

The Tim Ferriss Show Transcripts

Episode 104: Martin Polanco, Dan Engle

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Tim Ferriss:

Hello, boys and girls, lemurs and leprechauns. This is Tim Ferriss and welcome to another episode of The Tim Ferriss Show, where it is my job to deconstruct world-class performers, to identify people who are very, very, very, very good at what they do whether that's an actor like Arnold Schwarzenegger, a military strategist General Stanley McChrystal, a chess prodigy like Josh Waitzkin or, in the case of this episode, two very interesting doctors who are innovating in a number of different fields and let's just jump right into it. These topics are by popular demand.

You guys wanted follow-ups, for instance, to Jim Fadiman episode where we talked about LSD and micro-dosing for creative problem solving, anxiety reduction, etc. So in this case we have two; it's a two-fer: Martin Polanco, MD is founder and program director of Crossroads Treatment Center, which is based in Rosarito, Mexico. Crossroads specializes in helping patients conquer extremely difficult addictions like heroin and cocaine using the African hallucinogen, Ibogaine, as well as 5-MeO-DMT, which is sometimes referred to as the God molecule, and we'll get very much into that.

His other areas of expertise, which are complimentary, include addiction medicine, obviously highly relevant, and therapeutic neuro technologies. The second, Dan Engle, MD, is board-certified in the US for both psychiatry and neurology. His practice combines functional medicine with integrative psychiatry to enhance regenerative health, for instance as related to traumatic brain injury among other things, and peak performance, even in normal subjects. His prior and relevant experience, like I mentioned, includes PTSD, traumatic brain injury, as well as work in the Peruvian jungle with plant medicines, as they say, such as Ayahuasca.

So in this episode we don't just talk about addiction; we talk about impulse control, introspection, developing self-awareness, and this is within the context of a number of tools, not only these massively powerful psychedelics and hallucinogens like Ibogaine, as well as 5-MeO-DMT, we talk about how that compares and contrasts to

say, and LSD or Psilocybin or Ayahuasca, which you guys have heard a bit about in previous episodes just mentioned in passing.

We'll dig into that. But it's not just about smoking or imbibing things. We talk about, for instance, using flotation tanks to simulate or even replicate many of the benefits that can be found when doing this deep psychedelic psychotropic work. So you don't have to be a drug user or a plant medicine user to get something out of this episode.

We cover a lot of ground, so if you are interested in optimizing your psychological performance, emotional control, ala the Stoics and many other things that I've talked about before, this is a very useful episode to listen to. Two caveats: The first is we get into some pretty major woo woo shit in this one. I live in San Francisco, I have an allergy to sort of the hippy-dippy, burner, holier-than-thou, Ultra spiritual types.

Check out "Ultra spiritual;" Google that on YouTube and you'll find something entertaining. But at the same time, it's very hard to delve into some of the subjects we touch upon with the vocabulary that we're limited to when talking about mystical experiences. We get way out there, so you may end up thinking that I'm totally crazy and due to be taken away in a white jacket and that's okay. But I think you will find it interesting. The second caveat closely related: woo woo stuff is not necessarily safe.

You cannot, you cannot, I will repeat, explore these very powerful drugs without proper medical supervision. You need that. I am not a doctor; I don't play one on the internet, nor do I play one in the podcast sphere. So do not use any of these substances without proper medical supervision and approval. There can be some very dangerous interactions with common SSRIs, for example, like Prozac. So caveat emptor; be smart. Don't kill yourself; that would be terrible for everybody. Get proper medical supervision.

You can see how excited I am about presenting this episode to you. So all that said, without further ado, please enjoy this very wide-ranging, very deep conversation with many applications involving Martin and Dan.

Martin and Dan, welcome to the show.

Martin Polanco: Thanks, Tim.

Tim Ferriss: Yeah, I have been looking forward to this for many different reasons, but one of which is I've been surfing this resurgence of interest in psychedelics, which I've been interested in for several decades now, even in undergrad, looking at it from a psychological, neuroscience perspective. You both have areas of expertise that I've not yet had a chance to dig into. I am really looking forward to this and I hope people enjoy it as much as I suspect I will. Let's start with some of the basics. So Dan, I'll ask you this first. When people ask you, what do you do, how do you answer that question?

Dan Engle: Yeah, that's always – it kind of depends on the setting and the conversation that I'm in because usually it's a variety of things. The summary statement is I'm an integrative psychiatrist.

I've in the past run centers that help people transition off of psychiatric medications, experience psychedelic states, rehab traumatic brain injury and essentially all of those things are helping to awaken our remembering of who we are and what we're here to do.

Tim Ferriss: Got it. And where were you born and raised?

Dan Engle: Born and raised in San Antonio, Texas and went to college in Austin, med school back in San Antonio and then started to venture out of Texas and did my residency in Denver and my fellowships in Portland.

Tim Ferriss: Got it. Okay, I want to bookmark that remembering who we are statement, because I think that's an interesting way to phrase it. So we'll come back to that. Martin, what about yourself? How do you answer the question, what do you do?

Martin Polanco: I would answer the question with a brief statement. I'm a medical doctor who helps people suffering from drug addiction get clean.

Tim Ferriss: And what are the primary ways that you do that?

Martin Polanco: We work with a substance called Ibogaine, which is an African psychedelic that has been used for decades to treat opiate addiction and other types of substance abuse disorders.

Tim Ferriss: And what is your brief background? Where were you born and raised?

Martin Polanco: I was born in Austria and I moved to Mexico when I was a baby, so I have dual citizenship, but I feel more Mexican than Austrian.

Tim Ferriss: Let's do a follow-up. I know next to nothing about Ibogaine. In fact, the first time I ever heard of Ibogaine or Iboga, and I think it was pronounced Eboga by Hunter S. Thompson, who created this PR campaign, which was half of a joke, but basically accusing this politician of being an Iboga addict, which I think is kind of funny for many different reasons. But let's talk about psychedelics more broadly speaking. Martin, tell me the story of first experience with psychedelics.

Martin Polanco: So I became exposed to psychedelics as a teenager.

Growing up in Mexico, it was something which was part of the culture in certain areas of the country. Mexican law allows tribal groups to partake in ceremonies, whether it's with the mushrooms or with peyote, so it was just around in terms of circles that used this ceremoniously. First experience, I didn't feel anything. I think I was 14 when I was invited to participate. It wasn't until I was 21 that I had an earth-shattering with one of the plant medicines. And which was it? What was the context?

Martin Polanco: The context was just as teenagers wanting to explore our psyche. We took mushrooms and went to a mountain and before we got to our destination, we could not continue because of the strength of the experience. It was an extremely beautiful scene, that everything was alive, that rocks were alive, the sky was alive. Really being able to see and feel our emotions in a way that we had never been able to.

Tim Ferriss: And when did you decide to bridge to Iboga or Ibogaine?

Martin Polanco: I was finishing medical school when a very close family member was suffering from addiction. We saw her struggle. We had tried all different types of rehab. We had kicked her out of the house and tried the 12-step model and put her in different institutions. I came across a documentary where they were discussing Ayahuasca and Ibogaine and I became intrigued and looked it up on the internet and saw that this was real and that there was a wealth of clinical research backing up the claims that were being made about the substance.

So I took her to see a provider and I'm astounded by the change that she went through. From one day to another, she had a realization that her drug use was a problem, which might seem not

surprising, but for most addicts, they are in an addictive mindset where they cannot even see that there's a problem and they are able to rationalize it. I was going to become an ophthalmologist and I had started my residency training in eye surgery, but it always stuck with me how potent this transformation was.

I took a year off to try to open a clinic with another doctor and we did well and we saw success with patients, so we just kept on going.

Tim Ferriss: And what was the documentary? Do you recall what the name of the documentary was that you watched?

Martin Polanco: It was a BBC documentary. I cannot remember the name, but it was just focused on plant medicines. It was just a brief snippet that I managed to see from the corner of my eye that caught my attention. I wasn't really watching it. It was just a substance I had never heard of. Ibogaine is an obscure psychedelic in that it doesn't have a long history of recreational use because it's not a recreational experience.

Tim Ferriss: It doesn't sound like a light recreational experience from what I've read, at least.

Martin Polanco: It's probably the least recreational psychedelic. Definitely not something you would take and socialize or go to a party.

Tim Ferriss: It's not a light Burning Man, pre-evening experience. So on that point, I'd love to just ask, maybe Dan we could have a bridge here.

So Martin, you mentioned Ayahuasca and that's come up before in my conversation with James Fadiman, who's done a lot of micro-dosing and LSD research. How would you characterize the primary differences between either the benefits or effects, or both, of Ayahuasca versus Iboga or Ibogaine?

Dan Engle: Yeah, they're very different. The outcome can be somewhat similar, but the process that you get to that outcome is very different. Ayahuasca is done in a group setting, but it's a very solo, inward journey. Typically it's done in the dark, in the jungle. You go through deep, psychological healing; oftentimes pre-verbal healing around traumatic issues that –

Tim Ferriss: What do you mean by pre-verbal? Do you just mean on a nervous system, integrative level? What do you mean by pre-verbal?

Dan Engle: Pre-verbal is typically before those years of say 5 or so. So between birth and 4.

Tim Ferriss: Got it.

Dan Engle: Between birth and 5. We don't even really have the language centers connected to the memory centers in the way our brain has developed at that point. Some of the really early but good child developmental psychological studies suggest that 85 or so percent of the personality is set by the time we're 5 years old. So that means the majority of what makes us who we are, how we see the world, how we see ourselves, how we see others, how we form our relationships, the vast majority of it that we experience as adults is set by our constitutional genetic makeup; who we are as our primordial soup when we're born and all the experience that we have leading up to before we were even in elementary school.

Tim Ferriss: Got it.

Dan Engle: So there's so much that happens in the psyche that you can't easily access in psychotherapy. That's one of the reasons that psychotherapy is so challenging to get to the early root.

There are ways to do that. There are ways to massage the psyche, massage the ego so that you can start to exhume many of those early experiences, but they're really difficult to track, to hold onto, to have a consistent narrative and to heal. So when you have something like Ayahuasca that comes in to the mainstream of the psyche through this psychedelic experience, you gain a witness perspective, the fear centers relax, the trauma is brought back up onto the screen of the mind sight and you oftentimes get this replay of very early things.

And maybe not even just early things, sometimes there's traumas that happened that people thought they had dealt with. So all of this stuff that has been in the background but still shaping how we experience life and how we experience ourselves comes up to the forefront to be healed. Iboga can do that similarly.

However, Iboga is such a mind medicine. It will ride the psyche relentlessly until you essentially give up. Oftentimes, it's described as this controlled death experience. There's a lot of the psyche that will die or that will be released. It will be surrendered to the greater experience of becoming who we thought we could be or who we were maybe scared to be without this limitation of something like addiction.

Tim Ferriss: Right. Without the crutch or without the mask, whatever that might be.

Dan Engle: Right. And so much that drives what might be addiction are these early, developmental, oftentimes traumas that we find various ways as adults to try and compensate for or to medicate or to essentially through our own trials and tribulations just try and find a way to make it more palatable, easier to be human.

Tim Ferriss: Not to interject, but what I found, to maybe give people a concrete example also in my own experience with Ayahuasca and I won't go too deep into it, but I'm not, by any stretch, a Michael Jordan of hallucinogens, but I've probably had between 50 and 100 experiences, and for at least the last four years have recorded and journaled all of those. My experience with Ayahuasca has been that – just to reiterate a few things that you said – No. 1, it's brought back into sort of present state awareness things that happened that I'd completely forgotten about or thought I couldn't even access from very early in childhood.

But things that most certainly did happen. That's after being reminded of them, I could kind of explore in greater detail. But also, for me at least, showed me different versions of normal. What I mean by that is when you said medicate, one of my means of self-medication has always been caffeine or stimulants.

I think some people are drawn to opiates or depressants and I was always drawn to stimulants. I think that was fed by an early sort of heavy use of pre-workout stimulants that I was introduced to through competitive athletics. Through the Ayahuasca, I was able to sort of revisit what pre-caffeine Tim looked like, which was very unusual and really powerful and compelling for me, from a symptomatic standpoint. I think it'd be helpful perhaps to walk people through the experience of Ayahuasca and then Martin, I'm going to come back to you to talk about Ibogaine. But if we look at Ayahuasca, like you said, it's a group experience oftentimes. It's done at night in the dark. What would you say? It lasts like four to seven hours for most people?

Dan Engle: Mm-hmm, yeah.

Tim Ferriss: Could you describe what the onset feels like and maybe some of the common characteristics that people report. And then I'd love to get a comparison after that from Martin on Ibogaine, which I've never used.

Dan Engle:

Ayahuasca is classically described as very visionary. That being said, it's very different for everybody. One of my ISOs that I sat with, he described the [inaudible] or the time where you're experiencing the medicine as being a state that could include three different phases or three different types. One is visionary, one is mental, and one is kinesthetic or body. For example, for me, what oftentimes happens is I get a lot of ideas. I see the network of interrelated factors and potentials.

My mind starts to understand how things have affected me, how things are affecting the world, potentially the next step for me to take in my journey. That's all very mental. It's also been very somatic, so classically Ayahuasca is very purgative, which means you poop out a lot of toxins and debris and a lot of old emotional stuff.

The gut holds so much of the lymphatic tissue and the lymphatic tissue is related to how we hold onto things. Those being emotional things and those being physical or toxins. So it flushes out the GI system. You poop a lot out or you purge, you puke out a lot. And so you're releasing the entire GI system from what it's been holding onto. The GI system is the earliest formed system in the body. It has the same dermal structure as the skin or the ectoderm.

When we start to unravel so many of these early psychological traumas, we realize so much of that is connected to the gut and how people experience their own mind and then we take more of a cross-lateral comparative to the second brain research and we see that most of the neurotransmitters that are produced and stored are in the gut, not in the brain. They get transferred to the brain. So when the gut heals, when you release all of that stuff, you start to think more clearly and it up-regulates all of our neurochemistry.

So Ayahuasca is classically described as an antidepressant too. It's very successful in helping people transition from chronic depression into what would be called euthymia or normal mood. Many people don't even know what that feels like: but optimism, faith, courage, strength, personal empowerment. Then we also get into the set-in settings of that too and I think that's an important thing because there's a lot of medicine being offered worldwide now by many people who are not very experienced.

Tim Ferriss:

Yeah, I definitely want to come back and talk about that because I think the risks are worth exploring, including, and we'll come back to this, but you mentioned going from chronic depression to a more

normative state, but if people are on heavy regimens of SSRIs like Prozac and they straight into Ayahuasca –

Dan Engle: That's a no-go.

Tim Ferriss: That's a big, big no-go.

Dan Engle: Right.

Tim Ferriss: So we'll come back to that. Thank you for that, very helpful.

Dan Engle: Sure.

Tim Ferriss: Martin, could you perhaps walk us through Iboga and how it differs from your perspective, the experience?

Martin Polanco: Sure. So the first thing is I want to just make clear that Iboga is the plant which is used in Africa and Ibogaine is the primary alkaloid. So it's one of the active components in the plant. So at our clinic we use Ibogaine to detox patients and then we use Iboga as boosters or supplementary medication after the treatment. Although Ibogaine and Iboga are classified as psychedelics, the more accurate description of their effects would be [inaudible], which means dream creating. [Inaudible] experience with Ibogaine is long lasting, it has three major components. The first one is a visionary component, which can last anywhere from 3 to 12 hours.

Tim Ferriss: And by visionary, we mean visual?

Martin Polanco: Visual, correct.

Tim Ferriss: Visual hallucinations.

Martin Polanco: And these hallucinations are perceived almost like watching a movie of your life. It's a life review and people report that in the back of their eyelids they have these gigantic screens where they see images from their childhood. They see opportunities they missed, people they've hurt and unfinished business that they need to resolve. Many cases of addiction are linked to post-traumatic stress disorder. This can also be resolved by Ibogaine because it allows a person to go back to that traumatic event and experience it without any emotional pain. So one is able to go back and let go of the experience, come to terms with the experience or just recontextualize the experience.

Like Dr. Dan was saying, a lot of trauma that happens is pre-verbal, so it happens to people when they're before 5 years of age. The brain stores this just as an emotional charge because there's no words associated with the experience, so Ibogaine allows them to go back and see what happened almost like they were floating in the room like an observer. Because they're seeing this experience through the eyes of an adult, it allows them to put it in a different context.

Other imagery that comes up during the Ibogaine experience is related to the sentience or intelligence of plant life, the creation and the fate of the universe, our own mortality. There are certain images which can be disturbing to patients. You do see spirits and see images of dead people, which oftentimes can be explained by – in Africa what they say is Ibogaine is a controlled-death experience. So you go into the land of the dead and you're given information by your ancestors, which you can then take back into this world and apply for your life.

The second phase is a phase of introspection and this can last up to 24 hours. Most patients that come through, they're experiencing opiate withdrawal and this is pretty much gone, as well as the craving. Ibogaine has a very potent antidepressant effect, so people who take it feel an elevated mood for a period of time afterwards.

In terms of the differences between Ibogaine and Ayahuasca, I think that introspective life review is more pronounced with Ibogaine, although only 70 percent of people have it. So there's a full 30 percent of people that experience no visions at all. I don't know the statistics with Ayahuasca, but it might be more reliably psychedelic than Ibogaine is in that regard.

Tim Ferriss: That's very interesting. If you had to guess what the commonalities are of those people who don't experience anything, is it just a purely genetic component or is there something else to it?

Martin Polanco: There's definitely a genetic component. We have different ways that we metabolize drugs. There is 7 percent of people who are ultra-fast metabolizers and there's genetic tests that we can use to determine this. That also tell us how much we have to give them. In terms of the people that don't have visions, it's often related to what drugs they're on. So when somebody comes to us and they're taking benzodiazepines, we can't just ask them to stop taking those because they could have a seizure.

So if they're on benzodiazepines, there's a high likelihood they won't have visions. Plus the people who are coming off of methamphetamine, they're so depleted in terms of their neurotransmitters being washed out that they oftentimes don't have the building blocks to create these experiences, so they just sleep through the experience. We stabilize people and we have them stay for seven days until they are well-hydrated and they're able to replete these essential building blocks.

Tim Ferriss: Right. That makes perfect sense. Now benzodiazepines, what would be some common brand names for commonly prescribed benzodiazepines?

Martin Polanco: The commonly prescribed benzodiazepines would be Klonopin, Xanax, Valium – all of those are classified as benzodiazepines.

Tim Ferriss: Got it. Is that why, for instance, some therapists who work with – and correct me if I'm wrong, either of you guys – but who use MDMA in a clinical setting will use Klonopin to basically turn off the music if it's overwhelming? Is that accurate or am I off base there?

Dan Engle: No, I think that's a pretty good description. Benzodiazepines calm everything down. It shuts down that psychic space. It's a good safety hatch to use if you had to do it.

Tim Ferriss: On some level, it brings up all sorts of questions about what is being shut down, right?

Dan Engle: Right, very much so.

Tim Ferriss: I am really enjoying this because I've had a lot of trepidation surrounding Iboga and Ibogaine. I think it's worth mentioning here – maybe Dan we could talk about it a little bit. Please correct me if I'm wrong here. But for people who are wondering what the hell is Ayahuasca or they think of it as a single drug or alkaloid. The way I've tried to describe it to people is if Iboga is to Ibogaine as magic mushrooms is to Psilocybin, right? And then you have Ayahuasca, which is more like a cocktail, like an old-fashioned.

You have these principal ingredients which I guess are the chacruna leaf, which has the DMT in it, but then you have this vine that contains an oxidase inhibitor, which allows the DMT to be absorbed orally. But then you have people, depending on the person you're working with who throw in a little bit of toé or a little bit of God knows what. So it's very hard to standardize in a

therapeutic session Ayahuasca. Whereas you can more easily standardize and therefore gather reliable data on dosing, for instance, with something like Psilocybin or LSD or Ibogaine or 5-MeO-DMT, which we'll get into. With the Ibogaine experience, and this is just something I've heard because I haven't looked it very closely, after hearing this, which is kind of silly since I should've probably verified with someone like yourselves. Does Ibogaine have a very strong central nervous system stimulatory effect?

Someone had told me that and I'm very sensitive to certain types of beta agonists. There was a point in time when I was experimenting with yohimbe and yohimbine for fat loss, which made me feel literally like I was going to have a heart attack and die, even on a moderate dose. So the idea of having that experience for 6 to 12 hours or even more is just like –

Dan Engle: Right and with Iboga, it's more like 36 hours.

Tim Ferriss: Yeah, right. Which I cannot imagine anything worse.

Dan Engle: I know. Iboga is like Everest, man. It's climbing a huge mountain.

Tim Ferriss: Yeah. And does it produce that salivary response from central nervous stimulation? Or am I blowing that out of proportion?

Martin Polanco: Well, there is a stimulant effect, but it's very mild and mainly what it does at low doses is it increases awareness and focus. At higher doses, you're so overwhelmed with the visionary and the visual experience, that you're not really feeling the stimulant effect. It does keep you up for a couple days.

Some of the theories are that because it is stimulating rapid eye movement phases in the brain, that you have less of a need for sleep. So you could be having insomnia for days afterwards and it could be that your brain doesn't need as much sleep as it did before.

Tim Ferriss: That's really interesting. Just as a side note, when I was doing my undergrad at Princeton, I wanted to specifically work in a lab with a guy named Barry Jacobs because he did LSD research and the junior paper I wrote was on similarities between LSD-induced states and REM sleep. So this is really cool stuff.

Martin Polanco: REM is fascinating. This is a phase where the brain kind of restructures itself and gets rid of garbage and forms new memories.

So in a way addiction is a learned behavior and it can be considered a maladaptive learned behavior. So Ibogaine goes in and shakes up all these connections and breaks the bonds between the triggers and the cues and the response because it's a habit as well.

When you someone who smokes cigarettes and you give them a cigarette, automatically they will reach for it and they will light it without even thinking because they become unconscious behaviors and Ibogaine makes them conscious. So this REM component is a big component of why it is that it works.

Tim Ferriss: Dan, have you used Iboga or Ibogaine? I have so much trouble saying the I. Have you used either?

Dan Engle: I've used both.

Tim Ferriss: Okay. And how many times have you had that experience?

Dan Engle: I've had Iboga once, no twice. And Ibogaine once.

Tim Ferriss: What were your reasons for doing it?

Dan Engle: I suppose this is pretty similar to you in that I enjoy putting myself in the lab, having an experience, taking my own personal growth to its highest state.

When I was first introduced to Ayahuasca, there was such an immediate healing on so many different levels, and that's a whole book just by itself. The summary statement was these medicines are important. Their massively healing potential is obvious. I'm going to be dedicating a significant portion of my coming years to understanding the nuances of how they work, why they work, and how we can utilize them well in the best way possible for the maximum benefit of everybody involved. That's when you get into a lot of different discussions about right practices, safe use, and sustainable means.

In order to get to that point, we have to talk about the data and the studies and how to really set up the studies that show their efficacy because it's important to be able to do that. I had heard about Iboga like ten years ago from an underground clinic that asked me to come on board as the medical director.

At that point, I was working so intensely with Ayahuasca that I didn't want to do both at the same time. About ten years later, all

of a sudden it was in my field and I heard about it three times within about three or four days from different people. I checked it and it was clear it was time for me to do that. It had always been there. And that's another thing that I think happens for people too is we hear about things and they kind of seed into the depths of the consciousness and then all of sudden those seeds sprout and it's time to go to work. It's a bit esoteric to describe it that way.

So many people when you ask them about what led them to the medicine path, much of it was around personal development, inquiry, and then there was a clear "it's time to get to work; it's time to do that." As opposed to trying to force it. Like never hiking and then starting with Everest; that's a bad idea. Never working out and then starting at your level of peak performance or somebody that's been a gym rat for 20 years, that's not a great idea.

But to be able to take slow approximation, a lot of what has just happened naturally over time is that when we get into discussions around if I'm on a psychiatric medication and I desire to have an experience because my life is stuck and I can't get off of this medication because when I do I have side effects, what do I do? So there are really good safe practices for helping people transition off of psychiatric medications. When that happens in a good way, then we get to ask the next question: what would you enjoy experiencing now as your developmental next step? What are you desiring to experience in your life? How can we help you access that?

And oftentimes it comes down to working with the psychedelics because when you've built the container and by the container, I mean the right mindset, and you've built the body – you've started to put plugs in areas that were leaking energy or somebody had poor lifestyle practices that weren't allowing them to get ready for the medicine [inaudible].

Just because something is effect, it doesn't mean somebody's ready for it.

Tim Ferriss:

Right. And that's actually a very good segue to a question that I wanted to ask or a topic I wanted to explore, which is – and let's start with Ayahuasca just because it's something I'm more familiar with. I've had a number of extremely intense Ayahuasca experiences. This is where we're going to go into, for a lot of people listening, kind of cuckoo land; but that's okay.

So my experience was so intense and I had the distinct perception – and this is where we get out there a bit – but unlike with even heroic doses of mushrooms or higher doses of other psychedelics, the experience that my perception was being tuned to frequencies that allowed me to observe, and on some level, interact with entities that existed independently of myself.

And this is where we get into Peter Thiel’s question of what do you believe that other people would think or do think is entirely insane? This would probably fall in that category, and I’m paraphrasing his question. But when I came out of that experience and talked to a lot of friends who were like, “Yeah, I’m going to my friend’s place in Utah and she bought some Ayahuasca and had it shipped from Hawaii and we’re going to do it on Saturday.” And I’m like, “You guys are fucking insane.” Treat this like you would having a brain tumor removed by a brain surgeon.

You would spend months, if you had the luxury of time, to research all the best doctors, treating it like a life-and-death decision because of what could go wrong if it were done incorrectly. Maybe I’m being a drama queen about this, but I came out of it really feeling like it warranted that level of caution and preparation and due diligence.

I’d love to hear your thoughts on that because it’s become such a – it helps that it has a very cool-sounding name to English speakers. Like, ooh, Ayahuasca. They just love saying it. Or la purga, the purge, whatever. It has a lot of cool nicknames. But it’s become this very du jour –

Dan Engle: Chic and hip.

Tim Ferriss: Chic, hip conversation and it scares the shit out of me when I think about people treating this like a pseudo recreational drug because I just feel like people could go off a cliff and lose their tether to reality and just never come back if they really just don’t treat it with a suitable level of respect. Anyway, I’m going to stop now. But I’d love to hear your thoughts because maybe I’m blowing it out of proportion.

Dan Engle: I think you’re right on about that. Martin, if you don’t mind, I’ll just get in on that discussion and I’ve love for you to come in too. I think you’re right on with that. I think that’s exactly what happened in the ‘70s when LSD and all the other psychedelics were put on the Schedule I.

The Nixon administration clamped it down. You had a whole lot going on with Vietnam. You had a whole lot of people waking up. You had people revolting in the street against the administration and you had people tripping balls, ending up in the ER, really messed up. LSD is different. We can talk about the difference too. Part of the difference is LSD is synthetic and it will push you beyond the normal safe gaps of all the natural psychedelics like Iboga, Psilocybin, Ayahuasca, Wachuma San Pedro peyote and 5-MeO-DMT. I believe that the natural psychedelics have safe gaps and guards kind of put into place.

If you do something like LSD and you do too much, you can go past the glass ceiling. I've had that experience. I've received, not taken so much, and there's a big difference between the two and I didn't know that until I went down. I was just walking in, I was like, okay, I'm taking this medicine. No, this is a reverent medicine; it's been used for eons in very sacred ceremony.

It's a privilege to receive it as such. Pray it up and really be grateful for the opportunity to receive it. I've experienced a lot of different psychedelics in a lot of different arenas, including Ayahuasca. I lived down in the jungle for a little while, for about a year just doing a series of dietas because that was my apprenticeship path. And the dieta is a bit of a stronger ceremony and a longer ceremony and you're working with other plant medicines as teachers. But yeah, you're right. Ayahuasca has this kind of chic flavor to it now. You've got 60+ circles just in the LA area alone; that's a lot.

Tim Ferriss: That scares me to death.

Dan Engle: Right. I know, it's crazy, it really is. So I'm glad we're having these levels of conversation. It's a natural, consumer-driven movement. We've having another resurgence of the research and the interest, which is super exciting. Psychedelics are showing very clearly many of the areas that psychiatry, the way it's practiced now, is very weak.

For example, with addictions. And Iboga is four to five orders of magnitude above anything in the general psychiatric rehab arena as far as efficacy. You have that same thing with post-traumatic stress disorder, resolution, chronic PTSD with MDMA. That's why MDMA is going into Phase 3 trials. Psilocybin is going into Phase 3 trials because you have such success rate with people having spiritual experiences and going through end-of-life transitions and being relieved of their anxiety and really being able to walk

through death with dignity and strength. There's so many different arenas where it's really exciting and I think your example of brain surgery is spot on, really accurate and it puts into a person's mental construct the order of importance of being able to know that when you are in the midst of that facilitation, that it's done with somebody who – for me, No. 1 is integrity.

Because in that space you can get really screwed up by people who aren't serving the medicine with an altruistic intention or serving the medicine for their own ego or power.

Tim Ferriss: Yeah, or sexual conquest. Let's be honest. There's a lot of bad behavior and it's turned into a cottage tourist industry in Peru where Western – well, not always Western – but non-native tourist women who want to have Ayahuasca experiences, not always, of course, but with not a very low frequency, end up having these –

Dan Engle: I saw that, totally, first-hand.

Tim Ferriss: Yes, sexual experiences with shamans who have less-than-pure motives. I'm not trying to play the reefer madness scare reel for people, but I think it's important for us – and I appreciate you underscoring that this stuff really needs to be taken seriously. I'll just give another personal experience, which is whether it's localized or sort of full-body seizures are not that uncommon.

Tremors, if you want to call is something less scary, is really not that uncommon on Ayahuasca. Let's jump over to Martin for a second. So Martin, do you say Iboga or Eboga or is it both?

Martin Polanco: We say Iboga, even though the proper pronunciation according to the English language would be Eboga, but I think it's become a cultural norm and standard to call it Ibogaine and Iboga.

Tim Ferriss: Okay. With Iboga, what are some of the scarier aspects aside of the experience for people other than seeing imagery of spirits or dead people? Which I should say from the photos I've seen, it seems to just kind of layer on the terror aspect – isn't it the Bwiti tribe that uses principally? Or are there others? But they paint their faces white, do they not, when they're surrounding people who are having that experience?

Martin Polanco: Correct. When it's taken in an African context of the Bwiti religion, it is a communal experience. So the person undergoing the Iboga experience is requested and required to participate, whether it's dancing or sharing the visions. For a Westerner, it's

very difficult because these are such personal images that are coming up. I want to circle back to what you said about brain surgery. I think it is a type of psychic, spiritual surgery, and that's why it's so critical to have preparation before the experience and then a period of integration afterwards, because you are in this opened up and receptive state and more suggestible.

Whatever habits you incorporate in the weeks afterwards, they can stick. These can be good or bad. I don't remember exactly what the question was. I went off on a tangent.

Tim Ferriss: Oh, no, that's okay. I was just asking about what aspects of the Iboga or Ibogaine experience can be most terrifying to people going through it the first time?

Martin Polanco: From a medical standpoint, for us on the other side looking at somebody going through the experience and then we see a drop in the heart rate. We see some drug interactions which can be problematic. So, for example, somebody who is taking antidepressants or certain antibiotics that use the same pathway in the liver that metabolizes Ibogaine, they can have arrhythmias. As a medical professional, this is not surgery you want to see. That can be scary for the patient undergoing the experience.

I think just being confronted with who they really are and not being able to look away can be difficult. Patients who are using opiates, they generally are trying to numb themselves. They don't want to think; they don't want to feel. Ibogaine really forces them to have that discussion. Like look what you've done, look where you will end up if you continue using. So it is not a fun experience for them.

Tim Ferriss: And pharmacologically speaking, I was so fascinated when reading about Iboga and its applications to opiate – for instance, heroin addiction. And how it seems to mask the withdrawal symptoms. Because those can be so severe and I was just so puzzled and amazed by this. Pharmacologically or biochemically, what is happening that allows that to work?

Martin Polanco: So it's a very complex pharmacology that Ibogaine has. It works on 50 different neural receptors. In general pharmaceutical science, pharmaceutical companies want drugs that are clean. And by clean, they mean one drug, one receptor.

Tim Ferriss: Highly specific. Which is really very hard to do.

Martin Polanco: Yeah, very hard to do and it will never address the complexities of addiction. When you're dealing with addiction, you have to hit it at multiple levels. So it has very complex pharmacology. What it's doing at the opiate receptor and its effect on opiate withdrawal is really astounding because it's not just masking the withdrawal like a substitution drug would.

Tim Ferriss: Like methadone.

Martin Polanco: For example, somebody who's on heroin and they take methadone, for a period of time they will not have withdrawal, but as soon as the methadone leaves the system, the withdrawal comes back. This is not something that happens on Ibogaine. You take Ibogaine and the withdrawal is gone. 90 percent of the withdrawal is completely gone. So what that's telling us is that the Ibogaine is actually changing the shape of the receptor to the way it was before the person starting using. So it's actually restructuring it and healing it and bringing back the systems in a healthier and adaptive way.

Tim Ferriss: Have you observed cases of Ibogaine preventing other types of withdrawal? Say caffeine withdrawal, alcohol withdrawal, shakes, or things like that? Or does it seem to be opiate specific?

Martin Polanco: It's opiate specific. We have seen some benefits for certain psychiatric medications, but not for benzodiazepine withdrawal or for alcohol withdrawal.

These two withdrawals are actually dangerous. When somebody gets the shakes, it's DT and that can be deadly. So it's a very delicate process and somebody who's physically addicted to alcohol should not take Ibogaine. They need to detox first and then they can take Ibogaine for the psychological and the addictive benefits.

Tim Ferriss: I want to take a pause. We're going to keep going, obviously. But I want to just ask both of you, and maybe Dan I'll ask you this first. What are some resources for people who want to read more from qualified sources or good sources? Because there's so much garbage out there on all of this. What might you suggest? And it doesn't have to be Iboga or Ayahuasca specific, but let's just say there's someone out there who is on either prescription medications or addicted in some fashion who wants to try to educate themselves. What would you suggest?

Dan Engle: Great question. Because there is so much information out there. The first two websites that I point people towards are maps.org, M-

A-P-S.org. That was started by Rick Doblin in the early '80s. They've really pioneered a lot of the research that has been pushing Psilocybin and MDMA into Phase 3 trials. What I mean by that is that we're only a handful of years away from those being prescription available to trained professionals for therapeutic use here in the state, which is amazing.

Tim Ferriss: That's wild.

Dan Engle: So maps.org and then iceers.org. And that's I-C-E-E-R-S. MAPS stands for the Multi-Disciplinary Association of Psychedelic Studies and ICEERS is based in Spain. Their primary studies and their library of research is around both Ayahuasca and Iboga or Ibogaine.

Tim Ferriss: And it's I-C-E-E-R-S?

Dan Engle: Yes. It's I-C-E-E-R-S.org. And that was started by a guy named Ben De Loenen. They just had the first international, really well-researched consortium of scientists come together for a conference called AYA2014 conference and that was in Spain.

Tim Ferriss: AYA2014.

Dan Engle: Yeah, and that was a really one. I think that stands for the International Center for Ethnobotanical Education, Research & Service or something like that. And they're doing essentially kind of what you talked about earlier, which is part of the challenge with Ayahuasca is to make it clean and consistent over time. Until you can get to that, you can't really study it very well because in the jungle, you've got all these guys making up different kinds of brews. It's kind of how we make chocolate, you know? Chocolate has principal ingredients, but then everybody throws in their own stuff because their palate is different.

Tim Ferriss: Right, and you're like, oh, shit, I'm allergic to paprika. Oops, I didn't realize it was in there.

Dan Engle: Right, or oops, I didn't know that guy put toé in there.

Tim Ferriss: Which is not to be trifled with.

Dan Engle: So toé is classically used in brujadillo or like we were talking about, being able to actively manipulate people. So you really have to know who you're getting the medicine from and then to be able to look at it scientifically, know its purity, its potency and its

consistency over time. With Ayahuasca, you're principally using two different plants, like you said, the vine and the leaf. So when we take a scientific research approach to it, you can get that purity and potency quantified and consistent over time and therefore really start to research it. But there's not a whole lot of pharmaceutical industry funding for these kinds of psychedelics.

Tim Ferriss: Well, I would imagine – I'll just play Devil's advocate here. It's not so much that it's threatening, it's not profitable. So it's a subtle difference, but I would imagine these Phase 3 trials – and correct me if I'm wrong – but these trials cost money. I would have to imagine that they're being funded by some pharma company who's thrown on a [inaudible] group or something to make Psilocybin, whatever, tetramethylfolate Psilocybin so that they can patent it and protect it. I would have to imagine that it's a slight variant of some type.

Dan Engle: Yeah, MAPS is doing their own independent research outside of the pharmaceutical industry and outside of government funding, largely private funding. I think their MDMA trial is going into Phase 3 at something like \$17 million that they're raising.

Tim Ferriss: Great.

Dan Engle: It's pretty hefty. I think you're right. I think there is a dual relationship that the pharmaceutical industry has to psychedelic sciences. There's complete fascination – just like the movie "Limitless," how can we –

Tim Ferriss: Everybody wants NZT, yeah.

Dan Engle: Right, man. It's pretty freaking amazing. Sure, I think the first hurdle is going to be can we patent this? Can we make it profitable? But also on the other side of that, oftentimes when we become self-realized, when we become more integrated as a whole being on all levels, then we become more available to tolerate and experience and grow with the bumps and bruises of being human and we're less likely to utilize something to numb us out or down. That's stuff that makes psychiatric medications bad. I did that for a long time and every medicine has its place.

Sometimes when psychological suffering is so bad and the only thing you have available is a psychiatric medication, then use that. That's what the medications are for. And when they're used, they should be used with mindfulness for a particular period of time with a very clear plan on how to successfully titrate them off.

That's oftentimes what we're not taught as physicians even in our schooling.

Tim Ferriss: Not only taught, but not really incentivized, right? Inasmuch as you have limited time and resources to allocate to each patient and if you're within a traditional sort of HMO/PPO structure, it's as much as you might want to, to have a financially viable career, it's very difficult to build that in, right?

Dan Engle: Totally. Like the average interface with a client is like 12 minutes.

Tim Ferriss: Right, exactly. But let's talk about another one of these tools. Martin, I'm going to come back to you here. 5-MeO-DMT and Dan, I might ask you to add to this because I think through a fido at the beginning of that, which I'm very interested in. But Martin, could you explain what 5-MeO-DMT is and why and how you use it?

Martin Polanco: So 5-MeO-DMT is a cousin of DMT. DMT is found in Ayahuasca, whereas the 5-MeO-DMT is naturally found in certain plants and in the venom of the Sonoran Desert toad.

This is a toad that lives in Northern Mexico and Southern Arizona. It's been used for thousands of years by Mexican indigenous cultures to induce states of mystical consciousness. What we like about this medicine and what is particularly useful for drug addiction is that it reliably occasions mystical experiences. So I would say the majority of people that take it have this sense of unitary consciousness that all is one, that we're all love. This sense of your heart being open. So by incorporating it into the treatment program, we can help patients who have had the [inaudible] experience to feel a certain sense of release from the material that came up and of motivation and inspiration to move on with their life. As described, Ibogaine can bring up a lot of stuff from the subconscious and people are overwhelmed after the experience.

Just thinking about, oh, my God, this is my life and what am I going to do now? And then they have the 5-MeO experience and all of those preoccupations are just blown away because they realize that they are divine beings. And when you have this realization that you're indestructible and infinite and divine, then it's very hard to put a needle in your arm and continue using. So it works on many levels, but I do see such a profound effect on patients when used in combination with Ibogaine.

Tim Ferriss: How are the Ibogaine and 5-MeO-DMT administered? So is the Ibogaine oral or is that intravenous? How is that administered or smoked? And then the 5-MeO-DMT same question.

Martin Polanco: So the Iboga is oral. Ibogaine is also administered orally. It's given in capsule form, depending on a patient's body weight and the severity of the addiction and what kind of drug they're trying to detox from. Whereas the 5-MeO-DMT is smoked. So you vaporize it and then you inhale the vapors.

Tim Ferriss: Got it. And do you always use them in combination and if not, who do you choose which to use with whom?

Martin Polanco: So for patients who come for the drug addiction treatment, it is part of the program. Some people, if they don't want to, they can decline to participate. The experience of the 5-MeO on its own is profound. So some people are just coming for that. Our main treatment is treating drug addiction with Ibogaine and we use the 5-MeO at the tail end of the experience. So they're not used at the same time, but during the same week that patients are with us.

Tim Ferriss: I see. So the 5-MeO is used typically after the Iboga. So the sequence then is Iboga, Ibogaine, 5-MeO-DMT?

Martin Polanco: Yes. Actually, Ibogaine and then the 5-MeO-DMT. And then if they have any residual symptoms, we can give them some capsules of root bark, which would constitute the Iboga.

Tim Ferriss: I see. And by residual symptoms, you mean addiction related?

Martin Polanco: Yeah, so withdrawal related. So sometimes some symptoms that remain after a detox with Ibogaine can be restless legs, a little bit of anxiety, some peering. But these are minor. Generally, when people are going through withdrawal without any assistance, they have intense anxiety, they have vomiting, they have diarrhea. None of these are present after an Ibogaine experience, but if there's some residual remaining symptoms, then they can be easily treated with conventional medications or with the small doses of Iboga root bark.

Tim Ferriss: Yeah, those symptoms sound like me if I have creatinine and too many espressos on the way to the airport. For some reason, I need to learn that lesson over and over again. But the 5-MeO-DMT for your purposes, what plant are you deriving that from or is it synthesized?

Martin Polanco: So we're actually using the venom of the Sonoran Desert toads. We use dried venom, which –

Tim Ferriss: I'm sorry to interrupt. Is that the same as bufotinin or something? Are those different compounds? I apologize. I'm throwing a monkey wrench into the – sometimes there are circles burned into the arms of subjects and they're sort of put venom into the skin?

Dan Engle: That's a totally different experience and a totally different frog.

Tim Ferriss: It is? Okay.

Dan Engle: Yeah. A totally different use. It's called Kambo.

Tim Ferriss: Okay.

Martin Polanco: Exactly. The one that you're referring to, when they burn the skin and administer the poison, that's called Kambo.

Tim Ferriss: Kambo. And where is that? That's also Amazonian?

Martin Polanco: Correct.

Tim Ferriss: Got it. I'm very sorry to have interrupted though. You were saying that you take the dried – what would it be? Excretion or venom from the toad and you try it?

Martin Polanco: Correct. So there is a foundation in Sonora, which is Northern Mexico, which is tasked with protecting the toad. So every time it rains, which there's one rainy season in the desert and the toads come up from their underground lairs.

They catch them, they squeeze the parotid gland, which contains the venom, then this is dried. That is the compound that is then smoked to administer the 5-MeO.

Tim Ferriss: I see. Dan, in your experience, how do you think of the applications of 5-MeO-DMT versus Ayahuasca? Because, of course – I shouldn't say of course – but my understanding is whether you're looking at Psilocybin or the chacruna leaf that is typically used in Ayahuasca, the molecular structure is very similar to DMT, right? Or contains DMT?

Dan Engle: Mm-hmm.

Tim Ferriss:

So how do you think about the use of Ayahuasca versus 5-MeO-DMT? And in full disclosure, I should say I have smoked 5-MeO-DMT once. The experience only lasted somewhere between 5 and 15 minutes. Hard to track time accurately when you're on that stuff. And I didn't find that it allowed me to do the work and the introspective analysis and have the realizations that Ayahuasca provided over a much longer period of time.

That could be a very individual experience. That's only an N of 1 and it's one 5-MeO-DMT experience, but for what applications or types of contexts would you use one or the other?

Dan Engle:

Personally, I think your description of the difference is accurate. When we're engaging the process more consciously, a bit more slowly, but more in our body, when we can really see the traumas that are resolving, when our stuff, when the subconscious material comes up onto the projection screen and we can really see it and dance with it, understand it, engage it, have compassion for it, we have this complete corrective experience. So Ayahuasca, what the vine and the leaf do together, they up-regulate the neuro chemistry while you're going through these reparative traumatic experiences. So you're healing so much consciously.

And with 5-MeO, there's so much being healed as well, much of which is not necessarily conscious. And again, just to play Devil's advocate, 95 percent of what's happening in our mind stream at any one time is subconscious material anyway. So we're typically not totally aware of what the majority of our mind, including our brain, are doing at any given time. 5-MeO is one of those that the experience is so strong, it's so direct back to source consciousness.

It's extraordinarily strong in its flavor as a rocket ship back to God. That's why it's called the God molecule. DMT is called the spirit molecule. 5-MeO-DMT is called the God molecule. It does take you back to source. Sometimes it's really difficult to come back and know fully what happened. But that doesn't mean just because we don't know what happened and there wasn't a whole lot of healing that did happen.

I tend to be a researcher like yourself and I get curious to know what's happening and to be able to dance with it more consciously. So my preference is to take a bit of a slower approach. There are other methodologies of DMT experience – Psilocybin is one. That's why 94 percent of psychedelic-naïve people say that their first-time use of Psilocybin was in the top five spiritual experiences that they had ever had. Those are big numbers, right? 94 percent; that's huge. So

you've got Psilocybin as an orally active DMT, phosphoryl-oxy DMT.

And you've got yopo and vilka, which are different seeds of plants from South America, Argentina, all the way over to Brazil. Those are also with Bufotenine, 5-MeO-DMT, those are snuff powders. They're ground up seeds. You add a little bit of ash; you add a little bit of water. You have to prepare it just right.

That snuff is about somewhere between a 30 and 60-minute experience. So it's like the Sonoran Desert toad in the effect and it's not quite the robust rocket ship, so you have this slower engagement with it. You can understand a bit more about what's happening and that being said, I've experienced massive healing with 5-MeO-DMT. I've consistently seen massive healing be experienced and when people come back and first thing I do or we do is encourage them to "hold the gold," so to speak.

Tim Ferriss: What does that mean?

Dan Engle: Like hold the gold, keep that really private. Keep that experience really close. That was super precious. And when it feels right to share, then share it with people who are very sensitive to the fact that you just went on a really strong life-altering journey and they're going to be supportive of that.

They're not going to ridicule it or judge it or persecute it because all of that flavors that person's primary experience with it. So many people when they have a big experience, they want to go share it and sometimes the response they get isn't always supportive. That alters the healing that they just received.

Tim Ferriss: No, sorry. The reason I'm laughing is after I had my first Ayahuasca experience, I was like, I can probably never try to verbalize this to anyone because I will have people in white jackets come and take me away and commit me. Allow me to just sort of confess something that I feel very conflicted about internally, which perhaps people listening might not identify with. But I, for a very long time, have considered myself an atheist. I think agnostic is usually a cop out. Because a theist is someone who says "I believe in God" or "I believe in gods." And if you can't make one of those two statements or both, then you are an atheist. If you don't know, then you're an atheist, right?

So I always put myself pretty firmly in that camp and it's been very challenging to have some of these experiences, these direct,

first-person experiences that I've detailed meticulously in journaling, and I've had some extremely unusual interactions with friends and other people during and after these experiences that defy any type of immediate explanation. But they can be corroborated by sober people. So just some very unusual stuff. Not unlike – and this is again going to get into crazy town – but some of the sort of semi-telepathic seeming experiences that people have on Psilocybin.

So I still, when I hear God or spirit, there's part of me that still kind of winces and squirms, but I don't have any better vocabulary. Does that make sense?

Dan Engle: Right. Totally.

Tim Ferriss: But I usually try not to use those words because I feel like one of the pitfalls of hallucinogenic research and one of the Achilles heels in a way is that the – let's just call them conventional, formal, medical establishments or pharmaceutical regulatory bodies and so on – do not respond well to talk of oneness and returning to God and the spirit molecule.

They're like that is a bunch of woo woo, fucking crazy talk. Thanks, but no thanks, right?

Dan Engle: And that's a good example of the basis of the data that started this whole resurgence in psychedelic research with DMT and Rick Strassman's work back at the University of New Mexico in the '90s. He wanted to research DMT and his mentor said, "Well, don't talk about spirit or any kind of spiritual experience, just say with, let's see what happens with heart rate and blood pressure and just physiologic measures." The spiritual stuff may come as a natural secondary and it inevitably did. People had these amazing experiences with what they would call spirit or something outside, intelligence and beauty outside themselves that they had no reference for.

But when they went there, sometimes it was really unsettling because it was so unexpected.

Tim Ferriss: Yeah. But the reason I chuckled initially was that I think – and I've love to ask – Martin, I'll ask you this first and then Dan, I'll come back to you – is the relative importance of the treatment, let's just call it plant medicine. So you have plant medicine, then you have pre-experience work and post-experience integration. So let's just

call that the work. And then you have the ceremony itself. But excluding the medicinal component, just the ceremony.

So in Ayahuasca, it would be like everyone's sitting in a circle and having it go dark and the music and the [inaudible] and all that stuff, the songs. And then with Iboga it has its own thing. I'd be very curious to know how you would weight the importance of those? I'll leave it at that.

And then I'll come back to Dan because what I've observed, which I find very troubling is, as for instance, Ayahuasca has become very popular, there are people who do Ayahuasca two or three times a month and don't seem to do any prep work or post-experience integration. I'm not really convinced that much is happening, other than going to the casino and rolling the dice biochemically two or three times a month. So Martin that was a long-winded, somewhat scattered question. But what do you think the most important components are? How do you rank the prep work, the post-work, the actual medicine and the ceremony or ceremonies?

Martin Polanco: Yeah, that's a really interesting question. I think because Ibogaine has such a strong biological component, that is important, but in terms of the relative importance of the experience, like what goes on before and after the administration of Ibogaine, I think is even more important.

Because many people can have this experience and come out of the other side clean, they have no cravings and no withdrawal, but if they go back home and they haven't changed certain elements of their lifestyle or learned new tools or techniques to deal with stress or anxiety, when they come up, they can relapse and then what was the purpose of taking the treatment if they didn't prepare or they didn't integrate the experience afterwards? I would say that is critical. As with any plant medicine, setting the setting is also very important. So you mentioned in the Ayahuasca journey, [inaudible] they have the [inaudible] and with Ibogaine as well. We try to provide a safe container where people feel safe to have these mystical-type experiences. That involves lighting and sounds and smells and all these other things that are involved in preparing the space.

Tim Ferriss: Thank you. And Dan, what are your thoughts? And maybe we can start with how you feel.

I asked a very famous Peruvian shaman at one point, how much is too much? That might be how often is too often? And this might be asking a barber if you need a haircut, to quote Warren Buffet, right? And he's like, "Oh, yeah, you can do it every week no problem." And I was like, nah. I'm not sure about that. What are your thoughts on frequency for this type of thing?

Dan Engle: Well, the biggest hole in the whole system that I see as far as the medicines becoming more and more available is exactly what Martin is describing in the integration work. We're occasioned with so much. I'll use another example. Before I ever was on the psychedelic path, I was into Lakota medicine. Sweating and going on vision quest and going to sun dances and spear dances and these sorts of things. I went up on the mountain, on what they call a vision quest. And I came back and I was –

Tim Ferriss: And that's no food, no water for a period of time?

Dan Engle: Yeah. You go with a prayer. You set a space. You stay in your circle. You sweat in the beginning; you sweat at the end. One of the elders who was holding the fire for me, when I came down, he said, "Great, you had a good experience on the mountain. Well, come back in a year and tell me what happened, because it's going to take you that long to figure it out." I didn't really know what he meant at that time, and I certainly knew what he meant a year later. And there are still things that I'm working out from the first time I did Iboga a year and a half ago. I'm still learning about that ceremony.

I'm still learning about my Ibogaine experience six months ago. I'm still learning some of what I did in my first series of dietas with Ayahuasca. There's so much that just continues to unfold. And if we are going to ceremony and going to the medicine as a crutch to avoid doing our own work, because the medicines do help us feel better.

The up-regulate your chemistry. They will help you feel better in the short-term. And if you keep coming back without doing the necessary integration work. Another example is taking that yoga off your mat into your life or your meditation off the cushion into your life. Well, let's receive the medicine work out of ceremony and put it into our lives. That's integration. That's when our lives significantly start to change.

Tim Ferriss: Right.

Dan Engle: Most people are not talking about integration. Most people are really excited about this new kind of chic thing to do and that's not to minimize their deep prayer and coming in for some healing and, in fact, they're probably receiving a lot of healing. We still know that the maximum benefit that comes from any healing ceremony like that is integration and making it actualized deeply in a person's life. For me, the preparation is important. I think of maybe two ceremonies out of several hundred that I had an intention that was exactly what happened in the ceremony or that was realized in the ceremony.

I'll go in with a particular intention, but 99.5 percent of the time something completely different happens that I didn't expect. So intention is good; preparation is good; cleaning out the physical vessel, just being able to be fairly self-contained and be self-observant. These sorts of things are important. The setting is extraordinarily important, like we were talking about before. Somebody that's integris –

Tim Ferriss: What do you mean by that?

Dan Engle: They have a high degree of integrity and altruistic intention. I think of it as like, okay, it's like the E3 check. What's the person's experience? Have they been pouring medicine for longer than a month –

Tim Ferriss: You're talking about the person actually leading the experience?

Dan Engle: Exactly. What the facilitator's experience? What's their energetic? Do they hold a good space?

Is their energy clean or do they feel like they're manipulating the space or getting something out of it? Third is do they know how to work as a spiritual EMT? Do they know where the rip cord is if you can't find it? Like if shit really goes down, for example, like you were talking about with benzodiazepines. So there's a way to judge whether or not or perceive whether or not a setting is good and then the biggest still is making that gain actualized is the integration.

I think we're understanding more and more about how important that is because I've seen exactly what you've seen, which is people keep kind of circling around the ceremony space and dropping in and dropping in and dropping in, and they don't seem to be getting significantly better. And that might just be also something that they

need to work out. They're in a holding pattern until the external support comes.

A last point that I'll say in that regard is that the medicines are typically, when held right, extraordinarily safe. There is a threshold of going too far. There is a potential downside of drinking from the fire hose a little too strongly.

Tim Ferriss:

No, absolutely. I will just say to people – you mentioned clean energy. And again, we get into a set of words and vocabulary and adjectives that are not commonly combined. So people are like what the fuck is this? But I will say I've been in settings where you can tell people are offloading some really dark shit. I had an Ayahuasca experience where there were six or seven people in the room and two or three of them, I had that kind of dog-like reaction to them as soon as I met them. I was like, "Not good, not good at all." And sat down and I drank a heavy dose of medicine and completely – I remained completely sober.

That's another weird thing about some of this stuff is it was completely negated. My body or mind just somehow negated the experience. I could've done pseudo and just driven home. You do see people lose it, totally lose it. You need someone. I remember this woman was telling me this experience she had with a so-called shaman, like what do they call it? A yogawaska expert who decides, yeah, I've done some Bikram yoga and read a couple of Carlos Castaneda's books; sure, I'll be a shaman.

The woman leading the entire experience for like ten people doing their first Ayahuasca experience, freaked out and went and locked herself in the bathroom. That is a fucking disaster. You do not want that to happen. Total rough segue, but I'll do it anyway because it's sort of my specialty. Traumatic brain injuries – so maybe Martin, if you want to just maybe open the door on this a little bit. How can you use some of these treatments for traumatic brain injuries? Because this is actually something I've never heard of before.

Martin Polanco:

This is an area of experience for Dr. Dan. What I can talk about is my experience with war veterans. We get more and more referrals from physicians at the Veterans Affairs who are sending us people who are addicted to opiates. These are war veterans that often are suffering from traumatic brain injuries and PTSD. And there is no studies that back up things that we're seeing, but Ibogaine does have a narrow genetic effect or causes neurogenesis. And there's this new brain cell growth. That has been documented in pre-

clinical studies. So some of the benefits we're seeing are likely attributed to that.

The main benefits we see for war veterans is this resolution of the opiate addiction and the reduction in their symptoms of post-traumatic stress disorder. I would let Dr. Dan talk about the effects of different plant medicines on TBI, as that is his area of expertise.

Tim Ferriss: Sure, yeah, no. Thank you. Dan, do you want to pick it up from there?

Dan Engle: Yeah. I think Martin is exactly right. There are going to be multiple levels and layers in which these medicines help heal. We're looking at the whole self. You're helping to heal the psyche, the mental experience of trauma that's in PTSD. You're helping to heal the physical structure of the brain through neurogenesis and reparative mechanisms that up-regulate neurochemistry and have this healing effect. To be honest with you, we're not exactly sure how they work outside of that neurogenesis component, which means something called "BDNF," or "brain-derived neurotrophic factor" oftentimes gets stimulated and produced by the psychedelics. Ayahuasca will do that. Psilocybin will do that.

Psilocybin has got some amazing research when they just did these LSD trials, I think at the Royal College of London, where they were looking at a new compilation of SMRI scans. They took a whole lot of SMRI scans and you kind of stack them on top of one another. They were curious to see what's happening in the brain. And when you look at a before-and-after picture, it's similar if you were looking at a cobweb, and a really beautifully ornately designed cobweb and say maybe 10 percent of the lines in that cobweb were neon and you could see them on the scan.

That was before Psilocybin. And then after Psilocybin, during and right after Psilocybin, you saw the effect of what was happening on that cobweb and like 95 percent of the cobweb was highlighted. It was amazingly up-regulated increase in neuronal activity and neuronal connections that wouldn't otherwise be made. Like cross-talk communications with different areas of the brain.

And then, interestingly enough too, when you look at that picture like the brain on Psilocybin, it looks really similar to the brain of a child and how –

Tim Ferriss: Children are always tripping balls. That explains a lot.

Dan Engle:

Right, totally. A child's brain is open, curious, accessing all this information, like little sponges. Kids are little sponges. We hear that a lot and they are. Especially if you live with kids, you just see how much their brains are alive and they're always taking in new information and they're always making up stuff and they're always in this like really amazing growth phase. So that's just one good example of how we've seen in small clinical case studies with people that we've worked with, we've seen extraordinarily potent and impressive healing that happens with the brain.

Brain trauma, as well as the physical and the mental construct of that. Now we're seeing, because we have had the advance of science in brain imaging technology to be able to help us see what's actually happening, under the skull so to speak, during these experiences. All of that is on the plus side. What I will say too is that it's also important to pace. Somebody fresh out of a TBI or traumatic brain injury, I wouldn't necessarily say Ayahuasca or Psilocybin is your first gateway to healing. I would say, first let's stabilize the trauma.

Let's make sure that you're getting all of the supported, necessary therapeutics to make sure that the healing is also happening and there's not an acute potential exacerbation of that trauma. This is still a really new area of research. I tend to be a bit of a renegade and cavalier in some respects, and I also tend to play it safe in other respects. If I don't know, I'll tend to put myself in the laboratory first.

I've had half a dozen severe brain injuries through competitive athletics, one of which I dove off a pier, broke my neck and had a compression fracture at C5. That's how I started med school in a halo. So in the midst of that, seeing the down regulation of hormones and the down regulation of my neurochemistry after the TBIs, I got really curious about psychedelic research when I had my first Ayahuasca experience and I could feel my brain being healed. Literally. So now we're starting to see, okay, how can we bring in integrative psychiatry, antigenic research, and traumatic brain injury recovery, as well as addiction recovery? That's a really amazing interweaving of new medicine. That's why we're seeing this renaissance in psychiatry, as well as in rehab medicine. So that's kind of a long-winded way of saying it's important. The psychedelics have their place for TBI repair after we've done the stabilization protocols and somebody is resolved for their acute injury and in the midst of a supported, multi-layered, integrative approach.

Tim Ferriss: No, definitely. I think it's just a pretty basic risk benefit analysis, right? There's very limited downside and potentially high upside to starting slow and there's the opposite for starting too fast, right? It's like oh, you tore your ACL? Great, let's do some box jumps. No, no, no. Let's not do the box jumps first. One thing you mentioned that resonated with me was – and again – I would just ask everybody listening to just suspend your scoff reflex, because I've been in that position also, but when you have the first-person experience, just from a sensory perspective, you described your brain being healed, right? And it's kind of like, come on, how would you know that? But I had a very similar experience once where I felt this cooling sensation directly on my right dorsolateral prefrontal cortex. Like exactly there.

And the reason I know that location is because I've done some experimentation as a subject, also as an experimenter, with Adam Gazzaley, who I had on this podcast, who is a world-class, very famous neuroscience researcher who runs one of the top labs in the world at UCSF. He's been on the cover of Nature and so on. Did transcranial, direct current stimulation, so TDCS. And when you place, I think it was the anode on the dorsolateral prefrontal cortex, it's a very similar sensation, interestingly enough. And that is also implicated for potential use in PTSD.

So it's really fascinating when you start to spot these potential parallels or synergies between these different modalities, right? Of course, the language is different, so the neuroscience might be more readily accepted, but it doesn't make the medicinal path any less valid. It just is harder to capture potentially and measure in the way that you might measure, say voltage or wattage or whatever it might be, doing something like TDCS.

So let's do this. I want to ask just a couple of rapid-fire questions. You guys have been very generous with your time and I'm sure we'll talk more about this, probably privately and potentially do a Round 2 at this, but let me ask just a couple questions for both of you. Maybe Dan, we'll start with you and we'll just go back and forth here. So when you think of the word "successful," who is the first person who comes to mind?

Dan Engle: My first mentor, Roger Bell, who is a chiropractor.

Tim Ferriss: And why is he the first person who comes to mind?

Dan Engle: He was just such a gifted man in multiple areas of his life. Principally being that of facilitating healing for others and just

consistently saw people who were wrecked from a variety of issues, come out of his space healed, better, at peace. Whatever they were in the midst of trying to resolve, he had just cracked the code, so to speak, in the physician to client relationship and what it takes to actually facilitate healing for another person. He has consistently been just one of the most inspiring people to me.

Tim Ferriss: Is he still practicing or has he passed?

Dan Engle: He's passed away.

Tim Ferriss: I'm sorry to hear that. Martin? When you think of the word "successful" or hear the word "successful," who's the first person who comes to mind for you?

Martin Polanco: I would say Elon Musk. I really admire entrepreneurs and entrepreneurs and kind of the change that they bring about in the world. He's definitely a visionary that has come to the United States to fulfill his dreams and has changed various industries.

Tim Ferriss: He's very good at betting the farm repeatedly. I heard – I might be getting the numbers wrong. I think it was something like – I want to say \$180 million, but it might have been \$300-and-something million after his exit from PayPal and he took pretty much all of it and plowed it into his three new companies: SpaceX, Solar City and Tesla. Rumor has it he had to borrow money to pay for his rent, which seems unlikely, but it does make for a good story. Elon is amazing. Dan, what books have you give most as gifts? This doesn't have to be related to psychedelics but certainly you could throw one of those in if you wanted.

Dan Engle: Well, most recently, Mating in Captivity. It's such a good book about just deconstructing the whole idea of success in relationships. The Jeremy Nardi book on Ayahuasca was amazing for me.

Tim Ferriss: Is that the Cosmic Serpent?

Dan Engle: The Cosmic Serpent.

Tim Ferriss: It's interesting, yeah.

Dan Engle: Yeah. And then I suppose at the time that I was reading it, one of the more impactful books for me when I was living down in the jungle and experiencing more of the deeper reflections through the medicine space was Autobiography of a Yogi by Yogananda.

Tim Ferriss: Steve Jobs' favorite book.

Dan Engle: Wow, I didn't know that.

Tim Ferriss: Yeah, he had instructions before his death to give every attendee at his funeral or it might have been his wake, a copy of Autobiography of a Yogi.

Dan Engle: Wow, that's great.

Tim Ferriss: Martin, do you have any books that in particular you have given to other people as gifts?

Martin Polanco: Sure. I like gifting a book called The Journey Home. Most recently, I've given a lot of people a book called Ibogaine Explained, which is a very brief introduction to Ibogaine that is very accurate and scientific and just sound.

The other book would be Tryptamine Palace, which is fantastic because it looks at the 5-MeO experience from a Buddhist and a Hinduist perspective.

Tim Ferriss: That's very cool. That's a whole separate conversation that we could dig into. The purported psychedelic use in many of these traditions that have existed for millennia. Is the Ibogaine Explained – do you know the name of the author for that? I could certainly look it up.

Martin Polanco: I believe his last name is Frank. I can't remember what his first name is. It might be Victor.

Tim Ferriss: All right, perfect. I'll look that up. And everyone, you'll be able to find links to all of this in the show notes at fourhourworkweek.com/podcast. Just a few more questions for you guys. All right, so Dan, if you could have one billboard anywhere with anything on it, what would it say and where would you put it?

Dan Engle: Be curious. Everywhere.

Tim Ferriss: Put it everywhere.

Dan Engle: Put it everywhere.

Tim Ferriss: I like it. Martin?

Martin Polanco: I don't have an answer for that. I'm really [inaudible] about that question.

Tim Ferriss: No problem. It's not a mandatory. These are all optional. Then Martin, I'll segue to a different one for you. What advice would you give your 30-year-old self?

Martin Polanco: Mainly business advice. Be careful who you hire. Hire the right people. Be really diligent in your exploration of their backgrounds. So pretty standard. I guess that comes from personal experience of being burned.

Tim Ferriss: Yeah. No, for sure. I'll just throw out a recommendation for those people who have maybe had the experience or are looking to avoid that. There is a very good book called "Who," W-H-O, that a number of my start-ups have used for hiring practices, which is basically a streamlined – they won't like this description – but a streamlined version of Top Grading, which is a very big, fat, 600-page book. This is a much easier read and very prescriptive. Dan, what advice would you to give your 30-year-old self?

Dan Engle: It's always been an inclination for me to continue to drink from the fire hose. There would be some coaching around pacing and knowing that so much of what we get called to do at the time that we're getting called to do it, we don't even understand why. So really it involves our faith and knowing that we have the power to be able to shift our mindset at any given time. There's a great quote by Victor Frankel – "The last of the great human freedoms is the opportunity and the ability to choose one's own mindset in any given circumstance." He was an Austrian psychiatrist that wrote the book on Man's Search for Meaning.

Tim Ferriss: Man's Search for Meaning. Great book.

Dan Engle: Yeah. And somebody being able to go through that experience and write that? He wrote that book in like nine days after he got out of the camp. Bam. And just laid it out as a treatise for life.

The challenges that I've experienced, I think we all do in a variety of different ways is when our faith is being called in at a deeper level. For me it is patience, faith and patience, just recognizing that it's all moving exactly at the speed that it's supposed to. You can't rush it.

Tim Ferriss: Yeah. It's Man's Search for Meaning. Highly recommended for those who haven't read it. By Victor Frankel. If you have read that

and you're looking for perhaps a way to expand your thinking on those topics, David Blaine's favorite book, which he recommended to me, is actually a combination of two books. It's extremely powerful. Written by Primo Levi. This is a Man and The Truce. Those are usually found in one volume. I asked David what he learned from it and he said "everything." It is a really powerful book for those people who are interested in exploring that further.

Martin, what have I not asked or what would you like to say that I haven't given you a chance to say to the people listening to this?

Martin Polanco: I would say you did ask although maybe we didn't go into the full depth of it: who is a good candidate for Ibogaine and who isn't? I often get requests from people who just want to explore their psyche or they have depression or they want to deal with some childhood trauma. I often direct them towards Ayahuasca because I do think that Ibogaine is the big gun and it is generally best used for addictions. And that's not to say that people that don't have addictions don't derive benefit from it, but I do think that there's other modalities that they should explore first that are less risky.

Tim Ferriss: I'm really glad you brought that up. And for what it's worth, when I have people come to me and they're like, "I've never done any hallucinogens but my buddy is going to his friend's house. They're going to do Ayahuasca this weekend."

I'm like do not start with Ayahuasca. If Ibogaine is Everest, let's just say Ayahuasca is Kilimanjaro or something. It's still a serious fucking expedition. Why don't you start with lucid dreaming or –

Dan Engle: Flotation.

Tim Ferriss: Flotation tank or moderate dose Psilocybin? So actually, you know what? Since we didn't – I was going to ask you the same thing and I know you have an experience with flotation. So Dan, would you mind just elaborating on that for a moment?

Dan Engle: I'm just about as excited about flotation therapy as I am about psychedelics. Because not everybody is going to do a psychedelic. Maybe it's not in everybody's best interests to do it. The Art and Alchemy comes into one of the questions you asked earlier. Which is how do we know which one to recommend to a given person at any given time? And that takes a lot of understanding and nuance to assess and also intuition. But everybody can float.

And so it's going to reach the masses in a different way. And when prepped well and when done consistently over time, can be an extraordinary psychedelic arena. By psychedelic, I essentially mean coming back to a deeper connection with one's self.

Tim Ferriss: Just for people who may not be familiar with the term, by "floatation," you mean floating inside a tank where you've blocked out light and sound and the water has enough salt in it, like the Dead Sea, to keep you sort of in this embryonic fluid so you don't feel gravity. Is that a fair description?

Dan Engle: Right. It's the first time that we've been without sensory experience, sensory environmental stimulus, since we were conceived. There is no sound, no sight, no temperature gradient and no gravity. So all of the brain's mechanisms and energy and searching and gating information from the environment is relaxed. So that everything that was in the background – kind of behind the curtain – can now be exposed. And when done consistently over time, it's essentially like meditation on steroids. It starts to recalibrate the entire neuroendocrine system. So most people are running in stress mode or sympathetic overdrive start to relax that over time and you get this bleed-over effect. It's not just what happens in the tank. It continues outside of the tank. You see heart rate normalize, hypertension normalize, cortisone normalize. Pain starts to resolve. Metabolic issues start to resolve.

It's really a phenomenal modality. And there's another resurgence of that now up in the mainstream on flotation therapy and its myriad of benefits.

Tim Ferriss: Probably in no small part due to Joe Rogan's carrying of the torch.

Dan Engle: Yeah, totally, right? It's interesting how he's been really big in that. And it's a nice entry point for people who have never done a psychedelic. Because it starts to get you close with your stuff and are you comfortable in the dark and the unknown and the mystery?

Tim Ferriss: That's actually a really good point. If you can't handle a flotation tank, you're not ready to be strapped to a rocket ship that you can't turn off.

Dan Engle: One of my teachers, Don Howard, says it's a white-knuckle sleigh ride. It can get a little intense and the tank can tell you where you are in the midst of that. So that's a great entry point. And then there's so more entry level psychedelic experiences to have too, like LSD and MDMA and Psilocybin when held well. LSD has

thousands of case reports in the '50s, '60s and '70s of being used as a psychotherapeutic aid.

Like, wow, it was amazing. Stan Groff did thousands of cases and then when it became illegal, he went to holotropic breath work. And that's another modality. There's so much that's coming on line right now. It's just a really exciting time to be in this field.

Tim Ferriss:

Absolutely. I would say just a couple things. So on the LSD front, not a substance that I use much, if at all, because I prefer to use the compounds that, like you said, have that kind of natural dose dependent, self-limiting aspect, because you'll puke your brains out or something like that with Ayahuasca or fill in the blank with some of these plants that have existed for millennia and been used, probably for just as long. Or they've existed for longer than millennia but they've been used by humans for that long.

The Psychedelic Explorer's Guide I think is a very interesting read for a lot of people who may not be familiar with the logistics and ideal or optimal logistics of a guided experience with supervision for some of these substances and it looks in depth at, as we said, the set and setting. In other words, the mindset and the prep work preceding the experience, but then also the setting, the actual physical setting, having a chaperone or a sitter of some type and how to format the experience to minimize downsides and so on. I find it to be a pretty useful guide.

With the flotation, this is for me, but I'm sure other people might be interested. I've noticed, for instance, with transcendental meditation or other types of meditation, there is a – for me personally – kind of a trip point after a week of continual meditation at least once a day. So I'll have 20 minutes the first day, 20 minutes the second day, all the way up to day 5, 6, or 7.

And then there is kind of a phase shift where all of my measureable likes cortisol, subjective anxiety levels, 0 to 10 type thing, they all sort of make this quantum leap in a better direction, but it takes about a week for me personally to jump from non-boiling to boiling, right? With the flotation tank, in your experience, what is the minimum effective dose? Like when you said doing it consistently, if you were prescribing it like medicine, what would that look like? Like how many days or how many weeks? How many times a week? How long are the sessions, etc.?

Dan Engle:

Yeah, great question. It depends a little bit on the target symptom. So for the mind, anxiety, insomnia, mental chattering, that can be

supported and significantly improved in anywhere between three and seven sessions. And those stacked two to three a week.

So if you do two to three a week for three or four weeks and you're really compressed upwards of seven to eight sessions in that time, the majority of people would see a significant benefit.

Tim Ferriss: How long are the sessions?

Dan Engle: Typically an hour, but that's just for ease of scheduling.

Tim Ferriss: Got it.

Dan Engle: I recommend if people are able to get in there, do a two-hour float. Most people find a lot of benefit, exponentially more so between one-hour and two-hour. And two-hour can be a bit of a threshold. You get into a three-hour float, some people start to get a little antsy and are ready to get out, right?

Tim Ferriss: I can imagine.

Dan Engle: And then for pain, it's actually a little bit further. Like seven to ten sessions.

Tim Ferriss: Got it.

Dan Engle: Because it starts to repair the body's relationship with itself, as well as – and this is again some of the theory, but we're starting to see some of the research show that this is true.

Repair the body's own opioid production, its own pain molecule production. And then I've had clients and friends and family that have talked about significant trauma resolution in the midst of that too. Like replaying old traumatic patterns similarly to what you would see potentially experienced in an Ayahuasca ceremony. Now that might take a bit more of the floats.

Maybe between five and ten floats to really start to get in there, and then spaced relatively close together, you might get the benefit of maybe one super-strong, very potent, and really well-held ceremony of something like Ayahuasca, but you can start to see benefits in the same kind of arena because when the body just starts to relax, its constant survey of the environment and the natural exploration is inward and then it starts to go deeper and deeper into the psyche and into the mental constructs and the subconscious. And then it gets really juicy.

So I typically say two to three floats, however much you're able to squeeze in there and do that for a month and then see what happens. I'm going to be extraordinarily surprised if you didn't see anything happen and it wasn't beneficial. I've never had anybody come back and say yeah, that didn't work.

Tim Ferriss: Don't shave an hour before you go to do a float session.

Dan Engle: Right, definitely.

Tim Ferriss: You will feel that and it won't be pleasant. It will interrupt the experience. So guys, I want to let you get on with your evening, so I will finish with a question that I ask pretty much everyone, which is do you have any ask or request for my audience? We're going to get to where they can find more about what you're up to and so on, but if you could ask the people listening to do anything or make a recommendation, what would that be? I'll start with you, Martin.

Martin Polanco: The specific ask would be to support a study that we're doing on war veterans and Ibogaine. We're doing some pre-Ibogaine brain scans. We're doing a type of scanning called spect scanning and we're going to look after their brains afterward. So if you or a loved one are a veteran suffering from opiate addiction and are interested in participating in this study, please get in touch with us.

Tim Ferriss: And where is the best place for people to go to learn more about that?

Martin Polanco: So our website is crossroadsibogaine.com and the number is 866-956-7756.

Tim Ferriss: Great. And Ibogaine is I-B-O-G-A-I-N-E?

Martin Polanco: Correct.

Tim Ferriss: Crossroadsibogaine.com. I'll put these all in the show notes, everybody and I'll give that url in just a moment. But Dan? What ask or recommendation would you have?

Dan Engle: I appreciate Martin's suggestion. He kind of stole my thunder because that's the one I was going to say.

I think MAPS is doing some amazing work and being able to support those guys because they're pushing the envelope forward in the arena of medicine as we know it that's going to be able to

help a huge number of people have an entry point into the psychedelic sciences and understand the benefit of some of these medicines that have been culturally prejudiced against for so long. And when we become more and more integrated, when we become more and more resolved of our trauma and we become stronger within our own personal empowerment, we see the next evolution of our experience as a culture.

Essentially moving to a place where we remember how to all live well together. I think there's still a lot of healing worldwide in that regard and people see us in the States as a leader in the field of personal development.

Tim Ferriss: What's so interesting to me also is the, irony is overused here, but how far the pendulum has swung from a sort of innate, tribal social existence, to a digitally connected, highly isolated, anxiety ridden existence and how we're using tools from these pre-industrial societies to in some capacity return to a communal tribal mindset. I don't know; it's very interesting to see that gravitational or even sort of genetic pull in that direction. It's really interesting. I'll close out with asking you both where people listening can find you online? Where they can find you on social? Whatever you want to offer. Martin, let's go with you again and feel free to give out whatever you'd like.

Martin Polanco: So again, our website is crossroadsibogaine.com. The word Crossroads and the Ibogaine, I-B-O-G-A-I-N-E. Our number is 866-956-7756.

Tim Ferriss: Great. And Dan, what about yourself?

Dan Engle: You can find me on Twitter – Dr. Dan Engle. D-R-D-A-N-E-N-G-L-E. I'm also affiliated with Crossroads, the Temple of the Way of Light and [inaudible] Labs in Austin. I have contacts through each of those websites too.

Tim Ferriss: Fantastic. Well, guys, this has been great fun. For those of you listening, if you think I'm a complete nut case and this is our last time interacting, then thanks for listening up to this point in my life. And for those of you who found this fascinating and hopefully explore this alongside the three of us who are chatting right now and try to apply a sort of inquisitive, rational and skeptical mind, but an open mind, to these things that I think represent very powerful and flexible tools for a whole host of problems.

And also taking people from sort of normal to optimal in a lot of ways, then I wholeheartedly thank you for listening this far and invite you to join the conversation. Check out everything that we discussed in this call, whether that MAPS, Crossroads or others. Be sure to check out the show notes. Fourhourworkweek.com/podcast all spelled out. We will have all the links you could possibly want, including links to all the websites, Twitter handles and so on. But gentlemen, thank you so much for the time. I really enjoyed it.

Dan Engle: Great. Thank you too so much, Tim. It's been great.

Martin Polanco: Thank you, Tim. It was awesome.

Tim Ferriss: All right, guys. Until next time, everybody listening, thanks for listening and talk to you soon.