients and also music and building that in terms of a modality for treatment, is that something you do or imply into the care that you provide?

Yeah, I think, and there are ways that it can be implied in a very implicit, subtle way. And there ways I can made very explicit. I mean, you both mentioned, the theme of narrative medicine and the power of storytelling in how we make sense of our identity, how shift our identities.

As an artist, at the core of that is telling a story, telling your story telling other story. Telling your community story and so on the more explicit end, having Having people engage in creative songwriting and that sort of work is a tool for identity development, identity modification and change and how they write their theory of change.

And I think on the more implicit side is creating a context in which the person can start to see a possibility of a different version of themselves. And where's the gap between where you see yourself now and this other possible version of yourself?

What could we do to close that gap? Where are things that we can start to embody or things we could start thinking about that create the bridge between this version yourself that you are suffering with now, and another version that yourself you can potentially envision?

Now, when did you come into psychedelics? Like you were finishing Psychiatry Residency, like, and how does that all kind of, you know, add to the mix here of what we've just discussed?

Yeah, yeah. So definitely viewing Psychiatric Resgency was really where I started to kind be more exposed to psychedelics from a therapeutic and ceremonial context.

Using Music in Clinical Care

And so I think for me, the potential was really immediately recognizable from the therapeutic context and from more even community-based societal evolution, sort of spiritual development context, And yeah, I wanted to know more and so pursued training and pursued opportunities where I could begin to facilitate and understand just how to work with people in those states of consciousness and how they can be leveraged.

you know, therapeutically. And I think that, yeah, it's been a really exciting time to, again, think about this surely from a clinical context, but also from more societal and spiritual, like ceremonial context.

which is the term music mindfulness in psychedelic treatments. Tell us more about what that means so our audience can kind of get an idea of this as a diagnostic tool or as treatment tool.

What would music-mindfulness mean to a patient? Yeah, so music mindfulness can mean a few different things, but it's an umbrella term that describes activities, interventions, in which we are combining elements of music listening or music participation or musical creation with various kinds of mindfulness activities.

And there are a number of different ways that one can do that. In my lab, we've sort of pioneered a very specific version of this that focuses on focused attention and motivation and scripts and music to support both of those processes.

And I think the idea and what we're seeing is that you can tap into unique networks and physiological states when you combine music with mindfulness than when do music by itself or mindfulness by yourself.

Now, we already have evidence that both of those things by themselves can have like positive therapeutic impact. And there's this unique sort of potential synergy that one gets when you combine these two things in the same modality.

I think when it comes to psychedelics, it almost sort super ignites that process in that now you have an intersection of, I thinks, three mutually interacting variables in a sense, right?

Like the music we know influences the way that one will experience a psychedelic journey and can be a very important therapeutic component of that. We know that mindfulness activities and the degree of mindfulness someone brings to an experience also will modulate and modify how they will like experience that psychedelics and psychedelcs will influence the ways in which one can engage in mindfulness and the same way psychedelics, you know, modify the way that we perceive, music, even from a sensory component.

And so I think the interaction of those things and they way they show up within a psychedelic process, the more that, we can understand it, I thing the, more we, can leverage it in a really powerful way.

I love this line. I'm going to read this from the paper that was just published in February of 2025 because in the findings and the results of discussion, it said, both live and virtual music mindfulness sessions also acutely reduce stress and alter participants' state of consciousness.

However, only live sessions foster social connection. I love that, however, only life sessions fostered social connection. Just to remember that life, music matters.

It's not just the listening. And I loved how you parsed that out. That's huge. I think that really speaks to why kids need music in school. Stop cutting music programs.

Right? I really think it supports some of the interventions that we're trying to do on the ground level. You know, in this experiment, we have the live session and then we're live streaming the life session.

So the people on the virtual end are getting it in real time and they know that it's happening in, real-time with the other people in the Live group. And then, you have a live chat where they can interact.

And so I think it's a pretty good control, right? I obviously think more experiments and things like that need to be done, but it does seem that there is this unique sort of social benefit to the live experience that you don't get from a virtual experience, even when the virtual does have some therapeutic value in terms of stress reduction and enhancing mindfulness.

We talked about this in one of our workshops, which was this concept of entrainment and the entraiment of the different types of entraiment. And when you have a collective kind of entertainment, use music to kind help with that rhythmic harmonic kind connection.

You know, when we play in an orchestra or if you play different instruments and it's collectively heard and then there's a physical connection to that experience.

I mean, there's so many different layers to entrainment, right? And that social entrapment is also a big factor to what seems like what you're describing, which is very interesting to hear how that can be applicable in psychedelics.

And one of the questions that I have with patients is, and I ask them, what is your relationship to music? Because music is important. Sometimes when they do their sessions, knowing that they have a certain relationship is what can be a guide to assess how are they going to interpret the sound in that altered state of consciousness.

What would be your thoughts on that concept of preparing a patient for a session, say, and trying to access their relationship to music and how it would applicable or beneficial or not to the treatment?

I think the scientific data is still out on that, so I'll speak more from anecdotal and experiential context and my experience in the field. I thing that understanding a person's musical preferences and musical triggers is a good way of ensuring that you maximize the potential therapeutic benefit of you know, a playlist or whatever the musical experience will be.

I don't think that all musical triggers need to be avoided. And I do think there are ways in which certain emotions that might arise due to certain musical stimuli are actually a good part of the process for them to work with.

So I think it really is based on the therapeutic relationship and like when you make those kinds of decisions. don't have a lot of familiar music in the psychedelic playlist.

If you do have familiar, music is sort of after the peak of the experience. And so, you know, I think those are some of. The guiding points and I. Think sort.

Of understanding the person's own musical experience and like I, think for musicians or people who have who. Have a certain way of listening to music.

how that shows up in a psychedelic session, you know, maybe different than someone who, who maybe doesn't listen to music with as much of awareness or doesn' have as much of a conceptual framework about what's happening in different kinds of music.

So I think I like to have a playlist that is pretty broad in terms of genres and composer and world representations. And I do bring in certain aspects of And we'll even have some familiar songs later on near the end of the journey.

Yeah, you're absolutely right. And I tell patients, if you notice something in the session that you are feeling with sound, just lean into that because sometimes that's an important place.

If there's some resistance or sense of resistance, or like, what is that? I don't really want that.

Psychedelics, Entrainment, and Sound

Or just trusting that there is a reason why you have this kind of resistance or antagonism with that sound that there must be something there and to just kind of trust that and lean into that.

And it opens up another door sometimes to something that brought back that feeling. I have a clinical question actually. So this is an interesting, you know, when you talk about this complicated structure of music and then you'd talk, about a complicated of our cognitive apparatus and some of the ways in which we've combined psychedelics like ketamine with sound has been through sound bowls or doing a particular sound healing.

And one case that really stands up for me was a person with what looked to be CRPS, chronic regional pain syndrome in their foot post-surgery at a nerve bundle, which was such debilitating pain that it was disabling.

We were able to actually combine the two and something happened at that interface. of the nerve endings with the music and the ketamine. What's your understanding of what's happening at that kind of microscopic juncture and what can we surmise from what we know?

Yeah, so there was a really interesting study recently that showed if you align, now I don't remember all the details, I want to get it wrong, but essentially if your align TMS pulses to the beat of a certain music stimulus that someone's listening to, you basically can enhance the efficacy of the Tms.

And so it does show that there's this temporal kind of entrainment, you mentioned the word entainment. This temporal entraiment that happens that allows certain neural circuits to maybe communicate better or integrate information in a more precise way.

And I think a leading sort of mechanistic framework for the action of psychedelics is this idea of plasticity. And so I think with certain kinds of music, you're basically exciting and activating particular circuits that then sort of set the energetic landscape for where plasticity is going to happen most rigorously.

And that is gonna set a biological framework for what kind of psychological improvements a person can make. In our lab, we're working on a theory called pattern entrainment, which basically says there are cells in the brain that does do pattern encoding.

And so they recognize certain patterns in acoustic stimuli, and they're trying to keep track of those. Then there's

cells that can be entrained at specific frequencies.

And the integration of this information in the cortex is what might allow us to really then access particular subcortical networks or particular cognitive networks that can lead to sort of the wide range of cognitive and emotional effects music can have.

which also brings me like the case of, I have cases of patients often with tinnitus, right? And I've had patients who have benefited with treatments with tenitis, with ketamine treatment and music, and they feel like there's something that happens, where they disengage from that disturbance of that sound or the constant dysregulated signaling, that harmonics kind of improve, and this is just a theory, there's no science or backing to this, but it's just kind what we observed.

I had another patient who had a cochlear rupture because she held her sneeze and her cochlea was completely ruptured. And so she had sound treatment. We actually did actual ketamine treatment with sound therapy.

And again, she reported that that frustration that she has with movement because of the association to the cochlear and the instability that you felt was much improved.

Again, this is just subjectively assessed. What would be your thoughts on that and using this in other forms of hearing disorders or conditions that occur with psychedelics and ketamine or other substances that help in this aspect of treatment.

So I don't have a very clear model. One of the things that I'm thinking about though is this idea of which you brought up, which is being able to sort of have an orientation towards whatever the challenges, right?

So if it's tinnitus or if the vestibular cochlear instability, there's something that's happening within the framework of the dosing experience that shifts their relationship to that stimulus or to the challenge.

And I think sometimes within that dosage session, the experience of what that reorientation feels like, what it feels to not have the sound of a tinnitus be the only thing that I can think about or hear, but to experience a different thing creates like a window of opportunity, I think, that then allows them even after the experience to like, it's like once you've been to a place, you can, It's easier to find it again and revisit versus trying to get to the place you never been yet or haven't experienced.

I thing that's something that can happen I thinking a lot. Even just anecdotally you hear when people talk about their psychedelic experiences or experiences, you know, with ketamine, where they say like, I didn't know I could feel that anymore, or I don't remember what that felt like.

And then they feel it again. It's like oh yes, i'm capable. I am capable of feeling this, but this is something that is accessible for me. and I think that creates a new opportunity that they can work with, after the original experience with integration.

I love this conversation because we can go micro and we go kind of macro as well. And as you're speaking about all the different ways that different people have found healing and all of the ways healing can show up through psychedelics and also through community and collective healing, can you speak a little bit about what's happening here when we talk about the individual versus the collective?

How do you hold those both? And yeah, where are you putting your attention and what perspective are looking at that from? I really look now more and more at the collective as the core unit.

I think most of our medicine framework is definitely built around the individual as a core subject or the individuals as core units. In some ways that makes sense.

Other ways it has led to a malalignment of resources. And it certainly has not helped solve the mental health crisis. Certainly hasn't helped solved any of the chronic conditions.

Um, I think we do a good job of creating. Medications that can manage a number of different symptoms and medications that work very well for certain acute things.

But many of them, more chronic lifestyle, psychological sort of things we haven't really made a lot of end road on. I mean, part of that is because we're looking at the wrong fundamental unit of change in a sense.

And so more and more, I'm interested in the idea of the collective unit, the group-based forms of treatment, community- based protocols. Because I think, one, The problem won't be solved in a one-to-one way.

And just from an infrastructure standpoint, we can't have enough psychiatrists or therapists, LCSWs, and to deal with each person one on one even for something like psychedelics where it's two on ratio, in like the clinical trials, right?

That's just not, there's not a feasible, tangible way to actually create an accessible public health level intervention. And so I think looking at the collective, what are the emergent properties that happen when you bring a number of people together with shared intention to build community?

The idea that healing is a part of that motivation. you know, is what I'm most excited with and these studies that are coming out of the lab, we're really in community-based spaces and in group settings and really trying to understand mechanistically what's happening, physiologically, psychometrically, and then like how can we leverage the group as the therapeutic modality, which is not a new idea in psychiatry.

Obviously there was a time when group work was kind of like the in vogue, cooler thing to do, and then it fell out of fashion. And so I think there are challenges there obviously, but I do think that there is something right about that approach.

Collective Healing and Community-Based Treatment

Now we just want to add more of a neurobiological framework and understanding to it, and then again at the same time ask, how can things like music, which have, you know, been traditionally relegated to art with a pejorative, as a part of the mechanism of how you actually deal with the collective, right?

How do you synchronize people? how do actually coordinate and get them together? Things like music evolved, we think, because of its fundamental role in being able to do that.

So how can we bring that wisdom back into the infrastructures that we have? Definitely clinically, but even in my mind, more importantly, on the community side of implementation.

What would that look like in practically, you know, when we're thinking about social change, music and science driving social changes in the community, what would look that like?

Give us a picture of, I mean, we can talk about this in terms of having music in a concert hall, or in band, how can this be implemented in most effective, most healing way?

So I think that's part of the challenge, part, of what we're trying to work with, which is how do you come up with a protocol that is evidence-based and generalizable, yet modifiable, you know, with the same level of effectiveness?

I Think that the question, right? So, I, think, for instance, the music mindfulness study, we were showing, okay, You can leverage professional musicians with no prior therapeutic experience and place them within this community context and you can have, you know, potentially meaningful clinically significant therapeutic benefits for something like anxiety and depression.

And there's a biological mechanism that we can posit, might be mediating these effects in terms of autonomic activity and changes in heart rate variability and things like that.

Okay. So that model for treatment, let's say we're in the process of saying, OK, what is an eight week version? If you do this for eight weeks, can we see any, you know, effective or meaningful, clinical change in anxiety or depression?

Let's we say yes, like that actually is the case in our cohort of people in Washington, D. C. and in New Haven. then I think the question becomes, that's something that can scale because there are orchestras in all the major cities.

We do this in collaboration with New Haven Symphony Orchestra. There are professional musicians in, in these major places. But like, what is the right community setting, right?

So in New haven, we did this and Bloom Community Center, which has, you know, a reputation in the community for being like a very inclusive and welcoming space, aesthetically very beautiful.

Will we get the same result if we do it at the local Boys and Girls Club? Or is there something about this particular aesthetic that is important, you know, as a part of the effect?

So we might generalize the model, but maybe part the motto has to be like a particular kind of setting. So the like really understanding, I think those aspects will help us to know like, okay, these are the things that are generalizable.

Like the music has have these parameters. As long as it has these parameters, it can actually be any genre or from any culture, as long you're meeting these.

And those are the kinds of things that we're trying to now hone on. I think another thing that kind of helps us to better understand this is that in the study that you were referencing, we did a bilingual intervention.

So it was in English and Spanish, and that was successful. Again, that shows, okay, there's a way for us in the way that we think about these kinds of protocols.

And so that's just another frame that were also taking. I would imagine nature plays into this aspect of universal kind of understanding of music and the effect it has.

I mean, you know, landscape music or, music that has to do with, that's rhythmically balanced, right? That's in nature. What would be your thoughts around that, bringing that component of sound into So for me, I think sound is actually one of the most powerful sensory modalities.

It's kind of like one the first ones that comes online in Euro, where we're really first starting to try to make sense of sensory system. Sound is one first thing that we are getting inputs about.

And it's a very temporally precise and physically precise signal. Things are vibrating at a specific frequency, at specific place in time, right? In a way that olfaction and some of the other senses are not as much so.

Sight, obviously, is another big one. But again, that comes in later after sound has already been working for, you know, a good number of weeks. And so I think there's already that sort of just innate connectivity between the entire physiological system and sound as an input.

That's one thing. Then I think in nature, we see over and over again pattern sound, right? So whether we're looking at animals, whether were looking water, trees, the movement of things in Nature has a cyclical pattern kind of, you know, quality to it.

And at its essence, sound is just movement and vibration of physical things through space. And so when you listen to nature at many different scales, you will find cycles and patterns.

Music is, at it's core, a collection of cycles, and pattern at different scale. So you're telling me nature is music if we listen closely enough? beautifully said.

I'm just translating what you said like I just try to capture this. That's it. So interesting how it all comes together and it's so naturally there present.

It's just it so evident and yet sometimes we were going back to the basics is kind of what it sounds like you know when you really talk about healing we're really going I was going to say one of my mentors and good friends, Victor Wooten, talks a lot about this connection between music and nature and even has a camp that's like a music-and-nature camp where he specifically brings people into an awareness of that overlap and intersection.

And the other thing that happens in trauma is the disconnection to sound, right? Because I've seen patients who've had a trauma response, I mean, you probably all have, where they disassociate because if they've been exposed to so much trauma, yelling, sound related, they tend to tune things out.

And then when they get better, there's an appreciation to more sound that's much more nuanced. It's almost like I'm hearing a new environment, there's a surrounding I mean.

Yeah, yeah. No, this really goes back to, I think we're all, you know, love how these questions and these answers are just flowing because, Aliyah, almost read my mind, because I am kind of getting back what you said about it's the first sensory apparatus that comes online.

And then there is an evolutionary piece of it where we are embedded within sound, right? We are creatures that are here within sounds. And then we have all of this technology that we developed, our ancestors did, where drumming and sound and rhythm and harmony was a way of bringing us together, of making us resonate together and feel that kinship, that oneness.

And then we talk about how now art and music are relegated. They're put aside. In this culture, they're defunded, underappreciated, oh, you know, math and science are needed and we don't need music.

And I feel like what we've described here is that, just like stem cells need a infrastructure to grow on, Right? You're talking about sound as an infrastructure upon which these changes, these biochemical changes have like, you know, I loved how you said it was a field upon, which this kind of neuroplasticity changes are occurring.

I mean, we're talking about the ability to send in signals, right? That's why so much of now medicine has changed to ultrasound, there's so now we are doing it not just diagnostics, but therapeutics.

Sound is, even the left brain can agree sound is important, not the heart. They're coming around to it. So what do you see? What's your vision here? You know, what's kind of like big picture vision for this work that you're doing collectively and what you are bringing online, you know?

As you seeing the different things kind have emerged, there's always almost kind like an organic way that things come together. The people you need find you.

You find your directions. Like, yeah, What is growing in your garden, Dr. Azia? I'm very grateful that there are many things growing. I think the more that you plant, then when it comes to harvest, there's a lot of work to do.

And I am grateful for the work. Well said, well said. But if the soil is good, the weeds don't grow, right? If you tend to the soils, where I feel everything is, weeds do not grow as much.

You're right. Um, so I'll share, I won't share everything, but I will share I guess like two things. And one is on the research side, really coming to a place where we can start to create the sort of interventions that have evidence behind it, that there are things that like, like insurance can reimburse for, right?

Or there things like people can get a prescription for that's taken seriously within the medical context, There's this eight week program. You go for an hour each week.

They're going to play this special music and teach you these skills. And your anxiety is going be able to be

managed as an outpatient. So that will avoid you having to go to a crisis center or emergency room or be hospitalized because like your anxieties starting to pick up or your depression is coming down.

We're gonna enroll you in this, you know, eight-week program that is evidence-based, to return your depression back to levels where you can stay out in the community and we can continue to manage you instead of you having to go, you know, and insurance is gonna reimburse for that, right?

Like that to me would be like a huge win and related to that is having a very scientifically grounded model for the design of music therapeutics. So why do you create, why did you use certain notes?

in relation to other notes. Why do you use certain timbres? Why certain tempos? How do construct them in a way that with high probability can modify certain neural circuits to get a specific clinical outcome?

So those are the types of things that I'm really excited about. from that aspect. And then obviously, like, how do we leverage that within the psychedelic, you know, assisted psychotherapy framework?

And again, all of this I'm thinking about in group based community based, settings. Um, and then the other thing that I'll talk about is my music for the collective project.

which is an artistic project that really seeks to translate what I've learned in the past five or so years about music therapeutics into an accessible and fun collective healing experience that happens in community.

And we debuted the first kind of iteration of it at the Kennedy Center this year. Um, and it was like a sold out thing, really just amazing time. And since then we've done it at, you know, the Schwarzman Center at the National Academy of Sciences.

It's just something where I'm seeing more and more that this intersection of art and science is something that's being embraced at larger and larger scale.

Nature, Trauma, and the Future of Healing

and, it's, coming back to be something, that people are seeing as important. I think even as the field of psychedelic assisted psychotherapy grows, You know it becomes more, more apparent, like how art is such a valuable part to that process, both, I think, in terms of preparation, and some of the dosing and in term of integration.

And so, but I, think in this context, being able to step into my role as an artist, But still, bring in the fact that I actually am a doctor, actually I'm a scientist, In the early phase, i wanted to be respected as a artist so much that i tended to not really bring that part into what I was doing as an artist and really keep it separate.

So if you support me as a artist, it's through the art and it is through music. And I didn't want to be like, oh yeah, he's a good musician for a doctor or something like that.

But I think as I matured more in my career, that also is doing myself a disservice. to not bring in the fact that I did spend a lot of time learning how to think a certain way and developing these skills that, actually, if I bring them into what I'm doing as an artist, it creates so much more power and so many more opportunity for healing.

So why not bringing that in, right? And so I've been really excited about this project because it's my first artistic project where I really explicitly bring the in fact like, yeah, this can actually heal and we can actually come together and curate an experience that will be healing and and being able to like kind of stand in that and to get the responses that I've gotten from you know people in the audience has been really gratifying and that's something that really you pick up momentum.

Beautiful oh my gosh what a journey and as you're saying this when we experience healing as a collective we confirm it for each other. I think healing in isolation, right?

Yeah, you get there, but it's not everything. And it is this connection to this greater web of life that we're really disconnected from. So as you're kind of winding down on our beautiful, wide-ranging podcast conversation, I have a question for you.

What's the question you wish more people asked you? or people ask you more often. And then a second thing, what are you most curious about? What's the question you would like, you know?

I'm preempting Dr. Alia here. Now we have to start a whole new podcast. We're two curious MDs and we always want to end with curiosity. Yeah, yeah. You start with the curiosity, end it with curiousity.

A whole different podcast, we're just putting a pin on the next one. I tend to wear a lot of myself in a more external way. And again, through being an artist, I feel like a lots of my personal life is exposed and vulnerable in the sense that people do ask me a lotta different questions.

But I think, yeah, talking more about my kids, my life in that sense, in some settings I would like to do more of, and talking I guess more by my spiritual journey, is something that even when I talk about music and science, I allude to it, but it tends to not typically be a more explicit part of a lot of the conversations that I have.

And what am I most curious about? Right now I'm really curious, about women's health. My wife is a midwife and almost done training for midwives, has been a labor and delivery nurse for over a decade.

So as she's been in that process, is just reignited this idea of like, not just the different ways that we're embodied, but the way that affects our mental health, the ways it affects the we navigate the world.

And again, you know, we see that there are these differences that even pick up physiologically in how people define their section gender. So I'm really curious about just those dynamics and how they influence how we think about treatment and we can leverage that in thinking about the collective, thinking of the role of a mother in the family unit and that translates to the community, the roles of grandmother in community dynamics.

How can we better leverage I think an understanding of these dynamics towards this goal of collective healing and collective action. Absolutely. Include that.

Yeah, I just hear you. That just took my breath away. It really took away my breathe away because I think it's the wisdom of aging, right? And how we look at aging in terms of, oh, it was dementia, your cognitive decline.

But yet, if we bring back that social context to aging and a very matriarchal, you know, the like, wisdom that that experience has, think of the potential of that healing has in a cohort of family or in socially larger.

That's just brought tears to my, it was my personal story. It has to do with my mother, right? That her disengagement from her identity has affected us as well.

And then as she comes back from changes in her cognition, when she from that state, it's like, oh, we're all connected. We're there with her. And when she disengages, is like oh what happened?

Where did she go? She's right here, but she's not there. So, and I think that's a lot of story and a lotta people have that experience. I'm hearing this word of reclaiming.

Like, you know, We have had a culture of grandmothers. we have a had culture as a village. This is why we're here. We're all here because somewhere along our line there was a village, there were a collective of grandmothers who passed on healing stories and healing actual healing herbs and methodologies and technologies.

And we were kept alive and lullabies and song and that is locked in us, right? That's why were here and so this whole conversation has been such a reclamation.

of what is our ancestral right. And I thank you so deeply for this beautiful conversation, Dr. Asier, and for reclaiming your name and making it your own and just, you know.

Dr Asie. Yeah. Even that has a rhythmic tone to it. That's Dr Azie. No, that's just thinking. Wait a second. There's some notes in here. And Dr. Aliyah, I forgot that your middle name is also Z.

So I can call you Dr AZA if you'd like. I know. Maybe two of you. One of my websites, azza.com. Because of that thing. That's why I called you not to Azza earlier.

No, no, it's not. It's A-Z-A. But I saw Azzeh. Beautiful. How would somebody find you, you know, if somebody had to look you up or check out the work, the research that you're doing, or I know you you are all over in Google, but what would be, um, for patients and for, again, that healing that want Google feed to recognize you through?

Yeah, so azalab.org is where we talk, we host a lot of the science and is a point of contact. AZA for the Culture is like my artist page where you can find out about just free access to the music and find about shows and things like that.

And then, you know, on social media on LinkedIn, AZA Alsop on Instagram, AZA The Messenger. And I post a lot of things. Well, not a things, but I posts updates on kind of what's going on, shows, different events when I'm speaking and things like that.

Thank you. That's beautiful. The lab and the culture are both interconnected. Thank you so, so much. Thank You Dr. Azai. This was just a beautiful conversation and I hope it really gives our patients, our audience, even our collaborators, colleagues, and people who are doing the integrative work such another way of looking at healing.

This is why we have these conversations. I want medical students to, you know, because that's one of the biggest tensions of medical school. When you first go in, it's like, I'm a musician, and I have to give it up.

It's, like no, no you don't. And this is such a beautiful way of combining them and finding the riches of intersection. So, yeah, inspiring. Yeah, thank you all for hosting this great conversation.

Thanks for joining us on the Two Curious MD podcast. We hope today's episode inspired you to ask new questions and explore fresh perspectives. And we challenge you ask us those unasked questions that you're curious about in your medical practice, condition, health and wellness.

If you enjoyed the podcast, don't forget to subscribe, share it with somebody just as curious and leave us a review. It helps us keep the curiosity alive.

post or comment with a question or curious inquiry that you have and seek to explore or learn with us. Stay curious and we'll see you next time.