WEBVTT

NOTE duration:"01:05:29" NOTE recognizability:0.785

NOTE language:en-us

NOTE Confidence: 0.96580994

 $00:00:02.340 \longrightarrow 00:00:05.856$ OK. Thank you to everyone

NOTE Confidence: 0.96580994

 $00:00:05.856 \longrightarrow 00:00:07.600$ for joining us today.

NOTE Confidence: 0.96580994

 $00:00:07.600 \dashrightarrow 00:00:10.372$ We're excited to have the one and only false.

NOTE Confidence: 0.96580994

 $00:00:10.380 \longrightarrow 00:00:14.604$ Damitz Paul is the author of seven books.

NOTE Confidence: 0.96580994

 $00:00:14.610 \longrightarrow 00:00:16.863$ He is an invention ambassador for

NOTE Confidence: 0.96580994

00:00:16.863 --> 00:00:18.828 the American Association for the

NOTE Confidence: 0.96580994

00:00:18.828 --> 00:00:20.846 Advancement of Science and was

NOTE Confidence: 0.96580994

00:00:20.846 --> 00:00:22.766 inducted into the Explorers Club,

NOTE Confidence: 0.96580994

 $00:00:22.770 \longrightarrow 00:00:25.417$ an international organization dedicated

NOTE Confidence: 0.96580994

 $00:00:25.417 \longrightarrow 00:00:27.789$ to the advancement of field research,

NOTE Confidence: 0.96580994

 $00{:}00{:}27.790 \dashrightarrow 00{:}00{:}29.620$ scientific exploration,

NOTE Confidence: 0.96580994

 $00:00:29.620 \longrightarrow 00:00:31.531$ and resource conservation.

NOTE Confidence: 0.96580994

00:00:31.531 --> 00:00:34.079 He's received numerous awards,

 $00:00:34.080 \longrightarrow 00:00:36.048$ including the National Mycologist

NOTE Confidence: 0.96580994

 $00{:}00{:}36.050 \dashrightarrow 00{:}00{:}38.874$ Award from the North American

NOTE Confidence: 0.96580994

 $00:00:38.874 \dashrightarrow 00:00:40.462$ Mycological Association and the

NOTE Confidence: 0.96580994

 $00:00:40.462 \longrightarrow 00:00:43.205$ Gordon and Tina Wasson Award from

NOTE Confidence: 0.96580994

 $00:00:43.205 \longrightarrow 00:00:45.700$ the Mycological Society of America.

NOTE Confidence: 0.96580994

00:00:45.700 --> 00:00:47.839 He's named 4 new species

NOTE Confidence: 0.96580994

00:00:47.840 --> 00:00:49.442 of psilocybin mushrooms,

NOTE Confidence: 0.96580994

 $00:00:49.442 \longrightarrow 00:00:52.646$ and his work has entered the

NOTE Confidence: 0.96580994

 $00{:}00{:}52.646 \rightarrow 00{:}00{:}54.859$ mainstream of popular culture.

NOTE Confidence: 0.96580994

00:00:54.860 --> 00:00:58.110 In the new Star Trek Discovery series on CBS,

NOTE Confidence: 0.96580994

00:00:58.110 --> 00:01:01.060 the Science officer is portrayed

NOTE Confidence: 0.96580994

 $00:01:01.060 \longrightarrow 00:01:02.660$ by an Astro mycologist,

NOTE Confidence: 0.96580994

00:01:02.660 --> 00:01:05.380 a Lieutenant Paul Stamets,

NOTE Confidence: 0.96580994

 $00:01:05.380 \longrightarrow 00:01:07.834$ so Paul's work with mycelium has

NOTE Confidence: 0.96580994

 $00:01:07.834 \longrightarrow 00:01:10.589$ become a central theme of the series.

NOTE Confidence: 0.96580994

 $00:01:10.590 \longrightarrow 00:01:11.460$ Very cool, Paul.

00:01:11.460 --> 00:01:13.200 Thank you so much for joining

NOTE Confidence: 0.96580994

 $00:01:13.200 \longrightarrow 00:01:15.445$ us today at the Yale Seminar

NOTE Confidence: 0.96580994

 $00:01:15.445 \longrightarrow 00:01:16.579$ and Psychedelic Medicine.

NOTE Confidence: 0.96580994

00:01:16.580 --> 00:01:17.624 And whenever you're ready,

NOTE Confidence: 0.96580994

 $00:01:17.624 \longrightarrow 00:01:18.407$ take it away.

NOTE Confidence: 0.928618872

00:01:19.740 --> 00:01:20.856 All right. Well,

NOTE Confidence: 0.928618872

00:01:20.856 --> 00:01:23.460 thank you very much for inviting me.

NOTE Confidence: 0.928618872

 $00:01:23.460 \longrightarrow 00:01:25.878$ I'm in a remote island and

NOTE Confidence: 0.928618872

00:01:25.878 --> 00:01:28.240 desolation sound in British Columbia,

NOTE Confidence: 0.928618872

 $00{:}01{:}28.240 \dashrightarrow 00{:}01{:}30.416$ where I spend the majority of my time.

NOTE Confidence: 0.928618872

00:01:30.420 --> 00:01:33.416 It's literally, that's my land behind me.

NOTE Confidence: 0.928618872

 $00:01:33.420 \longrightarrow 00:01:35.204$ I've found paradise and

NOTE Confidence: 0.928618872

 $00:01:35.204 \longrightarrow 00:01:37.434$ I rarely like to leave,

NOTE Confidence: 0.928618872

00:01:37.440 --> 00:01:39.174 but I've been involved in solsiden

NOTE Confidence: 0.928618872

 $00:01:39.174 \longrightarrow 00:01:41.159$ mushrooms since for a very long time,

00:01:41.160 --> 00:01:44.436 literally since I was about 14 years of age.

NOTE Confidence: 0.928618872

00:01:44.440 --> 00:01:45.960 But I would like to.

NOTE Confidence: 0.928618872

 $00:01:45.960 \longrightarrow 00:01:47.316$ I have a presentation.

NOTE Confidence: 0.928618872

 $00:01:47.316 \longrightarrow 00:01:49.720$ I'm really excited to bring this data.

NOTE Confidence: 0.928618872

 $00:01:49.720 \longrightarrow 00:01:51.295$ Especially to neuroscientists.

NOTE Confidence: 0.928618872

00:01:51.295 --> 00:01:52.870 I'm at mycologist,

NOTE Confidence: 0.928618872

 $00:01:52.870 \longrightarrow 00:01:54.710$ I'm not a neuroscientist,

NOTE Confidence: 0.928618872

00:01:54.710 --> 00:01:57.740 but I do dive deep, you know,

NOTE Confidence: 0.928618872

 $00:01:57.740 \longrightarrow 00:01:59.565$ into the vortex of propelled,

NOTE Confidence: 0.928618872

 $00:01:59.570 \longrightarrow 00:02:02.870$ but my curiosity into this subject.

NOTE Confidence: 0.928618872

 $00:02:02.870 \longrightarrow 00:02:04.780$ And sometimes I think in

NOTE Confidence: 0.928618872

00:02:04.780 --> 00:02:05.926 many scientific disciplines,

NOTE Confidence: 0.928618872

 $00:02:05.930 \longrightarrow 00:02:07.695$ it takes somebody thinking outside

NOTE Confidence: 0.928618872

 $00{:}02{:}07.695 \dashrightarrow 00{:}02{:}10.284$ of the box, in the periphery.

NOTE Confidence: 0.928618872

 $00:02:10.284 \longrightarrow 00:02:13.332$ Often times what we don't know that

NOTE Confidence: 0.928618872

 $00:02:13.332 \longrightarrow 00:02:17.198$ can steer us to novel discoveries that

 $00{:}02{:}17.198 \dashrightarrow 00{:}02{:}20.338$ are not entrenched in conventional.

NOTE Confidence: 0.928618872

 $00:02:20.340 \dashrightarrow 00:02:24.173$ Scholarship so I would like

NOTE Confidence: 0.928618872

 $00:02:24.173 \longrightarrow 00:02:26.159$ to to March on forward here.

NOTE Confidence: 0.928618872

 $00:02:26.160 \longrightarrow 00:02:27.970$ Something to share a screen.

NOTE Confidence: 0.928618872

 $00:02:27.970 \longrightarrow 00:02:31.764$ My apologies, I'm still learning all this.

NOTE Confidence: 0.928618872 00:02:31.770 --> 00:02:32.118 OK, NOTE Confidence: 0.928618872

 $00:02:32.118 \longrightarrow 00:02:33.858$ what is going on here?

NOTE Confidence: 0.88554685

 $00:02:36.020 \longrightarrow 00:02:37.400$ Let's see. Hold on.

NOTE Confidence: 0.900884934

 $00:02:38.220 \longrightarrow 00:02:40.240$ Looks like another lovely location.

NOTE Confidence: 0.722760074

 $00:02:41.480 \longrightarrow 00:02:42.980$ Let me stop sharing again,

NOTE Confidence: 0.722760074

 $00:02:42.980 \longrightarrow 00:02:47.920$ OK? Let's see. And.

NOTE Confidence: 0.8590987

00:02:51.310 --> 00:02:52.030 OK.

NOTE Confidence: 0.789370266666667

 $00{:}02{:}58.950 --> 00{:}03{:}00.276$ Don't know why it's so small.

NOTE Confidence: 0.890614502

 $00:03:05.090 \longrightarrow 00:03:06.476$ Do you have any ideas, Jessica?

NOTE Confidence: 0.890614502

00:03:06.476 --> 00:03:10.199 I got a postage stamp. I do see

 $00:03:10.210 \longrightarrow 00:03:13.118$ it small in the corner things are happening.

NOTE Confidence: 0.87548392

 $00:03:14.640 \longrightarrow 00:03:16.350$ That's not gonna be helpful though.

NOTE Confidence: 0.80656172

 $00:03:18.700 \longrightarrow 00:03:19.369$ There we go.

NOTE Confidence: 0.69623455

 $00:03:19.460 \longrightarrow 00:03:21.698$ There it's going, there we go.

NOTE Confidence: 0.697099150166667

 $00:03:22.490 \longrightarrow 00:03:24.626$ See, folks, I'm. I'm a Luddite,

NOTE Confidence: 0.697099150166667

00:03:24.630 --> 00:03:28.038 alright? I have no freaking

NOTE Confidence: 0.697099150166667

00:03:28.038 --> 00:03:29.850 clue what just happened. OK,

NOTE Confidence: 0.759991375

 $00:03:30.830 \longrightarrow 00:03:31.778$ we're there. We're there.

NOTE Confidence: 0.632280545

 $00{:}03{:}32.810 \dashrightarrow 00{:}03{:}35.010$ So I'm presenting mushrooms

NOTE Confidence: 0.632280545

 $00:03:35.010 \longrightarrow 00:03:37.210$ as medicines for neurogenesis.

NOTE Confidence: 0.632280545

 $00:03:37.210 \longrightarrow 00:03:39.410$ So here are my disclosures.

NOTE Confidence: 0.632280545

 $00{:}03{:}39.410 --> 00{:}03{:}40.522$ You know, frankly, folks,

NOTE Confidence: 0.632280545

00:03:40.522 --> 00:03:41.912 I don't know the difference

NOTE Confidence: 0.632280545

00:03:41.912 --> 00:03:43.932 between my avocation, my vocation,

NOTE Confidence: 0.632280545

 $00:03:43.932 \longrightarrow 00:03:48.118$ but I own a business started in the basement,

NOTE Confidence: 0.632280545

00:03:48.118 --> 00:03:49.546 packing boxes by myself.

 $00:03:49.550 \longrightarrow 00:03:51.638$ I was accepted at 4 graduate

NOTE Confidence: 0.632280545

 $00:03:51.638 \longrightarrow 00:03:53.469$ schools and couldn't afford to go.

NOTE Confidence: 0.632280545

 $00:03:53.470 \longrightarrow 00:03:55.640$ I had a married woman 11 years older than me,

NOTE Confidence: 0.632280545

 $00:03:55.640 \longrightarrow 00:03:56.792$ with four children,

NOTE Confidence: 0.632280545

 $00:03:56.792 \longrightarrow 00:03:59.070$ so I adopted them too.

NOTE Confidence: 0.632280545

 $00:03:59.070 \longrightarrow 00:04:00.550$ Too expensive.

NOTE Confidence: 0.632280545

 $00:04:00.550 \longrightarrow 00:04:02.685$ So I was confined to the basement.

NOTE Confidence: 0.632280545

 $00:04:02.690 \longrightarrow 00:04:05.394$ You know, we created a little

NOTE Confidence: 0.632280545

00:04:05.394 --> 00:04:06.318 scientific mail order business,

NOTE Confidence: 0.632280545

 $00:04:06.320 \longrightarrow 00:04:08.810$ and I have 145 employees.

NOTE Confidence: 0.632280545

 $00:04:08.810 \longrightarrow 00:04:10.665$ We do about \$40 million in sales.

NOTE Confidence: 0.632280545

 $00{:}04{:}10.670 \dashrightarrow 00{:}04{:}12.938$ I own 100% of no doubt.

NOTE Confidence: 0.632280545

 $00:04:12.940 \longrightarrow 00:04:14.000$ Is my dream come true?

NOTE Confidence: 0.632280545

 $00:04:14.000 \longrightarrow 00:04:15.884$ I created the business in order

NOTE Confidence: 0.632280545

 $00:04:15.884 \longrightarrow 00:04:17.140$ to do scientific research.

 $00:04:17.140 \longrightarrow 00:04:19.288$ That was my entire motivation is

NOTE Confidence: 0.632280545

 $00:04:19.288 \longrightarrow 00:04:21.480$ to buy Petri dishes wholesale.

NOTE Confidence: 0.632280545

 $00:04:21.480 \dashrightarrow 00:04:24.120$ I can do that if I buy 10 cases at a time.

NOTE Confidence: 0.632280545

 $00:04:24.120 \longrightarrow 00:04:26.025$ So I recently cofounded Michael

NOTE Confidence: 0.632280545

 $00:04:26.025 \longrightarrow 00:04:27.930$ Medical Life Sciences as a

NOTE Confidence: 0.632280545

 $00{:}04{:}27.999 \dashrightarrow 00{:}04{:}29.548$ public benefit corporation.

NOTE Confidence: 0.632280545

 $00:04:29.548 \longrightarrow 00:04:32.060$ We've raised \$60 million.

NOTE Confidence: 0.632280545

 $00:04:32.060 \longrightarrow 00:04:33.620$ We've been in stealth mode.

NOTE Confidence: 0.632280545

00:04:33.620 --> 00:04:35.870 You can't find really anything else

NOTE Confidence: 0.632280545

 $00:04:35.870 \longrightarrow 00:04:38.259$ about us except for my lectures.

NOTE Confidence: 0.632280545

 $00:04:38.260 \longrightarrow 00:04:39.940$ So we've been under the radar.

NOTE Confidence: 0.632280545

 $00:04:39.940 \longrightarrow 00:04:42.868$ But we are at michaelmedica.com you can see.

NOTE Confidence: 0.632280545

 $00:04:42.870 \longrightarrow 00:04:47.470$ Sort of a skeleton synopsis of who we are.

NOTE Confidence: 0.632280545

00:04:47.470 --> 00:04:49.762 I've been awarded about 40 patents

NOTE Confidence: 0.632280545

 $00:04:49.762 \longrightarrow 00:04:52.249$ on the on the serial inventor

NOTE Confidence: 0.632280545

 $00:04:52.249 \longrightarrow 00:04:54.877$ and I have 3 patents recently

 $00:04:54.877 \longrightarrow 00:04:56.790$ issued on Seoul Syven.

NOTE Confidence: 0.632280545

00:04:56.790 --> 00:04:58.590 I have written seven books,

NOTE Confidence: 0.632280545

 $00:04:58.590 \longrightarrow 00:05:00.970$ but six books describe saltybet

NOTE Confidence: 0.632280545

 $00:05:00.970 \longrightarrow 00:05:03.810$ mushrooms and as I stated in,

NOTE Confidence: 0.632280545

 $00:05:03.810 \longrightarrow 00:05:08.059$ I would dare just ask just philosophically.

NOTE Confidence: 0.632280545

 $00:05:08.060 \longrightarrow 00:05:10.532$ Every one of us has a bias because

NOTE Confidence: 0.632280545

 $00:05:10.532 \longrightarrow 00:05:12.270$ we're driven by our interest.

NOTE Confidence: 0.632280545

 $00:05:12.270 \longrightarrow 00:05:13.590$ And if you didn't have any

NOTE Confidence: 0.632280545

 $00:05:13.590 \longrightarrow 00:05:14.470$ interest in the subject,

NOTE Confidence: 0.632280545

00:05:14.470 --> 00:05:15.811 you wouldn't have a bias, right?

NOTE Confidence: 0.632280545

 $00:05:15.811 \longrightarrow 00:05:16.293$ So anyway,

NOTE Confidence: 0.632280545

00:05:16.293 --> 00:05:17.980 I I kind of kind of amusing

NOTE Confidence: 0.632280545

 $00:05:18.035 \longrightarrow 00:05:19.680$ when people want to say to bias

NOTE Confidence: 0.632280545

 $00:05:19.680 \longrightarrow 00:05:21.410$ and they say they have no bias,

NOTE Confidence: 0.632280545

00:05:21.410 --> 00:05:23.150 but they're employed by the university,

00:05:23.150 --> 00:05:24.134 they pull a paycheck,

NOTE Confidence: 0.632280545

 $00{:}05{:}24.134 \dashrightarrow 00{:}05{:}25.118$ they're doing the research

NOTE Confidence: 0.632280545

00:05:25.118 --> 00:05:26.110 and they're publishing.

NOTE Confidence: 0.632280545

00:05:26.110 --> 00:05:27.804 I think you have a bias even

NOTE Confidence: 0.632280545

 $00:05:27.804 \longrightarrow 00:05:29.558$ if you work at a university.

NOTE Confidence: 0.632280545

 $00:05:29.560 \longrightarrow 00:05:32.507$ So the we have echoes from archaeology

NOTE Confidence: 0.632280545

00:05:32.507 --> 00:05:34.940 of the interest and mushrooms,

NOTE Confidence: 0.632280545

 $00:05:34.940 \longrightarrow 00:05:36.653$ putatively solsiden mushrooms,

NOTE Confidence: 0.632280545

 $00:05:36.653 \longrightarrow 00:05:39.508$ and from the Mesoamerican mushroom

NOTE Confidence: 0.632280545

 $00{:}05{:}39.508 \dashrightarrow 00{:}05{:}42.216$ stones that were made for about

NOTE Confidence: 0.632280545

 $00:05:42.216 \longrightarrow 00:05:44.397$ 1000 years to most interesting,

NOTE Confidence: 0.632280545

00:05:44.397 --> 00:05:46.792 the northern Algeria that's a

NOTE Confidence: 0.632280545

00:05:46.792 --> 00:05:49.320 silly cave art 7000 years ago,

NOTE Confidence: 0.632280545

 $00:05:49.320 \longrightarrow 00:05:52.435$ at a time when the Rotarian ecosystem

NOTE Confidence: 0.632280545

 $00:05:52.435 \longrightarrow 00:05:54.922$ was flush with deciduous trees and

NOTE Confidence: 0.632280545

 $00:05:54.922 \longrightarrow 00:05:57.310$ woods before climate change and the

 $00:05:57.379 \longrightarrow 00:05:59.569$ encroaching of the Sahara desert.

NOTE Confidence: 0.632280545

 $00:05:59.570 \longrightarrow 00:06:01.058$ In a very,

NOTE Confidence: 0.632280545

 $00:06:01.058 \longrightarrow 00:06:03.925$ very interesting relief of Demeter

NOTE Confidence: 0.632280545

00:06:03.925 --> 00:06:06.721 giving Persephone a mushroom which

NOTE Confidence: 0.632280545

 $00:06:06.721 \longrightarrow 00:06:08.467$ suggests the onset of the seasons

NOTE Confidence: 0.632280545

 $00:06:08.467 \longrightarrow 00:06:10.456$ when she goes into the underworld

NOTE Confidence: 0.632280545

 $00:06:10.456 \longrightarrow 00:06:12.568$ and then winter and the Eleusinian

NOTE Confidence: 0.632280545

 $00:06:12.568 \longrightarrow 00:06:14.485$ Mysteries have been very well described

NOTE Confidence: 0.632280545

00:06:14.485 --> 00:06:16.646 by Karl Rock and Jonathan Hott,

NOTE Confidence: 0.632280545

 $00{:}06{:}16.646 \dashrightarrow 00{:}06{:}19.876$ Albert Hoffman and other researchers.

NOTE Confidence: 0.632280545

 $00:06:19.880 \longrightarrow 00:06:22.897$ What's really interesting to me is coin.

NOTE Confidence: 0.632280545

 $00:06:22.900 \longrightarrow 00:06:24.660$ Incidentally, when the Mesoamerican

NOTE Confidence: 0.632280545

 $00{:}06{:}24.660 {\:{\mbox{--}}}{>} 00{:}06{:}26.992$ mushroom stones being made, you know,

NOTE Confidence: 0.632280545

 $00:06:26.992 \longrightarrow 00:06:29.280$ in the new world at the same time,

NOTE Confidence: 0.632280545

 $00:06:29.280 \longrightarrow 00:06:31.956$ persisting for more than 1000 years,

 $00:06:31.960 \longrightarrow 00:06:33.520$ was the Eleusinian Mysteries.

NOTE Confidence: 0.632280545

 $00{:}06{:}33.520 \dashrightarrow 00{:}06{:}35.470$ So it was very interesting.

NOTE Confidence: 0.632280545 00:06:35.470 --> 00:06:35.746 There,

NOTE Confidence: 0.632280545

 $00:06:35.746 \longrightarrow 00:06:37.678$ on two different regions of the world,

NOTE Confidence: 0.632280545

 $00:06:37.680 \longrightarrow 00:06:39.725$ there is a strong suggestions

NOTE Confidence: 0.632280545

 $00:06:39.725 \longrightarrow 00:06:41.770$ of use of magic mushrooms.

NOTE Confidence: 0.7800387174

 $00:06:41.770 \longrightarrow 00:06:43.726$ So we must give credit to

NOTE Confidence: 0.7800387174

 $00:06:43.726 \longrightarrow 00:06:45.030$ Allah to Maria Sabina.

NOTE Confidence: 0.7800387174

 $00:06:45.030 \longrightarrow 00:06:47.250$ Maria Sabina is the Mazatec shaman.

NOTE Confidence: 0.7800387174

00:06:47.250 --> 00:06:48.650 But I present to you,

NOTE Confidence: 0.7800387174

 $00:06:48.650 \longrightarrow 00:06:49.850$ she's more than just a shaman.

NOTE Confidence: 0.7800387174

 $00:06:49.850 \longrightarrow 00:06:51.154$ She was a mycologist.

NOTE Confidence: 0.7800387174

00:06:51.154 --> 00:06:53.110 She went out into the Wilds.

NOTE Confidence: 0.7800387174

00:06:53.110 --> 00:06:57.150 She went in and out in the wild and found

NOTE Confidence: 0.7800387174

 $00:06:57.150 \longrightarrow 00:06:59.039$ on the mushroom that she preferred was.

NOTE Confidence: 0.7800387174

 $00{:}06{:}59.040 \dashrightarrow 00{:}07{:}02.040$ Philosophy is zapato quorum.

 $00:07:02.040 \longrightarrow 00:07:03.348$ And this is the mushroom that

NOTE Confidence: 0.7800387174

 $00:07:03.348 \longrightarrow 00:07:04.660$ she used in her rituals.

NOTE Confidence: 0.7800387174

 $00:07:04.660 \longrightarrow 00:07:07.117$ Most of you know about our Gordon

NOTE Confidence: 0.7800387174

 $00{:}07{:}07.117 \dashrightarrow 00{:}07{:}08.700$ Wasson and Valentino Watson,

NOTE Confidence: 0.7800387174

 $00{:}07{:}08.700 \dashrightarrow 00{:}07{:}10.325$ but Valentino was a mycologist

NOTE Confidence: 0.7800387174

 $00:07:10.325 \longrightarrow 00:07:12.630$ and my Valentina was a physician.

NOTE Confidence: 0.7800387174

 $00:07:12.630 \longrightarrow 00:07:14.004$ She died, unfortunately,

NOTE Confidence: 0.7800387174

 $00:07:14.004 \longrightarrow 00:07:16.752$ 1958, just the same year the

NOTE Confidence: 0.7800387174

 $00:07:16.752 \longrightarrow 00:07:18.718$ Life magazine came out.

NOTE Confidence: 0.7800387174

00:07:18.720 --> 00:07:20.020 But she knew mushrooms

NOTE Confidence: 0.7800387174

 $00:07:20.020 \longrightarrow 00:07:21.320$ by their Latin binomials.

NOTE Confidence: 0.7800387174

 $00:07:21.320 \longrightarrow 00:07:23.010$ She could identify mushrooms or

NOTE Confidence: 0.7800387174

 $00{:}07{:}23.010 \dashrightarrow 00{:}07{:}25.040$ Gordon Wasson was fearful of them.

NOTE Confidence: 0.7800387174

 $00:07:25.040 \longrightarrow 00:07:28.160$ And that dialectic led to the

NOTE Confidence: 0.7800387174

00:07:28.160 --> 00:07:30.324 the new words Michael Ophelia

 $00:07:30.324 \longrightarrow 00:07:31.968$ from the Russians and.

NOTE Confidence: 0.7800387174

 $00{:}07{:}31.970 \dashrightarrow 00{:}07{:}34.460$ Phobia from the English and from

NOTE Confidence: 0.7800387174

 $00:07:34.460 \longrightarrow 00:07:36.672$ that dialectic that began this

NOTE Confidence: 0.7800387174

 $00{:}07{:}36.672 \dashrightarrow 00{:}07{:}39.037$ amazing career and love affair

NOTE Confidence: 0.7800387174

 $00:07:39.037 \longrightarrow 00:07:40.929$ they had with ethnomusicology.

NOTE Confidence: 0.7800387174

00:07:40.930 --> 00:07:42.934 But as these women mycologists that

NOTE Confidence: 0.7800387174

 $00:07:42.934 \longrightarrow 00:07:44.725$ have not been fully recognized

NOTE Confidence: 0.7800387174

 $00:07:44.725 \longrightarrow 00:07:46.650$ or appreciated that have really

NOTE Confidence: 0.7800387174

00:07:46.650 --> 00:07:49.457 led the charge and our Gordon

NOTE Confidence: 0.7800387174

 $00:07:49.457 \longrightarrow 00:07:52.202$ Washington sense was passed on

NOTE Confidence: 0.7800387174

 $00{:}07{:}52.202 \dashrightarrow 00{:}07{:}54.132$ the responsibility from Valentina.

NOTE Confidence: 0.7800387174

 $00:07:54.132 \longrightarrow 00:07:56.628$ But I think it's really important

NOTE Confidence: 0.7800387174

 $00:07:56.628 \longrightarrow 00:07:57.870$ to recognize this.

NOTE Confidence: 0.7800387174

 $00:07:57.870 \longrightarrow 00:07:59.991$ So this losophy ZAP at the quorum

NOTE Confidence: 0.7800387174

 $00:07:59.991 \longrightarrow 00:08:01.900$ was the primary species of use.

NOTE Confidence: 0.7800387174

00:08:01.900 --> 00:08:04.420 By Maria Sabina I also look at a

 $00:08:04.420 \longrightarrow 00:08:07.006$ shout out to my friend Andrew Weil,

NOTE Confidence: 0.7800387174

 $00{:}08{:}07.010 \dashrightarrow 00{:}08{:}08.774$ who graduated from Harvard

NOTE Confidence: 0.7800387174

 $00:08:08.774 \longrightarrow 00:08:10.824$ Medical School in 1977.

NOTE Confidence: 0.7800387174

 $00:08:10.824 \longrightarrow 00:08:13.734$ He published this in the

NOTE Confidence: 0.7800387174

00:08:13.734 --> 00:08:15.112 Harvard Botanical Museum.

NOTE Confidence: 0.7800387174

 $00:08:15.112 \longrightarrow 00:08:16.696$ Leaflets about this sudden

NOTE Confidence: 0.7800387174

00:08:16.696 --> 00:08:18.761 interest in souls have mushrooms

NOTE Confidence: 0.7800387174

 $00:08:18.761 \longrightarrow 00:08:20.417$ in the Pacific Northwest.

NOTE Confidence: 0.7800387174

00:08:20.420 --> 00:08:23.600 Heretofore it was not well known

NOTE Confidence: 0.7800387174

 $00:08:23.600 \longrightarrow 00:08:25.160$ that you could find still 7

NOTE Confidence: 0.7800387174

00:08:25.160 --> 00:08:26.200 mushrooms in Washington state,

NOTE Confidence: 0.7800387174

00:08:26.200 --> 00:08:28.840 Oregon, Northern California.

NOTE Confidence: 0.7800387174

 $00:08:28.840 \longrightarrow 00:08:31.315$ Then there was, as you many of you know,

NOTE Confidence: 0.7800387174

 $00:08:31.320 \longrightarrow 00:08:33.408$ thousands of people went to wahaca

NOTE Confidence: 0.7800387174

00:08:33.408 --> 00:08:35.234 and search for Maria Sabina

 $00:08:35.234 \longrightarrow 00:08:37.079$ and to take magic mushrooms.

NOTE Confidence: 0.7800387174

 $00:08:37.080 \longrightarrow 00:08:38.514$ Little did they know that many

NOTE Confidence: 0.7800387174

 $00:08:38.514 \longrightarrow 00:08:39.885$ of them have these mushrooms

NOTE Confidence: 0.7800387174

00:08:39.885 --> 00:08:41.675 growing perhaps in their backyard,

NOTE Confidence: 0.7800387174

 $00:08:41.680 \longrightarrow 00:08:44.860$ if not just, you know, down the street.

NOTE Confidence: 0.7800387174

00:08:44.860 --> 00:08:47.070 So Andy would, you know,

NOTE Confidence: 0.7800387174

 $00:08:47.070 \longrightarrow 00:08:48.995$ synopsis of this was important.

NOTE Confidence: 0.7800387174

 $00:08:49.000 \longrightarrow 00:08:50.675$ Even though the mushrooms that

NOTE Confidence: 0.7800387174

00:08:50.675 --> 00:08:52.015 he describes were misidentified,

NOTE Confidence: 0.7800387174

 $00:08:52.020 \longrightarrow 00:08:54.882$ the whole history of the taxonomy

NOTE Confidence: 0.7800387174

 $00:08:54.882 \longrightarrow 00:08:57.787$ of silicide mushrooms is speckled

NOTE Confidence: 0.7800387174

 $00:08:57.787 \longrightarrow 00:08:59.599$ with misidentifications.

NOTE Confidence: 0.7800387174

 $00:08:59.600 \longrightarrow 00:09:01.220$ So how many species are there?

NOTE Confidence: 0.7800387174 00:09:01.220 --> 00:09:01.573 Well,

NOTE Confidence: 0.7800387174

00:09:01.573 --> 00:09:03.338 there's about 140 known species

NOTE Confidence: 0.7800387174

 $00:09:03.338 \longrightarrow 00:09:04.750$ that are soulside inactive.

 $00:09:06.800 \longrightarrow 00:09:11.938$ 5682 reported collections from 1800 to 2022.

NOTE Confidence: 0.903798538333333

 $00{:}09{:}11.938 \dashrightarrow 00{:}09{:}15.122$ So I think there's no doubt we all

NOTE Confidence: 0.903798538333333

00:09:15.122 --> 00:09:17.692 came from Africa. Humans migrated,

NOTE Confidence: 0.903798538333333

00:09:17.692 --> 00:09:20.758 Sloshy Compenses is native to Africa

NOTE Confidence: 0.903798538333333

00:09:20.758 --> 00:09:24.508 is now found of course in Mesoamerica,

NOTE Confidence: 0.903798538333333

 $00:09:24.510 \longrightarrow 00:09:26.462$ thought to be brought over with by the

NOTE Confidence: 0.903798538333333

00:09:26.462 --> 00:09:27.930 Spaniards when they brought cattle.

NOTE Confidence: 0.903798538333333

 $00:09:27.930 \longrightarrow 00:09:30.162$ But it's loss to be convinced this is the

NOTE Confidence: 0.903798538333333

 $00{:}09{:}30.162 \dashrightarrow 00{:}09{:}32.139$ primary species of use is found in India,

NOTE Confidence: 0.903798538333333

 $00{:}09{:}32.140 --> 00{:}09{:}34.510$ Australia you know, South Africa,

NOTE Confidence: 0.903798538333333

00:09:34.510 --> 00:09:37.408 Mid Africa, South America, Middle America,

NOTE Confidence: 0.903798538333333

00:09:37.410 --> 00:09:38.826 Texas, Louisiana, Mississippi.

NOTE Confidence: 0.903798538333333

00:09:38.826 --> 00:09:40.714 So it's really circumpolar

NOTE Confidence: 0.903798538333333

 $00:09:40.714 \longrightarrow 00:09:43.150$ is that that species has a.

NOTE Confidence: 0.903798538333333

 $00{:}09{:}43.150 \dashrightarrow 00{:}09{:}45.555$ Broadest range of any suicidal

 $00:09:45.555 \longrightarrow 00:09:47.479$ mushroom is so far.

NOTE Confidence: 0.903798538333333

 $00{:}09{:}47.480 \dashrightarrow 00{:}09{:}50.777$ Now my brother John went to Yale.

NOTE Confidence: 0.903798538333333

00:09:50.780 --> 00:09:53.228 And I was only 14 years of age,

NOTE Confidence: 0.903798538333333

 $00:09:53.230 \longrightarrow 00:09:54.826$ and he came back with this book.

NOTE Confidence: 0.903798538333333

 $00:09:54.830 \longrightarrow 00:09:56.162$ Altered states of consciousness

NOTE Confidence: 0.903798538333333

 $00:09:56.162 \longrightarrow 00:09:58.328$ was one of his textbooks. At Yale.

NOTE Confidence: 0.903798538333333

 $00:09:58.328 \dashrightarrow 00:10:00.320$ We living in a small town called Columbiana.

NOTE Confidence: 0.903798538333333

 $00:10:00.320 \longrightarrow 00:10:03.350$ OH, a very conservative town.

NOTE Confidence: 0.903798538333333

 $00:10:03.350 \longrightarrow 00:10:05.170$ But John and the family,

NOTE Confidence: 0.903798538333333

 $00:10:05.170 \longrightarrow 00:10:07.650$ we had an entire laboratory in the basement.

NOTE Confidence: 0.903798538333333

 $00:10:07.650 \longrightarrow 00:10:08.790$ It was, I mean, seriously,

NOTE Confidence: 0.903798538333333

 $00:10:08.790 \longrightarrow 00:10:11.604$ it's 4 rows, 3 rows and chemicals.

NOTE Confidence: 0.903798538333333

 $00{:}10{:}11.610 \dashrightarrow 00{:}10{:}13.610$ John was a serious chemist.

NOTE Confidence: 0.903798538333333

 $00:10:13.610 \longrightarrow 00:10:16.038$ I've got accepted into Yale and

NOTE Confidence: 0.903798538333333

00:10:16.038 --> 00:10:17.886 I could be in the laboratory,

NOTE Confidence: 0.903798538333333

 $00:10:17.890 \longrightarrow 00:10:20.642$ but I was too young and I was, you know.

 $00{:}10{:}20.642 --> 00{:}10{:}22.679$ Not as sincere as he was or,

NOTE Confidence: 0.903798538333333 00:10:22.680 --> 00:10:23.244 you know, NOTE Confidence: 0.903798538333333

 $00:10:23.244 \longrightarrow 00:10:24.936$ and he was a serious chemist.

NOTE Confidence: 0.903798538333333

 $00:10:24.940 \longrightarrow 00:10:27.622$ But we got the my father served on the

NOTE Confidence: 0.903798538333333

 $00:10:27.622 \longrightarrow 00:10:29.990$ intrepid aircraft carrier and we got

NOTE Confidence: 0.903798538333333

00:10:29.990 --> 00:10:31.940 the intrepid aircraft carrier radio,

NOTE Confidence: 0.903798538333333

 $00:10:31.940 \longrightarrow 00:10:33.980$ the main radio on this aircraft

NOTE Confidence: 0.903798538333333

 $00{:}10{:}33.980 \dashrightarrow 00{:}10{:}35.540$ carrier from World War Two.

NOTE Confidence: 0.903798538333333

 $00:10:35.540 \longrightarrow 00:10:36.860$ And that was in our basement.

NOTE Confidence: 0.903798538333333

 $00:10:36.860 \longrightarrow 00:10:38.420$ So I was parked in the corner and

NOTE Confidence: 0.903798538333333

 $00:10:38.420 \longrightarrow 00:10:40.239$ I could just listen to the coded

NOTE Confidence: 0.903798538333333

 $00{:}10{:}40.239 \dashrightarrow 00{:}10{:}41.619$ messages behind the Iron Curtain.

NOTE Confidence: 0.903798538333333

 $00{:}10{:}41.620 \to 00{:}10{:}43.294$ I could be where my brother John he was.

NOTE Confidence: 0.903798538333333

 $00:10:43.300 \longrightarrow 00:10:46.760$ He was a huge hero in my life and mentor.

NOTE Confidence: 0.903798538333333

00:10:46.760 --> 00:10:49.073 And John lent me this book and he was

00:10:49.073 --> 00:10:51.432 on break and then two weeks later he

NOTE Confidence: 0.903798538333333

 $00:10:51.432 \longrightarrow 00:10:54.068$ had to come back to Yale and I he said

NOTE Confidence: 0.903798538333333

 $00:10:54.068 \longrightarrow 00:10:56.589$ please give it back to me and I read it.

NOTE Confidence: 0.903798538333333

 $00:10:56.590 \longrightarrow 00:10:58.998$ You know my and my best friend Ryan

NOTE Confidence: 0.903798538333333

 $00:10:58.998 \longrightarrow 00:11:01.052$ borrowed it and Ryan borrowed it and

NOTE Confidence: 0.903798538333333

00:11:01.052 --> 00:11:03.677 and time is a days are going by and

NOTE Confidence: 0.903798538333333

00:11:03.677 --> 00:11:05.822 I tell Ryan please return the book,

NOTE Confidence: 0.903798538333333

 $00:11:05.822 \longrightarrow 00:11:06.938$ return the book.

NOTE Confidence: 0.903798538333333

 $00:11:06.938 \longrightarrow 00:11:08.798$ He kept avoiding the question.

NOTE Confidence: 0.903798538333333

00:11:08.800 --> 00:11:10.588 And finally John was pressuring me

NOTE Confidence: 0.903798538333333

 $00{:}11{:}10.588 \dashrightarrow 00{:}11{:}12.545$ to return his textbook and I asked

NOTE Confidence: 0.903798538333333

00:11:12.545 --> 00:11:14.190 Ryan and demanded that he give it

NOTE Confidence: 0.903798538333333

00:11:14.251 --> 00:11:15.979 back to me and he said I'm sorry,

NOTE Confidence: 0.903798538333333

 $00:11:15.980 \longrightarrow 00:11:17.030$ I can't give it back to you.

NOTE Confidence: 0.903798538333333

 $00:11:17.030 \longrightarrow 00:11:20.397$ My father found it and burned it.

NOTE Confidence: 0.903798538333333

 $00:11:20.400 \longrightarrow 00:11:22.865$ So I said your father

 $00:11:22.865 \longrightarrow 00:11:24.837$ burned my brother's book.

NOTE Confidence: 0.903798538333333

00:11:24.840 --> 00:11:26.716 And I, and he was very authoritarian,

NOTE Confidence: 0.903798538333333

00:11:26.720 --> 00:11:28.104 conservative person, very concerned

NOTE Confidence: 0.903798538333333

 $00:11:28.104 \longrightarrow 00:11:29.834$ about other states of consciousness.

NOTE Confidence: 0.903798538333333

00:11:29.840 --> 00:11:31.208 And I thought, well,

NOTE Confidence: 0.903798538333333

 $00:11:31.208 \longrightarrow 00:11:34.119$ this is a subject I'm going to explore.

NOTE Confidence: 0.903798538333333

 $00:11:34.120 \longrightarrow 00:11:39.256$ So on the right is my first book.

NOTE Confidence: 0.903798538333333

 $00:11:39.260 \longrightarrow 00:11:41.678$ It was published 44 years ago.

NOTE Confidence: 0.903798538333333

 $00:11:41.680 \longrightarrow 00:11:43.320$ I began writing it when I was 21.

NOTE Confidence: 0.903798538333333

00:11:43.320 --> 00:11:44.555 I published my first book

NOTE Confidence: 0.903798538333333

 $00:11:44.555 \longrightarrow 00:11:47.108$ when I was 23 years of age.

NOTE Confidence: 0.903798538333333

 $00:11:47.108 \longrightarrow 00:11:50.808$ Philosophy, mushrooms and their allies.

NOTE Confidence: 0.903798538333333

 $00{:}11{:}50.810 \dashrightarrow 00{:}11{:}53.501$ And I was living in a remote cabin in

NOTE Confidence: 0.903798538333333

 $00:11:53.501 \longrightarrow 00:11:56.218$ the Cascades and or volcano snow capped

NOTE Confidence: 0.903798538333333

 $00:11:56.218 \longrightarrow 00:11:57.888$ volcano called White Horse Mountain.

 $00:11:57.890 \longrightarrow 00:11:59.306$ And I would come down to

NOTE Confidence: 0.867646284

 $00:11:59.306 \longrightarrow 00:12:00.250$ Seattle to visit John.

NOTE Confidence: 0.867646284

 $00:12:00.250 \longrightarrow 00:12:01.825$ He went the University of

NOTE Confidence: 0.867646284

00:12:01.825 --> 00:12:02.770 Washington Medical School.

NOTE Confidence: 0.867646284

 $00:12:02.770 \longrightarrow 00:12:04.576$ And so the yalies will then come

NOTE Confidence: 0.867646284

 $00{:}12{:}04.576 \dashrightarrow 00{:}12{:}06.605$ up into the Cascades and we would

NOTE Confidence: 0.867646284

 $00{:}12{:}06.605 \dashrightarrow 00{:}12{:}08.758$ trip on Sullivan and but John was

NOTE Confidence: 0.867646284

 $00:12:08.758 \longrightarrow 00:12:10.552$ really excited that I I learned

NOTE Confidence: 0.867646284

 $00{:}12{:}10.552 \dashrightarrow 00{:}12{:}12.719$ this because he inspired me from

NOTE Confidence: 0.867646284

 $00:12:12.719 \longrightarrow 00:12:15.241$ his trips to Mexico and Colombia

NOTE Confidence: 0.867646284

00:12:15.241 --> 00:12:17.743 and came back with his astonishing

NOTE Confidence: 0.867646284

00:12:17.743 --> 00:12:19.844 tales of magic mushrooms. So.

NOTE Confidence: 0.867646284

 $00:12:19.844 \longrightarrow 00:12:22.116$ He really kind of laid the spore or

NOTE Confidence: 0.867646284

 $00:12:22.116 \longrightarrow 00:12:24.856$ seed in my brain to continue this journey.

NOTE Confidence: 0.867646284

00:12:24.860 --> 00:12:27.079 I also want to acknowledge my father,

NOTE Confidence: 0.867646284

 $00:12:27.080 \longrightarrow 00:12:28.952$ you know, and he taught me

 $00:12:28.952 \longrightarrow 00:12:30.200$ a lot about science.

NOTE Confidence: 0.867646284

00:12:30.200 --> 00:12:30.790 You know,

NOTE Confidence: 0.867646284

00:12:30.790 --> 00:12:32.855 John unfortunately passed away in 2014 and

NOTE Confidence: 0.95492279

 $00:12:35.040 \longrightarrow 00:12:36.820$ my mother also passed away,

NOTE Confidence: 0.95492279

 $00:12:36.820 \longrightarrow 00:12:38.468$ you know, more recently.

NOTE Confidence: 0.95492279

 $00:12:38.468 \longrightarrow 00:12:40.116$ So these three individuals

NOTE Confidence: 0.95492279

 $00:12:40.116 \longrightarrow 00:12:41.660$ were hugely important.

NOTE Confidence: 0.95492279

00:12:41.660 --> 00:12:44.080 But my mycological mentors was

NOTE Confidence: 0.95492279

00:12:44.080 --> 00:12:46.500 Doctor Daniel stunts kit skates,

NOTE Confidence: 0.95492279

00:12:46.500 --> 00:12:49.836 Doctor Michael Bugg and Alexander Smith,

NOTE Confidence: 0.95492279

 $00:12:49.840 \longrightarrow 00:12:52.036$ 1978. We received a DEA license

NOTE Confidence: 0.95492279

 $00{:}12{:}52.036 \dashrightarrow 00{:}12{:}54.350$ under Michael Bue and myself and

NOTE Confidence: 0.95492279

 $00{:}12{:}54.350 \dashrightarrow 00{:}12{:}57.059$ Jeremy Big Wood and Michael Bugs were

NOTE Confidence: 0.95492279

 $00{:}12{:}57.059 \dashrightarrow 00{:}12{:}59.180$ covered by the Sullivan license.

NOTE Confidence: 0.95492279

 $00:12:59.180 \longrightarrow 00:13:00.770$ There was allowed me to collect

 $00:13:00.770 \longrightarrow 00:13:02.626$ and cultivate, and thereupon we

NOTE Confidence: 0.95492279

 $00:13:02.626 \longrightarrow 00:13:04.836$ began publishing quite a bit.

NOTE Confidence: 0.95492279

 $00:13:04.840 \longrightarrow 00:13:06.496$ I went on to discovered 4

NOTE Confidence: 0.95492279

 $00:13:06.496 \longrightarrow 00:13:07.960$ new species and named them,

NOTE Confidence: 0.95492279

 $00:13:07.960 \longrightarrow 00:13:09.220$ as long as we assure Russians,

NOTE Confidence: 0.95492279

 $00:13:09.220 \longrightarrow 00:13:10.510$ the most potent source of

NOTE Confidence: 0.95492279

 $00:13:10.510 \longrightarrow 00:13:11.800$ the mushroom in the world.

NOTE Confidence: 0.95492279

00:13:11.800 --> 00:13:12.268 Putatively,

NOTE Confidence: 0.95492279

 $00:13:12.268 \longrightarrow 00:13:15.076$ there's some competition based on analysis,

NOTE Confidence: 0.95492279

00:13:15.080 --> 00:13:16.724 linear formans, variety marijuana,

NOTE Confidence: 0.95492279

 $00{:}13{:}16.724 \dashrightarrow 00{:}13{:}17.916$ Sonic fibrosis, philosophy.

NOTE Confidence: 0.95492279

00:13:17.916 --> 00:13:20.844 Wiley I, which I named after Andrew Weil.

NOTE Confidence: 0.95492279

 $00:13:20.850 \longrightarrow 00:13:22.780$ So as long as we signed us as one of

NOTE Confidence: 0.95492279

 $00:13:22.842 \longrightarrow 00:13:24.678$ the most popular wood chip silicide

NOTE Confidence: 0.95492279

 $00:13:24.678 \longrightarrow 00:13:26.650$ mushrooms here in the Pacific Northwest

NOTE Confidence: 0.95492279

 $00{:}13{:}26.650 \dashrightarrow 00{:}13{:}28.708$ and Canada where I am Washington,

 $00{:}13{:}28.710 \dashrightarrow 00{:}13{:}30.170$ Oregon and Northern California

NOTE Confidence: 0.95492279

00:13:30.170 --> 00:13:32.360 down to the San Francisco Bay

NOTE Confidence: 0.95492279

00:13:32.422 --> 00:13:34.366 area a little bit further South,

NOTE Confidence: 0.95492279

 $00:13:34.370 \longrightarrow 00:13:35.678$ they're called WAVY caps.

NOTE Confidence: 0.95492279

 $00{:}13{:}35.678 \dashrightarrow 00{:}13{:}37.640$ It was also discovered by a

NOTE Confidence: 0.95492279

00:13:37.710 --> 00:13:39.690 great woman in my collagist LLC,

NOTE Confidence: 0.95492279

 $00:13:39.690 \longrightarrow 00:13:40.812$ Wakefield in 1946.

NOTE Confidence: 0.95492279

 $00{:}13{:}40.812 \dashrightarrow 00{:}13{:}42.682$ Again another example that the

NOTE Confidence: 0.95492279

00:13:42.682 --> 00:13:44.761 women in my colleges have really

NOTE Confidence: 0.95492279

00:13:44.761 --> 00:13:47.046 led the way and are under a

NOTE Confidence: 0.95492279

 $00{:}13{:}47.046 \dashrightarrow 00{:}13{:}48.656$ recognized and it's important that

NOTE Confidence: 0.95492279

 $00{:}13{:}48.656 \dashrightarrow 00{:}13{:}51.117$ I think we we do recognize them.

NOTE Confidence: 0.95492279

 $00{:}13{:}51.117 \dashrightarrow 00{:}13{:}53.062$ So there's a bluing reaction

NOTE Confidence: 0.95492279

 $00{:}13{:}53.062 \dashrightarrow 00{:}13{:}55.330$ that is related to psilocin.

NOTE Confidence: 0.95492279

00:13:55.330 --> 00:13:57.670 Silybin is a prodrug to salicin.

 $00:13:57.670 \longrightarrow 00:13:59.074$ Silybin dephosphorylates enzymes

NOTE Confidence: 0.95492279

 $00:13:59.074 \longrightarrow 00:14:01.882$ in your gut and digestive juices

NOTE Confidence: 0.95492279

 $00:14:01.882 \longrightarrow 00:14:04.114$ and then the Marcellus and

NOTE Confidence: 0.95492279

 $00:14:04.114 \longrightarrow 00:14:06.224$ degrades this blue pigment forms.

NOTE Confidence: 0.95492279

 $00:14:06.230 \longrightarrow 00:14:08.906$ So the stronger the bluing reaction,

NOTE Confidence: 0.95492279

00:14:08.910 --> 00:14:11.510 how is it indication of

NOTE Confidence: 0.95492279

 $00:14:11.510 \longrightarrow 00:14:14.110$ how potent it once was.

NOTE Confidence: 0.95492279

00:14:14.110 --> 00:14:16.768 So they're interesting and metric there.

NOTE Confidence: 0.95492279

 $00:14:16.770 \longrightarrow 00:14:18.954$ So since many of you have may have

NOTE Confidence: 0.95492279

 $00:14:18.954 \longrightarrow 00:14:20.530$ not collected sinus is a short,

NOTE Confidence: 0.95492279

 $00:14:20.530 \longrightarrow 00:14:21.769$ I think 32nd.

NOTE Confidence: 0.95492279

 $00:14:21.769 \longrightarrow 00:14:24.247$ Video and just what they look

NOTE Confidence: 0.95492279

 $00:14:24.247 \longrightarrow 00:14:27.098$ like in the wild is very popular

NOTE Confidence: 0.95492279

00:14:27.098 --> 00:14:29.894 to create your own soul saving

NOTE Confidence: 0.95492279

00:14:29.894 --> 00:14:32.397 mushroom patch in your backyard.

NOTE Confidence: 0.95492279

00:14:32.400 --> 00:14:35.575 My book mycelium running has

 $00:14:35.575 \longrightarrow 00:14:37.480$ techniques for transplantation.

NOTE Confidence: 0.95492279

 $00{:}14{:}37.480 \dashrightarrow 00{:}14{:}38.485$ You take those little Rison

NOTE Confidence: 0.95492279

 $00:14:38.485 \longrightarrow 00:14:39.909$ morphs at the base of the stem.

NOTE Confidence: 0.95492279

00:14:39.910 --> 00:14:41.765 You can cut the stem risorse off,

NOTE Confidence: 0.95492279

 $00:14:41.770 \longrightarrow 00:14:43.914$ put them in the wood chips and then

NOTE Confidence: 0.95492279

 $00:14:43.914 \longrightarrow 00:14:46.004$ grow your own mushroom pouch and then

NOTE Confidence: 0.95492279

 $00:14:46.004 \longrightarrow 00:14:48.510$ you feed it every year with wood chips.

NOTE Confidence: 0.95492279

00:14:48.510 --> 00:14:48.935 Interestingly,

NOTE Confidence: 0.95492279

00:14:48.935 --> 00:14:51.485 these soul type of mushrooms were

NOTE Confidence: 0.95492279

 $00:14:51.485 \longrightarrow 00:14:54.000$ not well known by even mycologists

NOTE Confidence: 0.95492279

 $00{:}14{:}54.000 \dashrightarrow 00{:}14{:}56.340$ until the advent of beauty bark.

NOTE Confidence: 0.95492279

 $00:14:56.340 \longrightarrow 00:14:58.489$ In the 60s where they started wood

NOTE Confidence: 0.95492279

 $00{:}14{:}58.489 \dashrightarrow 00{:}15{:}00.478$ chipping and putting it as landscaping,

NOTE Confidence: 0.95492279

 $00:15:00.480 \longrightarrow 00:15:02.460$ suddenly these solsiden mushrooms come,

NOTE Confidence: 0.95492279

 $00:15:02.460 \longrightarrow 00:15:04.490$ came out of the woodwork, so to speak.

00:15:04.490 --> 00:15:05.360 Many of us,

NOTE Confidence: 0.95492279

 $00:15:05.360 \longrightarrow 00:15:07.495$ my colleagues think that they're into fights.

NOTE Confidence: 0.95492279

 $00:15:07.500 \longrightarrow 00:15:09.310$ They're actually inside the trees

NOTE Confidence: 0.95492279

 $00:15:09.310 \longrightarrow 00:15:11.628$ and and now we have instances

NOTE Confidence: 0.95492279

00:15:11.628 --> 00:15:13.783 of Beavers and these silicide

NOTE Confidence: 0.95492279

00:15:13.783 --> 00:15:16.459 mushrooms coming out of Beaver holes

NOTE Confidence: 0.95492279

 $00{:}15{:}16.459 \dashrightarrow 00{:}15{:}18.659$ where Beavers are chipping wood.

NOTE Confidence: 0.95492279

 $00:15:18.660 \longrightarrow 00:15:20.748$ But it's the advent of beauty bark that

NOTE Confidence: 0.95492279

 $00{:}15{:}20.748 \dashrightarrow 00{:}15{:}22.303$ suddenly made these things prolific

NOTE Confidence: 0.95492279

00:15:22.303 --> 00:15:23.933 all over the Pacific Northwest,

NOTE Confidence: 0.95492279

 $00{:}15{:}23.940 \dashrightarrow 00{:}15{:}27.148$ associated with universities, prisons.

NOTE Confidence: 0.95492279

 $00:15:27.148 \longrightarrow 00:15:29.382$ Courthouses you can imagine around.

NOTE Confidence: 0.95492279

 $00{:}15{:}29.382 \dashrightarrow 00{:}15{:}31.172$ You know Microsoft is very

NOTE Confidence: 0.95492279

00:15:31.172 --> 00:15:33.083 interesting when they where these

NOTE Confidence: 0.95492279

 $00{:}15{:}33.083 \dashrightarrow 00{:}15{:}34.943$ silicide mushrooms tend to localize.

NOTE Confidence: 0.95492279

 $00{:}15{:}34.950 \dashrightarrow 00{:}15{:}37.071$ It seems to be a very important

 $00:15:37.071 \longrightarrow 00:15:38.863$ Nexus points the other species

NOTE Confidence: 0.95492279

 $00{:}15{:}38.863 \mathrel{--}{>} 00{:}15{:}40.913$ is very popular philosophy Simon

NOTE Confidence: 0.95492279

00:15:40.913 --> 00:15:42.143 Sieta Liberty caps

NOTE Confidence: 0.72313171

 $00:15:42.210 \longrightarrow 00:15:44.464$ now this one does not bruise bluish

NOTE Confidence: 0.72313171

 $00:15:44.464 \longrightarrow 00:15:46.432$ rarely and it's packed full of

NOTE Confidence: 0.72313171

00:15:46.432 --> 00:15:48.436 soul sibin and almost no salicin.

NOTE Confidence: 0.72313171

 $00:15:48.440 \longrightarrow 00:15:51.870$ Psilocybin is very stable, psilocin is not.

NOTE Confidence: 0.72313171

 $00:15:51.870 \longrightarrow 00:15:54.471$ This is why Silybin is a prodrug is presented

NOTE Confidence: 0.72313171

 $00{:}15{:}54.471 \dashrightarrow 00{:}15{:}56.867$ in the clinical studies this silybin.

NOTE Confidence: 0.72313171

00:15:56.870 --> 00:15:59.278 And it is much more stable than salicin,

NOTE Confidence: 0.72313171

 $00:15:59.280 \longrightarrow 00:16:01.576$ but this is a species that's also very,

NOTE Confidence: 0.72313171

 $00:16:01.580 \longrightarrow 00:16:03.556$ very popular and it grows in the field.

NOTE Confidence: 0.72313171

 $00:16:03.560 \longrightarrow 00:16:05.312$ So there's two habitats,

NOTE Confidence: 0.72313171

 $00:16:05.312 \longrightarrow 00:16:07.940$ peeled pastures near ponds in particular,

NOTE Confidence: 0.72313171

 $00:16:07.940 \longrightarrow 00:16:10.754$ wet areas and wood chips around buildings.

00:16:10.760 --> 00:16:12.874 Those are two primary areas that are

NOTE Confidence: 0.72313171

 $00{:}16{:}12.874 \dashrightarrow 00{:}16{:}15.174$ found from the second week of September

NOTE Confidence: 0.72313171

 $00:16:15.174 \longrightarrow 00:16:17.166$ to the second week of November.

NOTE Confidence: 0.72313171

00:16:17.170 --> 00:16:18.762 So we started organizing,

NOTE Confidence: 0.72313171

00:16:18.762 --> 00:16:21.150 I started organizing my two friends,

NOTE Confidence: 0.72313171

 $00{:}16{:}21.150 \dashrightarrow 00{:}16{:}22.795$ a group of mushroom conferences

NOTE Confidence: 0.72313171

 $00:16:22.795 \longrightarrow 00:16:24.873$ and a sense this little discussion

NOTE Confidence: 0.72313171

 $00:16:24.873 \longrightarrow 00:16:27.099$ we're having today is a continuation

NOTE Confidence: 0.72313171

 $00{:}16{:}27.099 \dashrightarrow 00{:}16{:}29.050$ of that threat of knowledge.

NOTE Confidence: 0.72313171

 $00:16:29.050 \longrightarrow 00:16:30.555$ So we started doing these

NOTE Confidence: 0.72313171

 $00:16:30.555 \longrightarrow 00:16:31.759$ mushroom conferences in 19.

NOTE Confidence: 0.72313171

 $00:16:31.760 \longrightarrow 00:16:35.830$ Actually 1978 was the 1st 1197079

NOTE Confidence: 0.72313171

 $00:16:35.830 \longrightarrow 00:16:36.850$ you see here.

NOTE Confidence: 0.72313171

 $00:16:36.850 \longrightarrow 00:16:39.076$ There's Gaston Guzman who wrote a

NOTE Confidence: 0.72313171

 $00:16:39.076 \longrightarrow 00:16:41.745$ world monograph on the Gina Salazar by

NOTE Confidence: 0.72313171

00:16:41.745 --> 00:16:43.870 Jonathan OTT some of you may have known,

00:16:43.870 --> 00:16:45.445 and Stephen Pollock at the far end,

NOTE Confidence: 0.72313171

 $00:16:45.450 \longrightarrow 00:16:47.748$ there he was, he was killed.

NOTE Confidence: 0.72313171

00:16:47.750 --> 00:16:48.749 Unfortunately, in Texas,

NOTE Confidence: 0.72313171

 $00:16:48.749 \longrightarrow 00:16:51.080$ some of my books and then Terence

NOTE Confidence: 0.72313171

 $00{:}16{:}51.144 \dashrightarrow 00{:}16{:}53.100$ McKenna and I became good friends.

NOTE Confidence: 0.72313171

00:16:53.100 --> 00:16:55.210 Terence McKenna is quite it

NOTE Confidence: 0.72313171

 $00:16:55.210 \longrightarrow 00:16:56.898$ was quite the character,

NOTE Confidence: 0.72313171

 $00:16:56.900 \longrightarrow 00:16:57.650$ very controversial,

NOTE Confidence: 0.72313171

 $00:16:57.650 \longrightarrow 00:17:00.275$ and his speculations one of the had

NOTE Confidence: 0.72313171

 $00:17:00.275 \longrightarrow 00:17:03.121$ one of the best commands of the English

NOTE Confidence: 0.72313171

00:17:03.121 --> 00:17:05.065 language I've ever heard enunciated.

NOTE Confidence: 0.72313171

 $00:17:05.065 \longrightarrow 00:17:07.690$ But like his brother said,

NOTE Confidence: 0.72313171

 $00{:}17{:}07.690 \dashrightarrow 00{:}17{:}10.192$ if only 1% of what Terrence said is true,

NOTE Confidence: 0.72313171

00:17:10.200 --> 00:17:11.442 it's indeed profound.

NOTE Confidence: 0.72313171

00:17:11.442 --> 00:17:13.926 So Terrence was a risk taker

 $00:17:13.926 \longrightarrow 00:17:16.460$ as a psychedelic philosopher,

NOTE Confidence: 0.72313171

 $00:17:16.460 \dashrightarrow 00:17:19.012$ and I would just say 90% of what he said.

NOTE Confidence: 0.72313171

00:17:19.012 --> 00:17:20.204 Pure ******* you know,

NOTE Confidence: 0.72313171

 $00:17:20.204 \longrightarrow 00:17:23.328$ but it it is that 1% that he actually,

NOTE Confidence: 0.72313171

 $00:17:23.328 \longrightarrow 00:17:25.760$ I think, tuned into something that I

NOTE Confidence: 0.72313171

 $00{:}17{:}25.760 \dashrightarrow 00{:}17{:}28.278$ think we're all beginning to see as well.

NOTE Confidence: 0.72313171

 $00:17:28.280 \longrightarrow 00:17:31.060$ These conferences continued in 1998.

NOTE Confidence: 0.72313171

00:17:31.060 --> 00:17:32.836 There's Albert Hoffman in the center,

NOTE Confidence: 0.72313171

00:17:32.840 --> 00:17:33.784 there's myself,

NOTE Confidence: 0.72313171

 $00:17:33.784 \longrightarrow 00:17:35.200$ there's saucer Shulgin.

NOTE Confidence: 0.72313171

 $00{:}17{:}35.200 \dashrightarrow 00{:}17{:}37.706$ So there's a thread here of knowledge

NOTE Confidence: 0.72313171

00:17:37.706 --> 00:17:39.948 that goes back really from the

NOTE Confidence: 0.72313171

00:17:39.948 --> 00:17:42.138 Sicily cave artist who we believe

NOTE Confidence: 0.72313171

 $00{:}17{:}42.138 \dashrightarrow 00{:}17{:}44.681$ the the reason why that art is

NOTE Confidence: 0.72313171

 $00:17:44.681 \longrightarrow 00:17:47.014$ so profound is mushrooms are kept

NOTE Confidence: 0.72313171

 $00{:}17{:}47.014 \dashrightarrow 00{:}17{:}49.212$ in into hunting for preservation.

00:17:49.212 --> 00:17:52.054 That's a long tradition in Europe,

NOTE Confidence: 0.72313171

 $00{:}17{:}52.060 \dashrightarrow 00{:}17{:}54.802$ it's a long tradition and in

NOTE Confidence: 0.72313171

00:17:54.802 --> 00:17:56.173 Mexico and Mesoamerica,

NOTE Confidence: 0.72313171

 $00:17:56.180 \longrightarrow 00:17:57.384$ and there's an interesting

NOTE Confidence: 0.72313171

 $00:17:57.384 \longrightarrow 00:17:58.889$ thing that I'd love for.

NOTE Confidence: 0.72313171

 $00:17:58.890 \longrightarrow 00:18:00.770$ Researchers look into further the

NOTE Confidence: 0.72313171

00:18:00.770 --> 00:18:02.650 Bavarian Bureau of Purity after

NOTE Confidence: 0.72313171

 $00:18:02.650 \longrightarrow 00:18:04.782$ 1516 specifically bans mushrooms

NOTE Confidence: 0.72313171

 $00:18:04.782 \longrightarrow 00:18:07.447$ from being put into beer.

NOTE Confidence: 0.72313171

 $00:18:07.450 \longrightarrow 00:18:09.676$ So some of us think it's the

NOTE Confidence: 0.72313171

 $00{:}18{:}09.676 \dashrightarrow 00{:}18{:}11.724$ psychoactive meds are the Pagan rituals

NOTE Confidence: 0.72313171

 $00:18:11.724 \longrightarrow 00:18:14.125$ of the of us from Germanic ancestry.

NOTE Confidence: 0.72313171

 $00{:}18{:}14.130 \dashrightarrow 00{:}18{:}16.350$ And they and these Pagan ritual

NOTE Confidence: 0.72313171

 $00{:}18{:}16.350 \dashrightarrow 00{:}18{:}18.286$ rituals are using Sullivan mushrooms

NOTE Confidence: 0.72313171

 $00:18:18.286 \longrightarrow 00:18:20.231$ or other mushrooms that were

 $00:18:20.231 \longrightarrow 00:18:22.749$ and and concocted into honey to

NOTE Confidence: 0.72313171

00:18:22.749 --> 00:18:24.090 create psychoactive meats.

NOTE Confidence: 0.72313171

00:18:24.090 --> 00:18:27.548 Again, speculative, we don't know for sure.

NOTE Confidence: 0.72313171

 $00:18:27.550 \longrightarrow 00:18:29.296$ So because I knew the psychedelic

NOTE Confidence: 0.72313171

 $00:18:29.296 \longrightarrow 00:18:32.110$ researchers, I also am a deadhead.

NOTE Confidence: 0.72313171

00:18:32.110 --> 00:18:33.482 And I'm part I'm a I'm a

NOTE Confidence: 0.72313171

 $00:18:33.482 \longrightarrow 00:18:34.929$ prankster with a merry pranksters.

NOTE Confidence: 0.72313171

00:18:34.930 --> 00:18:36.090 I I have the plaque,

NOTE Confidence: 0.72313171

 $00{:}18{:}36.090 \dashrightarrow 00{:}18{:}38.645$ I passed the electric acid kool-aid test.

NOTE Confidence: 0.72313171

00:18:38.650 --> 00:18:40.756 But of those of you know about the Beat

NOTE Confidence: 0.72313171

00:18:40.756 --> 00:18:42.158 Generation, Jack Kerouac, you know,

NOTE Confidence: 0.72313171

 $00:18:42.158 \longrightarrow 00:18:43.910$ one flew over the Cuckoo's Nest.

NOTE Confidence: 0.606871861666667

 $00:18:43.910 \longrightarrow 00:18:47.786$ But Ken Keesey teasing the pranksters

NOTE Confidence: 0.606871861666667

 $00:18:47.790 \longrightarrow 00:18:49.800$ were very much into psychedelics.

NOTE Confidence: 0.606871861666667

 $00{:}18{:}49.800 \dashrightarrow 00{:}18{:}51.350$ Since I knew the scientists

NOTE Confidence: 0.606871861666667

 $00{:}18{:}51.350 \dashrightarrow 00{:}18{:}52.590$ and the psychedelic Rangers,

 $00:18:52.590 \longrightarrow 00:18:55.512$ I brought them together at this

NOTE Confidence: 0.606871861666667

00:18:55.512 --> 00:18:57.474 incredible conference in 1999.

NOTE Confidence: 0.606871861666667

 $00:18:57.474 \longrightarrow 00:19:00.932$ Where Ken Kesey and zoster Trogan first

NOTE Confidence: 0.606871861666667

 $00:19:00.932 \longrightarrow 00:19:04.720$ met and it was a it was quite the thing.

NOTE Confidence: 0.606871861666667

00:19:04.720 --> 00:19:06.820 If you've seen the latest Netflix

NOTE Confidence: 0.606871861666667

 $00:19:06.820 \longrightarrow 00:19:08.888$ series and how to change your mind

NOTE Confidence: 0.606871861666667

 $00:19:08.890 \longrightarrow 00:19:10.954$ episode 2 is on sale sibin then it

NOTE Confidence: 0.606871861666667

00:19:10.954 --> 00:19:12.977 did much better job than I expected

NOTE Confidence: 0.606871861666667

 $00{:}19{:}12.977 \dashrightarrow 00{:}19{:}15.614$ and there was a short clip from that

NOTE Confidence: 0.606871861666667

 $00{:}19{:}15.614 \dashrightarrow 00{:}19{:}18.350$ conference in in that Netflix series.

NOTE Confidence: 0.606871861666667

 $00{:}19{:}18.350 \dashrightarrow 00{:}19{:}20.170$ So philosophy consensus is a

NOTE Confidence: 0.606871861666667

 $00:19:20.170 \longrightarrow 00:19:21.990$ species that's the most commonly

NOTE Confidence: 0.606871861666667

 $00{:}19{:}22.055 \dashrightarrow 00{:}19{:}24.636$ used around the world grows also an

NOTE Confidence: 0.606871861666667

00:19:24.636 --> 00:19:27.730 elephant dung as goes on yak dung.

NOTE Confidence: 0.606871861666667

 $00:19:27.730 \longrightarrow 00:19:29.735$ Because of course on horse

 $00:19:29.735 \longrightarrow 00:19:31.740$ Dong and and Cal Dong.

NOTE Confidence: 0.606871861666667

 $00{:}19{:}31.740 \dashrightarrow 00{:}19{:}34.120$ So it's a coprophagic species.

NOTE Confidence: 0.606871861666667

 $00:19:34.120 \longrightarrow 00:19:36.045$ It's it has a double walled spore

NOTE Confidence: 0.606871861666667

 $00:19:36.045 \longrightarrow 00:19:38.406$ which allows it to get through the

NOTE Confidence: 0.606871861666667

00:19:38.406 --> 00:19:39.886 gastrointestinal tract and then

NOTE Confidence: 0.606871861666667

 $00:19:39.886 \longrightarrow 00:19:41.640$ the stimulation in determination.

NOTE Confidence: 0.606871861666667

 $00:19:41.640 \longrightarrow 00:19:44.853$ But this is the most prevalent soulside

NOTE Confidence: 0.606871861666667

00:19:44.853 --> 00:19:46.750 mushroom being consumed today.

NOTE Confidence: 0.60687186166666700:19:46.750 --> 00:19:46.991 Now,

NOTE Confidence: 0.606871861666667

00:19:46.991 --> 00:19:48.678 I'm gonna show you four different surveys,

NOTE Confidence: 0.606871861666667

 $00{:}19{:}48.680 \dashrightarrow 00{:}19{:}51.812$ actually a fifth one, and this is these are,

NOTE Confidence: 0.606871861666667

00:19:51.820 --> 00:19:54.730 you know, informing these surveys.

NOTE Confidence: 0.606871861666667

00:19:54.730 --> 00:19:55.510 They're mental surveys.

NOTE Confidence: 0.606871861666667

00:19:55.510 --> 00:19:57.614 Of course, we're not clinical studies,

NOTE Confidence: 0.606871861666667

00:19:57.614 --> 00:20:01.197 but they're surveys just to get a gauge of

NOTE Confidence: 0.606871861666667

 $00:20:01.197 \longrightarrow 00:20:03.477$ the uses and practices and associations.

 $00:20:03.480 \longrightarrow 00:20:04.150$ Now association,

NOTE Confidence: 0.606871861666667

00:20:04.150 --> 00:20:06.160 you can say is not causation,

NOTE Confidence: 0.606871861666667

 $00{:}20{:}06.160 \dashrightarrow 00{:}20{:}08.860$ but it can be, it can be a blend of both.

NOTE Confidence: 0.606871861666667

 $00:20:08.860 \longrightarrow 00:20:11.320$ And this is very interesting.

NOTE Confidence: 0.606871861666667

 $00:20:11.320 \longrightarrow 00:20:14.130$ 27% decrease odds of larceny.

NOTE Confidence: 0.606871861666667

00:20:14.130 --> 00:20:16.878 22% decrease odds of property crime.

NOTE Confidence: 0.606871861666667

00:20:16.880 --> 00:20:20.600 18% reduced odds of violent crime if you

NOTE Confidence: 0.606871861666667

 $00:20:20.600 \longrightarrow 00:20:23.300$ had one psilocybin or psychedelic experience.

NOTE Confidence: 0.606871861666667

 $00:20:23.300 \longrightarrow 00:20:24.644$ I believe LSD and SILYBIN were

NOTE Confidence: 0.606871861666667

 $00:20:24.644 \longrightarrow 00:20:26.110$ the two that were correlated.

NOTE Confidence: 0.606871861666667

00:20:26.110 --> 00:20:27.898 Psilocybin had the greatest

NOTE Confidence: 0.606871861666667

00:20:27.898 --> 00:20:29.239 correlation of significance.

NOTE Confidence: 0.606871861666667

00:20:29.240 --> 00:20:30.920 These are prisoners.

NOTE Confidence: 0.606871861666667

00:20:30.920 --> 00:20:33.660 480 eighty 5000 people.

NOTE Confidence: 0.606871861666667

 $00:20:33.660 \longrightarrow 00:20:35.280$ Another survey,

00:20:35.280 --> 00:20:37.710 12166 community members,

NOTE Confidence: 0.606871861666667

00:20:37.710 --> 00:20:39.822 one use of psychedelic,

NOTE Confidence: 0.606871861666667

 $00:20:39.822 \longrightarrow 00:20:42.462$ and only silybin stood up.

NOTE Confidence: 0.606871861666667

 $00:20:42.470 \longrightarrow 00:20:44.198$ There's a significant reduction

NOTE Confidence: 0.606871861666667

00:20:44.198 --> 00:20:45.926 to partner partner violence.

NOTE Confidence: 0.606871861666667

 $00:20:45.930 \longrightarrow 00:20:47.958$ Think of that.

NOTE Confidence: 0.606871861666667

 $00:20:47.960 \longrightarrow 00:20:52.616$ Association be between opioid use disorder.

NOTE Confidence: 0.606871861666667

 $00:20:52.620 \longrightarrow 00:20:55.280$ And so oxygen and this sample size

NOTE Confidence: 0.606871861666667

 $00:20:55.280 \longrightarrow 00:20:57.535$ 214,000 people only soul siphon

NOTE Confidence: 0.606871861666667

 $00{:}20{:}57.535 \dashrightarrow 00{:}20{:}59.790$ was the only psychedelic associated

NOTE Confidence: 0.606871861666667

 $00{:}20{:}59.867 \dashrightarrow 00{:}21{:}02.131$ with a statistically significant

NOTE Confidence: 0.606871861666667

 $00:21:02.131 \longrightarrow 00:21:05.220$ reduction in post use of opioids

NOTE Confidence: 0.606871861666667

 $00:21:05.220 \longrightarrow 00:21:09.030$ once from a solar sybian experience.

NOTE Confidence: 0.606871861666667

 $00:21:09.030 \longrightarrow 00:21:11.550$ So you start and then so we've heard

NOTE Confidence: 0.606871861666667

00:21:11.550 --> 00:21:14.019 for so long that silybin could,

NOTE Confidence: 0.606871861666667

 $00:21:14.020 \longrightarrow 00:21:17.435$ could treat addiction and could

 $00:21:17.435 \longrightarrow 00:21:20.167$ also help fight depression.

NOTE Confidence: 0.606871861666667

00:21:20.170 --> 00:21:22.781 And now we have two very good

NOTE Confidence: 0.606871861666667

 $00:21:22.781 \longrightarrow 00:21:23.792$ clinical studies, placebo-controlled,

NOTE Confidence: 0.606871861666667

00:21:23.792 --> 00:21:25.888 double-blind, many of you are aware of this,

NOTE Confidence: 0.606871861666667

00:21:25.890 --> 00:21:28.092 but there's an interesting trend now

NOTE Confidence: 0.606871861666667

 $00:21:28.092 \longrightarrow 00:21:30.420$ and reducing the amount of salicylic.

NOTE Confidence: 0.606871861666667

 $00:21:30.420 \longrightarrow 00:21:33.332$ So 1% of solicitan approximately in the

NOTE Confidence: 0.606871861666667

 $00:21:33.332 \longrightarrow 00:21:36.377$ mushrooms by dried weight is 10 milligrams.

NOTE Confidence: 0.606871861666667

00:21:36.380 --> 00:21:38.220 So now you're down to,

NOTE Confidence: 0.606871861666667

00:21:38.220 --> 00:21:41.148 you know about basically.

NOTE Confidence: 0.60687186166666700:21:41.150 --> 00:21:41.710 Pardon.

NOTE Confidence: 0.8479639725

 $00:21:44.520 \longrightarrow 00:21:47.760$ I'm sorry. So 15 milligrams is low dose.

NOTE Confidence: 0.8479639725

 $00{:}21{:}47.760 \dashrightarrow 00{:}21{:}50.484$ You're approaching 1 gram of philosophy

NOTE Confidence: 0.8479639725

 $00:21:50.484 \longrightarrow 00:21:52.265$ convinces 1 gram of philosophy convinced

NOTE Confidence: 0.8479639725

 $00:21:52.265 \longrightarrow 00:21:54.068$ us that 1% is is 10 milligrams.

 $00:21:54.068 \longrightarrow 00:21:55.909$ So you look at about 1 1/2

NOTE Confidence: 0.8479639725

00:21:55.909 --> 00:21:57.757 grams as long as week events us.

NOTE Confidence: 0.8479639725

 $00:21:57.760 \longrightarrow 00:22:00.178$ So another study that came out,

NOTE Confidence: 0.8479639725

 $00:22:00.180 \longrightarrow 00:22:02.556$ it shows a very strong reduction

NOTE Confidence: 0.8479639725

 $00:22:02.556 \longrightarrow 00:22:04.820$ in binge drinking of alcohol.

NOTE Confidence: 0.8479639725

00:22:04.820 --> 00:22:06.654 OK, there's a, there's a narrative here,

NOTE Confidence: 0.8479639725

 $00:22:06.660 \longrightarrow 00:22:09.327$ folks, and you could dispute each study

NOTE Confidence: 0.8479639725

00:22:09.327 --> 00:22:12.420 or survey not being clinically relevant.

NOTE Confidence: 0.8479639725

 $00:22:12.420 \longrightarrow 00:22:15.185$ But now we are getting clinical studies

NOTE Confidence: 0.8479639725

 $00:22:15.185 \longrightarrow 00:22:18.095$ that are showing a very interesting cause

NOTE Confidence: 0.8479639725

 $00:22:18.095 \longrightarrow 00:22:21.728$ and effect and that there are many more.

NOTE Confidence: 0.8479639725

 $00:22:21.730 \longrightarrow 00:22:25.528$ In Q. I checked yesterday.

NOTE Confidence: 0.8479639725

00:22:25.528 --> 00:22:28.808 There's 116 clinical trials using

NOTE Confidence: 0.8479639725

00:22:28.808 --> 00:22:31.173 soul cybin at clinicaltrials.gov.

NOTE Confidence: 0.8479639725

00:22:31.173 --> 00:22:31.916 Unprecedented.

NOTE Confidence: 0.8479639725

 $00:22:31.916 \longrightarrow 00:22:37.117$ 11 trials including yales are using niacin

 $00:22:37.117 \longrightarrow 00:22:40.538$ opposite salsaman as an active placebo.

NOTE Confidence: 0.8479639725

00:22:40.540 --> 00:22:42.884 The concept was well the patients want to

NOTE Confidence: 0.8479639725

00:22:42.884 --> 00:22:44.996 feel something or expect to feel something.

NOTE Confidence: 0.8479639725

 $00:22:45.000 \longrightarrow 00:22:46.644$ So like nicotinic acid

NOTE Confidence: 0.8479639725

00:22:46.644 --> 00:22:48.288 niacin the flushing form,

NOTE Confidence: 0.8479639725

00:22:48.290 --> 00:22:50.906 you feel you start feeling hot and you

NOTE Confidence: 0.8479639725

 $00:22:50.906 \longrightarrow 00:22:52.858$ feel something within 1520 minutes,

NOTE Confidence: 0.8479639725

 $00:22:52.860 \longrightarrow 00:22:56.416$ just about the same onset of silybin.

NOTE Confidence: 0.8479639725

 $00{:}22{:}56.420 \dashrightarrow 00{:}22{:}58.948$ But I will present to you that I

NOTE Confidence: 0.8479639725

 $00:22:58.948 \longrightarrow 00:23:01.419$ think that is fundamentally flawed.

NOTE Confidence: 0.8479639725

00:23:01.420 --> 00:23:04.396 And typically the doses are between 25 and

NOTE Confidence: 0.8479639725

 $00:23:04.396 \longrightarrow 00:23:08.960$ 40 milligrams of cell cybin in these trials.

NOTE Confidence: 0.8479639725

 $00{:}23{:}08.960 \dashrightarrow 00{:}23{:}12.327$ So I'm very much, I'm involved in

NOTE Confidence: 0.8479639725

 $00:23:12.327 \longrightarrow 00:23:15.319$ several committees and as as an advisor,

NOTE Confidence: 0.8479639725

 $00{:}23{:}15.320 \dashrightarrow 00{:}23{:}17.819$ and I very much also subscribe that

00:23:17.819 --> 00:23:19.979 soul Simon should be rescheduled.

NOTE Confidence: 0.8479639725

 $00{:}23{:}19.980 \dashrightarrow 00{:}23{:}21.205$ I don't think there's any

NOTE Confidence: 0.8479639725

 $00{:}23{:}21.205 \dashrightarrow 00{:}23{:}22.940$ argument to keep it on schedule.

NOTE Confidence: 0.8479639725

 $00:23:22.940 \longrightarrow 00:23:24.380$ It's not addictive.

NOTE Confidence: 0.8479639725

 $00:23:24.380 \longrightarrow 00:23:26.300$ It does have medical.

NOTE Confidence: 0.8479639725

 $00{:}23{:}26.300 \dashrightarrow 00{:}23{:}29.360$ Applications so schedule one substances

NOTE Confidence: 0.8479639725

 $00:23:29.360 \longrightarrow 00:23:30.584$ have neither.

NOTE Confidence: 0.8479639725

 $00:23:30.590 \longrightarrow 00:23:32.442$ Insulsa even has both.

NOTE Confidence: 0.8479639725

 $00{:}23{:}32.442 \dashrightarrow 00{:}23{:}34.757$ So Johns Hopkins researchers read,

NOTE Confidence: 0.8479639725

00:23:34.760 --> 00:23:36.307 led by my good friend Roland Griffiths,

NOTE Confidence: 0.8479639725

00:23:36.310 --> 00:23:37.070 you know,

NOTE Confidence: 0.8479639725

 $00:23:37.070 \longrightarrow 00:23:37.450$ publicist,

NOTE Confidence: 0.8479639725

 $00:23:37.450 \longrightarrow 00:23:38.970$ to reschedule it from

NOTE Confidence: 0.8479639725

 $00:23:38.970 \longrightarrow 00:23:40.899$ schedule one to schedule 4.

NOTE Confidence: 0.8479639725

 $00{:}23{:}40.900 \dashrightarrow 00{:}23{:}42.832$ So I know the Biden administration

NOTE Confidence: 0.8479639725

 $00:23:42.832 \longrightarrow 00:23:44.931$ is now looking at rescheduling

 $00:23:44.931 \longrightarrow 00:23:46.419$ psychedelics currently.

NOTE Confidence: 0.8479639725

 $00:23:46.420 \longrightarrow 00:23:49.864$ There are 21 states that have

NOTE Confidence: 0.8479639725

 $00:23:49.864 \longrightarrow 00:23:53.150$ bills that are being have going

NOTE Confidence: 0.8479639725

 $00:23:53.150 \longrightarrow 00:23:55.860$ in various stages of progress.

NOTE Confidence: 0.8479639725

 $00{:}23{:}55.860 \dashrightarrow 00{:}23{:}58.002$ You know Colorado and Oregon being

NOTE Confidence: 0.8479639725

 $00:23:58.002 \longrightarrow 00:24:00.214$ the tattoo where the bills have

NOTE Confidence: 0.8479639725

 $00:24:00.214 \longrightarrow 00:24:02.713$ actually passed and become law and in

NOTE Confidence: 0.8479639725

00:24:02.713 --> 00:24:04.950 Oregon they are now actually involved

NOTE Confidence: 0.8479639725

 $00{:}24{:}04.950 \dashrightarrow 00{:}24{:}07.525$ in the the rapeutic distribution of

NOTE Confidence: 0.8479639725

 $00{:}24{:}07.525 \dashrightarrow 00{:}24{:}10.639$ sulci even as of this this month.

NOTE Confidence: 0.8479639725

 $00{:}24{:}10.640 \dashrightarrow 00{:}24{:}13.706$ So this is a wave that's happening

NOTE Confidence: 0.8479639725

 $00:24:13.706 \longrightarrow 00:24:15.020$ across the world.

NOTE Confidence: 0.8479639725

 $00:24:15.020 \longrightarrow 00:24:17.232$ So let's look at some of the

NOTE Confidence: 0.8479639725

00:24:17.232 --> 00:24:18.180 most interesting tryptamines,

NOTE Confidence: 0.8479639725

 $00:24:18.180 \longrightarrow 00:24:20.568$ the active tryptamines,

 $00:24:20.568 \longrightarrow 00:24:22.956$ psilocybin and solson.

NOTE Confidence: 0.8479639725

00:24:22.960 --> 00:24:25.300 You know cause, intoxication,

NOTE Confidence: 0.8479639725

 $00:24:25.300 \longrightarrow 00:24:27.640$ North Charleston basis and

NOTE Confidence: 0.8479639725

 $00:24:27.640 \longrightarrow 00:24:30.200$ Norberto system and originalism.

NOTE Confidence: 0.8479639725

 $00:24:30.200 \longrightarrow 00:24:32.399$ Definitely do not.

NOTE Confidence: 0.8479639725

 $00:24:32.400 \longrightarrow 00:24:36.770$ Probably broken down by MO's.

NOTE Confidence: 0.8479639725

 $00:24:36.770 \longrightarrow 00:24:39.608$ And in the question of having

NOTE Confidence: 0.8479639725

00:24:39.608 --> 00:24:41.331 MAOI inhibitors and MO's,

NOTE Confidence: 0.8479639725

 $00{:}24{:}41.331 \dashrightarrow 00{:}24{:}44.040$ of course you know is is a subject of

NOTE Confidence: 0.8479639725

 $00:24:44.110 \longrightarrow 00:24:46.770$ conversation amongst many researchers.

NOTE Confidence: 0.8479639725

00:24:46.770 --> 00:24:49.466 So I I got involved this microdose study,

NOTE Confidence: 0.8479639725

 $00:24:49.470 \longrightarrow 00:24:51.731$ all of you have the articles that

NOTE Confidence: 0.8479639725

 $00{:}24{:}51.731 \dashrightarrow 00{:}24{:}53.485$ we published in Nature Scientific

NOTE Confidence: 0.8479639725

 $00:24:53.485 \longrightarrow 00:24:55.977$ reports and we wanted to do a

NOTE Confidence: 0.8479639725

00:24:55.977 --> 00:24:58.057 survey basically on use of people's

NOTE Confidence: 0.8479639725

00:24:58.057 --> 00:25:00.646 use of of soul sybian for another

 $00:25:00.646 \longrightarrow 00:25:02.050$ drugs for microdosing.

NOTE Confidence: 0.8479639725

 $00:25:02.050 \longrightarrow 00:25:03.610$ What are you microdosing with?

NOTE Confidence: 0.8479639725

00:25:03.610 --> 00:25:04.510 How much do you're taking?

NOTE Confidence: 0.8479639725

00:25:04.510 --> 00:25:05.870 If it's sold cybin,

NOTE Confidence: 0.8479639725

 $00:25:05.870 \longrightarrow 00:25:08.170$ how frequently are are you taking it?

NOTE Confidence: 0.8479639725

00:25:08.170 --> 00:25:10.200 Is it pre, is it pre weighed?

NOTE Confidence: 0.8479639725

00:25:10.200 --> 00:25:11.350 Do you make it yourself?

NOTE Confidence: 0.8479639725

00:25:11.350 --> 00:25:12.139 Are you stocking?

NOTE Confidence: 0.8479639725

 $00:25:12.139 \longrightarrow 00:25:13.980$ And I have a stock that I

NOTE Confidence: 0.73893398555555

 $00:25:14.049 \dashrightarrow 00:25:16.809$ like called Lions mane and niacin with salsa.

NOTE Confidence: 0.73893398555555

00:25:16.810 --> 00:25:19.348 Seven, many of you may have heard about it,

NOTE Confidence: 0.73893398555555

 $00:25:19.350 \longrightarrow 00:25:22.836$ but this became the most popular stack

NOTE Confidence: 0.73893398555555

 $00{:}25{:}22.836 \dashrightarrow 00{:}25{:}26.444$ currently in the world and we found that

NOTE Confidence: 0.73893398555555

 $00:25:26.444 \longrightarrow 00:25:29.596$ when looking at the results we have fantastic

NOTE Confidence: 0.73893398555555

 $00:25:29.596 \longrightarrow 00:25:32.447$ results in reducing depression and anxiety.

 $00:25:32.450 \longrightarrow 00:25:36.570$ Now it's not placebo survey cannot be placebo

NOTE Confidence: 0.73893398555555

 $00:25:36.570 \longrightarrow 00:25:40.300$ double-blind controlled well typically so.

NOTE Confidence: 0.73893398555555

 $00:25:40.300 \longrightarrow 00:25:41.772$ The criticism of expectancy

NOTE Confidence: 0.73893398555555

 $00:25:41.772 \longrightarrow 00:25:43.980$ is is a good one you,

NOTE Confidence: 0.73893398555555

 $00:25:43.980 \longrightarrow 00:25:46.758$ but expectancy can enhance the medicine.

NOTE Confidence: 0.73893398555555

00:25:46.760 --> 00:25:49.720 You go to a doctor to get a medicine,

NOTE Confidence: 0.73893398555555

 $00{:}25{:}49.720 \dashrightarrow 00{:}25{:}51.250$ an antibiotic because you have an

NOTE Confidence: 0.73893398555555

00:25:51.303 --> 00:25:52.748 infection you expect the doctor's

NOTE Confidence: 0.73893398555555

 $00{:}25{:}52.748 \dashrightarrow 00{:}25{:}54.840$ antibiotic is going to be efficacious.

NOTE Confidence: 0.73893398555555

 $00:25:54.840 \longrightarrow 00:25:57.648$ So you can have a enhancement of the

NOTE Confidence: 0.73893398555555

 $00{:}25{:}57.648 \dashrightarrow 00{:}25{:}59.688$ real medicine from expectancy with

NOTE Confidence: 0.73893398555555

00:25:59.688 --> 00:26:02.214 depression and anxiety is a very,

NOTE Confidence: 0.73893398555555

 $00:26:02.220 \longrightarrow 00:26:04.800$ very complicated because it's very subjective

NOTE Confidence: 0.738933985555555

 $00:26:04.800 \longrightarrow 00:26:07.416$ and so even though we had significance there,

NOTE Confidence: 0.73893398555555

 $00:26:07.420 \longrightarrow 00:26:09.454$ we really started looking at something

NOTE Confidence: 0.73893398555555

 $00:26:09.454 \longrightarrow 00:26:11.680$ that had was outside of expectancy.

 $00:26:11.680 \longrightarrow 00:26:13.720$ And we had the tap test,

NOTE Confidence: 0.73893398555555

 $00:26:13.720 \longrightarrow 00:26:15.554$ which is the test used for Alzheimer's,

NOTE Confidence: 0.73893398555555

 $00:26:15.560 \longrightarrow 00:26:19.470$ dementia, Parkinson's and other types

NOTE Confidence: 0.73893398555555

 $00:26:19.470 \longrightarrow 00:26:22.292$ of neurodegenerative progressions where

NOTE Confidence: 0.73893398555555

 $00:26:22.292 \longrightarrow 00:26:26.674$ the ability of you to tap decreases,

NOTE Confidence: 0.73893398555555

 $00:26:26.680 \longrightarrow 00:26:27.952$ especially in age.

NOTE Confidence: 0.73893398555555

00:26:27.952 --> 00:26:30.336 Even if you're healthy, you're not.

NOTE Confidence: 0.73893398555555

 $00{:}26{:}30.336 \dashrightarrow 00{:}26{:}33.080$ You can't tap as frequently as you can

NOTE Confidence: 0.73893398555555

 $00:26:33.080 \longrightarrow 00:26:36.860$ when you're 75 versus when you're 25.

NOTE Confidence: 0.73893398555555

 $00:26:36.860 \longrightarrow 00:26:40.310$ So anyhow, the tap test gave us

NOTE Confidence: 0.73893398555555

 $00:26:40.310 \longrightarrow 00:26:42.135$ a signal that was surprising.

NOTE Confidence: 0.73893398555555

 $00:26:42.140 \longrightarrow 00:26:44.148$ So let's go back and look at in

NOTE Confidence: 0.73893398555555

 $00{:}26{:}44.148 \dashrightarrow 00{:}26{:}46.145$ this survey and the reason why the

NOTE Confidence: 0.73893398555555

00:26:46.145 --> 00:26:48.110 editors of Nature liked it so much.

NOTE Confidence: 0.73893398555555

 $00:26:48.110 \longrightarrow 00:26:51.494$ We had 14,000 people in this initial survey.

00:26:51.500 --> 00:26:54.664 I think we're up to 25,000 people now,

NOTE Confidence: 0.73893398555555

 $00:26:54.664 \longrightarrow 00:26:58.265$ but 88% of the people were taking a micro

NOTE Confidence: 0.73893398555555

 $00:26:58.265 \longrightarrow 00:27:00.979$ dose and that's 110th of a liftoff dose,

NOTE Confidence: 0.73893398555555

00:27:00.980 --> 00:27:01.776 10 milligrams,

NOTE Confidence: 0.73893398555555

00:27:01.776 --> 00:27:04.960 1 gram of Sophie Conventus at one percent,

NOTE Confidence: 0.73893398555555

00:27:04.960 --> 00:27:06.796 10 milligrams, that's a lift off.

NOTE Confidence: 0.73893398555555

 $00:27:06.800 \longrightarrow 00:27:08.350$ Because you can feel it.

NOTE Confidence: 0.73893398555555

 $00:27:08.350 \longrightarrow 00:27:09.442$ By definition of microdose

NOTE Confidence: 0.73893398555555

00:27:09.442 --> 00:27:10.807 means you cannot feel it.

NOTE Confidence: 0.73893398555555

 $00:27:10.810 \longrightarrow 00:27:12.421$ It's sub intoxication.

NOTE Confidence: 0.73893398555555

00:27:12.421 --> 00:27:15.106 I would say substance Orium,

NOTE Confidence: 0.73893398555555

 $00:27:15.110 \longrightarrow 00:27:17.450$ but actually people do science.

NOTE Confidence: 0.73893398555555

 $00:27:17.450 \longrightarrow 00:27:20.246$ The colors are brighter, they're happier.

NOTE Confidence: 0.738933985555555

 $00:27:20.250 \longrightarrow 00:27:21.588$ So I think that's a sense.

NOTE Confidence: 0.73893398555555

 $00:27:21.590 \longrightarrow 00:27:24.315$ But basically a microdose is

NOTE Confidence: 0.73893398555555

 $00:27:24.315 \longrightarrow 00:27:27.667 1/10$ of an intoxicating dose and

00:27:27.667 --> 00:27:30.297 you do not feel intoxication.

NOTE Confidence: 0.73893398555555

 $00:27:30.300 \longrightarrow 00:27:31.475$ The majority of people microdose

NOTE Confidence: 0.73893398555555

00:27:31.475 --> 00:27:32.910 three to five times per week.

NOTE Confidence: 0.73893398555555

 $00:27:32.910 \longrightarrow 00:27:35.238$ This is really important go to

NOTE Confidence: 0.73893398555555

00:27:35.240 --> 00:27:36.524 clinicaltrials.gov look at their

NOTE Confidence: 0.73893398555555

 $00:27:36.524 \longrightarrow 00:27:37.808$ articles been published that

NOTE Confidence: 0.73893398555555

00:27:37.808 --> 00:27:39.000 have discounted microdosing.

NOTE Confidence: 0.73893398555555

 $00:27:39.000 \longrightarrow 00:27:40.765$ They are so disconnected from

NOTE Confidence: 0.73893398555555

 $00:27:40.765 \longrightarrow 00:27:42.177$ the real world use.

NOTE Confidence: 0.73893398555555

 $00:27:42.180 \longrightarrow 00:27:44.142$ There's one study that usually they

NOTE Confidence: 0.73893398555555

00:27:44.142 --> 00:27:46.250 microdose one time and they said oh,

NOTE Confidence: 0.73893398555555

 $00:27:46.250 \longrightarrow 00:27:47.342$ they didn't have enough.

NOTE Confidence: 0.73893398555555

 $00{:}27{:}47.342 \dashrightarrow 00{:}27{:}49.599$ Another study of micro dose one time a

NOTE Confidence: 0.73893398555555

 $00:27:49.599 \longrightarrow 00:27:51.297$ month later they microdosed again and

NOTE Confidence: 0.73893398555555

00:27:51.297 --> 00:27:52.939 the Microdose was even a microdose,

 $00:27:52.940 \longrightarrow 00:27:55.082$ it was like 5 equivalent to 5

NOTE Confidence: 0.73893398555555

 $00{:}27{:}55.082 \to 00{:}27{:}57.199$ milligrams of of the solar sybian.

NOTE Confidence: 0.73893398555555

 $00:27:57.200 \longrightarrow 00:27:59.396$ So it's just astonishing to us

NOTE Confidence: 0.73893398555555

 $00:27:59.396 \longrightarrow 00:28:00.494$ that the clinicians.

NOTE Confidence: 0.73893398555555

 $00:28:00.500 \longrightarrow 00:28:02.112$ Designing these these clinical

NOTE Confidence: 0.73893398555555

 $00:28:02.112 \longrightarrow 00:28:04.127$ studies where microdosing are not

NOTE Confidence: 0.73893398555555

00:28:04.127 --> 00:28:05.790 following the real world world

NOTE Confidence: 0.73893398555555

00:28:05.790 --> 00:28:07.590 practice of what people are doing.

NOTE Confidence: 0.73893398555555 00:28:07.590 --> 00:28:07.942 Moreover,

NOTE Confidence: 0.73893398555555

 $00:28:07.942 \longrightarrow 00:28:10.054$ they're using soap in the molecule

NOTE Confidence: 0.738933985555555

 $00:28:10.054 \longrightarrow 00:28:11.949$ versus soul siphon the mushrooms.

NOTE Confidence: 0.73893398555555

 $00:28:11.950 \longrightarrow 00:28:16.716$ And I dare to say that 99.999% of the

NOTE Confidence: 0.73893398555555

 $00:28:16.716 \longrightarrow 00:28:18.760$ people using soul sibin are not using

NOTE Confidence: 0.738933985555555

 $00{:}28{:}18.823 \dashrightarrow 00{:}28{:}21.127$ the molecule they're using the mushrooms.

NOTE Confidence: 0.73893398555555

 $00:28:21.130 \longrightarrow 00:28:23.205$ Another example where there's a

NOTE Confidence: 0.73893398555555

 $00:28:23.205 \longrightarrow 00:28:25.227$ disconnect between science and and

 $00:28:25.227 \longrightarrow 00:28:27.040$ and this reduction is thinking of 1

NOTE Confidence: 0.7988019985

 $00:28:27.098 \longrightarrow 00:28:28.918$ molecule versus what is actually

NOTE Confidence: 0.7988019985

00:28:28.918 --> 00:28:30.738 happening because what I believe.

NOTE Confidence: 0.7988019985

 $00:28:30.740 \longrightarrow 00:28:33.290$ These other tryptamines are beneficial.

NOTE Confidence: 0.7988019985

 $00:28:33.290 \longrightarrow 00:28:35.838$ The other species that's being used is

NOTE Confidence: 0.7988019985

00:28:35.838 --> 00:28:37.616 philosophy mexicana, also philosophy

NOTE Confidence: 0.7988019985

00:28:37.616 --> 00:28:39.708 tampanensis form these sporozoa,

NOTE Confidence: 0.7988019985

00:28:39.710 --> 00:28:44.156 which tend to be much lower in in solsiden,

NOTE Confidence: 0.7988019985

00:28:44.160 --> 00:28:45.162 very little saucin,

NOTE Confidence: 0.7988019985

00:28:45.162 --> 00:28:47.166 but they're very stable and because

NOTE Confidence: 0.7988019985

 $00:28:47.166 \longrightarrow 00:28:49.527$ of a loophole in the law and Holland,

NOTE Confidence: 0.7988019985

 $00:28:49.530 \longrightarrow 00:28:51.850$ these could be legally sold.

NOTE Confidence: 0.7988019985

 $00{:}28{:}51.850 \dashrightarrow 00{:}28{:}53.160$ They call them truffles with

NOTE Confidence: 0.7988019985

 $00:28:53.160 \longrightarrow 00:28:54.470$ this terrible name for them.

NOTE Confidence: 0.7988019985

00:28:54.470 --> 00:28:56.647 They you know, they're not really truffles,

 $00:28:56.650 \longrightarrow 00:28:59.386$ but they form these small rosha

NOTE Confidence: 0.7988019985

 $00{:}28{:}59.390 \dashrightarrow 00{:}29{:}01.215$ and these sclerotia are easy

NOTE Confidence: 0.7988019985

 $00:29:01.215 \longrightarrow 00:29:03.214$ to grow and they did contain.

NOTE Confidence: 0.7988019985

 $00:29:03.214 \longrightarrow 00:29:05.600$ All time, but I said no solution.

NOTE Confidence: 0.7988019985

00:29:05.600 --> 00:29:08.752 So I popularized on Joe Rogan and actually

NOTE Confidence: 0.7988019985

00:29:08.752 --> 00:29:12.339 I came up with this in in 2015, two 1014.

NOTE Confidence: 0.7988019985

 $00{:}29{:}12.339 \longrightarrow 00{:}29{:}15.300$ I announced it at the Maps Conference

NOTE Confidence: 0.7988019985

00:29:15.383 --> 00:29:18.115 and I thought a patent July 23rd,

NOTE Confidence: 0.7988019985

00:29:18.115 --> 00:29:22.140 2016 on the STACK combining Stillson Lions

NOTE Confidence: 0.7988019985

 $00:29:22.140 \longrightarrow 00:29:24.992$ main molecules called arronax scenes.

NOTE Confidence: 0.7988019985

 $00{:}29{:}24.992 \dashrightarrow 00{:}29{:}27.832$ Are naceous come from the mushroom

NOTE Confidence: 0.7988019985

 $00:29:27.832 \longrightarrow 00:29:29.920$ mycelium and nicotinic acid.

NOTE Confidence: 0.7988019985

 $00{:}29{:}29.920 \dashrightarrow 00{:}29{:}32.146$ Now I chose nicotinic acid because

NOTE Confidence: 0.7988019985

00:29:32.146 --> 00:29:34.282 soul cycle, the values of constrictor,

NOTE Confidence: 0.7988019985

00:29:34.282 --> 00:29:36.324 nicotinic acid, niacin and vasodilator.

NOTE Confidence: 0.7988019985

 $00:29:36.324 \longrightarrow 00:29:39.460$ And when you take the nicotinic acid,

 $00{:}29{:}39.460 \dashrightarrow 00{:}29{:}42.520$ you know, 50 milligrams or more,

NOTE Confidence: 0.7988019985

 $00:29:42.520 \longrightarrow 00:29:43.798$ you started tingling.

NOTE Confidence: 0.7988019985

00:29:43.798 --> 00:29:45.471 And I thought, wow,

NOTE Confidence: 0.7988019985

00:29:45.471 --> 00:29:47.426 because of neuropathies oftentimes present

NOTE Confidence: 0.7988019985

 $00{:}29{:}47.426 \dashrightarrow 00{:}29{:}49.570$ themselves in the constrictions and the

NOTE Confidence: 0.7988019985

 $00:29:49.570 \longrightarrow 00:29:51.418$ deadening of the fingertips of the toes.

NOTE Confidence: 0.7988019985

00:29:51.420 --> 00:29:53.660 If your vascular system could be enhanced,

NOTE Confidence: 0.7988019985

00:29:53.660 --> 00:29:56.402 then you would have more delivery

NOTE Confidence: 0.7988019985

 $00{:}29{:}56.402 \dashrightarrow 00{:}29{:}58.230$ of these neurogenic potential

NOTE Confidence: 0.7988019985

 $00{:}29{:}58.312 \dashrightarrow 00{:}30{:}00.417$ compounds and that I thought.

NOTE Confidence: 0.7988019985

 $00:30:00.420 \longrightarrow 00:30:02.466$ Would enhance the activity of sulfide.

NOTE Confidence: 0.7988019985

00:30:02.470 --> 00:30:05.984 Moreover, I presented it as a form,

NOTE Confidence: 0.7988019985

 $00:30:05.990 \longrightarrow 00:30:08.108$ as a model similar to antabuse.

NOTE Confidence: 0.7988019985

00:30:08.110 --> 00:30:10.210 If people to try to take a

NOTE Confidence: 0.7988019985

 $00:30:10.210 \longrightarrow 00:30:12.330$ macro dose with a lot of niacin,

 $00:30:12.330 \longrightarrow 00:30:14.532$ the adverse reaction would be so

NOTE Confidence: 0.7988019985

 $00:30:14.532 \dashrightarrow 00:30:16.666$ strong they wouldn't have likely do

NOTE Confidence: 0.7988019985

00:30:16.666 --> 00:30:19.050 it again because as many of you know,

NOTE Confidence: 0.7988019985

 $00:30:19.050 \longrightarrow 00:30:20.930$ if you taking 500 milligrams

NOTE Confidence: 0.7988019985

00:30:20.930 --> 00:30:22.810 of of nicotinic acid niacin,

NOTE Confidence: 0.7988019985

00:30:22.810 --> 00:30:24.134 it's very, very uncomfortable.

NOTE Confidence: 0.7988019985

00:30:24.134 --> 00:30:25.732 You flush red, you're itching,

NOTE Confidence: 0.7988019985

 $00:30:25.732 \longrightarrow 00:30:27.538$ all your clothes feel like wool

NOTE Confidence: 0.7988019985

 $00{:}30{:}27.538 \longrightarrow 00{:}30{:}29.396$ and you want to take them off.

NOTE Confidence: 0.7988019985

 $00:30:29.400 \longrightarrow 00:30:29.835$ Interestingly,

NOTE Confidence: 0.7988019985

 $00:30:29.835 \longrightarrow 00:30:32.880$ 28% of the stockers use this formula.

NOTE Confidence: 0.7988019985

 $00:30:32.880 \longrightarrow 00:30:33.668$ The stock.

NOTE Confidence: 0.7988019985

 $00{:}30{:}33.668 \dashrightarrow 00{:}30{:}36.032$ So we published the first article

NOTE Confidence: 0.7988019985

00:30:36.032 --> 00:30:39.245 was more of a horizontal article in

NOTE Confidence: 0.7988019985

 $00:30:39.245 \longrightarrow 00:30:41.464$ microdosing and national scientific reports.

NOTE Confidence: 0.7988019985

 $00:30:41.464 \longrightarrow 00:30:44.996$ It's zoomed in the top 1% of all

 $00:30:44.996 \longrightarrow 00:30:47.286$ articles in nature publication ecosystem.

NOTE Confidence: 0.7988019985

 $00:30:47.290 \longrightarrow 00:30:49.828$ And we chose Lions main because

NOTE Confidence: 0.7988019985

 $00:30:49.828 \longrightarrow 00:30:52.210$ there's about 5 clinical studies,

NOTE Confidence: 0.7988019985

 $00:30:52.210 \longrightarrow 00:30:54.376$ three or four which are placebo,

NOTE Confidence: 0.7988019985

 $00:30:54.380 \longrightarrow 00:30:55.412$ double-blind controlled.

NOTE Confidence: 0.7988019985

 $00:30:55.412 \longrightarrow 00:30:59.024$ I populate a website for scientists and

NOTE Confidence: 0.7988019985

00:30:59.024 --> 00:31:00.186 physicians at mushroomreferences.com,

NOTE Confidence: 0.7988019985

 $00:31:00.186 \longrightarrow 00:31:01.930$ please go to that.

NOTE Confidence: 0.7988019985

 $00{:}31{:}01.930 \dashrightarrow 00{:}31{:}05.409$ It's, it's hundreds of pages long now.

NOTE Confidence: 0.7988019985

 $00{:}31{:}05.410 \dashrightarrow 00{:}31{:}06.700$ It's very quick for scientists to

NOTE Confidence: 0.7988019985

 $00:31:06.700 \longrightarrow 00:31:08.554$ be able to look into the medicinal

NOTE Confidence: 0.7988019985

00:31:08.554 --> 00:31:09.499 properties of mushrooms.

NOTE Confidence: 0.7988019985

 $00{:}31{:}09.500 \dashrightarrow 00{:}31{:}11.510$ It's non branded, no advertising,

NOTE Confidence: 0.7988019985

 $00:31:11.510 \longrightarrow 00:31:13.110$ just a labor of love.

NOTE Confidence: 0.7988019985

00:31:13.110 --> 00:31:15.566 And once a month that we upload it,

 $00:31:15.570 \longrightarrow 00:31:16.986$ but we have.

NOTE Confidence: 0.7988019985

00:31:16.986 --> 00:31:19.818 We have about 700 strains of

NOTE Confidence: 0.7988019985

 $00:31:19.818 \longrightarrow 00:31:22.517$ mushrooms in my cultural library.

NOTE Confidence: 0.7988019985

00:31:22.520 --> 00:31:22.998 You know,

NOTE Confidence: 0.7988019985

 $00:31:22.998 \longrightarrow 00:31:25.841$ I have a I have a lot of scientists and

NOTE Confidence: 0.7988019985

00:31:25.841 --> 00:31:28.844 we test these trains and the mycelium

NOTE Confidence: 0.7988019985

 $00:31:28.844 \longrightarrow 00:31:31.034$ provides these arenas scenes which

NOTE Confidence: 0.7988019985

 $00:31:31.034 \longrightarrow 00:31:33.776$ which then stimulate nerve growth factors.

NOTE Confidence: 0.7988019985

 $00{:}31{:}33.776 \dashrightarrow 00{:}31{:}36.146$ And this is really interesting

NOTE Confidence: 0.7988019985

 $00{:}31{:}36.146 \dashrightarrow 00{:}31{:}38.400$ because the small clinical studies

NOTE Confidence: 0.7988019985

 $00:31:38.400 \longrightarrow 00:31:40.613$ are very positive showing that these

NOTE Confidence: 0.7988019985

00:31:40.613 --> 00:31:42.438 aerona seems present and lions, mane,

NOTE Confidence: 0.7988019985

00:31:42.438 --> 00:31:43.778 mycelium, not the fruit bodies,

NOTE Confidence: 0.598279604

 $00:31:43.780 \longrightarrow 00:31:47.810$ the fruit bodies don't contain Aaron Nations.

NOTE Confidence: 0.598279604

 $00:31:47.810 \longrightarrow 00:31:49.818$ So as I mentioned,

NOTE Confidence: 0.598279604

 $00:31:49.818 \longrightarrow 00:31:52.830$ we had significant results in improving

 $00:31:52.923 \longrightarrow 00:31:56.649 \mod$ and decreasing depression and anxiety.

NOTE Confidence: 0.598279604

 $00{:}31{:}56.650 \dashrightarrow 00{:}31{:}58.768$ But then the expectancy of course

NOTE Confidence: 0.598279604

 $00:31:58.768 \longrightarrow 00:32:00.180$ is the confounder here.

NOTE Confidence: 0.598279604

 $00:32:00.180 \longrightarrow 00:32:01.472$ What does that mean?

NOTE Confidence: 0.598279604

 $00:32:01.472 \longrightarrow 00:32:03.829$ So our second study is more vertical

NOTE Confidence: 0.598279604

 $00:32:03.829 \longrightarrow 00:32:06.629$ and it's like looking at A cause and

NOTE Confidence: 0.598279604

 $00:32:06.629 \longrightarrow 00:32:08.584$ effect microdoses compared to non

NOTE Confidence: 0.598279604

 $00:32:08.584 \dashrightarrow 00:32:10.990$ microdoses was really a mazing to us

NOTE Confidence: 0.598279604

 $00:32:11.063 \longrightarrow 00:32:13.979$ which is harder still to wrap my mind around.

NOTE Confidence: 0.598279604

 $00{:}32{:}13.980 \dashrightarrow 00{:}32{:}17.543$ We had more non micro dosers in

NOTE Confidence: 0.598279604

 $00:32:17.543 \longrightarrow 00:32:20.948$ reporting that we had micro dosers.

NOTE Confidence: 0.598279604

 $00:32:20.950 \longrightarrow 00:32:22.646$ With advertised for microdosing

NOTE Confidence: 0.598279604

 $00{:}32{:}22.646 \dashrightarrow 00{:}32{:}25.190$ or you know popularized for it.

NOTE Confidence: 0.598279604

 $00{:}32{:}25.190 \dashrightarrow 00{:}32{:}26.891$ So I I think a lot of people wanted

NOTE Confidence: 0.598279604

00:32:26.891 --> 00:32:28.723 to get their baseline was being

 $00:32:28.723 \longrightarrow 00:32:30.313$ citizen scientists they said before

NOTE Confidence: 0.598279604

 $00{:}32{:}30.370 \dashrightarrow 00{:}32{:}32.218$ I microdose I'm going to enter into

NOTE Confidence: 0.598279604

 $00:32:32.218 \longrightarrow 00:32:34.202$ the microdose dot Me app and and

NOTE Confidence: 0.598279604

00:32:34.202 --> 00:32:36.397 you know code for my baseline and

NOTE Confidence: 0.598279604

00:32:36.397 --> 00:32:38.763 then start microdosing on top of it.

NOTE Confidence: 0.598279604

00:32:38.770 --> 00:32:40.471 I I really we just really haven't

NOTE Confidence: 0.598279604

 $00:32:40.471 \longrightarrow 00:32:41.900$ been able to disambiguate this

NOTE Confidence: 0.598279604

 $00:32:41.900 \longrightarrow 00:32:43.832$ but that's the other reason why

NOTE Confidence: 0.598279604

 $00:32:43.832 \longrightarrow 00:32:45.674$ the editors at nature like this

NOTE Confidence: 0.598279604

00:32:45.674 --> 00:32:47.384 is a very weighted evenly weighted

NOTE Confidence: 0.598279604

 $00:32:47.390 \longrightarrow 00:32:50.897$ study that we had so many people.

NOTE Confidence: 0.598279604

 $00:32:50.900 \longrightarrow 00:32:55.376$ Balance of non microdoses versus microdoses.

NOTE Confidence: 0.598279604

 $00{:}32{:}55.380 \dashrightarrow 00{:}32{:}59.355$ So. This is the result that stood out.

NOTE Confidence: 0.598279604

 $00:32:59.360 \longrightarrow 00:33:01.988$ And this is the top test.

NOTE Confidence: 0.598279604

00:33:01.990 --> 00:33:04.614 And now this is showing with 55 plus

NOTE Confidence: 0.598279604

 $00:33:04.614 \longrightarrow 00:33:07.349$ year olds one month after microdosing,

 $00:33:07.350 \longrightarrow 00:33:09.270$ three to five times per week.

NOTE Confidence: 0.598279604

00:33:09.270 --> 00:33:10.482 Like I mentioned,

NOTE Confidence: 0.598279604

 $00:33:10.482 \longrightarrow 00:33:12.906$ 88% of the people taking that

NOTE Confidence: 0.598279604

 $00:33:12.906 \longrightarrow 00:33:15.910$ that you know 1/10 to 1/3 of a

NOTE Confidence: 0.598279604

 $00{:}33{:}15.910 \dashrightarrow 00{:}33{:}17.430$ gram of philosophy commences.

NOTE Confidence: 0.598279604

 $00:33:17.430 \longrightarrow 00:33:20.085$ The tap test significantly showed

NOTE Confidence: 0.598279604

 $00:33:20.085 \longrightarrow 00:33:23.190$ that stacking the solicitan lines made

NOTE Confidence: 0.598279604

00:33:23.190 --> 00:33:28.244 of niacin has a a major increase in

NOTE Confidence: 0.598279604

 $00{:}33{:}28.244 \dashrightarrow 00{:}33{:}32.230$ the ability of individuals to tap.

NOTE Confidence: 0.598279604

 $00:33:32.230 \longrightarrow 00:33:33.922$ Compared to sole zyban by itself

NOTE Confidence: 0.598279604

 $00:33:33.922 \longrightarrow 00:33:35.930$ or soul siphon with any other form,

NOTE Confidence: 0.598279604

 $00:33:35.930 \longrightarrow 00:33:38.429$ and also compared to non micro dosers,

NOTE Confidence: 0.598279604

 $00{:}33{:}38.430 \dashrightarrow 00{:}33{:}40.338$ the PCV values significance.

NOTE Confidence: 0.598279604

 $00:33:40.338 \longrightarrow 00:33:43.826$ You know this one in 250 chances

NOTE Confidence: 0.598279604

 $00:33:43.826 \longrightarrow 00:33:47.662$ that it is noise or just random.

 $00:33:47.670 \longrightarrow 00:33:50.088$ So this got us very excited.

NOTE Confidence: 0.598279604

00:33:50.090 --> 00:33:51.944 In fact our coauthors would not

NOTE Confidence: 0.598279604

 $00:33:51.944 \longrightarrow 00:33:54.342$ let us have this data until they

NOTE Confidence: 0.598279604

 $00{:}33{:}54.342 \dashrightarrow 00{:}33{:}56.538$ attacked it three different ways and

NOTE Confidence: 0.598279604

 $00:33:56.538 \longrightarrow 00:33:58.778$ also got other skeptics involved.

NOTE Confidence: 0.598279604

 $00{:}33{:}58.780 \dashrightarrow 00{:}34{:}00.621$ They're going to have a crunch the

NOTE Confidence: 0.598279604

 $00:34:00.621 \longrightarrow 00:34:03.471$ data and so the data changed from .001.

NOTE Confidence: 0.598279604

 $00:34:03.471 \longrightarrow 00:34:06.176$.004 but nevertheless it remained

NOTE Confidence: 0.598279604

00:34:06.176 --> 00:34:07.258 highly significant.

NOTE Confidence: 0.598279604

 $00:34:07.260 \longrightarrow 00:34:10.338$ So this really stimulated my curiosity.

NOTE Confidence: 0.598279604

 $00{:}34{:}10.340 \dashrightarrow 00{:}34{:}12.236$ This is a cycle motor benefit.

NOTE Confidence: 0.598279604

 $00:34:12.240 \longrightarrow 00:34:13.932$ There's no placebo that can code

NOTE Confidence: 0.598279604

 $00:34:13.932 \longrightarrow 00:34:15.884$ for 55 plus year olds increasing

NOTE Confidence: 0.598279604

00:34:15.884 --> 00:34:17.416 their their finger tops.

NOTE Confidence: 0.598279604

 $00:34:17.420 \longrightarrow 00:34:19.020$ If you know of one let me know.

NOTE Confidence: 0.598279604

 $00:34:19.020 \longrightarrow 00:34:20.826$ Expectancy for they can't come in here.

 $00:34:20.830 \longrightarrow 00:34:22.588$ This is certainly an objective test

NOTE Confidence: 0.598279604

00:34:22.588 --> 00:34:24.579 that's already being used for Alzheimer's,

NOTE Confidence: 0.598279604

 $00:34:24.580 \longrightarrow 00:34:25.470$ Parkinson's etcetera.

NOTE Confidence: 0.598279604

 $00:34:25.470 \longrightarrow 00:34:28.585$ So what could cause this and this

NOTE Confidence: 0.598279604

 $00:34:28.585 \longrightarrow 00:34:31.516$ is really my imagination going and

NOTE Confidence: 0.598279604

 $00:34:31.516 \longrightarrow 00:34:33.196$ so I tasked my scientists.

NOTE Confidence: 0.598279604

 $00:34:33.200 \longrightarrow 00:34:35.195$ We dove deep and we looked at

NOTE Confidence: 0.598279604

00:34:35.195 --> 00:34:35.765 map Connections,

NOTE Confidence: 0.598279604

00:34:35.770 --> 00:34:38.410 track ABC and Jack ones I'm

NOTE Confidence: 0.598279604

 $00:34:38.410 \longrightarrow 00:34:40.170$ going to report on.

NOTE Confidence: 0.598279604

 $00:34:40.170 \longrightarrow 00:34:43.005$ And these all, you know as you well know,

NOTE Confidence: 0.598279604

 $00{:}34{:}43.010 \dashrightarrow 00{:}34{:}46.232$ stimulate neurons to grow or stem

NOTE Confidence: 0.598279604

 $00{:}34{:}46.232 \dashrightarrow 00{:}34{:}49.230$ cells to become newborn neurons.

NOTE Confidence: 0.598279604

 $00:34:49.230 \longrightarrow 00:34:51.480$ So there's, there's.

NOTE Confidence: 0.598279604

00:34:51.480 --> 00:34:52.230 Neurogenesis,

 $00:34:52.230 \longrightarrow 00:34:54.480$ newborn there's neurodegeneration,

NOTE Confidence: 0.598279604

00:34:54.480 --> 00:34:55.025 neuroregeneration,

NOTE Confidence: 0.598279604

 $00:34:55.025 \longrightarrow 00:34:57.750$ and these are all different

NOTE Confidence: 0.598279604

 $00{:}34{:}57.750 \dashrightarrow 00{:}35{:}01.354$ aspects of of the of neurological

NOTE Confidence: 0.598279604

 $00:35:01.354 \longrightarrow 00:35:03.349$ health and development.

NOTE Confidence: 0.598279604

 $00:35:03.350 \longrightarrow 00:35:06.575$ So we're looking at synergy

NOTE Confidence: 0.598279604

 $00:35:06.575 \longrightarrow 00:35:08.824$ coefficients then the track a

NOTE Confidence: 0.598279604

 $00:35:08.824 \longrightarrow 00:35:11.230$ as a receptor for Norco factors

NOTE Confidence: 0.719025387857143

 $00:35:11.323 \longrightarrow 00:35:14.130$ and so it's Allison by itself and

NOTE Confidence: 0.719025387857143

 $00:35:14.130 \longrightarrow 00:35:17.296$ that's a micro dose 3.3 milligrams is

NOTE Confidence: 0.719025387857143

00:35:17.296 --> 00:35:21.062 is a microdose also over the 88% of

NOTE Confidence: 0.719025387857143

 $00:35:21.062 \longrightarrow 00:35:23.138$ the people are using approximately and

NOTE Confidence: 0.719025387857143

00:35:23.138 --> 00:35:25.909 niacin a little bit of binding affinity

NOTE Confidence: 0.719025387857143

 $00:35:25.909 \longrightarrow 00:35:27.924$ there is predicted additive sun.

NOTE Confidence: 0.719025387857143

 $00:35:27.930 \longrightarrow 00:35:30.212$ Yeah, we use eurofins and this

NOTE Confidence: 0.719025387857143

 $00{:}35{:}30.212 \dashrightarrow 00{:}35{:}32.714$ has been a long term project and

 $00:35:32.714 \longrightarrow 00:35:35.327$ you can see a stocking shows synergy

NOTE Confidence: 0.719025387857143

 $00{:}35{:}35{.}327 \dashrightarrow 00{:}35{:}38{.}738$ of 4.8 and a 6.4 going up to 10

NOTE Confidence: 0.719025387857143

 $00:35:38.738 \longrightarrow 00:35:41.199$ milligrams which is a lift off dose.

NOTE Confidence: 0.719025387857143

 $00:35:41.200 \longrightarrow 00:35:44.950$ So then we start looking at ohh, yeah,

NOTE Confidence: 0.842835404285714

00:35:45.040 --> 00:35:46.286 Chris here. I'm sorry I was late,

NOTE Confidence: 0.842835404285714

 $00:35:46.290 \longrightarrow 00:35:47.614$ but I'm really enjoying

NOTE Confidence: 0.842835404285714

 $00:35:47.614 \longrightarrow 00:35:48.938$ your presentation in that.

NOTE Confidence: 0.842835404285714

 $00:35:48.940 \longrightarrow 00:35:50.655$ What exactly are you looking at here?

NOTE Confidence: 0.842835404285714

 $00:35:50.660 \longrightarrow 00:35:54.900$ Is this in cells? Is it in mind?

NOTE Confidence: 0.66714224875

 $00:35:54.900 \longrightarrow 00:35:57.777$ Too busy to do this is using

NOTE Confidence: 0.66714224875

 $00:35:57.777 \longrightarrow 00:35:59.726$ ecoli and you can go to your

NOTE Confidence: 0.66714224875

 $00:35:59.726 \dashrightarrow 00:36:01.250$ friend's website for map Kinesis.

NOTE Confidence: 0.66714224875

 $00{:}36{:}01.250 --> 00{:}36{:}03.930$ They have an extensive.

NOTE Confidence: 0.66714224875

 $00:36:03.930 \longrightarrow 00:36:06.450$ Background paper support this is being

NOTE Confidence: 0.66714224875

 $00:36:06.450 \longrightarrow 00:36:09.041$ used now by hundreds of scientists

00:36:09.041 --> 00:36:11.141 looking at different receptors and

NOTE Confidence: 0.66714224875

00:36:11.141 --> 00:36:14.178 they use a surrogate E coli and then

NOTE Confidence: 0.66714224875

 $00:36:14.178 \longrightarrow 00:36:16.550$ they they use that for the expression

NOTE Confidence: 0.66714224875

 $00:36:16.550 \longrightarrow 00:36:18.860$ of of of these compounds that

NOTE Confidence: 0.66714224875

 $00:36:18.860 \longrightarrow 00:36:21.236$ bind with map kinases and I would

NOTE Confidence: 0.66714224875

00:36:21.236 --> 00:36:23.590 just recommend that you go and look

NOTE Confidence: 0.66714224875

 $00:36:23.590 \longrightarrow 00:36:25.528$ at the European side they describe

NOTE Confidence: 0.66714224875

00:36:25.528 --> 00:36:27.168 what they've published widely on

NOTE Confidence: 0.66714224875

 $00:36:27.168 \longrightarrow 00:36:29.430$ this and it's it's well it's been

NOTE Confidence: 0.70824580555556

 $00:36:29.440 \longrightarrow 00:36:31.281$ well yeah I'll look at the the

NOTE Confidence: 0.708245805555556

00:36:31.281 --> 00:36:32.635 technical things because coli doesn't

NOTE Confidence: 0.70824580555556

 $00:36:32.635 \longrightarrow 00:36:34.177$ express track as they must be.

NOTE Confidence: 0.70824580555556

 $00:36:34.180 \longrightarrow 00:36:35.930$ Putting it in exogenous, but that's fine.

NOTE Confidence: 0.708245805555556

00:36:35.930 --> 00:36:37.130 So it's a, it's a,

NOTE Confidence: 0.70824580555556

 $00:36:37.130 \longrightarrow 00:36:39.390$ it's a blab bacterial acid.

NOTE Confidence: 0.708245805555556

 $00:36:39.390 \longrightarrow 00:36:41.196$ The reason that I'm what what

 $00:36:41.196 \longrightarrow 00:36:43.098$ struck me is since this is a,

NOTE Confidence: 0.708245805555556

00:36:43.100 --> 00:36:44.828 you know, a test tube assay,

NOTE Confidence: 0.70824580555556

 $00:36:44.830 \longrightarrow 00:36:46.350$ the original hypothesis was that

NOTE Confidence: 0.70824580555556

 $00:36:46.350 \longrightarrow 00:36:48.223$ niacin is leading to vasodilation and

NOTE Confidence: 0.70824580555556

00:36:48.223 --> 00:36:51.380 that's increasing delivery of the.

NOTE Confidence: 0.708245805555556 00:36:51.380 --> 00:36:52.100 There's no

NOTE Confidence: 0.596831161666667

00:36:52.110 --> 00:36:54.018 password system. That's why this is,

NOTE Confidence: 0.596831161666667

 $00{:}36{:}54.020 \dashrightarrow 00{:}36{:}55.994$ This is why I think it's even

NOTE Confidence: 0.596831161666667

 $00{:}36{:}55.994 \dashrightarrow 00{:}36{:}57.568$ more exciting because there's no

NOTE Confidence: 0.596831161666667

00:36:57.568 --> 00:36:59.528 vascular system in vitro, you know,

NOTE Confidence: 0.596831161666667

 $00:36:59.528 \longrightarrow 00:37:01.098$ using this map kinase test.

NOTE Confidence: 0.596831161666667

 $00:37:01.100 \dashrightarrow 00:37:03.944$ So what we want to show is clinically is

NOTE Confidence: 0.596831161666667

 $00{:}37{:}03.944 \dashrightarrow 00{:}37{:}06.690$ This is why I went into this, you know,

NOTE Confidence: 0.596831161666667

00:37:06.690 --> 00:37:09.035 and was quite surprised and I thought,

NOTE Confidence: 0.596831161666667

 $00:37:09.040 \longrightarrow 00:37:10.606$ Oh my gosh, with the vascular

00:37:10.606 --> 00:37:11.960 component added on to this,

NOTE Confidence: 0.596831161666667

 $00:37:11.960 \dashrightarrow 00:37:15.558$ this should make Suleiman even more active

NOTE Confidence: 0.596831161666667

 $00:37:15.558 \longrightarrow 00:37:18.680$ for neurogenesis or neurodegeneration.

NOTE Confidence: 0.596831161666667

 $00:37:18.680 \longrightarrow 00:37:21.664$ So yes, there's no vascular system in vitro.

NOTE Confidence: 0.596831161666667

00:37:21.670 --> 00:37:24.238 Equaline this test but this this

NOTE Confidence: 0.596831161666667

 $00:37:24.238 \longrightarrow 00:37:26.370$ exceeds my my skill set.

NOTE Confidence: 0.596831161666667

00:37:26.370 --> 00:37:28.440 My scientists you know know this

NOTE Confidence: 0.596831161666667

 $00:37:28.440 \longrightarrow 00:37:30.476$ subject inside and out and then

NOTE Confidence: 0.596831161666667

 $00{:}37{:}30.476 \dashrightarrow 00{:}37{:}32.527$ I refer you to your fans website.

NOTE Confidence: 0.596831161666667

 $00:37:32.530 \longrightarrow 00:37:34.906$ As many of you probably know there are

NOTE Confidence: 0.596831161666667

 $00:37:34.906 \longrightarrow 00:37:38.850$ multi billion dollar pre drug Discovery lab.

NOTE Confidence: 0.596831161666667

 $00:37:38.850 \longrightarrow 00:37:39.246$ OK.

NOTE Confidence: 0.596831161666667

 $00:37:39.246 \longrightarrow 00:37:42.414$ Is that does that answer your question Chris?

NOTE Confidence: 0.809888411428571

 $00:37:42.760 \longrightarrow 00:37:43.964$ I guess I have one other question.

NOTE Confidence: 0.809888411428571

 $00:37:43.970 \longrightarrow 00:37:45.716$ In the previous slide you were

NOTE Confidence: 0.809888411428571

 $00:37:45.716 \longrightarrow 00:37:47.886$ saying that by this essay when you

 $00:37:47.886 \longrightarrow 00:37:49.782$ combine this low dose salicin with

NOTE Confidence: 0.809888411428571

 $00:37:49.790 \longrightarrow 00:37:51.806$ with the niacin with the stack,

NOTE Confidence: 0.809888411428571

00:37:51.810 --> 00:37:54.702 you get something equivalent to 10

NOTE Confidence: 0.809888411428571

 $00:37:54.702 \longrightarrow 00:37:57.780$ milligrams of soloson whilst 10 milligrams.

NOTE Confidence: 0.809888411428571

00:37:57.780 --> 00:37:59.790 Am I reading this correctly?

NOTE Confidence: 0.809888411428571

 $00:37:59.790 \longrightarrow 00:38:01.152$ So 10 milligrams not a microdose

NOTE Confidence: 0.809888411428571

 $00:38:01.152 \longrightarrow 00:38:02.619$ as you were pointing out earlier?

NOTE Confidence: 0.70551810125

 $00:38:02.890 \longrightarrow 00:38:05.066$ No, it's it's getting up to the,

NOTE Confidence: 0.70551810125

 $00:38:05.070 \longrightarrow 00:38:06.820$ I would call it a minor dose,

NOTE Confidence: 0.821436735

00:38:06.860 --> 00:38:09.196 right? But it's not, it's not sub perceptual,

NOTE Confidence: 0.866680385714286

00:38:09.270 --> 00:38:13.855 right? But 3.3 milligrams is sub perceptual.

NOTE Confidence: 0.866680385714286

00:38:13.860 --> 00:38:16.240 You start crossing over.

NOTE Confidence: 0.866680385714286

 $00{:}38{:}16.240 \dashrightarrow 00{:}38{:}18.115$ Around 5 milligrams is where

NOTE Confidence: 0.866680385714286

00:38:18.115 --> 00:38:20.270 most people begin to feel it.

NOTE Confidence: 0.866680385714286

 $00:38:20.270 \longrightarrow 00:38:24.764$ At 10 milligrams, everyone feels it OK.

 $00:38:24.770 \longrightarrow 00:38:27.020$ This this part of the subject

NOTE Confidence: 0.866680385714286

 $00:38:27.020 \longrightarrow 00:38:29.261$ I know inside and out. OK.

NOTE Confidence: 0.866680385714286

 $00:38:29.261 \longrightarrow 00:38:31.307$ And so then we started getting

NOTE Confidence: 0.866680385714286

 $00:38:31.307 \longrightarrow 00:38:32.870$ some really interesting results.

NOTE Confidence: 0.866680385714286

 $00:38:32.870 \longrightarrow 00:38:35.686$ Now this is this is when each of

NOTE Confidence: 0.866680385714286

00:38:35.686 --> 00:38:37.526 the components Aaron AC from Lions,

NOTE Confidence: 0.866680385714286

 $00:38:37.526 \longrightarrow 00:38:40.160$ mane, mycelium.

NOTE Confidence: 0.866680385714286

00:38:40.160 --> 00:38:43.106 Psilocin and niacin have no binding

NOTE Confidence: 0.866680385714286

 $00:38:43.106 \longrightarrow 00:38:45.440$ affinities being being reported here

NOTE Confidence: 0.866680385714286

 $00:38:45.440 \longrightarrow 00:38:48.660$ on track A, but in combination they do.

NOTE Confidence: 0.866680385714286

 $00{:}38{:}48.660 \dashrightarrow 00{:}38{:}50.580$ This is the gunpowder analogy.

NOTE Confidence: 0.866680385714286 00:38:50.580 --> 00:38:53.058 It's a gating.

NOTE Confidence: 0.866680385714286

 $00:38:53.060 \longrightarrow 00:38:54.740$ It's a it's a gating test

NOTE Confidence: 0.866680385714286

 $00:38:54.740 \longrightarrow 00:38:55.580$ for apartment ability.

NOTE Confidence: 0.866680385714286

00:38:55.580 --> 00:38:57.068 At the Patent Office, it's called,

NOTE Confidence: 0.866680385714286

 $00:38:57.070 \longrightarrow 00:38:59.746$ uh, it's called the 1A access.

 $00:38:59.750 \longrightarrow 00:39:01.532$ When you can show 3 components

NOTE Confidence: 0.866680385714286

00:39:01.532 --> 00:39:02.423 of no activity,

NOTE Confidence: 0.866680385714286

 $00:39:02.430 \longrightarrow 00:39:05.586$ the center distinctly show activity together.

NOTE Confidence: 0.866680385714286

 $00:39:05.590 \longrightarrow 00:39:08.030$ That's surprising.

NOTE Confidence: 0.866680385714286

 $00:39:08.030 \longrightarrow 00:39:10.837$ So this is called maximum calculable value

NOTE Confidence: 0.866680385714286

00:39:10.837 --> 00:39:12.880 within neither component has activity,

NOTE Confidence: 0.866680385714286

 $00:39:12.880 \longrightarrow 00:39:15.512$ but when combined they do this is

NOTE Confidence: 0.866680385714286

00:39:15.512 --> 00:39:18.136 that one thousandth of a standard

NOTE Confidence: 0.866680385714286

 $00:39:18.136 \longrightarrow 00:39:19.555$ therapeutic Sullivan dose.

NOTE Confidence: 0.866680385714286

 $00{:}39{:}19.560 \dashrightarrow 00{:}39{:}21.445$ So we're talking an extremely

NOTE Confidence: 0.866680385714286

 $00:39:21.445 \longrightarrow 00:39:24.077$ small amount now when I show you

NOTE Confidence: 0.866680385714286

00:39:24.077 --> 00:39:26.081 this at 1 thousandths and that

NOTE Confidence: 0.866680385714286

 $00:39:26.081 \longrightarrow 00:39:28.540$ show it to you at 10 milligrams,

NOTE Confidence: 0.866680385714286

 $00:39:28.540 \longrightarrow 00:39:31.390$ there is a spectrum here.

NOTE Confidence: 0.866680385714286

 $00:39:31.390 \longrightarrow 00:39:33.030$ Of concentrations that are

 $00:39:33.030 \longrightarrow 00:39:34.260$ all having activities.

NOTE Confidence: 0.866680385714286

 $00{:}39{:}34.260 --> 00{:}39{:}36.024$ So it's just not a one off.

NOTE Confidence: 0.866680385714286 00:39:36.030 --> 00:39:37.068 And let me, NOTE Confidence: 0.866680385714286

 $00:39:37.068 \longrightarrow 00:39:38.798$ I'll show you more why.

NOTE Confidence: 0.866680385714286

 $00:39:38.800 \longrightarrow 00:39:41.012$ So we started then growing out Neurites

NOTE Confidence: 0.866680385714286

00:39:41.012 --> 00:39:43.637 and I'm sorry this slide is so cluttered,

NOTE Confidence: 0.866680385714286

 $00:39:43.640 \longrightarrow 00:39:47.000$ but I the combination of these

NOTE Confidence: 0.866680385714286

 $00{:}39{:}47.000 \dashrightarrow 00{:}39{:}50.026$ compounds with a PC-12 cells

NOTE Confidence: 0.866680385714286

 $00{:}39{:}50.026 \dashrightarrow 00{:}39{:}54.064$ coming from a rat adrenal glands.

NOTE Confidence: 0.866680385714286

 $00:39:54.070 \longrightarrow 00:39:56.464$ Move to the right brain and this is right.

NOTE Confidence: 0.866680385714286

 $00{:}39{:}56.470 \dashrightarrow 00{:}39{:}58.280$ In that formulation of 500

NOTE Confidence: 0.866680385714286

00:39:58.280 --> 00:39:59.728 milligrams lions made mycelium,

NOTE Confidence: 0.866680385714286

 $00:39:59.730 \longrightarrow 00:40:02.150$ 3 milligrams of solson and

NOTE Confidence: 0.866680385714286

 $00{:}40{:}02.150 \dashrightarrow 00{:}40{:}04.086$ 25 milligrams of niacin.

NOTE Confidence: 0.866680385714286

 $00:40:04.090 \longrightarrow 00:40:06.222$ We approached nearly the

NOTE Confidence: 0.866680385714286

 $00:40:06.222 \longrightarrow 00:40:08.788$ positive control of NGF's.

00:40:08.788 --> 00:40:11.784 This in vitro washing the cells grow

NOTE Confidence: 0.866680385714286

 $00:40:11.784 \longrightarrow 00:40:14.630$ moreover the synaptogenesis occurring.

NOTE Confidence: 0.866680385714286

 $00:40:14.630 \longrightarrow 00:40:16.686$ So it's not only the length of the

NOTE Confidence: 0.866680385714286

00:40:16.686 --> 00:40:18.541 neurons but it's the cross hatching

NOTE Confidence: 0.866680385714286

 $00:40:18.541 \longrightarrow 00:40:20.455$ and that's got us really excited.

NOTE Confidence: 0.866680385714286

 $00:40:20.460 \longrightarrow 00:40:22.662$ Now we have software to be

NOTE Confidence: 0.866680385714286

 $00:40:22.662 \longrightarrow 00:40:25.420$ able to to analyze this.

NOTE Confidence: 0.866680385714286

 $00:40:25.420 \longrightarrow 00:40:28.420$ But we're seeing also right in this range,

NOTE Confidence: 0.866680385714286

00:40:28.420 --> 00:40:31.270 we're having increases in neurite

NOTE Confidence: 0.866680385714286

 $00:40:31.270 \longrightarrow 00:40:33.550$ outgrowth but substantially that

NOTE Confidence: 0.866680385714286

 $00:40:33.550 \longrightarrow 00:40:35.628$ these three compounds together

NOTE Confidence: 0.866680385714286

 $00:40:35.628 \longrightarrow 00:40:38.478$ gave us the base best result.

NOTE Confidence: 0.866680385714286

 $00{:}40{:}38.480 \dashrightarrow 00{:}40{:}41.175$ So then we started looking at other

NOTE Confidence: 0.866680385714286

 $00:40:41.175 \longrightarrow 00:40:43.430$ tryptamines norbo system and niacin for

NOTE Confidence: 0.866680385714286

 $00:40:43.430 \longrightarrow 00:40:45.380$ track at two different concentrations.

 $00:40:45.380 \longrightarrow 00:40:49.496$ We saw also is synergistic effects.

NOTE Confidence: 0.866680385714286

 $00{:}40{:}49.500 \dashrightarrow 00{:}40{:}50.790$ Then we looked at track B,

NOTE Confidence: 0.866680385714286

 $00:40:50.790 \longrightarrow 00:40:52.728$ which I'm most excited about because

NOTE Confidence: 0.866680385714286

 $00:40:52.728 \longrightarrow 00:40:54.740$ of neurogenesis in the hippocampus.

NOTE Confidence: 0.866680385714286

00:40:54.740 --> 00:40:57.540 Again, no activity of either one of these.

NOTE Confidence: 0.866680385714286

 $00:40:57.540 \longrightarrow 00:41:01.416$ Together we have maximum calculable value.

NOTE Confidence: 0.866680385714286

00:41:01.420 --> 00:41:04.514 So now just to let you know,

NOTE Confidence: 0.866680385714286

 $00:41:04.520 \longrightarrow 00:41:06.452$ this is we've seen it now and

NOTE Confidence: 0.866680385714286

 $00{:}41{:}06.452 \dashrightarrow 00{:}41{:}08.398$ in this case what Jack wants,

NOTE Confidence: 0.866680385714286

00:41:08.400 --> 00:41:11.494 which is a promoter of Interleukin 10s,

NOTE Confidence: 0.866680385714286

 $00{:}41{:}11.500 \dashrightarrow 00{:}41{:}14.560$ which is a neuro anti-inflammatory

NOTE Confidence: 0.866680385714286

 $00:41:14.560 \longrightarrow 00:41:17.626$ has also been suggested for their

NOTE Confidence: 0.866680385714286

 $00:41:17.626 \longrightarrow 00:41:19.159$ preventing viral inflammation.

NOTE Confidence: 0.866680385714286

 $00:41:19.160 \longrightarrow 00:41:21.926$ So we also find maximum countable

NOTE Confidence: 0.866680385714286

 $00:41:21.926 \longrightarrow 00:41:24.400$ value also with these components

NOTE Confidence: 0.866680385714286

 $00:41:24.400 \longrightarrow 00:41:26.548$ looking at Jack ones.

 $00:41:26.550 \longrightarrow 00:41:28.290$ But to give you an idea,

NOTE Confidence: 0.866680385714286

 $00:41:28.290 \longrightarrow 00:41:30.888$ and this is Chris's in particular,

NOTE Confidence: 0.866680385714286

 $00:41:30.890 \longrightarrow 00:41:33.440$ I have hundreds of these.

NOTE Confidence: 0.866680385714286

 $00:41:33.440 \longrightarrow 00:41:37.899$ I have thousands of no good results.

NOTE Confidence: 0.866680385714286

 $00:41:37.900 \longrightarrow 00:41:41.659$ I have hundreds of maximum calculable values.

NOTE Confidence: 0.866680385714286

 $00:41:41.660 \longrightarrow 00:41:43.410$ Don't know if you can see the

NOTE Confidence: 0.866680385714286

00:41:43.410 --> 00:41:44.160 far right part

NOTE Confidence: 0.851656010769231

 $00:41:44.223 \longrightarrow 00:41:46.360$ of the screen. If you can't then

NOTE Confidence: 0.851656010769231

 $00{:}41{:}46.360 \longrightarrow 00{:}41{:}48.740$ move our windows here so you can.

NOTE Confidence: 0.851656010769231

00:41:48.740 --> 00:41:52.060 But these combinations of lions,

NOTE Confidence: 0.851656010769231

00:41:52.060 --> 00:41:54.040 mane and Salah, sibin,

NOTE Confidence: 0.851656010769231

00:41:54.040 --> 00:41:57.848 lions mane and and niacin we have

NOTE Confidence: 0.851656010769231

 $00{:}41{:}57.848 \dashrightarrow 00{:}42{:}00.800$ maximum calculated values across.

NOTE Confidence: 0.851656010769231

 $00:42:00.800 \longrightarrow 00:42:03.953$ All of these track a, B's and C's.

NOTE Confidence: 0.851656010769231

 $00:42:03.953 \longrightarrow 00:42:07.390$ So my hypothesis is that niacin is

 $00:42:07.390 \longrightarrow 00:42:09.465$ a catalyst for neurogenic factors

NOTE Confidence: 0.851656010769231

 $00:42:09.465 \longrightarrow 00:42:12.329$ with suicide and related tryptamines.

NOTE Confidence: 0.851656010769231

00:42:12.330 --> 00:42:13.930 We have I have it with North Charleston,

NOTE Confidence: 0.851656010769231

00:42:13.930 --> 00:42:15.646 I have it with nervous system,

NOTE Confidence: 0.851656010769231

 $00:42:15.650 \longrightarrow 00:42:17.270$ I have it with regional ISON.

NOTE Confidence: 0.851656010769231

00:42:17.270 --> 00:42:18.410 Just for the sake of time,

NOTE Confidence: 0.851656010769231

00:42:18.410 --> 00:42:21.514 I'm not going to show you 100 slides

NOTE Confidence: 0.851656010769231

00:42:21.514 --> 00:42:23.349 basically underscoring the same thing.

NOTE Confidence: 0.851656010769231

 $00:42:23.350 \longrightarrow 00:42:25.966$ We have a clinically we should be able

NOTE Confidence: 0.851656010769231

 $00:42:25.966 \longrightarrow 00:42:29.001$ to show that niacin is vasodilation helps

NOTE Confidence: 0.851656010769231

 $00{:}42{:}29.001 \dashrightarrow 00{:}42{:}31.828$ the delivery of these compounds that

NOTE Confidence: 0.851656010769231

 $00:42:31.828 \longrightarrow 00:42:34.504$ increase nerve growth factors and BDNF.

NOTE Confidence: 0.851656010769231

 $00:42:34.510 \longrightarrow 00:42:36.820$ And the lower doses of society and

NOTE Confidence: 0.851656010769231

 $00:42:36.820 \longrightarrow 00:42:38.641$ these tryptamine may be beneficial

NOTE Confidence: 0.851656010769231

 $00:42:38.641 \longrightarrow 00:42:40.945$ and the entourage effects of these

NOTE Confidence: 0.851656010769231

 $00{:}42{:}40.945 \dashrightarrow 00{:}42{:}42.497$ compounds using multiple trip

00:42:42.497 --> 00:42:44.657 communities I think is greater than

NOTE Confidence: 0.851656010769231

00:42:44.657 --> 00:42:46.904 silicon or silicon if you will,

NOTE Confidence: 0.851656010769231

 $00:42:46.904 \longrightarrow 00:42:48.047$ will by itself.

NOTE Confidence: 0.851656010769231

 $00:42:48.050 \longrightarrow 00:42:50.420$ We obviously need clinical trials

NOTE Confidence: 0.851656010769231

 $00:42:50.420 \longrightarrow 00:42:52.790$ to prove to prove efficacy.

NOTE Confidence: 0.851656010769231

 $00:42:52.790 \longrightarrow 00:42:54.470$ Now there's adverse events,

NOTE Confidence: 0.851656010769231

 $00:42:54.470 \longrightarrow 00:42:56.150$ variabilities and possible causes.

NOTE Confidence: 0.851656010769231

 $00:42:56.150 \longrightarrow 00:42:58.190$ This is something I really want to address.

NOTE Confidence: 0.851656010769231

 $00:42:58.190 \longrightarrow 00:42:59.690$ The difference is in the consensus.

NOTE Confidence: 0.851656010769231

00:42:59.690 --> 00:43:01.862 Also having silson now bear in

NOTE Confidence: 0.851656010769231

 $00:43:01.862 \longrightarrow 00:43:03.770$ mind with the tap test.

NOTE Confidence: 0.851656010769231

 $00{:}43{:}03.770 \dashrightarrow 00{:}43{:}06.410$ That's totally uncontrolled.

NOTE Confidence: 0.851656010769231

 $00{:}43{:}06.410 \dashrightarrow 00{:}43{:}09.658$ That significance of going from 48 tops to

NOTE Confidence: 0.851656010769231

00:43:09.658 --> 00:43:13.486 68 tops in 55 plus year olds after 30 days,

NOTE Confidence: 0.851656010769231

 $00:43:13.490 \longrightarrow 00:43:15.115$ people are sourcing this whole

00:43:15.115 --> 00:43:16.090 Sabina underground market,

NOTE Confidence: 0.851656010769231

 $00{:}43{:}16.090 \dashrightarrow 00{:}43{:}17.102$ variable concentrations,

NOTE Confidence: 0.851656010769231

00:43:17.102 --> 00:43:19.126 variable amounts of niacin,

NOTE Confidence: 0.851656010769231

00:43:19.130 --> 00:43:21.188 variable amounts of of of lions,

NOTE Confidence: 0.851656010769231

 $00:43:21.190 \longrightarrow 00:43:22.264$ mane, different sources.

NOTE Confidence: 0.851656010769231

 $00:43:22.264 \longrightarrow 00:43:25.133$ The fact that we get that signal and

NOTE Confidence: 0.851656010769231

 $00:43:25.133 \longrightarrow 00:43:27.198$ that benefit of the top test suggests

NOTE Confidence: 0.851656010769231

 $00:43:27.198 \longrightarrow 00:43:29.867$ to me that the results are understated

NOTE Confidence: 0.851656010769231

 $00:43:29.870 \longrightarrow 00:43:31.346$ because if there are more controlled,

NOTE Confidence: 0.851656010769231

 $00:43:31.350 \longrightarrow 00:43:33.190$ I think we'd see greater,

NOTE Confidence: 0.851656010769231

 $00:43:33.190 \longrightarrow 00:43:34.864$ greater positive effect.

NOTE Confidence: 0.851656010769231

 $00:43:34.864 \longrightarrow 00:43:37.096$ There's a genomic idiosyncrasies.

NOTE Confidence: 0.851656010769231

00:43:37.100 --> 00:43:38.094 Microbiome Constitution,

NOTE Confidence: 0.851656010769231

 $00:43:38.094 \longrightarrow 00:43:42.070$ what I call the climate of the microbiome.

NOTE Confidence: 0.851656010769231 00:43:42.070 --> 00:43:42.343 Persons, NOTE Confidence: 0.851656010769231

 $00{:}43{:}42.343 \rightarrow 00{:}43{:}44.254$ admixtures and I think we all know

 $00:43:44.254 \longrightarrow 00:43:46.109$ about that sentence setting the rapeutic

NOTE Confidence: 0.851656010769231

 $00:43:46.109 \longrightarrow 00:43:47.426$ preparation quality providers.

NOTE Confidence: 0.851656010769231

00:43:47.426 --> 00:43:50.938 Many of us know people have taken high

NOTE Confidence: 0.851656010769231

00:43:50.938 --> 00:43:53.626 doses of solsiden mushrooms, 5 grams,

NOTE Confidence: 0.851656010769231

00:43:53.626 --> 00:43:56.112 50 milligram equivalent, no effect.

NOTE Confidence: 0.851656010769231

00:43:56.112 --> 00:43:58.367 Their partner right beside them,

NOTE Confidence: 0.851656010769231

 $00:43:58.370 \longrightarrow 00:44:00.060$ they're on the floor going,

NOTE Confidence: 0.851656010769231

 $00{:}44{:}00.060 \dashrightarrow 00{:}44{:}02.590$ you know, going into hyperspace.

NOTE Confidence: 0.851656010769231

00:44:02.590 --> 00:44:05.006 So it's really interesting,

NOTE Confidence: 0.851656010769231

 $00{:}44{:}05.006 \dashrightarrow 00{:}44{:}06.818$ the individual sensitivities.

NOTE Confidence: 0.851656010769231

00:44:06.820 --> 00:44:09.076 So the things I want to point out,

NOTE Confidence: 0.851656010769231

 $00:44:09.080 \longrightarrow 00:44:10.660$ which is really important,

NOTE Confidence: 0.851656010769231

 $00:44:10.660 \longrightarrow 00:44:12.240$ unfortunately and unfortunately the

NOTE Confidence: 0.851656010769231

 $00{:}44{:}12.240 \dashrightarrow 00{:}44{:}14.125$ majority of the clinical studies

NOTE Confidence: 0.851656010769231

 $00:44:14.125 \longrightarrow 00:44:15.860$ right now with solzi mushrooms,

 $00:44:15.860 \longrightarrow 00:44:17.432$ these people are just not experts

NOTE Confidence: 0.85165601076923100:44:17.432 --> 00:44:18.218 in this field. NOTE Confidence: 0.851656010769231

 $00:44:18.220 \longrightarrow 00:44:20.542$ They're just jumping into this because

NOTE Confidence: 0.851656010769231

 $00:44:20.542 \longrightarrow 00:44:23.427$ bees locking the honey of a subject matter.

NOTE Confidence: 0.851656010769231

 $00:44:23.430 \longrightarrow 00:44:25.200$ And the mushrooms in the foreground

NOTE Confidence: 0.851656010769231

 $00:44:25.200 \longrightarrow 00:44:27.230$ and the mushrooms in the background.

NOTE Confidence: 0.851656010769231

 $00:44:27.230 \longrightarrow 00:44:29.458$ That's about four hours.

NOTE Confidence: 0.851656010769231

 $00:44:29.458 \longrightarrow 00:44:31.686$ Mushrooms grow that fast.

NOTE Confidence: 0.851656010769231

 $00{:}44{:}31.690 --> 00{:}44{:}33.382 \ {\rm Sporulation \ causes}.$

NOTE Confidence: 0.851656010769231 00:44:33.382 --> 00:44:34.228 Allergies, NOTE Confidence: 0.851656010769231

 $00:44:34.228 \longrightarrow 00:44:36.766$ especially in children,

NOTE Confidence: 0.851656010769231

00:44:36.770 --> 00:44:40.448 asthmatic children 100% of asthmatic children

NOTE Confidence: 0.851656010769231

 $00:44:40.450 \longrightarrow 00:44:43.066$ reacted to sloshy comments of spores.

NOTE Confidence: 0.851656010769231

 $00:44:43.070 \longrightarrow 00:44:45.780$ I have a good friend whose wife.

NOTE Confidence: 0.851656010769231

 $00:44:45.780 \longrightarrow 00:44:48.630$ Died in his arms this year

NOTE Confidence: 0.851656010769231

 $00:44:48.630 \longrightarrow 00:44:50.898$ from the asthma attack.

 $00:44:50.900 \longrightarrow 00:44:54.280$ Asthmatic children become asthmatic adults.

NOTE Confidence: 0.851656010769231

00:44:54.280 --> 00:44:55.850 If you're using soulside mushroom,

NOTE Confidence: 0.851656010769231

 $00:44:55.850 \longrightarrow 00:44:58.706$ they should be in the left great

NOTE Confidence: 0.851656010769231

00:44:58.706 --> 00:45:00.899 sporulating just to minimize

NOTE Confidence: 0.851656010769231

 $00:45:00.899 \longrightarrow 00:45:02.678$ that potential reaction,

NOTE Confidence: 0.851656010769231

 $00:45:02.680 \longrightarrow 00:45:04.200$ which is another confounder.

NOTE Confidence: 0.851656010769231

 $00:45:04.200 \longrightarrow 00:45:06.100$ But this is the subject,

NOTE Confidence: 0.851656010769231

 $00:45:06.100 \longrightarrow 00:45:07.752$ and this is the subject I want

NOTE Confidence: 0.851656010769231 00:45:07.752 --> 00:45:08.460 all of you NOTE Confidence: 0.889559545714286

 $00:45:08.520 \longrightarrow 00:45:10.094$ to drill down on, please.

NOTE Confidence: 0.889559545714286

 $00:45:10.094 \longrightarrow 00:45:12.470$ Look at the references.

NOTE Confidence: 0.889559545714286

 $00:45:12.470 \longrightarrow 00:45:14.460$ The most common thing that

NOTE Confidence: 0.889559545714286

 $00{:}45{:}14.460 \dashrightarrow 00{:}45{:}16.052$ I hear about valvulopathy.

NOTE Confidence: 0.889559545714286

00:45:16.060 --> 00:45:18.308 Which is just extraordinarily

NOTE Confidence: 0.889559545714286

00:45:18.308 --> 00:45:20.556 exaggerated in my opinion.

 $00:45:20.560 \longrightarrow 00:45:23.080$ When you look at the binding affinities with

NOTE Confidence: 0.889559545714286

 $00{:}45{:}23.080 \dashrightarrow 00{:}45{:}26.560$ 5H2B and it compared to thin floor a mine.

NOTE Confidence: 0.889559545714286

 $00:45:26.560 \longrightarrow 00:45:29.557$ Then for me is being taken twice a day,

NOTE Confidence: 0.889559545714286

 $00:45:29.560 \longrightarrow 00:45:31.576$ 14 milligrams a day.

NOTE Confidence: 0.889559545714286

 $00:45:31.576 \longrightarrow 00:45:34.180$ It's 160 to 96 milligrams per week.

NOTE Confidence: 0.889559545714286

 $00:45:34.180 \longrightarrow 00:45:35.860$ A micro dose is 1 milligram.

NOTE Confidence: 0.889559545714286

 $00:45:35.860 \longrightarrow 00:45:38.296$ Five times a week, that's 5 milligrams.

NOTE Confidence: 0.889559545714286

 $00:45:38.300 \longrightarrow 00:45:40.930$ Look at the binding affinities

NOTE Confidence: 0.889559545714286

 $00{:}45{:}40.930 \dashrightarrow 00{:}45{:}43.410$ of of solson with 5HQ2B.

NOTE Confidence: 0.889559545714286

 $00:45:43.410 \longrightarrow 00:45:45.630$ Now I've so I've been there.

NOTE Confidence: 0.889559545714286

00:45:45.630 --> 00:45:47.226 This is an in vitro test still,

NOTE Confidence: 0.889559545714286

 $00:45:47.230 \longrightarrow 00:45:48.553$ so I've been does not make it

NOTE Confidence: 0.889559545714286

 $00:45:48.553 \longrightarrow 00:45:49.889$ to the heart valve receptors.

NOTE Confidence: 0.889559545714286

 $00:45:49.890 \longrightarrow 00:45:50.704$ It's dephosphorylated,

NOTE Confidence: 0.889559545714286

 $00:45:50.704 \longrightarrow 00:45:53.146$ so you can't use the binding

NOTE Confidence: 0.889559545714286

00:45:53.146 --> 00:45:54.809 affinity of cell cyclin.

 $00:45:54.810 \longrightarrow 00:45:56.694$ They're the references there

NOTE Confidence: 0.889559545714286

 $00:45:56.694 \longrightarrow 00:45:58.107$ and it's extraordinary.

NOTE Confidence: 0.889559545714286

00:45:58.110 --> 00:46:01.344 I mean, if you're gonna say that, silson.

NOTE Confidence: 0.889559545714286

 $00:46:01.344 \longrightarrow 00:46:04.680$ Can cause value opathy.

NOTE Confidence: 0.889559545714286

 $00:46:04.680 \longrightarrow 00:46:06.678$ Well so then then serotonin does

NOTE Confidence: 0.889559545714286

 $00:46:06.678 \longrightarrow 00:46:08.500$ and this doesn't speak at all,

NOTE Confidence: 0.889559545714286

 $00:46:08.500 \longrightarrow 00:46:10.817$ but what happens past the cell wall?

NOTE Confidence: 0.889559545714286

 $00:46:10.820 \longrightarrow 00:46:13.790$ There are many drugs for higher

NOTE Confidence: 0.889559545714286

 $00:46:13.790 \longrightarrow 00:46:16.264$ binding affinities with 5H22B that

NOTE Confidence: 0.889559545714286

 $00:46:16.264 \longrightarrow 00:46:19.216$ do not call cause cause valvulopathy.

NOTE Confidence: 0.889559545714286

 $00:46:19.220 \longrightarrow 00:46:21.355$ So this is something that you know

NOTE Confidence: 0.889559545714286

 $00:46:21.355 \longrightarrow 00:46:23.378$ we have drilled very deeply down.

NOTE Confidence: 0.889559545714286

 $00{:}46{:}23.380 \dashrightarrow 00{:}46{:}25.270$ I hear these positions bring this up

NOTE Confidence: 0.889559545714286

 $00:46:25.270 \longrightarrow 00:46:27.512$ and again it just boggles my mind that

NOTE Confidence: 0.889559545714286

 $00:46:27.512 \longrightarrow 00:46:29.499$ someone has not done the math here.

 $00:46:29.500 \longrightarrow 00:46:31.492$ Now ultimately we do not know

NOTE Confidence: 0.889559545714286

00:46:31.492 --> 00:46:33.251 because it's much more complex

NOTE Confidence: 0.889559545714286

 $00:46:33.251 \longrightarrow 00:46:35.435$ than just binding affinities on a

NOTE Confidence: 0.889559545714286

 $00:46:35.435 \longrightarrow 00:46:38.990$ receptor with a heart valve, but.

NOTE Confidence: 0.889559545714286

00:46:38.990 --> 00:46:42.007 Look at this, look at the references,

NOTE Confidence: 0.889559545714286

00:46:42.010 --> 00:46:44.690 look at the data that we've put together,

NOTE Confidence: 0.889559545714286

 $00:46:44.690 \longrightarrow 00:46:47.093$ and if you can improve on this or you

NOTE Confidence: 0.889559545714286

 $00:46:47.093 \longrightarrow 00:46:49.590$ have criticisms, we'd love to hear it.

NOTE Confidence: 0.889559545714286

 $00:46:49.590 \longrightarrow 00:46:51.838$ Five of us worked on this or well

NOTE Confidence: 0.889559545714286

 $00:46:51.838 \longrightarrow 00:46:54.649$ over a month just to give this result.

NOTE Confidence: 0.889559545714286

 $00:46:54.650 \longrightarrow 00:46:57.374$ There's no one yet has approached

NOTE Confidence: 0.889559545714286

 $00:46:57.374 \longrightarrow 00:47:00.049$ this subject in the same way.

NOTE Confidence: 0.889559545714286

 $00:47:00.050 \longrightarrow 00:47:02.210$ So I just wanna end.

NOTE Confidence: 0.889559545714286

 $00:47:02.210 \longrightarrow 00:47:05.850$ This is a very common way of delivery.

NOTE Confidence: 0.889559545714286

00:47:05.850 --> 00:47:08.970 People making chocolates with lions,

NOTE Confidence: 0.889559545714286

 $00:47:08.970 \longrightarrow 00:47:12.648$ mane and niacin and then that's

 $00:47:12.648 \longrightarrow 00:47:13.874$ your microdose.

NOTE Confidence: 0.889559545714286

 $00:47:13.880 \longrightarrow 00:47:15.924$ A lot of people are doing this

NOTE Confidence: 0.889559545714286

 $00:47:15.924 \longrightarrow 00:47:17.980$ as a very convenient way.

NOTE Confidence: 0.889559545714286

00:47:17.980 --> 00:47:20.178 Please label your jar lacks it over

NOTE Confidence: 0.889559545714286

 $00:47:20.178 \longrightarrow 00:47:22.550$ something so your kids don't get into it.

NOTE Confidence: 0.889559545714286

 $00:47:22.550 \longrightarrow 00:47:25.925$ So this study just came out two days ago.

NOTE Confidence: 0.889559545714286 00:47:25.930 --> 00:47:28.270 One in four.

NOTE Confidence: 0.889559545714286

 $00:47:28.270 \longrightarrow 00:47:31.511$ Over the age of 65 are interested

NOTE Confidence: 0.889559545714286

00:47:31.511 --> 00:47:33.720 in microdosing to improve.

NOTE Confidence: 0.889559545714286

 $00:47:33.720 \longrightarrow 00:47:34.770$ Their mental health.

NOTE Confidence: 0.895786831

 $00:47:36.920 \longrightarrow 00:47:39.270$ And under the age of 65 is 1 in 10.

NOTE Confidence: 0.846556493333333

 $00:47:41.430 \longrightarrow 00:47:42.550$ That's extraordinary.

NOTE Confidence: 0.846556493333333

 $00{:}47{:}42.550 \dashrightarrow 00{:}47{:}46.470$ There's so much interest in this subject.

NOTE Confidence: 0.846556493333333

 $00{:}47{:}46.470 \dashrightarrow 00{:}47{:}49.566$ So the stock I think is exciting and

NOTE Confidence: 0.846556493333333

 $00:47:49.566 \longrightarrow 00:47:52.410$ this needs to be proved clinically.

 $00:47:52.410 \longrightarrow 00:47:55.000$ Again, I'm in my collagist, I'm a researcher.

NOTE Confidence: 0.846556493333333

00:47:55.000 --> 00:47:57.340 I'm just driven by my curiosity.

NOTE Confidence: 0.846556493333333

 $00:47:57.340 \longrightarrow 00:47:59.848$ But I think I'm onto something that

NOTE Confidence: 0.846556493333333

 $00:47:59.848 \longrightarrow 00:48:02.416$ other others have not seen yet.

NOTE Confidence: 0.846556493333333

 $00:48:02.420 \longrightarrow 00:48:05.060$ So here is our research staff.

NOTE Confidence: 0.846556493333333

00:48:05.060 --> 00:48:07.310 I have 11 scientists full-time,

NOTE Confidence: 0.846556493333333

00:48:07.310 --> 00:48:09.378 5 PHD's I have.

NOTE Confidence: 0.846556493333333

 $00:48:09.378 \longrightarrow 00:48:11.963$ We have 77 peer review

NOTE Confidence: 0.846556493333333

 $00{:}48{:}11.963 \dashrightarrow 00{:}48{:}13.700$ publications amongst us.

NOTE Confidence: 0.846556493333333

 $00:48:13.700 \longrightarrow 00:48:15.104$ I challenge them all the time

NOTE Confidence: 0.846556493333333

 $00{:}48{:}15.104 \dashrightarrow 00{:}48{:}16.529$ to take me to the mat.

NOTE Confidence: 0.846556493333333

00:48:16.530 --> 00:48:19.070 We go back and forth and so it's a very,

NOTE Confidence: 0.846556493333333

00:48:19.070 --> 00:48:22.556 very good group of inspired young

NOTE Confidence: 0.846556493333333

 $00:48:22.556 \longrightarrow 00:48:25.671$ scientists who are really are

NOTE Confidence: 0.846556493333333

00:48:25.671 --> 00:48:28.427 passionate about this research.

NOTE Confidence: 0.846556493333333

 $00:48:28.430 \longrightarrow 00:48:30.680$ So I found these two quotes

 $00:48:30.680 \longrightarrow 00:48:31.805$ by Albert Einstein.

NOTE Confidence: 0.846556493333333

 $00:48:31.810 \longrightarrow 00:48:34.050$ I like it because there's

NOTE Confidence: 0.846556493333333

 $00:48:34.050 \longrightarrow 00:48:35.842$ a leap in consciousness.

NOTE Confidence: 0.846556493333333

 $00:48:35.850 \longrightarrow 00:48:39.350$ This is, some people call it intuition.

NOTE Confidence: 0.846556493333333

 $00{:}48{:}39.350 \dashrightarrow 00{:}48{:}41.779$ And I think it's this second comment

NOTE Confidence: 0.846556493333333

 $00:48:41.779 \longrightarrow 00:48:44.292$ is really interesting is is that the

NOTE Confidence: 0.846556493333333

 $00:48:44.292 \longrightarrow 00:48:46.057$ most influential people first become

NOTE Confidence: 0.846556493333333

 $00{:}48{:}46.057 \dashrightarrow 00{:}48{:}48.038$ aligned with their spiritual nature

NOTE Confidence: 0.846556493333333

 $00{:}48{:}48.038 \dashrightarrow 00{:}48{:}49.998$ and then their physical selves.

NOTE Confidence: 0.846556493333333

00:48:50.000 --> 00:48:52.840 So my acknowledgments are

NOTE Confidence: 0.846556493333333

 $00:48:52.840 \longrightarrow 00:48:57.038$ here and that is it for now.

NOTE Confidence: 0.846556493333333

 $00:48:57.038 \longrightarrow 00:48:57.686$ Stay tuned.

NOTE Confidence: 0.846556493333333

 $00{:}48{:}57.686 \dashrightarrow 00{:}49{:}01.249$ We do have a lot more research coming out.

NOTE Confidence: 0.846556493333333

 $00:49:01.250 \longrightarrow 00:49:03.658$ We have 4 papers in queue on Lions

NOTE Confidence: 0.846556493333333

 $00:49:03.658 \longrightarrow 00:49:05.840$ made on nerve growth factors.

00:49:05.840 --> 00:49:07.424 Also on synergy,

NOTE Confidence: 0.846556493333333

 $00:49:07.424 \longrightarrow 00:49:11.771$ we have about 1000 more test results coming

NOTE Confidence: 0.846556493333333

 $00:49:11.771 \longrightarrow 00:49:17.020$ back from several of contract laboratories.

NOTE Confidence: 0.846556493333333

 $00:49:17.020 \longrightarrow 00:49:19.600$ Many, many of you know these

NOTE Confidence: 0.846556493333333

 $00:49:19.600 \longrightarrow 00:49:20.890$ laboratories beside Eurofins.

NOTE Confidence: 0.846556493333333

 $00:49:20.890 \longrightarrow 00:49:23.424$ And now we're progressing with Michael Medica

NOTE Confidence: 0.846556493333333

 $00:49:23.424 \longrightarrow 00:49:25.952$ to launch clinical studies comparing silybin,

NOTE Confidence: 0.846556493333333

 $00:49:25.952 \longrightarrow 00:49:26.934$ the molecule,

NOTE Confidence: 0.8465564933333333

 $00:49:26.934 \longrightarrow 00:49:27.916$ the silybin,

NOTE Confidence: 0.846556493333333

 $00:49:27.920 \longrightarrow 00:49:31.136$ the mushrooms with and without niacin.

NOTE Confidence: 0.846556493333333

 $00:49:31.140 \longrightarrow 00:49:35.214$ And so we'll be looking at specifically

NOTE Confidence: 0.846556493333333

00:49:35.220 --> 00:49:38.076 neurocognitive decline in Parkinson's,

NOTE Confidence: 0.846556493333333

 $00:49:38.076 \longrightarrow 00:49:42.360$ but there is this is fundamentally

NOTE Confidence: 0.846556493333333

 $00:49:42.360 \longrightarrow 00:49:45.792$ you know can I think can help your

NOTE Confidence: 0.846556493333333

00:49:45.792 --> 00:49:48.152 neurological health and we're just

NOTE Confidence: 0.846556493333333

 $00:49:48.152 \longrightarrow 00:49:50.689$ at the beginning beginning of this.

 $00:49:50.690 \longrightarrow 00:49:53.826$ I have personally spent more than \$1,000,000

NOTE Confidence: 0.846556493333333

 $00:49:53.826 \longrightarrow 00:49:56.518$ on the research that you've seen.

NOTE Confidence: 0.846556493333333

 $00:49:56.520 \longrightarrow 00:49:58.634$ This is why I created my company.

NOTE Confidence: 0.846556493333333

 $00:49:58.640 \longrightarrow 00:50:01.195$ It's so hard to get research funding.

NOTE Confidence: 0.846556493333333

 $00:50:01.200 \longrightarrow 00:50:03.800$ So we have it just a cascade of

NOTE Confidence: 0.846556493333333

 $00:50:03.800 \longrightarrow 00:50:06.237$ new data coming down the pipe.

NOTE Confidence: 0.846556493333333

 $00:50:06.240 \longrightarrow 00:50:09.320$ We are going into my studies here in

NOTE Confidence: 0.846556493333333

 $00{:}50{:}09.320 \dashrightarrow 00{:}50{:}12.650$ about a month and then from there we'll

NOTE Confidence: 0.846556493333333

 $00:50:12.650 \longrightarrow 00:50:14.680$ progress into human clinical studies.

NOTE Confidence: 0.846556493333333

 $00{:}50{:}14.680 \dashrightarrow 00{:}50{:}16.276$ So I thank you for your attention.

NOTE Confidence: 0.846556493333333

 $00:50:16.280 \longrightarrow 00:50:17.724$ I'm happy to take.

NOTE Confidence: 0.846556493333333

 $00:50:17.724 \longrightarrow 00:50:18.807$ A few questions.

NOTE Confidence: 0.871532631111111

 $00{:}50{:}23.050 \dashrightarrow 00{:}50{:}25.320$ Thank you Paul for taking

NOTE Confidence: 0.871532631111111

 $00:50:25.320 \longrightarrow 00:50:27.136$ us through this journey.

NOTE Confidence: 0.871532631111111

 $00:50:27.140 \longrightarrow 00:50:29.338$ Something that I'm struck by is the

00:50:29.338 --> 00:50:31.220 mean something you're reminding us of,

NOTE Confidence: 0.871532631111111

 $00:50:31.220 \longrightarrow 00:50:34.640$ which I think is really great is the

NOTE Confidence: 0.871532631111111

00:50:34.640 --> 00:50:36.770 importance of the complexity, right?

NOTE Confidence: 0.871532631111111

 $00:50:36.770 \longrightarrow 00:50:38.220$ I mean, as in science,

NOTE Confidence: 0.871532631111111

 $00:50:38.220 \longrightarrow 00:50:39.828$ we often simplify things,

NOTE Confidence: 0.871532631111111

 $00:50:39.828 \longrightarrow 00:50:41.034$ the single molecule,

NOTE Confidence: 0.871532631111111

 $00:50:41.040 \longrightarrow 00:50:42.495$ the single outcome,

NOTE Confidence: 0.871532631111111

 $00{:}50{:}42.495 \dashrightarrow 00{:}50{:}44.435$ and that's incredibly powerful.

NOTE Confidence: 0.8715326311111111

 $00:50:44.440 \longrightarrow 00:50:45.889$ And in the real world were played

NOTE Confidence: 0.871532631111111

 $00:50:45.889 \longrightarrow 00:50:47.282$ by a complexity where there multiple

NOTE Confidence: 0.871532631111111

 $00{:}50{:}47.282 \to 00{:}50{:}48.969$ you know the mushroom as you pointed

NOTE Confidence: 0.871532631111111

00:50:49.018 --> 00:50:50.411 has multiple compounds in it and and

NOTE Confidence: 0.871532631111111

 $00:50:50.411 \longrightarrow 00:50:51.902$ it has you know may have multiple

NOTE Confidence: 0.8715326311111111

 $00:50:51.902 \longrightarrow 00:50:53.240$ physiological effects at the same time.

NOTE Confidence: 0.871532631111111

 $00:50:53.240 \longrightarrow 00:50:55.400$ So that's just a real tension that I

NOTE Confidence: 0.871532631111111

 $00{:}50{:}55.400 \dashrightarrow 00{:}50{:}57.744$ that I see in I mean in psychiatry

 $00:50:57.744 \longrightarrow 00:51:00.187$ in general but in this field in

NOTE Confidence: 0.871532631111111

 $00:51:00.187 \longrightarrow 00:51:02.427$ particular is is how do we make

NOTE Confidence: 0.871532631111111

00:51:02.427 --> 00:51:04.818 progress is it by simplifying or is

NOTE Confidence: 0.871532631111111

00:51:04.818 --> 00:51:06.282 it by embracing the complexity but

NOTE Confidence: 0.871532631111111

 $00{:}51{:}06.282 \dashrightarrow 00{:}51{:}07.972$ then also embracing that the data

NOTE Confidence: 0.871532631111111

 $00:51:07.972 \longrightarrow 00:51:09.700$ are more difficult to to interpret.

NOTE Confidence: 0.871532631111111

00:51:09.700 --> 00:51:10.680 It's hard to know what's going on.

NOTE Confidence: 0.871532631111111

 $00:51:10.680 \longrightarrow 00:51:13.098$ I think the answer is both.

NOTE Confidence: 0.871532631111111

 $00:51:13.100 \longrightarrow 00:51:14.276$ And and try to you know,

NOTE Confidence: 0.871532631111111

 $00:51:14.280 \longrightarrow 00:51:15.967$ have hope hope that the two routes

NOTE Confidence: 0.8715326311111111

00:51:15.967 --> 00:51:16.982 to knowledge complement each

NOTE Confidence: 0.871532631111111

00:51:16.982 --> 00:51:17.946 other going forward but.

NOTE Confidence: 0.835877256

 $00{:}51{:}18.950 \dashrightarrow 00{:}51{:}21.694$ Yeah, I see. I see health and disease

NOTE Confidence: 0.835877256

 $00:51:21.694 \longrightarrow 00:51:23.976$ is being a multifactorial equation

NOTE Confidence: 0.835877256

00:51:23.976 --> 00:51:26.511 with our coefficient variables on

 $00:51:26.511 \longrightarrow 00:51:29.390$ one side that lead to an outcome.

NOTE Confidence: 0.835877256

 $00{:}51{:}29.390 \dashrightarrow 00{:}51{:}31.630$ We did not grow up in a single

NOTE Confidence: 0.835877256

 $00{:}51{:}31.630 \dashrightarrow 00{:}51{:}34.026$ molecule universe. We consumed foods.

NOTE Confidence: 0.835877256

 $00:51:34.026 \longrightarrow 00:51:35.250$ We've evolved.

NOTE Confidence: 0.835877256

 $00:51:35.250 \longrightarrow 00:51:37.710$ It seems only obvious to me

NOTE Confidence: 0.835877256

00:51:37.710 --> 00:51:39.350 that this Symphony effect,

NOTE Confidence: 0.835877256

 $00:51:39.350 \longrightarrow 00:51:42.250$ the entourage of these compounds

NOTE Confidence: 0.835877256

00:51:42.250 --> 00:51:45.150 related to soil cybin biosynthesis,

NOTE Confidence: 0.835877256

 $00{:}51{:}45.150 \dashrightarrow 00{:}51{:}48.470$ would activate other receptors and

NOTE Confidence: 0.835877256

 $00:51:48.470 \longrightarrow 00:51:51.790$ cause having a neurological effect.

NOTE Confidence: 0.835877256

 $00:51:51.790 \longrightarrow 00:51:53.140$ I think the challenge is

NOTE Confidence: 0.835877256

 $00:51:53.140 \longrightarrow 00:51:54.740$ how do we dial this in?

NOTE Confidence: 0.835877256

 $00:51:54.740 \longrightarrow 00:51:57.701$ How do we get the all these

NOTE Confidence: 0.835877256

 $00:51:57.701 \longrightarrow 00:51:59.270$ coefficient multipliers dialed in?

NOTE Confidence: 0.835877256

 $00:51:59.270 \longrightarrow 00:52:00.785$ To optimize on the other

NOTE Confidence: 0.835877256

 $00:52:00.785 \longrightarrow 00:52:01.997$ side of the equation,

 $00:52:02.000 \longrightarrow 00:52:03.760$ the best possible mental

NOTE Confidence: 0.835877256

00:52:03.760 --> 00:52:05.520 health or physical health.

NOTE Confidence: 0.835877256

 $00:52:05.520 \longrightarrow 00:52:07.788$ So I think that's the challenge

NOTE Confidence: 0.835877256

 $00:52:07.788 \longrightarrow 00:52:10.300$ and the idea of the single

NOTE Confidence: 0.835877256

 $00{:}52{:}10.300 \dashrightarrow 00{:}52{:}12.595$ bullet magic molecule and if,

NOTE Confidence: 0.835877256

 $00:52:12.600 \longrightarrow 00:52:14.931$ if if you those of you are

NOTE Confidence: 0.835877256

 $00.52:14.931 \longrightarrow 00.52:16.730$ not involved in business.

NOTE Confidence: 0.835877256

 $00:52:16.730 \longrightarrow 00:52:18.730$ It is amazing to me.

NOTE Confidence: 0.835877256

00:52:18.730 --> 00:52:20.346 I wouldn't say foolish,

NOTE Confidence: 0.835877256

 $00:52:20.346 \longrightarrow 00:52:22.366$ but how ill informed people

NOTE Confidence: 0.835877256

 $00:52:22.366 \longrightarrow 00:52:25.116$ are investors and investing in

NOTE Confidence: 0.835877256

 $00:52:25.116 \longrightarrow 00:52:27.380$ companies creating new synthetic

NOTE Confidence: 0.835877256

 $00{:}52{:}27.380 \to 00{:}52{:}29.330$ molecules unknown to nature.

NOTE Confidence: 0.835877256

 $00{:}52{:}29.330 \dashrightarrow 00{:}52{:}31.794$ If you experience with the FDA then

NOTE Confidence: 0.835877256

 $00:52:31.794 \longrightarrow 00:52:33.811$ I'll approach a billion dollars

 $00:52:33.811 \longrightarrow 00:52:36.463$ and toxicity studies compared to a

NOTE Confidence: 0.835877256

 $00{:}52{:}36.463 \dashrightarrow 00{:}52{:}38.916$ molecule that has been consumed by

NOTE Confidence: 0.835877256

 $00:52:38.916 \longrightarrow 00:52:41.154$ humans for thousands of years and

NOTE Confidence: 0.835877256

00:52:41.160 --> 00:52:43.206 the President in like soul syven.

NOTE Confidence: 0.835877256

 $00:52:43.210 \longrightarrow 00:52:45.219$ So it's just started you know as

NOTE Confidence: 0.835877256

 $00{:}52{:}45.219 \to 00{:}52{:}46.915$ much as scientists are driven

NOTE Confidence: 0.835877256

00:52:46.915 --> 00:52:48.845 academically to have new discoveries,

NOTE Confidence: 0.835877256

 $00:52:48.850 \longrightarrow 00:52:50.768$ the reality of getting that drug to

NOTE Confidence: 0.835877256

 $00{:}52{:}50.768 \dashrightarrow 00{:}52{:}52.929$ market to have a positive impact on

NOTE Confidence: 0.835877256

 $00:52:52.929 \longrightarrow 00:52:55.090$ the population is is huge with a

NOTE Confidence: 0.835877256

 $00:52:55.090 \longrightarrow 00:52:57.085$ with a synthetic molecule not found

NOTE Confidence: 0.835877256

 $00:52:57.085 \longrightarrow 00:52:59.920$ in nature compared to these other compounds.

NOTE Confidence: 0.835877256

 $00:52:59.920 \longrightarrow 00:53:01.636$ This is these tryptamines that have

NOTE Confidence: 0.835877256

 $00:53:01.636 \longrightarrow 00:53:03.290$ been consumed by thousands of people.

NOTE Confidence: 0.7498383

 $00:53:11.320 \longrightarrow 00:53:12.810$ Stunned silence.

NOTE Confidence: 0.90525607

00:53:18.780 --> 00:53:20.720 Any other questions or comments?

00:53:30.650 --> 00:53:34.168 Yeah, everyone, I think you raised a great

NOTE Confidence: 0.7013147325

 $00:53:34.170 \longrightarrow 00:53:37.078$ question about the placebo and I know.

NOTE Confidence: 0.7013147325

00:53:37.078 --> 00:53:38.598 You know, you're not exactly

NOTE Confidence: 0.7013147325

 $00:53:38.598 \longrightarrow 00:53:40.300$ in a clinical trial space,

NOTE Confidence: 0.7013147325

00:53:40.300 --> 00:53:41.630 but that and that sort of works,

NOTE Confidence: 0.7013147325

 $00:53:41.630 \longrightarrow 00:53:44.078$ so I'm not expecting.

NOTE Confidence: 0.7013147325

00:53:44.080 --> 00:53:46.215 You know magic, that's a great answer,

NOTE Confidence: 0.7013147325

00:53:46.220 --> 00:53:48.236 like a well formed answer anything.

NOTE Confidence: 0.7013147325

 $00:53:48.240 \longrightarrow 00:53:50.735$ But what do we do about the placebo, right.

NOTE Confidence: 0.7013147325

 $00{:}53{:}50.735 \dashrightarrow 00{:}53{:}52.800$ I think we're all kind of asking

NOTE Confidence: 0.7013147325

 $00:53:52.800 \longrightarrow 00:53:54.905$ this question one way or another for

NOTE Confidence: 0.7013147325

 $00{:}53{:}54.905 \dashrightarrow 00{:}53{:}56.649$ these clinical trials and I'd just

NOTE Confidence: 0.7013147325

 $00:53:56.649 \longrightarrow 00:53:58.521$ love to hear what you think on it

NOTE Confidence: 0.7013147325

 $00:53:58.521 \longrightarrow 00:54:00.360$ and more more on your thoughts on

NOTE Confidence: 0.7013147325

 $00:54:00.360 \longrightarrow 00:54:01.770$ niacin and all that sort of stuff.

 $00:54:02.290 \longrightarrow 00:54:04.340$ Let's get real here folks.

NOTE Confidence: 0.783928172

 $00:54:04.340 \longrightarrow 00:54:07.360$ Is it medically, ethically?

NOTE Confidence: 0.783928172

 $00:54:07.360 \longrightarrow 00:54:09.838$ Right, that you give a place be to

NOTE Confidence: 0.783928172

 $00:54:09.838 \longrightarrow 00:54:12.860$ somebody who has a mental illness or a

NOTE Confidence: 0.783928172

00:54:12.860 --> 00:54:15.380 mental disease or depression or anxiety,

NOTE Confidence: 0.783928172

00:54:15.380 --> 00:54:17.916 and then 20 minutes later they know you

NOTE Confidence: 0.783928172

00:54:17.916 --> 00:54:20.080 tricked them and you got the placebo?

NOTE Confidence: 0.783928172

 $00:54:20.080 \longrightarrow 00:54:22.030$ Don't you exacerbate their depression

NOTE Confidence: 0.783928172

 $00:54:22.030 \longrightarrow 00:54:23.980$ and anxiety because they're the

NOTE Confidence: 0.783928172

 $00:54:24.045 \longrightarrow 00:54:25.875$ unfortunate ones who got the placebo

NOTE Confidence: 0.783928172

 $00:54:25.875 \longrightarrow 00:54:28.180$ as opposed to the active ingredient?

NOTE Confidence: 0.783928172

 $00:54:28.180 \longrightarrow 00:54:30.765$ Are placebos really relevant in

NOTE Confidence: 0.783928172

 $00:54:30.765 \longrightarrow 00:54:33.350$ clinical studies for mental health?

NOTE Confidence: 0.783928172

 $00{:}54{:}33.350 \dashrightarrow 00{:}54{:}35.695$ When there is such a strong effect

NOTE Confidence: 0.783928172

00:54:35.695 --> 00:54:37.910 with the active ingredient socin.

NOTE Confidence: 0.783928172

 $00:54:37.910 \longrightarrow 00:54:40.535$ And there's no effect with the placebo.

00:54:40.540 --> 00:54:42.905 Doesn't your background contrast of

NOTE Confidence: 0.783928172

 $00{:}54{:}42.905 \dashrightarrow 00{:}54{:}45.812$ your data now exacer bated by the

NOTE Confidence: 0.783928172

 $00:54:45.812 \longrightarrow 00:54:47.648$ unfortunate number of individuals

NOTE Confidence: 0.783928172

 $00:54:47.648 \longrightarrow 00:54:50.388$ who got no medicine when they

NOTE Confidence: 0.783928172

 $00:54:50.388 \longrightarrow 00:54:52.608$ were hoping to get a medicine?

NOTE Confidence: 0.783928172

 $00:54:52.610 \longrightarrow 00:54:55.658$ Where's the studies that disambiguate that?

NOTE Confidence: 0.783928172

 $00.54.55.660 \longrightarrow 00.54.57.588$ So I think there's.

NOTE Confidence: 0.731300815714286

 $00:54:59.280 \dashrightarrow 00:55:01.485$ I mean, the clinical trials design it.

NOTE Confidence: 0.731300815714286

 $00:55:01.490 \longrightarrow 00:55:03.430$ It is unethical to withhold

NOTE Confidence: 0.731300815714286

 $00:55:03.430 \longrightarrow 00:55:04.206$ effective treatment.

NOTE Confidence: 0.731300815714286

 $00{:}55{:}04.210 \dashrightarrow 00{:}55{:}07.577$ It's not unethical to give up to

NOTE Confidence: 0.731300815714286

 $00:55:07.577 \longrightarrow 00:55:09.624$ a place bo-controlled trial when

NOTE Confidence: 0.731300815714286

 $00{:}55{:}09.624 \dashrightarrow 00{:}55{:}12.229$ you're doing a an intervention

NOTE Confidence: 0.731300815714286

00:55:12.229 --> 00:55:14.730 that isn't considered proven yet.

NOTE Confidence: 0.731300815714286

 $00:55:14.730 \longrightarrow 00:55:16.557$ So that's where the that's where the line is.

 $00:55:16.560 \longrightarrow 00:55:19.250$ But you're absolutely right that

NOTE Confidence: 0.731300815714286

 $00:55:19.250 \longrightarrow 00:55:21.544$ withholding effective treatments when a

NOTE Confidence: 0.731300815714286

 $00:55:21.544 \longrightarrow 00:55:23.229$ good effective treatment is available,

NOTE Confidence: 0.731300815714286

 $00:55:23.230 \longrightarrow 00:55:24.810$ it raises ethical issues.

NOTE Confidence: 0.731300815714286

 $00:55:24.810 \longrightarrow 00:55:26.785$ I think the question is,

NOTE Confidence: 0.731300815714286

00:55:26.790 --> 00:55:29.590 is in and I'm talking very specifically

NOTE Confidence: 0.731300815714286

 $00:55:29.590 \longrightarrow 00:55:31.690$ about the clinical context now.

NOTE Confidence: 0.731300815714286

00:55:31.690 --> 00:55:33.586 Are these substances proven to be

NOTE Confidence: 0.731300815714286

 $00:55:33.586 \longrightarrow 00:55:35.388$ effective to the standards of the

NOTE Confidence: 0.731300815714286

 $00{:}55{:}35.388 \dashrightarrow 00{:}55{:}37.082$ FDA and to the standards of the

NOTE Confidence: 0.731300815714286

 $00{:}55{:}37.082 \dashrightarrow 00{:}55{:}38.593$ medical establishments? Proof.

NOTE Confidence: 0.731300815714286

 $00:55:38.593 \longrightarrow 00:55:41.977$ And I think the answer there is no.

NOTE Confidence: 0.731300815714286

 $00:55:41.980 \longrightarrow 00:55:43.678$ I'm extremely impressed by the small

NOTE Confidence: 0.731300815714286

00:55:43.678 --> 00:55:45.135 studies that have been published

NOTE Confidence: 0.731300815714286

 $00:55:45.135 \longrightarrow 00:55:47.018$ to date and I think they're very

NOTE Confidence: 0.731300815714286

 $00{:}55{:}47.018 \dashrightarrow 00{:}55{:}48.435$ promising and that's why we're

 $00:55:48.435 \longrightarrow 00:55:49.815$ doing research in this field.

NOTE Confidence: 0.731300815714286

 $00{:}55{:}49.820 \dashrightarrow 00{:}55{:}51.703$ But that in terms of the ethics

NOTE Confidence: 0.731300815714286

00:55:51.703 --> 00:55:53.697 of giving a placebo that's that's

NOTE Confidence: 0.731300815714286

 $00:55:53.697 \longrightarrow 00:55:55.119$ the answer is that that's why

NOTE Confidence: 0.731300815714286

00:55:55.119 --> 00:55:56.516 giving a placebo is considered

NOTE Confidence: 0.731300815714286

 $00:55:56.516 \longrightarrow 00:55:57.796$ ethically acceptable in this,

NOTE Confidence: 0.731300815714286

 $00:55:57.800 \longrightarrow 00:55:58.790$ in this context

NOTE Confidence: 0.737967658

 $00:55:58.800 \longrightarrow 00:56:01.439$ I think the answer I think a

NOTE Confidence: 0.737967658

 $00{:}56{:}01.439 {\:{\circ}{\circ}{\circ}\:} 00{:}56{:}03.046$ better place be environment is

NOTE Confidence: 0.737967658

 $00:56:03.046 \longrightarrow 00:56:04.638$ having a staged microdose,

NOTE Confidence: 0.737967658

 $00:56:04.640 \longrightarrow 00:56:07.870$ microdose, microdose. Are there

NOTE Confidence: 0.906145774166667

 $00:56:07.880 \longrightarrow 00:56:09.868$ other ways to try to isolate pharmacological

NOTE Confidence: 0.906145774166667

 $00{:}56{:}09.868 \dashrightarrow 00{:}56{:}11.310$ effects other than the placebo?

NOTE Confidence: 0.906145774166667

 $00:56:11.310 \longrightarrow 00:56:13.155$ And placebo is profoundly problematic

NOTE Confidence: 0.906145774166667

 $00:56:13.155 \longrightarrow 00:56:15.000$ when you're studying a substance

00:56:15.060 --> 00:56:16.980 that has a psychological, you know,

NOTE Confidence: 0.906145774166667

 $00:56:16.980 \longrightarrow 00:56:18.180$ an unmistakable psychological effect.

NOTE Confidence: 0.906145774166667

00:56:18.180 --> 00:56:20.856 Especially if, as many people believe,

NOTE Confidence: 0.906145774166667

 $00:56:20.860 \longrightarrow 00:56:22.635$ the psychological effect is fundamental

NOTE Confidence: 0.906145774166667

 $00:56:22.635 \longrightarrow 00:56:24.445$ to the therapeutic benefit, right.

NOTE Confidence: 0.906145774166667

 $00:56:24.445 \longrightarrow 00:56:26.370$ If the psychological effect is

NOTE Confidence: 0.906145774166667

00:56:26.370 --> 00:56:28.420 fundamental to the therapeutic benefit,

NOTE Confidence: 0.906145774166667

 $00:56:28.420 \longrightarrow 00:56:29.662$ then the whole concept of placebo

NOTE Confidence: 0.906145774166667

00:56:29.662 --> 00:56:30.680 goes out the window, right?

NOTE Confidence: 0.906145774166667

 $00:56:30.680 \longrightarrow 00:56:32.010$ Because the idea of a placebo is

NOTE Confidence: 0.906145774166667

 $00:56:32.010 \longrightarrow 00:56:33.380$ you take the drug and it doesn't,

NOTE Confidence: 0.906145774166667

 $00:56:33.380 \longrightarrow 00:56:35.104$ that you have indistinguishable

NOTE Confidence: 0.906145774166667

 $00:56:35.104 \longrightarrow 00:56:37.259$ psychological effects between the two.

NOTE Confidence: 0.906145774166667 00:56:37.260 --> 00:56:37.642 That's it. NOTE Confidence: 0.906145774166667

 $00:56:37.642 \longrightarrow 00:56:38.597$ I think where the field,

NOTE Confidence: 0.906145774166667

 $00:56:38.600 \longrightarrow 00:56:40.640$ that's where we really found her.

 $00:56:40.640 \longrightarrow 00:56:41.372$ And and this is,

NOTE Confidence: 0.906145774166667

 $00:56:41.372 \longrightarrow 00:56:42.690$ there's not unanimity in the field here.

NOTE Confidence: 0.906145774166667

 $00:56:42.690 \longrightarrow 00:56:44.874$ It may be that the psychological effects

NOTE Confidence: 0.906145774166667

 $00:56:44.874 \longrightarrow 00:56:46.525$ and the neurotrophic and antidepressant

NOTE Confidence: 0.906145774166667

 $00:56:46.525 \longrightarrow 00:56:48.493$ and other effects are separable and

NOTE Confidence: 0.906145774166667

 $00:56:48.493 \longrightarrow 00:56:50.450$ there are billions of dollars of

NOTE Confidence: 0.906145774166667

 $00:56:50.450 \longrightarrow 00:56:52.322$ capital going into companies that are,

NOTE Confidence: 0.90614577416666700:56:52.330 --> 00:56:52.876 you know,

NOTE Confidence: 0.906145774166667

 $00:56:52.876 \longrightarrow 00:56:53.968$ based on that presumption.

NOTE Confidence: 0.906145774166667

 $00:56:53.970 \longrightarrow 00:56:55.566$ Or it may be that they're not

NOTE Confidence: 0.906145774166667

 $00{:}56{:}55.566 \dashrightarrow 00{:}56{:}57.096$ separable and the psychological effect

NOTE Confidence: 0.906145774166667

 $00:56:57.096 \longrightarrow 00:56:58.688$ is fundamentally not dissociable

NOTE Confidence: 0.906145774166667

 $00{:}56{:}58.688 \dashrightarrow 00{:}57{:}00.280$ from the the rapeutic effect.

NOTE Confidence: 0.906145774166667

 $00{:}57{:}00.280 \to 00{:}57{:}02.176$ In which case we got a huge problem

NOTE Confidence: 0.906145774166667

 $00:57:02.176 \longrightarrow 00:57:03.437$ with placebo because it's not

00:57:03.437 --> 00:57:04.913 a problem of choice of placebo

NOTE Confidence: 0.906145774166667

 $00{:}57{:}04.913 \dashrightarrow 00{:}57{:}06.549$ or design or technical things.

NOTE Confidence: 0.906145774166667

 $00:57:06.550 \longrightarrow 00:57:07.790$ It's something quite fundamental.

NOTE Confidence: 0.726176194076923

00:57:07.860 --> 00:57:09.379 Yeah, this is, This is why with

NOTE Confidence: 0.726176194076923

00:57:09.379 --> 00:57:11.050 microdosing is it any different country?

NOTE Confidence: 0.726176194076923

00:57:11.050 --> 00:57:13.038 Because it's substance orium,

NOTE Confidence: 0.726176194076923

00:57:13.038 --> 00:57:14.529 it's non intoxicating,

NOTE Confidence: 0.726176194076923

 $00:57:14.530 \longrightarrow 00:57:18.250$ much easier to do at cycle motor benefits.

NOTE Confidence: 0.726176194076923

 $00:57:18.250 \longrightarrow 00:57:20.878$ That. That's not subjective,

NOTE Confidence: 0.726176194076923

 $00:57:20.878 \longrightarrow 00:57:22.310$ that's objective.

NOTE Confidence: 0.726176194076923

00:57:22.310 --> 00:57:24.368 So if you look at psychomotor

NOTE Confidence: 0.726176194076923

 $00:57:24.368 \longrightarrow 00:57:25.740$ benefits substance Dorian with

NOTE Confidence: 0.726176194076923

 $00:57:25.805 \longrightarrow 00:57:28.130$ the place bo substance thorium with

NOTE Confidence: 0.726176194076923

00:57:28.130 --> 00:57:29.525 microdosing substance storium,

NOTE Confidence: 0.726176194076923

 $00:57:29.530 \longrightarrow 00:57:31.595$ you've evened out the data set then

NOTE Confidence: 0.726176194076923

 $00:57:31.595 \longrightarrow 00:57:35.047$ to be able to see if there's a real

00:57:35.047 --> 00:57:36.298 world benefit neurophysiologically

NOTE Confidence: 0.726176194076923

 $00:57:36.298 \longrightarrow 00:57:38.189$ based on psychomotor skills.

NOTE Confidence: 0.726176194076923

 $00:57:38.190 \longrightarrow 00:57:40.334$ Or tests and that's the area that I'm,

NOTE Confidence: 0.726176194076923

 $00:57:40.340 \longrightarrow 00:57:42.088$ I'm particularly fascinated with.

NOTE Confidence: 0.897823568

00:57:42.100 --> 00:57:43.692 But as you point out, if you're microdosing,

NOTE Confidence: 0.897823568

 $00:57:43.692 \longrightarrow 00:57:45.610$ if you're using substance sorial doses then

NOTE Confidence: 0.897823568

00:57:45.656 --> 00:57:47.315 the problem with placebo goes away then,

NOTE Confidence: 0.897823568

 $00:57:47.320 \longrightarrow 00:57:48.478$ then you know then a placebo,

NOTE Confidence: 0.897823568

 $00{:}57{:}48.480 \dashrightarrow 00{:}57{:}51.088$ then you can just use a traditional place bo

NOTE Confidence: 0.897823568

 $00:57:51.088 \longrightarrow 00:57:53.328$ without any complexity and you don't need

NOTE Confidence: 0.897823568

 $00:57:53.328 \longrightarrow 00:57:55.916$ to use you and you can use a mood outcome.

NOTE Confidence: 0.897823568

 $00:57:55.920 \longrightarrow 00:57:57.891$ And so I I agree with you that that

NOTE Confidence: 0.897823568

 $00{:}57{:}57.891 \dashrightarrow 00{:}58{:}00.333$ the microdosing studies to date in the

NOTE Confidence: 0.897823568

 $00:58:00.333 \longrightarrow 00:58:02.679$ scientific literature are are the controlled,

NOTE Confidence: 0.897823568

 $00:58:02.680 \longrightarrow 00:58:04.710$ you know biomedical controlled microdosing

 $00:58:04.710 \longrightarrow 00:58:07.282$ studies are are inadequate and I think

NOTE Confidence: 0.897823568

 $00{:}58{:}07.282 \dashrightarrow 00{:}58{:}09.194$ that's an area where we need a lot.

NOTE Confidence: 0.897823568

 $00:58:09.200 \longrightarrow 00:58:11.160$ A lot more work because I do

NOTE Confidence: 0.897823568

 $00:58:11.160 \longrightarrow 00:58:13.153$ think that addresses the placebo issue.

NOTE Confidence: 0.897823568

 $00:58:13.153 \longrightarrow 00:58:14.868$ It's completely different clinical context,

NOTE Confidence: 0.897823568

 $00.58:14.870 \longrightarrow 00.58:16.522$ the big you know single macro dose

NOTE Confidence: 0.897823568

 $00:58:16.522 \longrightarrow 00:58:17.810$ versus the regular microdosing.

NOTE Confidence: 0.897823568

 $00:58:17.810 \longrightarrow 00:58:20.858$ But but the placebo issues aren't as complex.

NOTE Confidence: 0.532405726

00:58:21.250 --> 00:58:23.250 Our teammates that quantified citizen,

NOTE Confidence: 0.532405726

 $00:58:23.250 \longrightarrow 00:58:25.301$ we have millions and millions of data

NOTE Confidence: 0.532405726

 $00{:}58{:}25.301 \dashrightarrow 00{:}58{:}27.472$ points and we have such a large data

NOTE Confidence: 0.532405726

 $00:58:27.472 \longrightarrow 00:58:29.539$ set that we have not been able to

NOTE Confidence: 0.532405726

 $00:58:29.539 \longrightarrow 00:58:31.646$ dive into the entire data set to be

NOTE Confidence: 0.532405726

 $00:58:31.646 \longrightarrow 00:58:33.718$ able to see what other signals that

NOTE Confidence: 0.532405726

 $00:58:33.718 \longrightarrow 00:58:36.210$ could be resident within the data set.

NOTE Confidence: 0.532405726

 $00:58:36.210 \longrightarrow 00:58:39.582$ It's just it's too much information we just.

 $00:58:39.582 \longrightarrow 00:58:41.934$ Focus on what cycle motor tests that

NOTE Confidence: 0.532405726

 $00:58:41.934 \longrightarrow 00:58:44.980$ we have that would be independent of

NOTE Confidence: 0.532405726

00:58:44.980 --> 00:58:47.290 expectancy that would be an objective

NOTE Confidence: 0.532405726

00:58:47.290 --> 00:58:50.239 test of motor of cycle motor benefit

NOTE Confidence: 0.532405726

 $00{:}58{:}50.240 \dashrightarrow 00{:}58{:}52.956$ and we thought we found that it

NOTE Confidence: 0.532405726

 $00:58:52.956 \longrightarrow 00:58:55.086$ was still Sivan with niacin and

NOTE Confidence: 0.532405726

 $00:58:55.086 \longrightarrow 00:58:57.340$ lions mane that's the only one that

NOTE Confidence: 0.532405726

 $00:58:57.407 \longrightarrow 00:58:59.617$ achieved any level of significance.

NOTE Confidence: 0.532405726

 $00{:}58{:}59.620 \dashrightarrow 00{:}59{:}02.116$ The other ones were non significant.

NOTE Confidence: 0.532405726

 $00:59:02.120 \dashrightarrow 00:59:04.536$ So I think it's it's an early signal,

NOTE Confidence: 0.532405726

 $00:59:04.540 \longrightarrow 00:59:07.420$ it has to be approved clinically how do

NOTE Confidence: 0.532405726

 $00{:}59{:}07.420 \dashrightarrow 00{:}59{:}10.207$ we design the clinical trials but if.

NOTE Confidence: 0.532405726

 $00:59:10.210 \longrightarrow 00:59:12.098$ This bear is out.

NOTE Confidence: 0.532405726

 $00:59:12.098 \dashrightarrow 00:59:14.930$ This is a breakthrough in medicine.

NOTE Confidence: 0.532405726

 $00:59:14.930 \longrightarrow 00:59:17.723$ This is a way of improving your

 $00:59:17.723 \longrightarrow 00:59:19.992$ neurological health as you age and

NOTE Confidence: 0.532405726

 $00{:}59{:}19.992 \dashrightarrow 00{:}59{:}22.839$ the loss of the body intellect of our

NOTE Confidence: 0.532405726

00:59:22.839 --> 00:59:25.294 Society of literally Einstein's getting

NOTE Confidence: 0.532405726

 $00:59:25.294 \longrightarrow 00:59:28.104$ dementia or have neurocognitive decline.

NOTE Confidence: 0.532405726

 $00:59:28.110 \longrightarrow 00:59:30.175$ NO takes away a library of knowledge

NOTE Confidence: 0.532405726

 $00:59:30.175 \longrightarrow 00:59:31.790$ that the next generation needs

NOTE Confidence: 0.532405726

 $00{:}59{:}31.790 \dashrightarrow 00{:}59{:}35.239$ to have access to and I believe.

NOTE Confidence: 0.532405726

 $00:59:35.240 \longrightarrow 00:59:38.930$ That we can become smarter.

NOTE Confidence: 0.532405726

00:59:38.930 --> 00:59:40.674 Kinder and better people,

NOTE Confidence: 0.532405726

 $00:59:40.674 \longrightarrow 00:59:44.689$ those of us who are deep in the subject,

NOTE Confidence: 0.532405726

 $00{:}59{:}44.690 \dashrightarrow 00{:}59{:}47.035$ know that soul Sylvan has changed our

NOTE Confidence: 0.532405726

 $00:59:47.035 \longrightarrow 00:59:49.330$ lives and that we're nicer people.

NOTE Confidence: 0.532405726

 $00:59:49.330 \longrightarrow 00:59:50.755$ We're more considerate,

NOTE Confidence: 0.532405726

 $00:59:50.755 \longrightarrow 00:59:53.605$ we're more thoughtful or less planned.

NOTE Confidence: 0.532405726

00:59:53.610 --> 00:59:54.826 Environments. Violence.

NOTE Confidence: 0.532405726

00:59:54.826 --> 00:59:58.474 Think about the reduction in crime.

 $00:59:58.480 \longrightarrow 01:00:00.576$ These these meta studies that have come out,

NOTE Confidence: 0.532405726

 $01:00:00.580 \longrightarrow 01:00:01.476$ they're surveys,

NOTE Confidence: 0.532405726

 $01:00:01.476 \longrightarrow 01:00:04.164$ but this signal is being repeated

NOTE Confidence: 0.532405726

 $01:00:04.164 \longrightarrow 01:00:05.979$ over and over again.

NOTE Confidence: 0.532405726

 $01:00:05.980 \longrightarrow 01:00:07.924$ It's hard to say that they're

NOTE Confidence: 0.532405726

 $01:00:07.924 \longrightarrow 01:00:08.896$ all just random.

NOTE Confidence: 0.532405726

 $01:00:08.900 \longrightarrow 01:00:11.666$ But if we can reduce crime

NOTE Confidence: 0.532405726

 $01:00:11.666 \longrightarrow 01:00:13.510$ and violence and addiction?

NOTE Confidence: 0.532405726

 $01:00:13.510 \longrightarrow 01:00:16.560$ Let alone depression and anxiety.

NOTE Confidence: 0.532405726

 $01:00:16.560 \longrightarrow 01:00:19.640$ The return of an investment to our society.

NOTE Confidence: 0.532405726 01:00:19.640 --> 01:00:20.334 Is. NOTE Confidence: 0.532405726

 $01:00:20.334 \longrightarrow 01:00:23.110$ It's hard to overestimate.

NOTE Confidence: 0.532405726

01:00:23.110 --> 01:00:24.760You, you, you don't criminalize,

NOTE Confidence: 0.532405726

01:00:24.760 --> 01:00:27.679 you know, people are less prone to.

NOTE Confidence: 0.532405726

 $01:00:27.680 \longrightarrow 01:00:28.784$ They have criminal behavior.

 $01:00:28.784 \longrightarrow 01:00:29.888$ That's a game changer.

NOTE Confidence: 0.92663835

 $01:00:32.990 \longrightarrow 01:00:33.620$ This is an NOTE Confidence: 0.864925602666667

 $01:00:33.630 \longrightarrow 01:00:34.776$ incredibly inspiring talk.

NOTE Confidence: 0.864925602666667

 $01:00:34.776 \longrightarrow 01:00:36.686$ Paul. Thank you for coming

NOTE Confidence: 0.864925602666667

 $01:00:36.686 \longrightarrow 01:00:38.869$ today to talk with us about is,

NOTE Confidence: 0.864925602666667

 $01:00:38.870 \longrightarrow 01:00:41.145$ would it be possible to offer the

NOTE Confidence: 0.864925602666667

 $01:00:41.145 \longrightarrow 01:00:43.821$ in a clinical trial to offer the

NOTE Confidence: 0.864925602666667

 $01:00:43.821 \longrightarrow 01:00:45.861$ patients that received the placebo

NOTE Confidence: 0.864925602666667

 $01{:}00{:}45.861 \dashrightarrow 01{:}00{:}47.914$ after the place bo treatment to

NOTE Confidence: 0.864925602666667

 $01:00:47.914 \longrightarrow 01:00:50.278$ give them an opportunity to have

NOTE Confidence: 0.864925602666667

01:00:50.280 --> 01:00:52.490 the actual treatment and then

NOTE Confidence: 0.864925602666667

01:00:52.490 --> 01:00:55.333 evaluate their outcomes and try to

NOTE Confidence: 0.864925602666667

 $01:00:55.333 \longrightarrow 01:00:58.088$ disentangle some of these psychomotor

NOTE Confidence: 0.864925602666667

01:00:58.088 --> 01:01:00.292 versus psych psychological effects?

NOTE Confidence: 0.72936284555556

01:01:00.810 --> 01:01:01.894 Yeah, actually that's that's

NOTE Confidence: 0.72936284555556

 $01:01:01.894 \longrightarrow 01:01:03.249$ been happening in the past.

 $01:01:03.250 \longrightarrow 01:01:04.429$ Two clinical studies,

NOTE Confidence: 0.729362845555556

 $01:01:04.429 \longrightarrow 01:01:06.394$ they gave the options specifically

NOTE Confidence: 0.72936284555556

 $01:01:06.394 \longrightarrow 01:01:08.304$ because there was these patients

NOTE Confidence: 0.72936284555556

 $01:01:08.304 \longrightarrow 01:01:09.716$ who were so disappointed.

NOTE Confidence: 0.72936284555556

 $01{:}01{:}09.720 \dashrightarrow 01{:}01{:}11.502$ They said we will promise you

NOTE Confidence: 0.72936284555556

01:01:11.502 --> 01:01:13.520 that we will give you silybin,

NOTE Confidence: 0.72936284555556

 $01:01:13.520 \longrightarrow 01:01:15.416$ but you need to go to two or

NOTE Confidence: 0.72936284555556

 $01:01:15.416 \longrightarrow 01:01:16.806$ three sessions and then one

NOTE Confidence: 0.72936284555556

 $01:01:16.806 \longrightarrow 01:01:18.236$ of those sessions we promise

NOTE Confidence: 0.72936284555556

01:01:18.236 --> 01:01:19.920 you you'll get the real thing.

NOTE Confidence: 0.72936284555556

 $01:01:19.920 \longrightarrow 01:01:21.384$ They tried to ameliorate

NOTE Confidence: 0.72936284555556

 $01:01:21.384 \longrightarrow 01:01:22.116$ the disappointment.

NOTE Confidence: 0.729362845555556 01:01:22.120 --> 01:01:22.770 I think NOTE Confidence: 0.810089552857143

01:01:22.780 --> 01:01:24.915 that in our clinical study of OCD,

NOTE Confidence: 0.810089552857143

 $01:01:24.920 \longrightarrow 01:01:27.636$ people who are randomized placebo have the

01:01:27.636 --> 01:01:30.289 opportunity to come back and do a follow

NOTE Confidence: 0.810089552857143

 $01:01:30.289 \longrightarrow 01:01:32.300$ up open label study. I mean session.

NOTE Confidence: 0.63822235

 $01:01:34.760 \longrightarrow 01:01:35.969$ But that doesn't that doesn't

NOTE Confidence: 0.63822235

01:01:35.969 --> 01:01:37.434 mitigate the problem with placebo

NOTE Confidence: 0.63822235

 $01:01:37.434 \longrightarrow 01:01:39.143$ of that that mitigates some of

NOTE Confidence: 0.63822235

 $01:01:39.143 \longrightarrow 01:01:41.359$ the ethical concerns and and

NOTE Confidence: 0.63822235

 $01:01:41.359 \longrightarrow 01:01:42.256$ patient disappointment concerns.

NOTE Confidence: 0.63822235

01:01:42.256 --> 01:01:43.751 It doesn't mitigate the problem

NOTE Confidence: 0.63822235

 $01{:}01{:}43.751 \dashrightarrow 01{:}01{:}45.408$ of of place bo control if people

NOTE Confidence: 0.63822235

 $01:01:45.408 \longrightarrow 01:01:46.456$ know what they've received.

NOTE Confidence: 0.8516281

01:01:47.770 --> 01:01:50.270 Yeah, Chris, I'm still just

NOTE Confidence: 0.8516281

 $01:01:50.270 \longrightarrow 01:01:52.464$ focused on the increased level

NOTE Confidence: 0.8516281

01:01:52.464 --> 01:01:56.330 of depression and anxiety. Yeah.

NOTE Confidence: 0.771662197

 $01:01:56.330 \longrightarrow 01:01:57.710$ That's been called the nocebo

NOTE Confidence: 0.771662197

 $01:01:57.710 \longrightarrow 01:01:59.377$ effect when people come in. Yeah.

NOTE Confidence: 0.771662197

 $01:01:59.377 \longrightarrow 01:02:01.099$ When people come and filled with

 $01:02:01.099 \longrightarrow 01:02:03.532$ hope and then then it don't get any

NOTE Confidence: 0.771662197

 $01{:}02{:}03.532 \dashrightarrow 01{:}02{:}05.047$ response and they have depression

NOTE Confidence: 0.771662197

 $01:02:05.109 \longrightarrow 01:02:06.831$ and they have a negative response

NOTE Confidence: 0.771662197

 $01:02:06.831 \longrightarrow 01:02:08.718$ because of the the loss of hope.

NOTE Confidence: 0.771662197

 $01:02:08.718 \longrightarrow 01:02:09.948$ It's called the nocebo effect.

NOTE Confidence: 0.771662197

01:02:09.950 --> 01:02:11.070 So yeah, that's something

NOTE Confidence: 0.771662197

01:02:11.070 --> 01:02:11.910 that certainly people,

NOTE Confidence: 0.771662197

 $01:02:11.910 \dashrightarrow 01:02:13.248$ people pay attention and I agree

NOTE Confidence: 0.771662197

 $01:02:13.248 \longrightarrow 01:02:14.693$ with you that that's because of

NOTE Confidence: 0.771662197

 $01:02:14.693 \longrightarrow 01:02:16.211$ there is so much optimism around

NOTE Confidence: 0.771662197

01:02:16.211 --> 01:02:17.519 these substances and people who

NOTE Confidence: 0.771662197

01:02:17.519 --> 01:02:18.784 are coming to participate in

NOTE Confidence: 0.771662197

 $01{:}02{:}18.784 \dashrightarrow 01{:}02{:}19.776$ treatment trials are usually doing

NOTE Confidence: 0.771662197

 $01{:}02{:}19.776 \dashrightarrow 01{:}02{:}20.910$ so with a great deal of optimism

NOTE Confidence: 0.771662197

 $01:02:20.943 \longrightarrow 01:02:21.979$ that it will be helpful to them.

 $01:02:21.980 \longrightarrow 01:02:23.945$ No see bo responses are I

NOTE Confidence: 0.771662197

 $01:02:23.945 \dashrightarrow 01:02:25.517$ think a significant problem.

NOTE Confidence: 0.771662197

 $01:02:25.520 \longrightarrow 01:02:26.590$ Both ethically and in terms

NOTE Confidence: 0.771662197

 $01:02:26.590 \longrightarrow 01:02:27.660$ of clinical trial design and

NOTE Confidence: 0.76182335

 $01:02:27.670 \longrightarrow 01:02:28.334$ outcomes, yeah.

NOTE Confidence: 0.76182335

 $01:02:28.334 \longrightarrow 01:02:31.250$ And it's important to note that up to 30%

NOTE Confidence: 0.76182335

 $01:02:31.250 \longrightarrow 01:02:33.266$ of the people have a negative experience.

NOTE Confidence: 0.76182335

 $01:02:33.270 \longrightarrow 01:02:34.662$ They actually don't benefit.

NOTE Confidence: 0.76182335

01:02:34.662 --> 01:02:36.750 So it's not all you know,

NOTE Confidence: 0.76182335

 $01:02:36.750 \longrightarrow 01:02:39.492$ it's not this rosy picture that

NOTE Confidence: 0.76182335

01:02:39.492 --> 01:02:41.176 everyone benefits you know,

NOTE Confidence: 0.76182335

 $01:02:41.176 \longrightarrow 01:02:42.708$ from depression or anxiety

NOTE Confidence: 0.76182335

 $01:02:42.710 \longrightarrow 01:02:43.934$ from these experiences.

NOTE Confidence: 0.76182335

 $01:02:43.934 \longrightarrow 01:02:45.974$ But you look at microdosing

NOTE Confidence: 0.76182335

 $01:02:45.974 \longrightarrow 01:02:48.328$ as a universality of use.

NOTE Confidence: 0.76182335

 $01{:}02{:}48.330 \dashrightarrow 01{:}02{:}51.990$ We all get older, non intoxicating.

 $01:02:51.990 \dashrightarrow 01:02:54.188$ You don't need a hospital or clinic.

NOTE Confidence: 0.76182335

 $01:02:54.190 \longrightarrow 01:02:55.590$ You don't need to have a massive.

NOTE Confidence: 0.76182335

01:02:55.590 --> 01:02:56.918 Support system.

NOTE Confidence: 0.76182335

01:02:56.918 --> 01:02:58.910 So if microdosing,

NOTE Confidence: 0.76182335

 $01{:}02{:}58.910 \dashrightarrow 01{:}03{:}01.646$ you know if you take 30 milligrams at

NOTE Confidence: 0.76182335

 $01:03:01.646 \longrightarrow 01:03:04.928$ once or you take 1 milligram for 30 days.

NOTE Confidence: 0.76182335

 $01:03:04.930 \longrightarrow 01:03:08.416$ Wasn't comparison after that 30 days.

NOTE Confidence: 0.76182335

 $01:03:08.420 \longrightarrow 01:03:10.107$ That would be a really interesting study.

NOTE Confidence: 0.821121707142857

01:03:16.310 --> 01:03:19.126 All, I wanted to uh to thank you for

NOTE Confidence: 0.821121707142857

01:03:19.126 --> 01:03:21.070 sharing some of your personal history,

NOTE Confidence: 0.821121707142857

01:03:21.070 --> 01:03:22.522 your family history,

NOTE Confidence: 0.821121707142857

 $01:03:22.522 \longrightarrow 01:03:24.458$ your personal anecdotes about

NOTE Confidence: 0.821121707142857

 $01{:}03{:}24.458 \dashrightarrow 01{:}03{:}26.710$ experiences with these substances.

NOTE Confidence: 0.821121707142857

01:03:26.710 --> 01:03:28.528 I think a lot of times in academia,

NOTE Confidence: 0.821121707142857

 $01:03:28.530 \longrightarrow 01:03:31.085$ especially people who also function

 $01:03:31.085 \longrightarrow 01:03:33.575$ as clinicians, we we either lack the

NOTE Confidence: 0.821121707142857

 $01{:}03{:}33.575 \dashrightarrow 01{:}03{:}36.135$ boldness or really lack the the space and

NOTE Confidence: 0.821121707142857

 $01:03:36.135 \longrightarrow 01:03:38.205$ permission to talk about these things.

NOTE Confidence: 0.821121707142857

 $01:03:38.210 \longrightarrow 01:03:40.274$ So it's it's a wonderful for you as

NOTE Confidence: 0.821121707142857

 $01:03:40.274 \longrightarrow 01:03:42.748$ an ex to be able to comment on them.

NOTE Confidence: 0.821121707142857

01:03:42.750 --> 01:03:44.650 I also really enjoy hearing about your

NOTE Confidence: 0.821121707142857

 $01:03:44.650 \longrightarrow 01:03:47.091$ hopes and dreams for these things.

NOTE Confidence: 0.821121707142857

 $01:03:47.091 \longrightarrow 01:03:49.800$ That sort of extend outside into society.

NOTE Confidence: 0.821121707142857

 $01:03:49.800 \longrightarrow 01:03:52.096$ Also, love the patch on your sweatshirt.

NOTE Confidence: 0.821121707142857

 $01:03:52.100 \longrightarrow 01:03:53.048$ Keep on rocking.

NOTE Confidence: 0.97512598

01:03:54.580 --> 01:03:55.060 Thank you.

NOTE Confidence: 0.809380998571429

 $01:03:58.450 \longrightarrow 01:04:00.809$ Well folks, I am past my heart.

NOTE Confidence: 0.809380998571429

 $01:04:00.810 \longrightarrow 01:04:03.450$ Stop. I have people waiting outside,

NOTE Confidence: 0.809380998571429

 $01:04:03.450 \longrightarrow 01:04:05.746$ so I want to thank you all.

NOTE Confidence: 0.809380998571429

01:04:05.750 --> 01:04:07.700 Thank you, Christopher.

NOTE Confidence: 0.809380998571429

01:04:07.700 --> 01:04:08.840 Thank you, Jessica.

 $01:04:08.840 \longrightarrow 01:04:10.360$ Thank all of you.

NOTE Confidence: 0.809380998571429

01:04:10.360 --> 01:04:13.076 You know, I'm not a traditional scientist,

NOTE Confidence: 0.809380998571429

 $01:04:13.080 \longrightarrow 01:04:16.496$ but I think it's helpful to have these

NOTE Confidence: 0.809380998571429

 $01:04:16.496 \longrightarrow 01:04:18.656$ discussions to stimulate more ideas.

NOTE Confidence: 0.809380998571429

01:04:18.660 --> 01:04:21.780 And we're all on this Earth ship together.

NOTE Confidence: 0.809380998571429

 $01:04:21.780 \longrightarrow 01:04:24.174$ We all have a collective responsibility to

NOTE Confidence: 0.809380998571429

01:04:24.174 --> 01:04:27.114 be better or citizens and it's our time,

NOTE Confidence: 0.809380998571429

 $01:04:27.114 \longrightarrow 01:04:29.130$ it's our time in this lifetime

NOTE Confidence: 0.809380998571429

 $01:04:29.200 \longrightarrow 01:04:30.640$ to make a difference.

NOTE Confidence: 0.809380998571429

 $01:04:30.640 \longrightarrow 01:04:33.699$ And I think we'll be judged by

NOTE Confidence: 0.809380998571429

 $01:04:33.699 \longrightarrow 01:04:35.482$ future generations and we're

NOTE Confidence: 0.809380998571429

 $01:04:35.482 \longrightarrow 01:04:37.737$ at time critical that we.

NOTE Confidence: 0.809380998571429

01:04:37.740 --> 01:04:39.796 You know, we need to make a difference,

NOTE Confidence: 0.80938099857142901:04:39.800 --> 01:04:41.380 folks.

NOTE Confidence: 0.809380998571429

 $01:04:41.380 \longrightarrow 01:04:44.290$ Those of us are involved in

 $01:04:44.290 \longrightarrow 01:04:47.660$ biodiversity and ecosystems.

NOTE Confidence: 0.809380998571429

 $01:04:47.660 \longrightarrow 01:04:51.356$ It's much worse than what you've been told.

NOTE Confidence: 0.809380998571429 01:04:51.360 --> 01:04:52.500 Yeah, we are.

NOTE Confidence: 0.809380998571429

 $01:04:52.500 \longrightarrow 01:04:55.160$ We are at a perilous point in

NOTE Confidence: 0.809380998571429

 $01:04:55.254 \longrightarrow 01:04:57.819$ the evolution of our species.

NOTE Confidence: 0.809380998571429

01:04:57.820 --> 01:05:00.295 And if we do not get our act together,

NOTE Confidence: 0.809380998571429

 $01:05:00.300 \longrightarrow 01:05:04.388$ then species extinction is is not so far.

NOTE Confidence: 0.809380998571429

01:05:04.390 --> 01:05:05.725 Away, you know,

NOTE Confidence: 0.809380998571429

01:05:05.725 --> 01:05:07.505 I think it's some,

NOTE Confidence: 0.809380998571429

01:05:07.510 --> 01:05:09.988 it's it's it cannot be really overstated

NOTE Confidence: 0.809380998571429

 $01{:}05{:}09.988 \dashrightarrow 01{:}05{:}12.830$ how important it is that we have a

NOTE Confidence: 0.809380998571429

 $01:05:12.830 \longrightarrow 01:05:14.198$ collective change in consciousness

NOTE Confidence: 0.809380998571429

 $01\text{:}05\text{:}14.198 \dashrightarrow 01\text{:}05\text{:}16.038$ to become better Earth citizens

NOTE Confidence: 0.809380998571429

 $01:05:16.038 \longrightarrow 01:05:18.516$ and to be kinder, nicer people.

NOTE Confidence: 0.809380998571429

01:05:18.516 --> 01:05:22.177 I think Saul Sylvan can do that.

NOTE Confidence: 0.809380998571429

 $01:05:22.180 \longrightarrow 01:05:23.820$ Thank you. Thank you all for your work.

NOTE Confidence: 0.809380998571429 $01:05:23.820 \longrightarrow 01:05:24.206$ Take care. NOTE Confidence: 0.809380998571429

 $01{:}05{:}24.206 \longrightarrow 01{:}05{:}26.056$ Thank you all for spending this time.

NOTE Confidence: 0.809380998571429

01:05:26.060 --> 01:05:26.808 All right, take care.

NOTE Confidence: 0.809380998571429 01:05:27.730 --> 01:05:29.000 Thank you.