The Tim Ferriss Show Transcripts Episode 66: James Fadiman Show notes and links at tim.blog/podcast

Tim Ferriss: Hello boys and girls. This is Tim Ferriss and welcome to another episode of the Tim Ferriss Show where I deconstruct world class performers and experts of all types ranging from billionaire investors to chess prodigies to Arnold Schwarzenegger type celebrities and in this case a scientific researcher named Jim Fadiman. I have wanted to have a sit down conversation with Jim for ages.

He is the author of The Psychedelic Explorer's Guide, which is an incredible book and really one of a kind, but he's also conducted studies since the '60s related to psilocybin, LSD and so on focusing not only on the mystical implications but using them in micro-dosing protocols for problem solving, including very difficult, hard science problems like engineering, math, circuitry, etcetera. This is a rambling, meandering discussion of all of the implications and applications therapeutic and otherwise of these substances that have really been criminalized and politicized and in my view a very counterproductive way. So without further ado please enjoy a long conversation with Jim Fadiman.

- Tim Ferriss: Jim, welcome to the show.
- Jim Fadiman: It's a real pleasure to finally be here.
- Tim Ferriss: I'm so excited to be outside on this gorgeous day in San Francisco, and I have wanted to have this conversation for so long now. It feels like years, but I think it's probably closer to six to nine months because the term that you introduced me to which is microdosing. I'm sure we'll jump back and forth but could you define what micro-dosing is?
- Jim Fadiman: Well, let's be clear that we're talking about psychedelics because a micro-dose is going to be a little tiny dose of something. With psychedelics is actually a low enough dose so it could be called sub-perceptual which means you don't necessarily see any differences in the outside world. As one person said to me, "The rocks don't glitter even a little, and the flower don't turn and watch you." But you are using it in a way that is really very unknown.

Albert Hofmann who invented LSD said that micro-dosing was the area of kind of the most neglected research. Tim Ferriss: Why do you think it's so neglected and what are the promises or applications of micro-dosing? Jim Fadiman: He took it for the last couple decades of his life, so I like to think that it helps you be really sharp at 101. Tim Ferriss: How frequently did he micro-dose over that period of time? Jim Fadiman: It would probably be once or twice a week. What he said is he almost would always take it when he was walking with the trees. So what it is and why he said it was under researched is it does a far better job of a whole class of drugs which we're now calling cognitive enhancers, most of which are simply derivatives of speed. Right. Definitely, like Methylphenidate, Ritalin. Tim Ferriss Jim Fadiman[.] Adderall Tim Ferriss[.] Adderall Jim Fadiman: Probably the most popular among educated students. Tim Ferriss: Oh, it's a popular currency for bartering. Jim Fadiman[.] Right. Tim Ferriss And when we talk about small doses in the case of say Hofmann using it twice per week, would that be in the 100mg range? Jim Fadiman: No, no, no, no. 100mg is a major dose. Tim Ferriss: That's a major dose. See, I'm not an LSD – Jim Fadiman: Aficionado? Tim Ferriss: I'm not well versed. Jim Fadiman: Let me just briefly run through doses because it does matter. Let's go from the top down. Terence McKenna talks about a heroic dose. Tim Ferriss[.] Yeah. That's enough to shatter the most resistant people.

Jim Fadiman: What happens is you don't remember anything. You don't bring anything back.

Tim Ferriss: Got it.

Jim Fadiman: It's kind of like you want to go swimming. How about going over to Niagara Falls?

Tim Ferriss: Right. Not a lot of time to work on technique.

Jim Fadiman: But if we get down to say 400mg, that's a transcendental dose. That's for mystical experience. That's something you should always have a guide.

- Tim Ferriss: This is LSD specifically.
- Jim Fadiman: This is LSD specifically. If we go down to 200, we're talking psychotherapy, deep inner work, all kinds of healing and great for self-exploration. 100 is really useful creative problem solving of problems that aren't personal, things like in physics or biomechanics or architecture. We can talk about some of that work that's been done because there's only been a little bit done, and I was involved in all of it. Go down to 50 and again I'll really reveal my age. It used to be called a museum dose.

Now it's called a concert dose. And 10, 15 is this micro-dose which another person described it as an all chakra enhancer, which is everything is just a little better. You know at the end of a day when you say, "Wow, that was a really good day," that's the way most people report on micro-dose. They're a little bit nicer. They're a little bit -

- Tim Ferriss: Personally behaving in a nicer fashion.
- Jim Fadiman: Yeah, they also find that stupid people are not so bad.

Tim Ferriss: More tolerant.

Jim Fadiman: They're much more tolerant including their relatives which is really extraordinary. They are not at a higher level of creativity, but they can be creative longer - kind of steady, more in flow. As one of my favorite women who's been micro-dosing - I discovered her, and she said, "Oh, yeah, I've been doing that for years" - she said, "The only way anyone else can tell is that my computer, I lower the illumination a little." But she has very large pupils so it's hard to tell.

- Tim Ferriss: The micro-dosing, is there an optimal frequency with which to use it? Is there too much of micro-dosing in terms of frequency?
- Jim Fadiman: Psychedelics are very peculiar. They are anti-addictive which means if you take it on day one and you have whatever experience you have, if you take it on day two same amount, maybe some experience maybe not, and if you take it a third day straight, nothing.
- Tim Ferriss: So you develop tolerance very quickly?
- Jim Fadiman: So your mind develops tolerance. The drug is gone. It's way gone particularly if we're talking LSD micrograms. It's gone within an hour and a half. So something in the mind says, "I think we've just had enough of that for now." It's a little bit like if you have a fantastic one of your killer carb days."
- Tim Ferriss: Right, my cheat day explosion.
- Jim Fadiman: Right, and then you do that the next day, and then the third day you just get sick. So they're anti-addictive. I have a protocol I actually send to people, and it basically says, "Take it on day one. Notice that you're still having experience on day two. This is different than if you take a higher dose. Day three, take a day off. And then if you are doing it continually, then you can take it again on day four." And that seems to work best for people.
- Tim Ferriss: And they're only dosing once on day one, but they see the residual effect on day two.
- Jim Fadiman: This is one of the things that what's wonderful is I feel like I'm Columbus. Any place I land counts because no one's been there. Most of the people who are listening to us who have any experience with psychedelics know that LSD is eight to 12 hours. Psilocybin is five to eight hours. DMT is 15 minutes, etcetera. Micro-dose seems to be two days. I was talking with a professor who does psychedelic research at a major east coast university, and he said tell me more about micro-dosing.

And I mentioned the two days, and he's basically a specialist in this area and in neurochemistry. And he kind of looks at me like, "Oh, you west coast cool hippies," and I said, "Well, that's been what I hear from people." And then a guy walks by who runs a very large corporation with manufacturing plants in about five

	countries. And he looks down at me and he says, "Second day is better."
Tim Ferriss:	This is just a passerby?
Jim Fadiman:	Well, it's someone I knew at the same gathering, and then I kind of gave my buddy a little kick in the ribs. Then he looks back at me, and he says, "Ask my daughter," who happened to be a mental health worker who also said. "Yeah," for her too.
Tim Ferriss:	That's something.
[Crosstalk]	
Jim Fadiman:	So this is one of the things we're discovering, and this is the fun part. I don't do research. I only do search.
Tim Ferriss:	Could you explain that?
[Crosstalk]	
Jim Fadiman:	Once I've learned something, replicating it or doing it with a whole bunch more people is not as interesting as, "Can I find out something else?"
Tim Ferriss:	Now I would imagine that you probably run into some resistance or debate around that point with people who would want to see multiple iterations of replicating results or they don't pay attention to the empirical data you might offer otherwise. Has that been a challenge?
Jim Fadiman:	 Well, there's a game in science. One is called have a big number. You can always ask this question, which is, "Why didn't you have more? You've had eight. How come you didn't have 15? You had 15. How come you didn't have 30? You only had 100,000, and you had no one from Norway in the sample. How do we know we can generalize?" So that's the kind of silliness that academics do to each other. The other in drug research - and this is really helping for a very small number of drugs - is called a double blind, which is you go to people and you give half of them nothing and you give half of them something. Psychedelic research has always stumbled on that one because within an hour except for micro-doses maybe everybody knows. And then the researchers are stuck acting like jerks all day

pretending that they don't know. So that's another one. But the

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main thing with micro-dosing is I'm not doing research. I'm not giving people psychedelic drugs. One is they're illegal, and two is I'm not a physician connected to a university. Keep in mind that since LSD became illegal, 26 million Americans - and just Americans - have taken LSD.

So I'm saying to people, "If you're interested in micro-dosing and you have your own material because you either know someone who is in college or in high school or in prison - these are the three places you can get almost any drug, particularly these less dangerous ones - then let me know and I'll be happy to help you make it as safe and as valuable as possible."

- Tim Ferriss: For those people perhaps unfamiliar with your background, could you give a short chronology or description of your background?
- Jim Fadiman: Sure. I was brought up in Los Angeles in the shadow of the film business. The shadow being the writers who didn't respect anybody else because they were the only ones who'd read and written. I went to Harvard as an undergraduate, and my favorite teacher was someone named Richard Aplert. After Harvard I scrambled around and got all the money and gifts and favors that I could find plus all the people to stay with and when and lived in Europe for close to a year. Ram Dass - Richard Aplert - still showed up and said, "Hi, Jim, the most wonderful thing in the world has happened to me, and I want to share it with you."

And I thought, "Okay," whatever it is. And then he takes some pills out of his pocket, and I think words you don't say on radio -"Oh, my" - and so I had some psilocybin with him while living in Paris. A week later I followed him to Copenhagen where he was teaming up with Timothy Leary and Aldous Huxley to present at the first conference that there was, of a world psychology conference, they first presented about psychedelics. And then my draft board wrote me a note and said, "You like living in Paris, or would you like to come to Vietnam where we can show you how to crawl on the ground on your elbows in the mud? Or would you like to go to graduate school?"

And all of the sudden graduate school had these little shiny stars around it, so I ended up at Stanford. There was a group off campus that was doing psychedelic research, and I found them. Did my dissertation on psychedelics. Not on psychedelics but it was about psychedelics. And then as the government said, "We don't know what to do about all these kids taking psychedelics. Let's stop all the legitimate research. At least we stopped something." So I then went and had a career doing other things and wrote about altered states and wrote about madness and wrote one novel - one psychedelic novel.

I used to call it government repression, but one of my fellow researchers calls it a lull in the research. So one the lull was over, I basically found some areas that interested me and I now am really a psychedelic researcher in this unusual way where I don't have a laboratory and I don't stay with people and I just ask them what they're doing. So it's more field research. At one level it's crowdsourcing. Another level it's - this is one of Ram Dass's terms - like going to the explorer's club now and then and you swap stories.

So that's a very short background, and I've had a long career. I've been a professor at various places. I've been a consultant. I was with the Stanford Research Institute with a group that developed the mouse and word processing, which was probably my closest to being "woo" in history.

- Tim Ferriss: What was your undergraduate major?
- Jim Fadiman: Well, I started in physics, and it was really hard.
- Tim Ferriss: Physics is hard.

Jim Fadiman: I had this wonderful moment after I just squeaked through calculus where my advisor said, "You know, Mr. Fadiman, that everyone who got a lower grade than you in this course will not be in your next course." And I thought, "Is there a message here?" Tim Ferriss: Tell me how you really feel.

- Jim Fadiman: Am I supposed to hear something? So ended up in social relations, which was psychology without rats, and that's where I met Dick Albert.
- Tim Ferriss: How did he differ as Professor Albert versus Ram Dass? What was that transformation?
- Jim Fadiman: Well, as a professor, particularly when you're a Harvard assistant professor, you are at the bottom of the stairway that leads to heaven, right, at least that's what you're told. So you're supposed to just work your ass off climbing those stairs so maybe, maybe, maybe, they will keep you. So Richard was kind of a wonderful teacher and a wonderful - as he would say - incredibly neurotic. And he was also then a closet gay - very closet because that's the

	era. And the Harvard department was full of really basically nice people looking at the kind of better sides of human beings.
	Also the department had B. F. Skinner, which was behaviorism, which was saying there is nothing in the mind worth noticing. So it was a wonderful place for a kind of nerdy intellectual, which I was. It's like from being seriously unpopular in high school and liking that to being just one more smarty ass person at Harvard who pretended to have read a lot more than he ever had.
Tim Ferriss:	What did you like about being unpopular in high school?
Jim Fadiman:	Well, they didn't respect me for the same reasons I didn't respect them. I was student body president because I was clever enough to figure out a way to make the other person look foolish, surely a terrible admission. And in turn when I won a letter in tennis - I was the captain of the tennis team - I never won a match against another school, but I knew how to get into a good college, which is to have Tennis Team California on your resume. The letterman's club had a meeting and changed the rules so that I couldn't get a letter, and I confessed that I found that wonderful. They and I understood each other deeply.
Tim Ferriss:	Your thesis - what was your thesis about in graduate school?
Jim Fadiman:	I'd been doing my Stanford courses by day and psychedelic research by night and afternoons and weekends.
Tim Ferriss:	What were the courses that you were teaching?
Jim Fadiman: [Crosstalk]	Well, I was taking.
Tim Ferriss:	Oh, the graduate level classes. I'm sorry.
Jim Fadiman:	I was the only graduate student that always wore a coat and tie because I thought that would fool them, and it did. But my dissertation was on behavior change following LSD therapy. And it took me two years to get a committee of three people and about eight weeks to do the dissertation. So it was a little scary for Stanford because this was just when Dick and Tim had been fired from Harvard. The country was in –
[Crosstalk]	
Tim Ferriss:	This is Tim Leary.

Jim Fadiman:	Tim Leary.
Tim Ferriss:	And Dick - Richard Alpert. That's right, Richard Alpert.

Jim Fadiman: And this was when students were taking over campuses and so forth and so on, so Stanford was terrified at earning its nickname, which was the Harvard of the West. I basically really had to sneak around very quietly and do my work, which was this wonderful work where I interviewed 100 people who'd had high dose, mystical, transcendental experiences. And my question was that's really cool. Has your behavior changed?

> Are you different in some way or are you just someone who has a lot of wonderful kind of new age, flowery things to say? And the answer of course is that people like their work more. They had more friends at work. They played with their children more. They were out in nature more. They watched television less. Their eating habits improved. So they were fundamentally across the board healthier human beings.

- Tim Ferriss: What it could be dosages or commonalities did you find in the people who had the most durable effects?
- Jim Fadiman: Very straightforward that if one has this transcendental experience and maybe I should say it a little bit what that is. That's the feeling or the awareness that you are connected not only to other people but to other things and to other living things and to living systems and to the air you breathe. Just think for a moment. We tend to think we're kind of encapsulated. Like, I'm separate.

Tim Ferriss: Like compartmentalized.

[Crosstalk]

Jim Fadiman: Obviously the air I am breathing comes from all over the world, and some of it's a billion years old. My cells are turning around. Every 8 years I get almost all new cells from something. Obviously everything I eat is connected to me. Everyone I meet is connected to me. Right now you and I are sitting outside, and our feet our touching the ground. We're connected to the ground. Now that's all easy to say intellectually and even poetically. But when you actually experience that you're part of this larger system, one of the things that you become aware of is your ego - your personal identity - is not that big a part of you.

> What I learned was - and this is from my own personal experience in 1961 - Jim Fadiman is a subset of me, and "the me" is very, very large and a lot smarter and knows a lot more than Jim Fadiman.

And that's been a shift, which in the people I also saw from my dissertation that was the big shift. Let give you a kind of really serious example which is some of the people that we worked with were alcoholics. And what we found is the ones who would have a transcendental experience, a week later they'd go out and drink, which at first thought, "Oh, we failed."

And they'd come back to us and say, "It doesn't work." And we'd say, "What doesn't work?" They'd say, "Drinking doesn't work anymore. It makes me feel less." And what we realized is that many alcoholics are drinking because they feel isolated. They have not made this transition to feeling part of a larger system, and if we go into their background they may not feel part of their family and so for and so on. But at the deeper level if you realize that you're part of a larger existence and that that's basically all positive, then if drinking closes that down why on earth would you do it?

It's kind of like going to the movies but you carry some little eye shades with you. And the movie starts, and you put on the eye shades. And someone next to you says, "What are you doing that for?" You say, "Well, I don't want to be too much part of the event."

- Tim Ferriss: I don't want to be immersed in the movie.
- Jim Fadiman: Exactly. And when you get into relationships and when you get into lovemaking, you can see where this could be a real problem.
- Tim Ferriss: Absolutely. And I've done a fair amount of reading, and I've had my own experiences - not with addiction, with other substances but I've been in the same settings as others using, for instance whether it be psilocybin or mushrooms or ayahuasca for the purposes of overcoming opiate addiction or heroin addiction. Are there any other aspects of those experiences or the pharmacokinetics of those substances that lead to overcoming those types of addictions?
- Jim Fadiman: Well, that's the wonderful is there is one, and it's a different substance than what we've talked about yet, which is ibogaine comes from a root in Africa, the iboga root, etcetera, etcetera, etcetera. The tribe that uses it, the Bwiti, has never heard of addiction. But somehow we discovered that if an addict takes a session with iboga or ibogaine, 1) is the session may last 36 hours. It's a killer.

- Tim Ferriss: That sounds terrifying.
- Jim Fadiman: And imagine if one of the things you go through is every single event in your life that you did that wasn't good, okay? And it isn't like reading about it as it happened years ago, but you got it right in your face, event after event. And you really get that you don't want to do that. And after 36 hours - and this is the pharmacokinetic or the medical, kind of chemical part - you come out and you do not have withdrawal symptoms.
- Tim Ferriss: How does that happen? I'm so fascinated by this.
- Jim Fadiman: The answer is nobody has the faintest idea.
- Tim Ferriss: That's so fascinating because you read about things like Naltrexone, I think it is, that's used, or obviously you have Methadone, which is totally any different substance, but I've heard straight from the horse's mouth from people who have overcome.
- Jim Fadiman: So you have a window because the problem is normally if you're an addict and you get clean, withdrawals symptoms are horrible terrible - and the one thing that we know takes care of them is more of whatever you're addicted to. But if you don't have that, then it only doesn't last that long, this kind of open, pure space. If you stop, you have a chance to stop. And the people I know that run clinics - there are some wonderful clinics in Mexico and in South America, a lot of countries other than the one we're sitting in; don't know why - what they say is a number of people don't make it on the first session.

They relapse after a couple months, and they come back. We get a number proved on that group. I remember listening to this wonderful young man talking about when his sister found him under the bridge where he was addicted to heroin and methadone methadone is what you're given to not be addicted to heroin, by the way - and she said, "I think there's a place that could help you." He was now several years later running a small clinic in Mexico to help other heroin kind of addicts. So that's a particular one. Ayahuasca and psilocybin and all can clean up your psyche and again give you this different way of seeing yourself, but they don't have this amazing kind of grace.

Tim Ferriss: Grace period provided. It doesn't matter where you are in San Francisco. I'm not sure if you people listening can hear all the sirens. It always sounds like Beirut warfare for at least half of the day, so I apologize to everybody. The question of psychedelics and psychedelics of choice, do the applications of say psilocybin differ greatly from the applications of LSD in your mind? What differentiates them?

Jim Fadiman: If you're up on the kind of research game since the government said, "Well, maybe if you go through 82 hurdles we'll actually let you do it," most of the research has been psilocybin. There are two reasons for that. One is it takes five to eight hours. LSD takes ten to twelve. The second reason is so the staff can go home, which is part of the first reason. The difference between those two substances and mescaline and peyote in terms of what they do for you and to you are very much the same. They don't have the same molecule.

They're not the same chemically, but psycho dynamically or spiritually they're very similar. When you get to another group, kind of like another FM station, ayahuasca is a totally different set of experiences. The very fast acting ones - DMT -

[Crosstalk]

- Tim Ferriss: DMT.
- Jim Fadiman: Being one that is most popular again, that's a different universe that you're plunged into. And then there's something called salvia, and the wonderful thing about salvia is it has nothing to do chemically with anything else I've just talked about. And it's full name is salvia divinorum.
- Tim Ferriss: Divinorum.
- Jim Fadiman: So it's been used in Mexico historically for who knows how many thousand years for divination for finding out things. And, again, we seem to be able as Americans to take almost anything that is indigenous and screw it up in some way. So people smoke salvia and have a short, intense, sometimes meaningful experience. That isn't how it's used. It's chewed, which means it takes about an hour, and it comes on slowly. And it has a time, and then it goes down. So it's a totally different experience.
- Tim Ferriss: Well, that's something that I've spoken with friends about before who have used, and I've experimented with 5-MeO-DMT. I decided that I disliked it, and the reason I decided I disliked it is I felt there was - for me personally and this is certainly subject to debate - but I felt precisely due to its fast acting nature and how quickly it cleared the system or seemed to clear the system that

there was a higher potential for addiction or abuse maybe is a better way to put it.

Similarly if you look at, say, cocoa leaf tea, which I've had in South America, which is just a wonderful tea that is very mild. It's milder than a cup of coffee in my experience without the jitters and the crash at least. But then you compare it to same plant matter but refined to cocaine and further let's just say refined into the quick hitting crack cocaine, the dangers are very, very different. The risks are very different.

- Jim Fadiman: It's one the things where actually Sasha Shulgin. There are two great beings that invented psychedelics: God and Sasha Shulgin. And I think Sasha may have invented more, but there are literally hundreds that he played with and looked at, and what he says in the beginning of his book is –
- Tim Ferriss: What's the name of his book?
- Jim Fadiman: PiHKAL.
- Tim Ferriss: PiHKAL.
- Jim Fadiman: Phenethylamines I Have Known and Liked.
- Tim Ferriss: P-I-K-A-L?
- Jim Fadiman: And he has another book called TiHKAL, which is Tryptamines I Have Known and Liked. And they're filled with synthesizing how to do various synthesis. And I asked him once why he put out such a book. He said, "So the government can't stop people from experimenting."
- Tim Ferriss: He wanted to unleash the recipe.

Jim Fadiman: What he says is, "If you are using something and you don't have any knowledge about it, you are at fault."

- Tim Ferriss: Right.
- Jim Fadiman: So like the 5-MeO of which there are some varieties, one of the problems is that the very unpleasant or close to toxic dose is fairly close to the dose that people like. One of the nice things I like about LSD is we don't know what the toxic dose is. Nobody's ever taken enough, and there is in the literature a great article which is an elephant was given like several hundred thousand

micrograms of LSD and died. And for many years I used to say, "If you give enough LSD to kill an elephant, you can kill an elephant. Ha, ha, ha."

I only learned recently that the elephant had been dosed with tranquilizers - massive amounts of tranquilizers - because the experimenters were afraid. You don't really want an angry elephant that's says, "Hey, who gave me this LSD? I'm gonna stop you." So they had packed this Pachyderm with tranquilizers, and it basically suffered respiratory failure.

- Tim Ferriss: No kidding.
- Jim Fadiman: So we really don't. So it's like 100s of times the dose people take before it really harms you. Now taking too much of any of these substances psychologically can be really scary, especially if you don't know what you're doing and especially if you don't have someone with you. You know, the equivalent of the designated driver.
- Tim Ferriss: I'd love to touch on that because I've spoken openly before about psychedelic use, although the term bothers me for some reason.
- Jim Fadiman: I don't use it. Try psychedelic experience.
- Tim Ferriss: Psychedelic experience.
- Jim Fadiman: Because that way you're not talking about a drug. You're talking about the effects of a drug.
- Tim Ferriss: That's true. I also came across the word entheogen I think it is?
- Jim Fadiman: Yeah. Entheogen is –
- Tim Ferriss: Entheogen

Jim Fadiman: That means the divine within, and that's using these substances ayahuasca, mescaline, peyote, LSD, psilocybin, etcetera - as a spiritual tool. So what you're aiming for is to reconnect and reunite and remember - re-member - your connection with the spiritual world. That is called a entheogenic experience.

- Tim Ferriss: I like that phrase.
- Jim Fadiman: It's a lovely phrase.
- Tim Ferriss: It doesn't have the tinge perhaps.

Jim Fadiman: It doesn't have all that kind of '60s razzamatazz behind it.

Tim Ferriss: The connotation.

Jim Fadiman: You don't hear that going, "Hm, he-he-he."

- Tim Ferriss: Right. Exactly. But speaking of uninformed use, I think this is very important because I have shied away from LSD precisely because I have two close friends who overtime - I saw them after several years of very heavy LSDs, which they did solo for the most part, and I don't know if it unearthed latent schizophrenic tendencies that they had genetically or not - but they were noticeably, oddly enough less connected. It seemed they were just less self-aware and less connected in much the opposite you might expect because when I meet people who've undergone a very deep entheogenic or psychedelic experience in a controlled environment, they seem to gain all of those things. But these people seemed to have lost that.
- Jim Fadiman: Well, what happens for some people is you discover this incredibly more interesting world, and you then don't like this one.
- Tim Ferriss: Right.
- Jim Fadiman: Because you don't integrate. So you say, "Well, I'd like to get back there." And my buddy said, "I bought this off of this guy in the village, and he said it's real. I'll take it." And then if you keep leaving in a sense and not integrating, eventually you can really get disconnected. And one of my teachers had a really wonderful image. Now you have to go back to film where you roll the film, and if you take a picture with film, we got a huge amount of information.

You can also what's called double exposure. You get twice as much information, but it's really hard to figure out what's there. If you do a triple exposure, you've got a massive amount of information, and it's worthless. So one of the problems that your friends had is they kept kind of piling on the images and not rolling the film.

Tim Ferriss: That's interesting.

Jim Fadiman: I have a little remark in my book which is a couple of chapters on how to do the best possible session. I'm really into safety. I'm really into purity. I'm really into people having the best possible experience just like a good travel agent says, "You know, when you go to Paris, don't jump in the Seine. It's really interesting. Just walk along it," things like that, kind of the obvious. And what I found is that when you do things this way, what I say in my book at some point, "You've had a wonderful –

- Tim Ferriss: This is The Psychedelic Explorer's Guide.
- Jim Fadiman: Yeah.
- Tim Ferriss: Yeah. Great book by the way. You should check it out.
- Jim Fadiman: Thank you. If you've had a really meaningful experience and about a month later you say, "I really need to have another one," what that means is you're not willing to work something through. You're trying to get around it. You're trying to avoid it, and that's a real good indicator that that, "Oh, I really need another one," not to. That's hard for people. Again, that's a reason. When I wrote the book the purpose was so that people could have safe, spiritual, therapeutic or just for recreation purposes because they're not bad for you, but it's hard to think of something you can't misuse.

And there's a wonderful diagram that my marijuana friends use when they're describing dangers, and it's this chart. And way up at the top is what kills the most people per year. You know, it's tobacco, like 400,000; alcohol, 200,000. And then you kind of get down there. There's the iatrogenic diseases. That's things you get from hospitals and doctors, about 100,000. And you go way down to the bottom, and the second from the bottom is peanuts - 100 deaths a year. And then there's marijuana - 0. And it makes the point, but the point is peanuts, water, salt. You know, it's possible to harm yourself if you don't know what you're doing with practically anything.

- Tim Ferriss: I think a big part of it coming to just the peanut point specifically is people who are perhaps either unaware they have a peanut allergy or who don't do their homework to determine what's in the food that they're consuming.
- Jim Fadiman: Or they choke.

Tim Ferriss: Or they choke. Or they choke, right. So it could be all three or one of the year. In the case of psychedelics, what are some of the guidelines that you provide for safe and successful experiences? We have a regular parade of dogs coming by us, which is really pleasant.

Jim Fadiman: You heard those little bells. The basics are - and you can really do it with just a series of little S words, which is - "What is the set?" Meaning, what's the mental attitude you have? I really want to be with my friends and go to the beach and then groove on the sunset, or I really want to look into the fact that I've never acknowledged that I was raped by my uncle at age 13, and I still hate men. Those are real different sets. The setting is nature. I can't think of the worse setting, but it's probably in a laboratory in a university.

> Almost all the psychedelic research that's done now is in a living room like setting with comfortable cushions and art and flowers so that you feel physically and emotionally safe. Then the question is, "What's the substance?" and then, "What's the dose?" because as we talked about, that make a huge difference. And then the question is, "What's your situation afterwards?" which is one of the things we know as people who get out of prison - I'm deep breathing while the truck goes by.

- Tim Ferriss: No, I appreciate that.
- Jim Fadiman: If they go back to the same neighborhood, they are much more likely to go back to prison because that's the occupations that are available to them. So part of it is, "What's the aftercare?" and the last is, "Who's the sitter or the guide or the person assisting you?" In a lot of psychedelic circles I'm kind of a rightwing nut because I really have found that a guide makes an enormous difference in not only safety, which is pretty obvious, but in depth. It's kind of if you're on safari. Why do you have a guide?

Well, he doesn't see the animals for you, but he sure can say, "I'd look over there if I were you," and you say, "Woaw." And he'd say, "It's your safari, but personally this rhinoceros coming toward us, I'm going to stand behind the tree. Okay?" I remember once - this is not with animals - I was in Australia. And I was in a town where there was a rodeo with a lot of aborigines coming into town, and after the rodeo they got drunk.

And that there was this piling out of the bar, kind of angry, swirl of aborigines, and I'm walking along. And I think, "Wow, that's really interesting," and so I'm starting to walk right in the middle of them. The woman I was with pulls me back and says, "What are you doing?" I thought I was invisible to them because I'm just some white guy, but I'm still an object in the middle of people who were pulling out knives. So a guide is really valuable

- Tim Ferriss: A guide is fundamental.
- Jim Fadiman: If you're serious. If you're really serious to discovering what's inside yourself, then a guide is really helpful. And it's, again, also like a designated driver, which is you do want to be safe. I remember a wonderful response from a student I was asking. He said, "The session was really going well until the car caught on fire."
- Tim Ferriss: That tells you a lot about the setting being slightly off.
- Jim Fadiman: Exactly.
- Tim Ferriss: What separates aside from what you just mentioned a good sitter or a great sitter or guide from someone who is not?
- Jim Fadiman: Well, a great sitter is someone you trust. Let's do it this way. A good sitter is someone you trust. A great sitter is someone who loves you and you trust. And a superlative sitter is someone who doesn't have any agenda of their own. They don't want you to see a certain thing. They don't want you to be a certain way. They don't want you to discover a certain thing. Now, they all do, but what their job as a guide is is, "How can I give this person the best possible experience that they can have at this time in their lives?"

And at some point when someone for instance says, "All I want is to be in the spirit," and after a few hours you can see that's not going to happen, then you say, "Well, why don't we take a walk in nature?" which is a beautiful experience and always a good idea. I met Albert Hofmann just once, and he said - and my German accent's probably a little weak - but he said, "People are always asking me, 'How should I take psychedelics?' and I say to them, 'Always take it in nature.""

- Tim Ferriss: That was pretty well done.
- Jim Fadiman: Well, it hit me because again what happens when you're in nature is you begin to understand that you're in nature. You're not apart from nature, and that's again part of this deep revelation that you are really connected to a very intensely alive and complicated system of which you play a role.
- Tim Ferriss: Well, I liked your segregation of re and member, the re-member. I like that a lot.

Jim Fadiman: Yeah, because what happens a lot of times people at some point will start laughing. And they laugh and –

[Crosstalk]

Tim Ferriss: That seems very consistent.

- Jim Fadiman: In a very deep way and it isn't the giggles of marijuana. It's the laughter of how could I have forgotten who I really am? And then much later in the day when they're reintegrating and finding that they still surprisingly are in the same body they came in with in spite of having been part of the galaxy or whatever else, and one person said very beautifully, "I was back in the prison of all of the things that hold me back, but I could see that the door was locked from the inside."
- Tim Ferriss: Oh.
- Jim Fadiman: So that's the level of psychotherapeutic insight.
- Tim Ferriss: That's deep.

Jim Fadiman: And that's deep.

Tim Ferriss: What is the proper way to integrate after such a session so that it doesn't get lost in the slipstream because I've met people who've been transformed by a responsible, supervised psychedelic use? I've also met people - as I'm sure you have - who seem to be they're almost like seminar junkies: people who can't stop going to seminars, but they never take the time to do the work that's assigned to them.

And I go do cocktail parties, of course, ayahuasca's very much of the moment. It's a popular topic of conversation, and I was in New York. And I met a number of people who claimed to have done it 80, 100, 150 times, and they seemed utterly unchanged by it. How do you avoid that trap? What is the proper way to integrate?

Jim Fadiman: Well, let's put ayahuasca aside for a moment because it's a separate question. With any major intervention in your life, if you don't see how it fits into your life or try to fit it in, you're going to be in trouble. We have something called culture shock, which you know a lot about 'cuz you've traveled in a lot of weird places, and you suddenly get, "I'm in a really weird place." I remember a moment. I'm in Japan, and all my friends who've been around me and helping who are Japanese, they all went away. And I'm

suddenly aware I'm illiterate. I'm totally illiterate. I cannot read a street sign.

I cannot tell what the stop sign says. I look at a restaurant. I have no idea what's going on. I ended up getting food from the Subway out of like an automat. It was really just terrible, but I had the realization of what culture shock is. And then I started to integrate, which is, "Oh, I'm in Japan. It's okay. I'm really not illiterate. I just don't speak Japanese." And then, "Oh, there's that sign with the word in English," and integration is the missing piece in the psychedelic world, which is why the successful studies don't talk even as we've been talking about psychedelic experience. They talk about experience in a therapeutic package.

So the work with MDMA for example, which is wonderfully mind-blowing that it releases people from post-traumatic stress disorder, but not just taking MDMA, but taking MDMA, preparing for it with a psychotherapist, having two guides - male and female - and then a lot of time with integration with talking with these people, talking with other people who've had a similar experience. There's a term we have, "Working it through," which is like getting rid of it. This is the opposite. This is putting it into practice. Zen Roshi who I know - Kennett Roshi - said, "You know why we call meditation practice?

It's so you're practicing on how to be in the world. You're not practicing on how to sit on your butt and look the wall." She said, "That's the easiest possible way to meditate and to integrate it into your system. The point is to get up and do something." And she would tell me that these bright-eyed people would show up and say, "I'm ready Roshi. I'm gonna meditate my little tail off." And she'd say, "You're really serious?" and they'd say, "Oh, yeah." This is Mount Shasta. She'd say, "Well, one of the goats is giving birth in a shed up there. Someone has to be with that goat all night."

And they would look at her, and she would look at them. And she said, "Some of them left, but the ones who stayed began to understand that integration means to put it into your life." I didn't know much when I did my dissertation, but my question was, "If it doesn't change your behavior in ways not only that you notice but that other people notice, it probably hasn't gotten very deep." Right? So when someone says to me, "I took LSD and discovered I was god," I say, "That's wonderful. Am I god?" And if they say, "No," we're already in trouble.

But if they say, "Yes," then I say, "Well, what are we going to do about that? You know, what are you doing that's different?" Because there's a lot of things in the world that you feel need some help. And when you talk to people who are in the service world, lots more than you think have had psychedelic experiences that changed their life.

Tim Ferriss: Service, meaning wait staff?

Jim Fadiman: No, service meaning where you're helping people from wait staff up to feeding people with AIDS.

Tim Ferriss: Got it.

Jim Fadiman: One of the curious things, when I give a talk at a university, two things happen. One is I'm assured that there won't be too many people, and it's always packed because I usually go to universities where they don't talk about it much in the faculty. And I was at Yale, and I was comparing them with UC Santa Cruz. And I can tell you before it's published that UC Santa Cruz students who are interested in psychedelics take way, way, way, way more drugs of all kinds than people at Yale.

However, the people at Yale took these sessions very seriously, and a significant number made a serious life change after their one or two experiences. They would change majors. One wonderful person indicated he gave up his summer job in a hedge fund and ended up in a service job in a nonprofit. And one of my favorites was two people said it made massive changes in their religious orientation.

Tim Ferriss: Doggy break.

Jim Fadiman: And one of them said that - I forget if it was a he or she - totally realized that her religion was a sham and hollow and that there was a deeper universal. And the other said she became totally aware of how valuable her religion was and how much more she was committed to it - same religion. So it makes a difference in people's lives when they integrate it.

Tim Ferriss: What did the Yale students do differently and specifically did the integration take the form of a set of questions that a therapists asked them, a set of exercises that they did after the fact?

- Jim Fadiman: When I talk to college students, nobody's ever been in a research setting or had a therapist. They've had friends who've been guides. So these are all folks like the other 25.9 million.
- Tim Ferriss: So what do you think distinguished these Yale students?

[Crosstalk]

Jim Fadiman: Well, I think the Yale students perhaps because it's harder and rarer that they took it more seriously. They may have had more guiding, and they were taking it starting with self-exploration. What I found in the Santa Cruz students is a lot of them simply took what was around at a low enough dose, so it was for fun or for nature. But what very interesting is what they said is, "Eventually I was taking it more for self-exploration and spiritual work, and I noticed I was nicer. I was less neurotic. I liked people more."

Grades were not an issue. These were the smartest people that I know in Santa Cruz. People with undergraduates developed their own courses and the administration allowed it. These were all people who were knowledgeable and understood how to use these, but they had a lot more opportunity and experiences. So if you're going to do something once or twice in your life, you take it more seriously than when it's more available. It's ubiquitous.

Jim Fadiman: Yeah.

Tim Ferriss:

- Tim Ferriss: I have so many questions I want to ask, but one of them I was doing a little bit of reading - and I want to talk about problem solving and then we'll come to the micro-dosing. But before we get to that, I was reading that is it true that one of the cofounders of AA was a proponent of psychedelic use at one point after the formation of AA?
- Jim Fadiman: It's a wonderful story. Bill Wilson who had this great breakthrough in his kind of treatment room years before he had a psychedelic, but he actually was taking something. This is not generally known, but John Lattin has a book L-A-T-T-I-N, has a wonderful book which describes that early session. It happened to be something called the datura cure. Now datura is something which is also known as locoweed.
- Tim Ferriss: Oh, absolutely. Yeah.

Jim Fadiman: Nobody should try it. Believe me. Cows don't like it. They go crazy. We don't do much better, but it was in the '30s. This was a possible treatment for alcoholism because they didn't know what they were doing. But that's when he had his breakthrough, and a divine being appears in his room and kind of helps him. Well, years later he's in Southern California in the subculture which included all Aldous Huxley and a philosopher named Gerald Heard. And he takes LSD, and he says, "Woaw, this is very much like what happened to me, and I think it would be a wonderful adjunct for AA in every chapter."

And the directors of AA, which by that time was a massive organization, said, "We are so uninterested and so against everything you just," with the usual reasons which is, "We have no idea what you're talking about. We haven't experienced it." If the government says something is bad, those days you had like an even-odds chance that it might be true. The odds have gone way down, but then they basically said, "Thanks for sharing and please go away. You founded this organization. Now go away."

Tim Ferriss: Don't discredit it with your rantings.

Jim Fadiman: Exactly. With your nutty pharmaceuticals.

- Tim Ferriss: What did Bill do after that point? Did he continue to experiment with LSD himself or do you know?
- Jim Fadiman: I don't know, and I don't think so. Again, there's a saying in the psychedelic world that if you get the answer, hang up the phone.
- Tim Ferriss: What does that mean?
- Jim Fadiman: I think Alan Watts suggested is when you get the message from God, then you got it.

Tim Ferriss: Don't keep knocking on the door?

Jim Fadiman: Yeah. Don't keep asking. Didn't I tell you that last week? And that's a little bit, again, the people who keep taking psychedelics over and over, they're not getting the message which is obviously they're designed to help you be here. As one of my friends years ago said, "If we were designed not to be here, we wouldn't be here." So the people who keep wanting to escape from here, they haven't yet understood it. And what I understand now is they're escaping that feeling of being alone because they're not here. I mean, we're now sitting under - what - about 85 foot eucalyptus

trees, and the hillside that we're both looking at is a combination of green grass and bright yellow flowers. Who wants to leave?

- Tim Ferriss: Yeah, not me.
- Jim Fadiman: Man, this is your neighborhood.
- Tim Ferriss: Yet another reason to be in San Francisco during our very unusual, scorching hot winter as it turns out. Could you comment on the problem solving potential of for instance LSD or psychedelics? And is it limited to LSD? That's the substances that comes up most frequently, but who are some of the types of people who have seemingly benefited from problem solving doses of LSD?
- Jim Fadiman: Well, you can name names. I won't.
- Tim Ferriss: Well, okay, so I'm cheating a little bit but yeah.
- Jim Fadiman: Let me go back a step because it isn't clear for many people including lots of people with psychedelic experience how you can possibly use these for hard nose, practical, real world problem solving like circuit design because you take a psychedelic and life is beautiful and you're an immortal being. Who is interested in circuit design?
- Tim Ferriss: How does that translate?
- Jim Fadiman: But what we did and at the time we developed this study, we weren't sure that anybody could use it either. But we decided one of the things that people do with that setting was focus: focus on pathology, focus on spirituality. We thought, "Well, how about focusing on a hard science problem?" So we created a little study, and we invited scientists because one of our team was Willis Harman who was full professor of electrical engineering at Stanford at the time. So we knew people in the valley, and Hewlett-Packard was roaring along and so forth. That was those days: Varion and Lockheed, and Stanford Research Institute.

And we said, "You may come to this study, and we'll give you the most creative day of your life. But you have to have a problem which obsesses you that you have been working on for a couple of months and that you've failed at." And these were people who didn't like failure because they didn't have much in their lives. And we wanted them to have the emotional feeling not only they were interested in the problem, but they had an emotional kind of money in the game. And so we said, "Come in with that problem." And what we did is give them psychedelics and give them the kind of traditional way of allowing people to relax with music and eye shades for a couple of hours.

And then right at the peak, we bring them out and say, "You may work on your problem." And because they were obsessed with their problem, they all did. And what was wonderful is nobody did any personal therapeutic work because that's not what they came for. And out of the 48 problems that people came in with, 44 had solutions.

- Tim Ferriss: That's incredible.
- Jim Fadiman: And, again, when you're doing problem solving in the real world, you can test, which is, "Did it get a patent? Did it get a product? Did it get a publication?" That's kind of proof that it was a real solution because what happens in your mind is you have incredible focus and enhanced pattern recognition. And we do focus first because it's wonderful little tales. This is a circuit design, and if you imagine a circuit which is energy's going from a capacitor to resistor, down a wire, and it goes through a gate, it has little objects, literally. You can see them on a circuit board. Maybe not anymore because everything is microscopic, but that's what it looks like.

And what this guy would do is he'd say, "I'd kind of visualize one of these, and then I'd imagine electricity going through it. And I'd watch, and I could see where it failed. So then I would - imaginary - I'd take this peace out and put another piece in, and I'd run it again." So he was running experiments of a very kind of physical level but totally in his mind. Another different - this was an architect - and he had a project, and it was a little mall with a few shops and maybe a coffeehouse and parking and so forth.

And when he came up out of his three hours of - he said - going through Aztec architecture, Indian architecture, medieval architecture, he gets his big piece of paper out, and he looks at it. It's totally just blank, and he says, "It's just blank." And he said, "That isn't the way I normally work. I usually have a bunch of ideas, and I sketch and so forth. And it stayed blank." And then says, "Okay, but this customer's been really hard. I really want this to work," and he said, "I saw the building." He said, "I didn't see a drawing of the building. I didn't see an image of the building. I saw the building."

He said, "The trees were grown. There were cars in the parking lot. The fountain was flowing, and there were people talking

about." He said, "So I just made a bunch of drawings of what I saw." And these are drawings such as if you go kind of go underneath a little balcony, you can see the four by fours and you can see the bolts that you're using to hold and what size are the bolts? Okay, well, he went and looked.

- Tim Ferriss: So he went in his mindscape?
- Jim Fadiman: He could do that level of detail, and then a few weeks later he sat down to do the architectural drawing because he basically told the client, and the client liked it. And he said, "I did drawing after drawing after drawing." He said, "But I noticed I didn't use the drawings - any of the drawings - that I'd drawn the day of my session because I didn't need them. I knew the building."
- Tim Ferriss: Wow.
- Jim Fadiman: So that's kind of two pieces of it. See, people had wonderful problems. Someone came up with a new theory of the photon, which he published because, again, he ran experiments kind of Einsteinian thought experiments, and he kept thinking, "This is so simple. It's gonna fail, and it kept not failing and not failing and not failing." He said, "Woaw." Okay, so that's the background. That's how they can be used for problem solving. Now what happens in outside of a laboratory is that people who care about problems understand that a low enough dose and this is, say, 100 micrograms of LSD or you're asking about substances, mescaline works just as well at an equivalent dose which is about 200 milligrams and the desire to solve the problem because people have asked me.

I've got three countries now that want to replicate this study, and the thing that I have to make clear to them, which is hard for them, is you can't get 20 computer science students who are in their second year and say, "Solve a really hard problem," because they don't care. And also, when you use scientists who have put a lot of sweat equity into it, they must know enough to find the answer. That is what their heads are full of. What they don't know is where to find it or where to stack it or how to unroll it.

And one of our scientists, his problem - the kind of problems he used - he used something called matrix algebra. Things that just take numbers is a terrible thing to do with psychedelics. Numbers just don't lie there. But what he did instead is he realized he could see the whole matrix. He could see the visual pattern, and so the other thing we're learning is when you have a psychedelic - and this is true very much at the micro-dose level - you have, technical term, enhanced pattern recognition.

You can see stuff working with other stuff more easily, more obviously. It's like if you're a violinist and you listen to a symphony orchestra, you can hear the violin absolutely as if it's sticking above the rest of the orchestra. And if you're a cello player, you don't hear the violins very well, but you really can see the pattern of the cello in your head. So that's pattern recognition.

- Tim Ferriss: Have you looked specifically at the implications of using these substances for say learning music or languages?
- Jim Fadiman: Well, one of my little micro-dose team as I call them, people who write me, he said, "You know, when I have a micro-dose and I jam with friends, I'm not a very good guitar. And I'm a little better on a micro-dose, but I remember so many more lyrics." So that's just something we know. The answer of using them, well, yeah, I'll give you a wonderful example. This is a young man, senior year, college. He wants to go to medical school. He's taking something like embryology, and the entire course is going through how one cell becomes a chicken. And it's a hard course, but he has a sugar cube of LSD in the refrigerator.
- Tim Ferriss: A sugar cube.
- Jim Fadiman: A sugar cube with I don't know a couple hundred mics on it. This is when sugar cubes had that much and you used sugar cubes. So he said, "I used to take a lick out of it before I'd go to class, and it really made class a lot easier." So that's something about focus.
- Tim Ferriss: He's like a deer with a saltlick. You just give it a swipe with the tongue and off to class.
- Jim Fadiman: But then he was ill and missed the final. That's eek- a hard course, hard course. So he called the professor, and the professor said, "Of course, I understand. You can come right over to my office, and I'll give you a makeup final." And he looks in his refrigerator, and there's just a little bit left. So he just eats it all. So we don't know how much. He gets to the professor's house or to the lab. And it's a lab, and there's a nice window. And there's some grass outside, but she says, "Okay, here's a blank piece of paper and a pencil. Draw the progression from seed to chicken and label."

He said, "That's the whole course." She said, "Well, makeups are supposed to be harder." So he goes and sits quietly, and he knows that killing himself is not an option but it certainly came up. And then he closed his eyes, and he saw the first slide that she had projected. This was before power points. And in his head he then moved it and saw the second slide, and he realized that he could see every slide in the course. So he just started drawing madly. He had two hours, and within an hour and a half he said, "Here." And she looked at him with a kind of, "I knew I really screwed you with this kind of an exam," and she goes through.

And he just watches her getting it because he knows everything is right. And she says, "I guess I'll have to give you an A." And then he said when he looked out at the plants they were just all waving at him.

- Tim Ferriss: Yeah, and then he said, "I can see your pores breathing at me," and then walked off into the sunset.
- Jim Fadiman: So there are some interesting studies in academia, and I have another one which is just fun because it's again pattern recognition. This is someone taking economics course. He was probably a B student, but he hadn't studied for the final. And he had gotten stoned. So he was still kind of stoned when he came in to the final, and he thought, "I don't just know anything."
- Tim Ferriss: Stoned marijuana.
- Tim Ferriss: Have you explored at all the world of lucid dreaming or techniques related to lucid dreaming because there was a previous time where I was very fascinated and an avid practitioner. I'd wake up in the middle of the night. I would do exercises and kept journals and so on to get to the point where I could induce lucidity, say, three of four times per night. And I found that I feel like that experience has helped me to navigate the psychedelic experience in a lot of ways or at least to mitigate some of the fear factor. Do you have

any stories of people who've combined those two in any interesting ways?

- Jim Fadiman: Well, in an uninteresting way –
- Tim Ferriss: Or uninteresting.
- Jim Fadiman: From my dissertation what comes back is and I love it people dream more in color after psychedelics. We all would kind of imagine everyone dreams in color, but it's not true at all because suddenly when you're dream in color, woaw, it's very different. So that's just interesting. David Brown at the moment is finishing a book on lucid dreaming and the use of all kinds of substances herbs of all sorts and some psychedelics, I'm sure - that influence lucid dreaming.
- Tim Ferriss: Where's David Brown based?
- Jim Fadiman: He's in Santa Cruz.
- Tim Ferriss: Oh, he is?
- Jim Fadiman: Yeah.
- Tim Ferriss: Makes perfect sense.
- Jim Fadiman: And he's a lovely guy. The problem and it's the problem with a lot of your questions is imagine neuroscience that hadn't done anything for the past 40 years, and you'd say, "Well, how come you don't know where parts of the brain are?" "Because we haven't been allowed to look. Duh." So we're just starting off. I mean, if you said to me, "Give me 15 research projects," I'll give you just one because it's so easy. I know two cases. One is the most famous mycologist in the world, Paul Stamets, and the other is someone I know in San Francisco who both cured themselves of severe stuttering in one session.

Now this was in both, not surprisingly for Paul Stamets - this was side by side with mushrooms. But he was in high school, and the other was a man in his, I think, late 20s. But they both realized while on the psychedelic that they didn't have to stutter. This is nothing about insight or psychodynamics or anything else. It's just they didn't want to stutter anymore. And Paul tells this wonderful story where imagine not the worst moment in your life but you stutter a lot in high school and your hormones are in full flower. Okay, it's terrible. Tim Ferriss: It sounds terrible.

Jim Fadiman: So the next day he's sitting, and a girl goes by - a girl, a real, live girl - and she says hello. And he says, "Hello." And she goes, "Bye," and he just practically falls down. He said, "I just said hello to one of them."

Tim Ferriss: Without stuttering.

Jim Fadiman: And if you listen to him, people who've worked on stuttering - my wife was a speech therapists so I'm a little trained - you can tell when someone has learned to overcome stuttering. Paul doesn't sound like that at all. So that's a piece of research which is a snap to do: no risks, no pathology. We now do studies with people who are stage four cancer. They're dying. It's a little scary working with them because you don't want anything in the psychedelic session to upset them, but, hey.

> So we're at the place where as the government kind of realizes that keeping people healthy is better than laws that have nothing to do with science. And it's happening, and fortunately there are a lot of other countries where good research is also being done, so a lot to be done.

- Tim Ferriss: I want to talk about what's steps might be taken because I feel like there are many people - in fact I was just at a dinner last night with a very influential venture capitalist - who feel very strongly that the positive applications, therapeutic applications of these substances should be fostered and funded and so on. I think there are actually a lot of people in this neck of the woods who feel that way and elsewhere. But before we get there, is the choice of say LSD or mescaline or psilocybin a personal choice from a therapeutic standpoint or of those three are some of them better for certain things as opposed to others?
- Jim Fadiman: Probably some are better for certain things. But of the three you mentioned, they're fairly interchangeable, and the difference between LSD and psilocybin as we mentioned is simple the length of time. The reason for instance DMT, which takes 15 minutes, is not really useful. It's just most of your time is spent rocketing up into space and falling back down. So that's just a time question. Ibogaine as we've talked about seems to be particularly good for addictive substances. I met a wonderful young woman in England who said, "After I took ibogaine" she went to Africa and actually worked with the Bwiti she said, "I no longer took cocaine on the

weekends. I stopped being an alcoholic. I gave up smoking, and I don't eat junk food.

- Tim Ferriss: That's a lot.
- Jim Fadiman: And then a year or two later she took some ayahuasca and worked on some sexual trauma. So it didn't clear up everything, but these were very different.

Tim Ferriss: Well, that's a hell of a lot to get with one trip.

- Jim Fadiman: Yeah. It's the wonderful kind of question, "Which medication for which situation?" For instance, MDMA, it's not exactly a psychedelics because you don't leave your identity behind, but it is the single best way to overcome intractable post-traumatic stress disorder, period. There's no doubt in any researcher's mind or anyone who's used. You can go to YouTube and people are telling you about their story. We have 700,000 veterans - I'm going to rant for just a moment -
- Tim Ferriss: Please.
- Jim Fadiman: Who have come back with some form of post-traumatic stress disorder, and it's not necessarily from being in combat in the usual sense of people shot at me and I was really afraid. It's people who've done unspeakable things that's against the hardest wiring in the human body. You're in your tank or your vehicle, and there are children playing in the road. And your sergeant says, "Drive on. It might be a trap," and you kill them. And you come back, and you've really done a terrible thing. And post-traumatic stress disorder is about all that. The use of MDMA in a therapeutic environment, not on the street, can turn that around.

When you start these kinds of things, you always get the worst people to work with - the hardest ones. These are called patients who had to have had like 20 years of not being helped. And they had two or three sessions plus therapy sessions, and 80 percent of them dropped so many points on the post-traumatic stress disorder scale that they no longer could have possibly gotten into the study, which also means they went back to work. They did not want to strangle their wives in the middle of the night in a nightmare. I'm talking very serious things, and the government is ever so slowly acknowledging that this might be a good idea.

And I think the argument that's going to carry is has nothing to do with doing the right thing, but when I say to someone, "Do you want to pay for this 22 year old vet from Arkansas for the next 40 years at the VA for therapy and medications and the chances of his committing suicide is very high? Or would you like to cure him in a couple weeks." Just think of the money. Don't think of being a human being. Don't think of being nice.

- Tim Ferriss: It's the economic argument.
- Jim Fadiman: So that's part of it.
- Tim Ferriss: With the MDMA specifically, I've been very fascinated by MDMA but also perhaps unduly worried about MDMA after, and this is a vague recollection. So I feel like this could be the equivalent of some type of propaganda like reefer madness movies back in day. There are people in my family who have histories of battling depression for instance, and I'm very concerned about damaging serotonin receptors or the serotonergic system in general.

And at one point when MDMA had become very, very popular and was thought to have no side effects whatsoever or at least that was the common sort of street lore, seeing slides of damaged serotonin receptors terrified me enough that it's not a substance I've even considered. What are the risks of misuses of MDMA?

- Jim Fadiman: Well, the misuse is the usually which is too much, too often.
- Tim Ferriss: Right. For the therapeutic sessions just out of curiosity, what is the range on dosing for that?
- Jim Fadiman: It depends. That's not kind of my area, but it's well within the safe range. I think 170, 125 milligrams sounds about right, but that might be dead wrong.

Tim Ferriss: Speak to your medical practitioner.

Jim Fadiman: Yeah, speak to your dealer or your medical practitioner and in all truth. But one of the things that we know is that - and you're asking about different substances - depression and MDMA are not probably the best mix. Curiously, what I'm finding is micro-doses of LSD or mushrooms may be very helpful for depression because they make you feel enough better that you do something about what's wrong with your life. Depression - we've made it an illness.

It may be the body's way of saying, "You better deal with something because it's making you really sad." And I was just looking at book on Lincoln, which talks about his depression. And I those days when you were depressed, people said, "He's really depressed."

Tim Ferriss: Melancholy.

Jim Fadiman: It was assumed that you would have to deal with it. So I'm really relooking at depression, but if we look at substances, ketamine - this is, again a very odd substance because it's used in veterinary medicine as an anesthesia; it's used in humans as an anesthesia - but at another level it's psychedelic. At another level it apparently overcomes depression in a totally different way that antidepressants. Antidepressants, you take it and then you take, take, take, take, take, take, take. In four to six weeks later, maybe it'll be the right one. And if it isn't, you take another one - take, take, take, take, take, take, take - four to six weeks.

Ketamine, you take it, and about 15 minutes later you're not depressed. What's happened is it blew the whole theory of depression wide open. Pharmaceutical companies are all scrambling to come up with something that has the same effect but isn't ketamine because ketamine shouldn't be taken very often. Again, it's not one of those. You can not only become addicted but you can get your brains burned out with ketamine. And I've unfortunately met one very quiet, dull, concerned, serious person who his friends told me had been a sparkling, delightful, charming but now used ketamine endlessly.

So, again, we can misuse anything. MDMA is probably fine as far as we know in moderation. And, again, its best use is therapeutic. It's to get you to let go of trouble. It's milder use, which is called raves –

- Tim Ferriss: What's it called?
- Jim Fadiman: When you go to raves.
- Tim Ferriss: Oh, I see.
- Jim Fadiman: Why are people taking MDMA or ecstasy?

Tim Ferriss: Yeah, ecstasy. They're taking it because they like everybody, meaning they aren't caught up in negative emotions. And imagine, again, we're back in high school. Imagine you went to a group, and there was dancing and music. And you liked everyone, and everyone liked you. And it wasn't sexual. There's a particular phenomena at a rave called a puppy pile, which is where just kids

	And that's an amazing event if you think of high school.
Tim Ferriss: [Crosstalk]	It's antithetical.
Jim Fadiman: [Crosstalk]	Exactly.
Tim Ferriss:	It's a tribal behavior.
Jim Fadiman:	That's right. So, again, it has its uses, and, again, overuse of anything. Remember, why do people like alcohol? Because a little of it really lowers inhibitions and makes you think you're

are all piled on top of each other giggling and having a good time

Jim Fadiman: That's right. So, again, it has its uses, and, again, overuse of anything. Remember, why do people like alcohol? Because a little of it really lowers inhibitions and makes you think you're charming. Okay, right? And when you have everyone having just a little and everyone thinking they're charming, it's a kind of pleasant thing. And then if you keep drinking, the effects shift. Again, with LSD, you take too much and you just have no idea what happened because the part of your identity that stores memory is kind of offline and so forth. Again, it's hard to think of anything. You know, you take too many baked beans, you're just not social, okay?

Tim Ferriss: I speak from experience. This is true.

Jim Fadiman: Right. The government propaganda is unfortunately kind of dumb. It's kind of simpleminded. It is at the reefer madness level, and it's going away. And the great breakthrough is it's really hard now to get someone to stand up and say, "I know something, and marijuana is bad for you." You can still get people to stand up and say, "Marijuana is bad for you." But if you say, "Do you have any evidence?" and they say, "Well, it is."
Tim Ferriss: I say, therefore it is.

Jim Fadiman: Right.

Tim Ferriss: What would you like to see happen in the next, say, 5 years? What are they organizations that are doing good work or the people that folks listening to this can look into perhaps learning more about or supporting? What is the most, sort of the Occam's razor approach to getting these substances more widely studied and researched for therapeutic uses?

Jim Fadiman: Well, strategically you've just given it, which is how do we make them available for therapeutic uses? Meaning, can we make them available to the medical community because they're the very, very conservative community. And these are substances which go inside your body, therefore physicians are supposed to be the people who know that stuff. And that's actually happening with MDMA, and the MAPS organization, M-A-P-S, Multidisciplinary Association for Psychedelic Studies, is funding almost all of that research across the country.

And they're doing a really good job of making it available to that someone with post-traumatic stress disorder could go to a place where they know what they're doing. If you think about it, radioactive isotope is not illegal, but you don't just carry them around on the street and say, "Would you like one?" You have to know what you're doing. You have to know how to use the equipment, etcetera, etcetera, etcetera. So what we're moving towards is trained kind of center.

Like you go to a trauma center or a burn center or a cancer center, you should be able to go to say a post-traumatic stress disorder center for MMDA. For psilocybin, another group called the Hefner Foundation is working to make it, again, medically legal for people who are dying. And one of the nice things is when people are dying and you give them the understanding that a mystical experience gives them, they are still clear they're dying, but they're not so upset about it.

And they say, "You know, I only have six months. Rather than be anxious and miserable and frightened and have everyone around me feeling rotten, I'm going to plant flowers with my grandchild." And I'm thinking of someone who was in a study, and we see her later planting flower with her grandchild. So that group is moving towards, again, medical acceptance. Now I think there's another part of the whole medical game, which is called off label, which is once the medical profession is allowed to give something for whatever reason has been thoroughly researched, it can perhaps go slightly to the right of left and see.

And the third area is spiritual experience, and when I'm kind of on rightwing radio, I say, "I'm for freedom, and I think there should be nothing that restricts a human being from being closer to God." And they go, "Uh-huh, uh-huh," and I say, "And I think there should be nothing that prevents a human being from discovering the majesty and beauty of this world through science." "Uh-huh." "And I think there should be nothing that interrupts your ability or prevents you from discovering who you are." And then I point out that that's the three major areas where psychedelics are most useful. And that is my deep belief, which is no civilization is going to really continue to progress if it prevents people from spirituality, science, and self-exploration. So it's kind of straightforward for me, and the culture's actually moving very fast. I mean, the number of cheerful articles in places you wouldn't expect it - I used to say I can't keep up with the research - now I can't even keep up with the popular articles, you know: Vice and Huffington Post, and New York Times.

- Tim Ferriss: New Yorker recently.
- Jim Fadiman: The New Yorker did this beautiful article with Michael Pollan. Again, Michael Pollan, who is Mr. Impeccable, why is he looking at psychedelics? Because he's blown away how much they help people. So we're rediscovering in a careful and sophisticated way and understanding the nature of culture institutions, what the '60s kind of blundered into and fell all over. I have a daughter who's an ethnobotanist, and as a child she had a verb and the verb was "to flomp." To flomp, flomp meant you jumped into the center of something and you probably fell down.

You flomped. But you got into the center of something, and that was pretty much the way the '60s worked. We all flomped, and the institutions got terrified. Two things have changed. One is it's a very different generation of very sophisticated people. The other is all the people running the institutions, a huge percentage of them have had psychedelic experiences and therefore aren't afraid. They're saying, "Well, let's do science. Let's do good education." But we're not terrified that Tim Leary's gonna get us, or that we're all gonna paint our buses psychedelic and become Ken Keseys.

- Tim Ferriss: If you could have 100 people in the United States have psychedelics who have not in terms of just turning the tide from a political and policy standpoint, who would those people be?
- Jim Fadiman: Well, the senate would a good start because it is peculiar. When you actually as I do work with lots of different groups and you say, "What's the percentage of people in this occupation who've had psychedelics?" and it goes down as you go up the kind of socioeconomic world into finance. But when you hit legislators, they're the people with the least experience. And so I would like them all to have enough experience so they would not legislate out of ignorance and fear. They might legislate in a very different way than I would like, but that's what they're paid to do.

- Tim Ferriss: Right. But at least legislate from a standpoint of awareness and ideally firsthand experience.
- Jim Fadiman: Exactly. It's kind of that when somebody who I usually don't like, what he says - McCain really did have military experience. And when he says something about the military, it's not out of reading comic books. So the other probably 100 people that who I really want are the people who are the shakers and movers in hi-tech, and most of them I've heard from some people like you have already made that transition. If you'd like to see what a interesting psychedelic culture might look like is go to Burning Man.

Tim Ferriss: Certainly is a unique experience. [Crosstalk]

- Jim Fadiman: Where you see not only people free kind of emotionally and sometimes sexually but certainly physically and dancing and enjoying their body. You also see some of the most fascinating creative productions and buildings and constructions. And you just look around and you say, "Psychedelics may not be available legally, but they sure are being used well in certain areas."
- Tim Ferriss: It sounds like the next step I need to get somehow the legislators out there. We need to get a copy of The Psychedelic Explorer's Guide to all members of the senate. Where can people learn more about you - find you - online?
- Jim Fadiman: I think I have both jimfadiman and jamesfadiman.com which go to the same place, and that has a bunch of talks, of some lectures. There's one wonderful one where I did an evening with a Zen roshi on psychedelics and Buddhism. He's just so gorgeous, and before he was a Buddhist monk - and he's been one for 19 years - he was a follower of The Dead. So he really comes from deep experience. That's there. And actually the book The Psychedelic Explorer's Guide is most everything that I wanted to ever get down in writing, and I was sure when I was putting it together that I would selfpublish.

And then this wonderful publisher Inner Traditions said, "Oh, that looks pretty good." And Inner Traditions puts out a lot of the now useful psychedelic books. So if you're interested in ibogaine or ayahuasca or there's a cactus called San Pedro which has mescaline just as the peyote cactus does, plus just a lot of general books, they're kind of the go to publisher at this point though Cinetics Press in Santa Fe, it's coming. Again, what people are finding is like that famous baseball field, if you write it they will read.

- Tim Ferriss: Well, I'm very excited for the future of research and exploration related to many of these substances. I think that they're very useful tools, and like you said, there's the potential for misuse of the tools. But in the right hands, with the right direction, with the right guidance and supervision, I really feel like they can be transformative for so many people.
- Jim Fadiman: The word "tool" is really the case. I've only been asked once, "Would you just talk about psychedelics as tools?" So I went through about eight areas of science where they would be useful. Kary Mullis, who won the Nobel Prize, said psychedelics gave him not the great breakthrough idea. That he got when he was driving up in Northern California with his girlfriend. But he said - and he's the one who did recombinant DNA - and what he said was by that time I knew how to go inside a molecule and look around. It looks like a good tool.

Okay, so if I want to understand visual perception, here I have a substance which shifts the visual world, and I actually understand some of what people are experiencing. I have a certain amount of psychological bullshit jargon that I can throw at that. So we do know a little, but imagine being able to again in the laboratory. Roland Griffiths talks about - this is a professor at John Hopkins who's done probably the most and best studies - we can –

- Tim Ferriss: How do you spell that?
- Jim Fadiman: Griffiths.

Tim Ferriss: Griffiths. Okay.

Jim Fadiman: With a T-H-S at the end. And his research - some of his research - has been that we can pretty much guarantee that we can establish a mystical experience in someone, he said from a psychology of religion or from being a religious person. That's pretty exciting.

Tim Ferriss: That's very exciting. I think that it's –

Jim Fadiman: So they're tools.

Tim Ferriss: If you look at the origin stories of most of our dominant religions in the world today, they contain prophetic or mystical experiences that have now been criminalized in the United States. Jim Fadiman: Well, they also have used psychedelics a lot more than some religions will cop to if you just google "secret drugs of Buddhism." And what you'll find is one major school of Buddhism for its rituals for a couple hundred of years clearly used a psychedelic as the core of the ritual. Greek religion we know about from the Eleusinian Mysteries, sorry, elic. Though my Muslim friends tend to worry when I say this - I feel like Click and Clack, the Tappet Brothers talking about NPR - there's a lot of traditions in a number of Sufi orders in a number of countries who are using these materials.

Now Hinduism is based on soma, and in a sense it makes total sense because every culture tends to know about the plants in its vicinity. And if some of those plants can be fermented and say make beer, I can't think of a culture that didn't have fermentable plants that didn't ferment them. Right? And similarly psychedelics mushrooms for instance grow all over England. They're called fair caps. There's 100 species of psilocybin mushrooms. They're around, and then question that gets profound is why is it that there are these substances which when given to human beings have this extraordinary effect of reconnecting them to the natural world?

Now these substances probably are in plants that are older than human beings. Okay? This is the kind of thing that people late in the night with a small amount of a psychedelic will talk about, which is, "Hm." And then when you go into South America and you say to an Ayahuasceta, someone who uses ayahuasca, "Why are you using ayahuasca?" And you say well, "The plants told me how to use this, and this plant also tells me how to use other plants. It's called a teacher plant because most of the plants can't talk to us but these plants can." So you get into some much more fun areas than we've covered so far.

- Tim Ferriss: Well, this could be part one. I feel like we could talk about this for hours and hours. And suspect we might, but for now I will encourage everyone to check out your website. Check out your book, The Psychedelic Explorer's Guide. I'll link to everything in the show notes and very fascinating questions and topics to explore. So I hope to do much more of it, and thank you so much for taking the time.
- Jim Fadiman: Thank you for having me Tim.
- Tim Ferriss:Thank you for supporting the sponsors of this show. I've used
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There's all sorts of other cool stuff including my interactions with people like Warren Buffet, Mike Shinoda of Linkin Park, the list goes on and on and on. And I would love your feedback. Let me know what you thought of this show, who you'd like to hear on the show next and any other thoughts really. You can find me at Twitter at @Tferriss. That's twitter.com/ T-F-E-R-R-I-S-S and on Facebook at facebook.com/timferriss with two r's and two s's. Until next time, thank you for listening.