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ONTARIO COURT OF JUSTICE

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HIS MAJESTY THE KING

v.

15

SAMER AKILA

P R O C E E D I N G S O N C H A R T E R A P P L I C A T I O N

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BEFORE THE HONOURABLE JUSTICE G. ORSINI (VIA ZOOM)

on February 25, 2025, at LONDON, ONTARIO

25

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APPEARANCES:

V. Mazza / K. Benzakein / A. Pashuk

Counsel for the PPSC

P. Lewin

Counsel for the accused

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Legend:

[sic] - Indicates preceding word has been reproduced verbatim and is not a transcription error.

(ph) - Indicates preceding word has been spelled phonetically.

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TUESDAY, FEBRUARY 25, 2025

THE COURT: All right, are we ready to proceed then?

P. LEWIN: I believe so.

K. BENZAKEIN: Yes, thank you.

THE COURT: Thank you. So, we have Dr. Nutt on the line. Dr. Nutt, are you there?

... PAUSE

P. LEWIN: Perhaps, Your Honour, I will text him.

THE COURT: Sure.

P. LEWIN: With your permission.

DAVID NUTT: PREVIOUSLY AFFIRMED

PROFESSOR NUTT: Apologies [indiscernible].

THE COURT: Not a problem. All right. All right, so we'll continue then. I'll just remind you you're still under your affirmation. Go ahead, Mr. Lewin.

P. LEWIN: Thank you, Your Honour.

EXAMINATION IN-CHIEF BY P. LEWIN CONTINUES:

Q. Professor Nutt, I'm going to take you to the population study called Johansen and Kreb, and that would be one of the emailed studies, and it's called "Psychedelics not linked to mental health problems or suicidal behaviour".

A. Yes.

Q. Very good. I'll just make sure everyone and make sure Your Honour has it.

THE COURT: Yes. So, are you going to ask that this be marked as the next exhibit?

P. LEWIN: Yes, please.

THE COURT: All right, thank you. On consent then, Ms. Benzakein, this will be exhibit 27.

K. BENZAKEIN: Yes, thank you.

THE COURT: All right, thank you. So, we'll call it Population Study, Johansen is J-O-H-A-N-S-E-N and Kreb, K-R-E-B.

EXHIBIT NUMBER 27: Population Study, Johansen and Kreb - produced and marked.

P. LEWIN: Thank you, Your Honour.

Q. So, Professor Nutt, you're familiar with this?

A. Yes, in fact I was the editor of the journal in which it was published.

Q. Oh, very good. What is it about?

A. Well, it's looking at the question of whether psychedelic use causes enduring harms to people, and it took advantage of a large American, US survey of people who had used psychedelics, either LSD, psilocybin or mescaline, and then looked to see whether there were any differences in their ratings of mental health subsequent to having taken those drugs.

Q. All right. I'll start you off on page one, and beginning with the second paragraph and I'll begin at the beginning of the second paragraph. I'll read it to you and then I'll ask you about it:

"Psychedelics are not known to harm the brain or any other body organs or to cause addiction or compulsive use. Psychedelics are well known for inducing profound effects on the mind which sometimes includes confusion and emotional turmoil. Both the European monitoring centre for drugs and drug addiction and health authorities in the Netherlands, where hundreds of thousands of servings of psilocybin mushrooms are legally sold in shops each year, report that serious injuries related to psychedelics are extremely rare. Furthermore, Dutch police report that legal sale of psilocybin mushrooms has not led to

public order problems. Approximately .005 percent of emergency department visits in the US involve LSD or psilocybin."

Do you agree with this?

A. I do.

5 Q. So, this psilocybin usage they're talking about, would this be in a clinical setting?

A. No, most of what they're talking about there is outside the clinical setting. I'm not sure any of it is within the clinical setting. So, in the Netherlands the access to the truffle which is the underground part of the mushroom which also contains psilocybin is available. People use it for the same purposes as they use the mushroom, fruiting bodies, in order to have a psychedelic experience, and it's popular there.

15 Q. I'll take you to page two. And here just to get some numbers, and this is under "Materials and Methods" on the left-hand side?

A. Yes.

20 Q. And the bottom four lines, and I'll just read this out and you can tell me if you agree with this. There were 135,095 respondents of whom 19,299 reported lifetime use of psychedelic substances?

A. Yes.

25 Q. Okay. And then I'll take you to page three - actually, you know what, I'll take you to page five, and there is a chart there which gives us some further numbers. So, I'm looking at Table 2 on page five, and I see here - if I look at the first two columns, "Ever use psychedelics?" it looks like under "Psilocybin" there were, if I'm interpreting this correctly, 30 14,438 respondents who'd used psilocybin?

A. Correct.

5 Q. Okay. So, I'll go back to page three, and this is in the right-hand column under "Specific psychedelic use", and I'm gonna read you the second paragraph and I'll read the first three lines and ask you about it. "Associations between psilocybin use and...."

THE COURT: Sorry, just one moment. Page three?

P. LEWIN: Page three, right-hand column...

THE COURT: Mm-hmm.

P. LEWIN: ...under "Specific psychedelic use"...

10 THE COURT: Yes.

P. LEWIN: ...and second paragraph.

THE COURT: Thank you. Go ahead.

P. LEWIN:

15 "Associations between psilocybin use and lower likelihood of past year serious psychological distress in-patient mental health treatment and psychiatric medication prescription were statistically significant both in this study."

Does that surprise you?

20 A. No. I think partly because they published something similar with a different survey a couple of years before.

25 Q. And then I'll take you to page four, and on the right-hand side at the bottom of the page, here they talk about HPPD or hallucinogen persisting perceptual disorder.

A. Yes.

Q.

30 "In particular, our previous population study, Krebs and Johansen, 2013, did not support either the idea of flashbacks described in extreme cases as recurrent psychotic episodes, hallucinations or panic attacks, or the more recent hallucinogen persisting perceptual

5 disorder, described as persistent visual phenomena with accompanying anxiety and distress, since lifetime use of psychedelics and past year use of LSD was not associated with past year symptoms of visual phenomena, (seeing something others could not), panic attacks, psychosis or overall serious psychological distress. Recent randomized control trials with psilocybin have not reported any cases of flashbacks or persistent visual phenomena."

10 What do you think about this?

15 A. Well, there has been concern raised that one persisting negative manifestation of taking psychedelics is this syndrome called HPPD, and is most typically characterized by alterations in people's sense of seeing, sometimes flashes, sometimes trails, when you move your eyes, some people might see a little trail of images that are sort of left behind. It's not very common, as is reported here. It's certainly not unique to psychedelics, very many people experience similar kinds of visual disturbances and other disturbances. Obviously, panic attacks are seen as a sort of consequence of psychedelics are extraordinarily common in the population, almost everyone's had one.

25 So, the question is to what extent are psychedelics contributing to this phenomenon and clearly if they occur after a psychedelic, it's likely that the psychedelic has a part in their production. But I have treated quite a number of people with this syndrome and two things become very clear. The first is that they're not disabled. It's not as if they cannot function in their work or social life because they have these odd intermittent occurrences in their vision. The main concern is that they believe incorrectly that their brain has been damaged by the drug. There's obviously also a common tendency for when things happen unexpectedly
30 in a person to look back and try to find an explanation. So, were

these to occur spontaneously after someone had taken a psychedelic, they might well be attributed to the psychedelic even if they had another cause.

5 And in the cases where people are seeking treatment, this becomes much more like hypochondriasis, it's a state where people are worried about their health rather than impaired by the actual phenomenon. And what we do to help these people is to help them focus away from the symptom or the experience and focus back into the more important aspects of life, which they might neglect if they're only focusing on the symptom, especially if they engage in vast amounts of medical interrogation, investigations at great expense and time to try to resolve what actually isn't a problem to be resolved.

15 Q. Why don't they seem to appear in controlled settings?

20 A. Well, I think it's because they're very rare, that's the first thing to say. I mean, so we only have probably about a thousand or more - round about a thousand individuals who've been given psilocybin in controlled settings, so if their frequency is less than one in a thousand, you know, we may by chance not have seen them. But there's another important aspect to this is that this relationship of those symptoms to anxiety, certainly in the population it's very clear that people seeking help with them are often very anxious. In the controlled settings, we reduce anxiety enormously. One of the major platforms of psychedelic exposure in a clinical research setting, even if you're not a patient, is to have your guides or experts, facilitators present, anxiety is reduced as much as possible so people go into the trip often - well, I think generally, less worried than they would if they were doing it themselves somewhere else, at a festival or something. And I think by reducing anxiety we probably reduce the likelihood of these events happening.

Q. Is it more common or less common with LSD?

A. LSD seems to be more likely to provoke these experiences. And one reason for that is that LSD does have a much longer action in the body, the brain, two to three times than that of psilocybin.

Q. Okay. I will take you the next study and that is Nayak, Jackson.

A. Yes.

Q. And that is called "Naturalistic psilocybin use"?

A. Yes.

Q. And Your Honour, have you got that? That was an emailed study.

THE COURT: Yes, this is the - just give me a moment here, "Naturalistic psilocybin use associated with persistent improvements in mental health and wellbeing", is that the one?

P. LEWIN: Yes.

THE COURT: All right. Thank you. On consent then, Ms. Pashuk, that can be the next exhibit?

K. BENZAKEIN: Yes, thank you.

THE COURT: I'm sorry, Benzakein. I apologize, Ms. Benzakein.

K. BENZAKEIN: No trouble.

THE COURT: That'll be exhibit 27 then? Or sorry, 28? Yes, exhibit 28 then, survey, Nayak, Jackson, Sepeda.

EXHIBIT NUMBER 28: Nayak, Jackson, Sepeda survey - produced and marked.

P. LEWIN: Q. Professor Nutt, you're familiar with this longitudinal survey?

A. I am, yes.

Q. Okay. And tell us a little bit about this?

5 A. So, this is one of quite a number of surveys that groups have done. This was done by the Johns Hopkins groups, we have done similar ones, and they seek to understand the impact of psilocybin or psychedelic use in the population because we know that population use is extensive, as we saw one of the papers yesterday, the Johnson paper, up to eight and half percent of Americans have used mushrooms. So, that's millions of people, so how can you ascertain the harms of psilocybin? Well, the best way is to ask lots of people, because if a rare harm is going to emerge, then you're more likely to find it if you have a population of millions rather than tens in a laboratory study.

10 And the way this study was done, and the way we do the studies, is to make it known on the web that we are interested in exploring the outcomes in terms of mental experiences, mental wellbeing and also potentially mental problems in people who would take what would generally be called recreational psychedelics. I prefer the term experiential because I think most of these people aren't going into these experiences just to have fun, I think they're actually going because they're interested in exploring the capacities of their mind and to see whether psilocybin can in some ways, benefit them. But whatever the reason, they're invited to log onto a website and then rate themselves before and then rate themselves after the experience so we can see whether there are beneficial or detrimental consequences of taking psychedelics in a naturalistic rather than a medical setting.

25 Q. And so this consumption would not be supervised?

30 A. Well, sometimes it is. Very often they go to things called retreats where individuals provide the psilocybin and also encourage them or teach them how best to deal with the experience. Often they're in groups, sometimes they're alone. Sometimes they're just on their own, yeah, or with friends.

Q. Would the retreats be legal or not legal?

A. Um, they're not legal in the USA, they're not legal in Canada. Some of them are legal in the Netherlands because psilocybin truffles are legal. I think they're also legal in Jamaica now, but I don't think these relate to that.

Q. I will take you to page five, Table 1 is on page five and I will take you over to the right-hand side of the column at the very top, and here we have the demographics, the total number of respondents, if I have this correct. So, at two to three months post-use there were 657 respondents?

A. Correct.

Q. And two to four weeks post, there were 1,182 respondents?

A. Correct.

Q. And one to three days post there were 1,551 respondents?

A. Yes.

Q. And I won't get into the pre. And then I'll take you to page nine, and on page nine it appears that cognitive flexibility was measured. And where I'm looking is on the right-hand side, the second paragraph. Are you with me there?

A. I'm with you, yes.

Q. Okay. And if I could ask you what was found....

THE COURT: Sorry, just give me a moment to get there. Page nine?

P. LEWIN: Yes, please.

THE COURT: Just give me a moment. Yes, what part of that page?

P. LEWIN: It's under "Cognitive Flexibility".

THE COURT: Yes, go ahead.

P. LEWIN: Q. So, Professor Nutt, what were the findings regarding cognitive flexibility?

5 A. So, they found a very significant increase in cognitive flexibility with an effect size which they describe as .23 with a significance level of less than one in a thousand of that being by chance. So, cognitive flexibility was enhanced quite significantly in the population.

Q. And then I will go to page 12, and....

10 A. Sorry, Mr. Lewin, can I just - there's one other important point in that paragraph which is that the increased cognitive flexibility was predicted by the magnitude of the mystical experience, so it does seem to correlate with some of the other data we discussed yesterday, that it is the experience that leads to the cognitive flexibilities, not simply having taken the drug or being in a situation where you take the drug.

15 Q. Thank you. So, going to page 12 on the left-hand side, and I'll read this and then I will ask you about it. Actually, I'll read page 12 and page 13, then I'll ask you about it. So, on page 12, left-hand side, five lines down:

20 "The most commonly reported behavioural changes after psilocybin use were improved relationships with others, increased physical activity/exercise, improvements in career/work life and improvement in diet and nutrition."

And then on page 13, and this is on the right-hand column, and I'm looking at the second paragraph down.

25 THE COURT: Sorry, just give me one second here.

Just give me one moment. Sorry, page 13, second paragraph down?

P. LEWIN: Yes, beginning with "Longitudinal data".

THE COURT: Yes.

30 P. LEWIN:

"Longitudinal data indicate that among the convenient sample reported here, naturalistic

5 use of psilocybin mushrooms was associated with significant improvements in mental health, wellbeing, and psychological functioning when controlling for demographic variables in line with initial hypothesis. Persisting reductions in depression, state and trait anxiety and alcohol misuse were found after psilocybin use, congruent with clinical studies showing similar results."

10 Q. So, Professor Nutt, first of all, do you agree with the findings in those two paragraphs? Do they....

15 A. I do. And I can say that when we were applying for funding and also the ethical permission to do our studies in patients with depression, especially the first study, evidence coming from these kind of questionnaires in the population were helpful in directing the target indication because of this - it's really quite reliable reports of improvements in mood.

Q. And now this use this would not be in a supervised setting?

20 A. No, quite often, although I can't speak for each of the individual centres or science where these interventions took place, but I certainly know in the Netherlands they exclude people who are seeking treatment for depression because that would essentially be a breach of the law. Psilocybin is not a medicine in the Netherlands, but truffles are allowed for individuals to experience what they want to experience in terms of the psychedelic state. So, these people are not - most of them would not be considered mentally ill in the psychiatric sense.

25 Q. Okay. And does this tell us anything about the likelihood that psilocybin use in society outside of a supervised setting produces thought-related benefits?

30 A. Well, I think it shows really quite clearly that it does.

Q. Okay. I'll take you now to Ketner, Rosas, Timmermann, and this is called "Psychedelic Communitas"?

A. Yes.

THE COURT: Sorry, Ketner, Rosas and Timmermann?

P. LEWIN: Yes.

THE COURT: Give me a moment. All right. So, this would be exhibit 29 then, I believe? On consent, Ms. Benzakein?

K. BENZAKEIN: Yes, thank you.

THE COURT: All right, thank you.

EXHIBIT NUMBER 29: Ketner, Rosas, Timmermann survey - produced and marked.

P. LEWIN: Q. So, Professor Nutt, you are familiar with this survey?

A. I am.

Q. And I will take you to page two - actually, before I do that, in terms of the numbers here, am I correct under "Methods" that it looks like the participants were 886?

A. Correct.

Q. Okay. And I'll take you to page two and I'm going to the right-hand column, second paragraph...

A. Mm-hmm.

P. LEWIN: Your Honour, are you there?

THE COURT: Yes.

P. LEWIN: Q. Okay, Professor Nutt, so I'm gonna read you a portion of this and then ask you about it:

"A rapidly growing phenomenon that lends itself particularly well to the study of psychosocial effects of psychedelics can be found in psychedelic retreat settings. In countries where specific psychedelic substances have remained legal, the unmet global demand for structured and safe use of

5 psychedelics has helped create an industry of psychedelic experience provision often comprising of multi-day retreat programs, typically consisting of one or more guided psychedelic group sessions referred to as ceremonies. Usually, such guided psychedelic sessions are prepared and conducted by one or more individuals who have acquired the skill through formal training or experience in the care for others during the psychedelic experiences. These practitioners" - and there's various names there, or shamans, I won't read them all 'cause I can't pronounce them all - "may carry out or recommend preparatory activities before the session to induce a prepared mindset in the participants."

10 So, you're aware of this information, Professor Nutt?

15 A. I am.

Q. So, these ceremonies or retreats how common are they, to your knowledge?

A. Well, there must be several thousand happening every weekend across the world, I would think.

20 Q. Are these - and I guess you've touched upon this already, whether they're legal or not. How would you describe them relative - I mean, we've talked about clinical trials, we've talked about use in society, where do these fit in in terms of the type of protocols that people receive in these
25 retreats and ceremonies?

A. Well, they're definitely more structured than going to a festival and taking a drug. There's a deliberate attempt to optimize the benefits that people are seeking to have from these experiences, and that's why there are preparatory
30 sessions, why there are guides, shamans, curandero, etcetera present. The people who go to them often travel long distances.

Many people go from the UK to Peru or Brazil or Mexico to engage in one of these retreats because they're interested in knowing whether a psychedelic will have benefit to them.

Q. And then on page four....

5 A. I suppose I should also emphasize - we didn't finally close the legal aspect. In many countries mushrooms are not illegal. They're not legal necessarily, but they're not illegal, so they're decriminalized. And that is very much true for Mexico, and obviously other forms of psychedelics are legal for particular groups in the USA, which is the Native American churches. So, there are countries in which access to psychedelics isn't breaking the law, even though they're not medicines.

15 Q. Taking you to page four, top right, and here they set out how the study proceeded. And could you tell us briefly how the surveys were - when they were gathered relative to the usage?

20 A. So, it says baseline measurement two weeks before, a second measurement just before. That's trying to ascertain the emotional state of the individual just before they take the drug might affect the outcome. It alludes to the question I've touched on many times where if you're very anxious do you have a worse outcome or a worse trip, than if you are not anxious. And the measurements take place on the day, basically looking back the next day, and then the day after leaving the ceremony which would be three or four days later, and the fifth one at four weeks.

25
30 Q. Thank you. And then I'm going to take you to page 12 and I'm gonna read three passages and then I'm gonna ask you about the passages. So, the first one, so page 12, and Your Honour, this is on the left-hand side and it's about one-

third of the way down. It's beginning with the words "In a similar vein".

THE COURT: Page 12. Just give me a moment. Yes, I see that. Go ahead.

P. LEWIN:

"In a similar vein, the present study provides novel evidence of enduring prosocial and psychological benefits derived from the experience of *communitas* during a collective psychedelic experience. In particular, post-psychedelic improvements in wellbeing, social connectedness, depressive symptoms, trait anxiety and interpersonal tolerance were found to be positively associated with the extent of *communitas* experienced during psychedelic ceremonies, demonstrating the predictive criterion validity of the here proposed instrument."

And then going down a little bit to the bottom paragraph....

THE COURT: All right, just give me one second here while I highlight this. Yes, bottom paragraph?

P. LEWIN: Thank you.

"The observed increases in psychological wellbeing are in accordance with previous research which indicates that guided and ceremonial use of psychedelics can lead to long-lasting psychologically beneficial changes. Experiences of psychedelic ceremonies have been consistently reported as positive, valuable, and in many cases associated with health improvements by both novice and regular participants. Furthermore, in line with the current results, previous observational studies on psychedelic ceremony participants have found increased wellbeing, creative divergent in thinking, cognitive flexibility

and mindfulness related capacities as well as reduced abuse of alcohol and other addictive drugs.

And I'll just pause. And when Your Honour's ready for me....

THE COURT: Yes, go ahead.

P. LEWIN: Q. And then in the right-hand column, the third paragraph, beginning with "The strongest association".

THE COURT: Yes.

P. LEWIN:

"The strongest association between any long-term outcome and communitas was observed for social connectedness pointing to the ability of positive relational experiences during psychedelic ceremonies to induce a sense of belongingness beyond the context of the immediate social environment."

Q. So, Professor Nutt, first of all, do you agree with those observations and findings?

A. I do.

Q. So, what is communitas?

A. Well, communitas is a sense of feeling part of the community, and in this case, it's feeling part of the community during the experience, during the retreat or the ceremony, which seems to carry over to a sense of connectedness with the community beyond that particular - the time of the actual trip or the shamanistic experience. And it's one of the novel - well, the novelty of this study which essentially comes to the same conclusions as the previous one and many others, the novelty in terms of wellbeing and reduced depression scores, etcetera after having a trip. What's novel here is that they used a scale, they adapted a scale which had been used to measure communal feeling in other circumstances, such as people being at sporting

5 events or people being in clubs dancing together, and they adapted that to measure the sense of communitas present during these group retreats. And showed that that experience of becoming closer to the group was a powerful experience but also one that had meaning and relevance to the long-term outcomes.

Q. They use a term here which I think we've seen a few times in the studies, they say there were improvements in trait anxiety. What is trait anxiety?

10 A. Trait anxiety is the sort of background level of anxiety that a person experiences. So, we all - all normal people have a degree of anxiety. If you don't have anxiety, then you're almost certainly a psychopath. We all care about other people, we all worry about our performance, we all want to do the best. We all have a level of anxiety, and we all know that some people are more anxious than others, and that's genetic largely but may also have been influenced by upbringing and stress, etcetera. So, the background level of anxiety which sort of major determinant of the damage of anxiety is called the trait anxiety. The contrast then is with state anxiety - obviously if you - you can be not very anxious but if someone throws you out of an airplane, for that period you will be very, very anxious especially if your parachute doesn't open, you know. So, state anxiety is the anxiety provoked by a particular experience and exposure, whereas trait is the background level of anxiety that is with you day in, day out for your life.

25 Q. And here they talked about improvements in trait anxiety derived from the experience. Is this something that you've seen in other studies, this improvement in trait anxiety as a result of psilocybin use?

30 A. Yes. So, anxiety and depression are bedfellows in a way and when depression improves, anxiety improves, and when anxiety improves, depression improves. So, they're both

manifestations of - reductions in anxiety and depression are one of the reasons why wellbeing is increased after psychedelics.

Q. In the model in which....

5 A. Perhaps I could - sorry, Mr. Lewin. I could also say there have been formal studies now of psychedelics to treat anxiety disorders. An anxiety disorder is a disorder where someone's trait anxiety is so high that it impairs their function and they seek medical help. And there are studies showing that psychedelics can treat even the disorder of anxiety, not just
10 reduce the background level.

Q. Is a model in which people consume psilocybin together but with guidance a safe means of experiencing thought-related benefits from psilocybin?

15 A. I think it's probably the optimal way, particularly if you are a naïve user, yes.

20 Q. So, I'll shift gears a little bit and ask you how would you compare the issues and vulnerabilities of people with treatment-resistant depression and comorbidities taking psilocybin as opposed to healthy people taking psilocybin? So, another way of putting my long, wordy question was are the issues around people with treatment-resistant depression and comorbidities do they have special vulnerabilities that are of concern?

25 A. Yeah, people with mental illness, depression, anxiety, they're more vulnerable. They're more vulnerable because they're ill, they're more vulnerable because they have beliefs, negative beliefs about the future, whether it's depressive beliefs or anxious beliefs, and they need, I believe, probably a greater level of care during the administration of psilocybin than
30 someone who doesn't have a mental illness.

Q. Is suicide a risk for people with serious depression?

A. Yes. I mean, depression is one, if not the leading cause of suicide, with up to 15 percent of people with chronic severe depression committing suicide.

Q. What is the nocebo effect?

5 A. The nocebo effect is the opposite of the placebo effect. So, the placebo effect - the word "placebo" is derived from the Latin "to please" and it is an effect which you see when you give in a clinical trial or other areas of life, you give someone something which probably doesn't do anything but
10 you tell them it does, and they say it does something. However, in clinical trials where people get the placebo - and this is particularly relevant to the trials of psychedelics, in clinical trials people are randomized, they do not know what they're getting. But in a trial of psilocybin the person will sign a
15 consent form to be given either a trip dose or a placebo dose. It's pretty clear for most people, not everyone, but for most people if they don't get a trip dose, they were probably on the placebo dose. If you're a patient and you're looking, perhaps
20 it's your last hope because all other treatments have failed, that the psychedelic will lift your depression, and you get what you think is the placebo, then you become very despondent because you may believe it won't work because you think it's
25 not active, although it could be, and you may then become despondent and that could make your depression scores go up, which is a nocebo effect, it's a harmful effect of not giving
someone a treatment.

Q. What are the risks for people with PTSD, the big risks?

30 A. Well, PTSD is strongly associated with suicide, the rates are very similar to those of depression, maybe higher because in PTSD not only is depression very common and very severe,

but also they very often turn to drugs, particularly alcohol in order to deaden the trauma, memories, and alcohol itself is strongly associated with suicide too.

5 K. BENZAKEIN: Your Honour, I have an objection, and I wonder if the witness could be excused, please.

THE COURT: All right. We'll just put you into a breakout room for a moment, Doctor. Thank you. Yes, Ms. Benzakein?

10 K. BENZAKEIN: Thank you, Your Honour. I'm just trying to pull up my notes about Your Honour's ruling but until I can do that effectively on the computer, which I've already indicated I'm terrible at, it seems to me that this witness is now straying into an area in which he was not qualified. He certainly was not qualified about depression, but I understand in Your Honour's comments on my objection yesterday, I appreciate that that could be related to the safety profile because this witness is very knowledgeable in the treatment of depression using psilocybin. But again, like yesterday, now we're sort of moving further into medical science that this witness has not been qualified to talk about, like the risks of PTSD and even frankly my friend's earlier question about the risks of suicidality in the sense that, you know, how serious it is for people suffering from it and what the risks are. So, I'm gonna ask - I mean, subject of course, to whether Your Honour agrees with me, I'm going to ask that the witness really be cautioned about staying within the parameters of his expertise which have

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to do with psilocybin and not the precipitating events that cause people to seek out psilocybin for medical use.

5 THE COURT: So, you're concerned that he's giving what opinion, that...?

K. BENZAKEIN: That - sorry, go ahead, Your Honour.

THE COURT: No, you go ahead. Go ahead.

10 K. BENZAKEIN: That he's given us opinions now about how serious a risk suicide is for people with severe depression. You know, I think it's closely tied to the benefits of psilocybin, but now he's talking about the risks of PTSD, post-traumatic stress disorder presumably, about which, as I said yesterday about other issues, we just don't know anything about, this point has no....

15 THE COURT: You mean giving an opinion that PTSD creates a risk of suicide?

K. BENZAKEIN: Yes.

THE COURT: All right.

20 K. BENZAKEIN: I see Your Honour....

THE COURT: Isn't that kind of common sense? I mean, I don't know that's earth-shattering that depression and PTSD increase the risk of suicide, but is that what you're objecting to though?

25 K. BENZAKEIN: Well, I'm objecting to the witness now giving evidence about medicine about which he was not qualified, number one, to give opinion evidence, and second, about which the Crown has no notice, so we don't have - I appreciate Your Honour's point of course, it is sort of known that people who suffer from serious mental illness are at increased

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risk of suicidality, but the Court of Appeal has warned us repeatedly that we have to be sure that when opinion evidence is tendered that we are keeping it strictly within the confines of....

5 And so, I don't want to put us in a position where this court has accepted a scope creep of the witness's opinion into areas in which he was not qualified.

10 THE COURT: All right, I understand. Mr. Lewin, are you going to go much farther down this road because I think we are creeping into an area that he shouldn't be giving evidence on.

P. LEWIN: No, that's fair, I'll stop. I'll have no further questions on this line.

15 THE COURT: All right, thank you. We'll bring the witness back then. Yes, thank you Dr. Nutt, can you hear us?

WITNESS: I can.

20 THE COURT: All right. So, I'll just caution you and I don't, I mean, I think it's probably common sense that people suffering from PTSD or depression are more likely to be engaging in suicidal behaviour or attempt suicide, but technically that's not an area that you were qualified in, so I don't think that counsel's going to have any more questions on that, so just proceed on that basis. Thank you.

25 P. LEWIN: Thank you, Your Honour.

30 Q. So, Professor Nutt, in a psilocybin clinical trial how many preparation sessions are necessary for a person with treatment-resistant depression?

THE COURT: Sorry, what was the question again?

P. LEWIN: Q. In a psilocybin clinical trial how many preparation sessions are necessary for a person with treatment-resistant depression?

5 A. Well, the way we do it, I suppose we are as good as anyone - has done as much as anyone, is - we obviously do very careful screening to ensure that they meet the criteria to be eligible and for the psilocybin to work. And that involves making sure they're not on medicines that will blot the effects of psilocybin or medicines that will make psilocybin potentially 10 more dangerous. We also exclude people who have a history of psychosis, psychotic experiences, either themselves or first-degree relatives, that's parents or children or siblings.

15 If they then meet eligibility, they come to a clinic and the day before the psilocybin treatment they have a preparatory session with the guides or facilitators or therapists, whatever you'd like to call them, who will be with them through the experience, and that lasts between two and three hours. And during that time, they are educated as to what the experience may be like, how best to utilize it, how to communicate concerns 20 and they're asked if they want to grant permission, if they want it, to talk to the guides or if they find things challenging, we ask their permission if they ask for the guide to maybe hold their hands, then they get permission for that if they want to. So, that's the preparatory day.

25 Q. And in your view, in a clinical trial how many preparation sessions are necessary for a healthy person?

30 A. I'm not sure whether any preparatory sessions are necessary. I think they might be helpful. I think clearly understanding what you're doing, understanding how people have experienced psilocybin previously is generally useful before you do anything you haven't done before to have some knowledge as to what it might be like and how you might maximize the benefits

5 and minimize the risks. I don't know that you need specifically to have a preparatory session, but I think certainly being in the presence of someone who isn't taking a psychedelic I think is quite critical, and ideally in the presence of someone who has some experience, like a shaman or a curandero or a western facilitator, that would be ideal.

10 Q. In a clinical trial in which someone's being treated for treatment-resistant depression, how many people, at least the way you guys see things, how many people should be or are present?

15 A. We have two people who do the preparation with the person during the trip and who do the integration session afterwards. We do that because we were pioneers, and we wanted to put safety at the forefront of what we were doing. Other groups use one individual, but if you use one person, you need to have someone who is an experienced, either psychiatrist or
20 psychologist, to be present in case there are challenging psychological experiences. One of the reasons we have two present is so that we can use it as training because if the requirement is to have someone who's trained and there's only one person, then you can't train others in the experience. But certainly one would be the minimum, two I believe, is ideal. But I should say, Mr. Lewin, there are one or two good examples in
25 research now where psilocybin has been administered in groups, groups of four people, with one psychiatrist or therapist present as well rather more like the model that is used in ceremonies and retreats.

Q. And is that a viable model, the group?

30 A. Well, I think there are - we saw from the communitas paper that actually in a group you will get a sense of group feeling of community which may in itself add value to the experience. I know from talking with large numbers of people

5 who have been seeking treatment, particularly for PTSD disorders, using ayahuasca or psilocybin, that being in a group of individuals who suffer from the same problem, and that's usually victims of war, being a veteran, a group setting can actually give added value. And the reason for that I think is straightforward, that the majority of combatants work in small groups, platoons, and they're damaged in a group, and healing in a group seems to be easier than healing alone.

10 Q. In a clinical trial for a person with treatment-resistant depression, how many integration sessions are necessary for such a person?

15 A. We cannot say necessary because we haven't - no one's done experiments with different numbers of integration sessions. What we know is that our patients find them very important. We give a minimum of three but the constraints there are purely economic, the research grants don't give us the resources to do more. What has happened with our patients is that some of them have set up their own support groups to carry on giving each other support.

20 There is another model which is being developed and we're starting out ourselves now, which is to take people who are in therapy and bring their therapist into the psychedelic treatment as a sitter, as a guide, to allow them to see and to learn about the psychedelic exposure and be part of the integration sessions and then take back full control or the full relationship with their patient after the experience. That then means there's a continuity of care, psychotherapeutic care right through the medical treatment period, which I think could end up being potentially more secure and maybe more effective than separating them and putting them back into care.

30 Q. How important is record-keeping in a psilocybin clinical trial?

5 A. Well, record-keeping is important in any clinical trial, it's obviously very important in any clinical interaction. I don't think it's any more important in a psychedelic trial than in other trials. What is important is that people are present all the time during the experience.

Q. Okay. So, now - actually, I didn't ask you this but how important is integration for a healthy person?

10 A. Well, that's a difficult question to answer because there haven't been any systematic studies, but by and large, our experience in our healthy studies like the Insight Study where we gave integration, we found that individuals did enjoy that, they wanted to talk about the experience. One of the challenges of taking psychedelics and coming to insights, you know, having your thoughts freed up is that afterwards it can be quite difficult to communicate with other people exactly
15 what it was like. If someone hasn't had a psychedelic experience, they don't know what you're talking about and therefore get a bit bored with people raving on about the way that they have touched God or seen the universe, and those are important things
20 to the individual. So, having someone to talk to about the experience afterwards is generally something that people benefit from, would desire, I think ideally would be provided. But of course, if you're in a ceremony in Peru, well you can talk to the others that were there after breakfast the next day or whatever,
25 so you know, that kind of community bonding in a setting where you're isolated from others probably provides enough post-trip experience. But others go on - there are now therapists who are available, you know, you can find them on the web, you know, who help people make deeper integrations from trips that, you
30 know, they can sign up and have counselling or therapy to help them optimize the mental benefits that they believe they can get from having had the trip.

Q. You've already indicated that serious adverse events from unsupervised psilocybin use is extremely rare. My final question to you, how can we further reduce the likelihood of these rare events?

5 A. Well, there are several ways we can do that. The first is education. The second is ensuring that people have access to the right dose, that is not easy in a situation where in most countries the mushrooms or the psilocybin is illegal. But I'm particularly interested in what will be the outcomes of the Oregon model. As you may know, Oregon voted well, four 10 years ago now, to allow psilocybin - to allow mushroom treatment centres or experiential centres to be present across the state. And most jurisdictions, localities in Oregon have gone along with that, and so there's a network of what they would call wellbeing centres that are gonna use mushrooms plus therapy, 15 or plus presence, or plus community support, to help people experience mushroom treatment or mushroom experiences, with a view to improving wellbeing, and I think that's a really powerful model. And I am pleased that currently the US government is going to allow proper evaluation of the outcome, which they 20 wouldn't necessarily have done in the past. I think there was a lot of interest in psilocybin as a way of improving wellbeing and also resilience because mental health problems are growing and if we can give people resilience then they may have - be 25 less vulnerable to them.

Q. So, going back to my question then, you said number one is education. And how does that compare to preparation or is that just another way of saying preparation?

30 A. Well, yeah, I mean self-preparation I suppose. Education would be self - people should know what the risks and benefits of psilocybin are. And that information should be available honestly, transparently, so people can read about it.

I mean, a lot of people won't want to have a trip. It's not something you should insist that people have or impose on people. People need to know the truth and they should get that truth - they can get it from books, including one I've written, they can get it from the web. If they can go retreats, get it from the people who are running the retreat. So, I mean, people should be educated about any intervention which might affect their mind or their health. I mean, that would apply to any medicine or any piece of surgery, etcetera. So, that's what I mean by education, knowledge of the benefits, the procedures and the possible risks.

Q. And then you mentioned the right dose. Is that about knowing what you're getting?

A. The right dose is knowing what you're getting and there's growing interest in using non-psychedelic doses for wellbeing, particularly to facilitate engagement in therapies which are difficult, like behaviour therapy for OCD. We've just completed a study where people have a 10-milligram psilocybin dose, they don't have a trip, they don't hallucinate at all. And the reason for that, by the way, is because our patients with OCD said there was no way they were going to take a trip. They didn't want to lose control, even though we thought losing control might be helpful in getting them overcoming their obsessions, so we settled on a non-hallucinogenic dose. But for many of them it was actually quite a meaningful experience in the same way as I recounted yesterday, in the Goodwin study a 10-milligram dose did actually occasion quite a lot of mystical experiences in some people, and they were of therapeutic value. So, I think over time people will understand that there may be a different dose for a different desired outcome. But the other thing they need to know is they need to know what the dose is, and they need not, ideally not exceed it. So, though psilocybin is very

safe, we know that if you push the dose up beyond 30 milligrams then you don't get better effects but you get more side effects, so that's why we settled on a 25-milligram dose.

5 Q. And when you say right dose, does that - of course it's important to know what they're getting, but does that provide any kind of - does that do anything in terms of their anxiety going in, knowing they're knowing?

10 A. Undoubtedly. I mean, I think they do know when we're doing the studies that the dose is safe, but I think anticipation of bad effects with psychedelics is a strong predictor of having bad effects, and unknowing the dose is one of the greatest uncertainties and anxieties of people who are using psychedelics.

15 Q. And so, you mentioned education, the right dose, you've mentioned this previously in your evidence, should someone be present?

20 A. Yes, I've said many times, it's in my book, that people should not take psychedelics without there being someone who is not taking them present with them.

25 Q. Does this need to be at a facility?

30 A. No, it doesn't need to be at a facility, no. You just need to be safe, because in the relatively unlikely event of someone having a bad trip, then you need someone to reassure you and maybe occasionally seek help. And I think that is particularly true for someone who has not taken it before. I mean, there are clearly some individuals who become very experienced and are perfectly confident in coping with whatever psilocybin might induce in them, but certainly for a first timer I would strongly caution against using the drug alone. Or in situations where you are at risk, such as sitting on the edge of the sea or a lake, or being high up in a tree, or a cliff. The best way

to avoid harm is to avoid being in situations where accidental decisions could lead to harm.

Q. Should there be any kind of screening? We've talked about screening.

5 A. Yes, my view is that - and I've said this for, you know, over a decade now, based on the analysis we talked about in *The Lancet* paper, given the remarkable safety of psilocybin, and particularly its being, on our estimates, between eight and ten times less harmful than alcohol, it seems to me inexcusable that it should be denied to people who might want it. But the best way of doing that, I believe, is to have a licensed access in the way they do with truffles in the Netherlands so that people know what they're getting. I would be very comfortable with individuals being required to have a medical certificate of approval to say that their doctors do not dissent from them having, purchasing a dose of psilocybin. And I think one could also have a smart card which could potentially limit the number of doses you could get in a year, so avoid people accidentally collecting them or deliberately collecting them and having more. I think there are ways we could make what is actually a very safe drug even safer.

10 15 20 Q. And who would be the people who are screened out in that situation?

25 A. So, people who are currently psychotic, that would be an absolute. I mean, as I've said, we have always avoided taking anyone who has a first-degree relative who has been psychotic. We may have been over-cautious, but you know, that is better than being cavalier. In time, it may - we know that the majority of people who have psychotic parents do not become psychotic, so it may be as we learn more, that even people who have that vulnerability in their family might be able to have access.

30 But at present I think we should recommend strongly that they

do not take psilocybin. And were it to become legal, I think we would counsel them against that and hopefully most of them would listen.

5 And then there are medicines. There are some medicines which - certainly the one that we know is problematic with psilocybin is lithium. Now, most of those people would be excluded. People on lithium would be excluded because they have been manic, which is psychotic, so they would be excluded anyway, but it's conceivable that there are others who are on lithium
10 for other reasons who we might want to not allow them to - or recommend they shouldn't take psilocybin.

Q. And in terms of consumption of alcohol or other drugs, is that...?

15 A. Yes, I think it's very - it's very wise not to mix psychedelics with other drugs, because other drugs can distort the way you react. And certainly, drugs which impair your cognitive function rather than open it or expand it like psychedelics, drugs like alcohol, we know they are strongly associated with very poor decision-making, impulsivity, which
20 potentially could be more dangerous if you're on a psychedelic. I think there's also the chance that they might also impair the benefit of the psychedelic too.

25 P. LEWIN: All right. Well, thank you, Professor Nutt. Those are all my questions, and the Crown will have some questions for you.

THE COURT: All right. Well, let's take the morning recess now for 20 minutes and then we'll return. Thank you.

30 K. BENZAKEIN: Thank you, Your Honour.

U P O N R E S U M I N G :

DAVID NUTT: PREVIOUSLY AFFIRMED

THE COURT: Yes, good afternoon. Yes, Ms. Benzakein, when you're ready then.

K. BENZAKEIN: Thank you, Your Honour. Just setting myself up for success technologically.

CROSS-EXAMINATION BY K. BENZAKEIN:

K. BENZAKEIN: All right. Good afternoon, Professor Nutt. How are you?

WITNESS: Well, thank you, apart from my leg.

K. BENZAKEIN: Excellent. Well, please be sure to let us know if you need a break and I'm sure His Honour will be happy to accommodate it. So, my name is Kerry Benzakein, I'm one of the prosecutors on this case. And I'm not a scientist, so you're the expert that we have here and if there's something I misstate or have misunderstood, I encourage you to correct me, and it will not be with malice but rather with ignorance.

Q. So, I'm gonna start with some background matters just so that we're all operating from the same starting point. So, first, as you may know, the court has already ruled that the evidence that was heard back in 2024 on this matter on the *voir dire*, that that could apply on the trial, so feel free to refer back to it. I may refer you back to it. Have you had an opportunity to review the evidence that you gave during the *voir dire* proceedings?

A. I have not reviewed that.

Q. Okay. I have a transcript of it, so if you should have a question about something you said before, all you need to do is ask and we can get that to you right away, okay?

So, that's the first thing I want to go over with you. The second thing is I'd like to know what you have with you today?

A. I have what?

Q. What do you have with you today where you're seated in your office there to give your evidence?

A. Oh, I have all the exhibits and that's it.

Q. Okay.

A. And a glass of water.

Q. Excellent. So, you have all the exhibits that are referred to in your affidavit?

A. Correct.

Q. And the materials that you referred to yesterday and today?

A. Correct.

Q. Do you have any other studies or reports that we so far haven't touched on in this proceeding?

A. Yes, only one that was mentioned in the affidavit, which is the Schlagg paper but that's in the affidavit. Schlagg, that's in the affidavit.

Q. Yes, okay. So, nothing else with you?

A. No. No.

Q. If you haven't mentioned it yet in the last day and a half, you don't have it?

A. I don't have it with me, no.

Q. Okay, terrific. Thank you. Is there any material that you collected after testifying on the *voir dire*?

A. Um, I'm not sure there was anything - no, I think even the Insight Study was out by then. I don't think we have any new studies, no.

Q. So, let me ask this a different way. You swore an affidavit, and you made reference to several studies in that affidavit, right?

A. Yes.

Q. And Schlagg, as far as I can see, is the last - that's Exhibit F, so that's six - that's actually five studies that you refer to and that are appended to your affidavit, right?

A. Correct.

Q. Okay. The sixth item is your CV, right?

A. Yes, I have that too.

Q. Okay. So, we have these five appendices that are effectively medical studies and population studies, but then when we come to, you know, this week, we have an additional two dozen studies that have also been produced to us, right?

A. Yes.

P. LEWIN: Objection, Your Honour. Perhaps the witness could be excused?

THE COURT: All right, thank you. We'll just excuse the witness for a moment, Madam Clerk.

... WITNESS EXCUSED

THE COURT: Yes?

P. LEWIN: So, maybe I jumped the gun a little bit but I recall from Professor Walsh, who was asked about communications between him and I, and I think what my friend is gonna be asking is why did I put to him these other studies, and what she seems to be getting at which is squarely in litigation privilege, that - like, there's a million things she can ask him about to do with psilocybin but if she wants to know about communications between him and I and why I put certain studies to him that weren't in the original affidavit, that is litigation privilege. I've got a case from the Supreme Court of Canada here. That appears to be where she's going. I say this

partially based on her questions to Walsh. I should have objected with Walsh, I sat on my hands, but I'm not gonna do it this time.

THE COURT: Ms. Benzakein, where are you going with this questioning?

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K. BENZAKEIN: Well, I'd like to know if Professor Nutt selected these studies and reports based on the questions he heard at the *voir dire*, or conversations he had with my friend. It goes to bias impartiality, which was deferred, shall I say, at the expert *voir dire* and questions of credibility because there are, as my friend says, hundreds and hundreds of studies out there, Professor Nutt has said there are thousands. And the reason that some were picked over others I think is relevant to assessing his credibility. It's not the most important thing, but I don't think it counts as litigation privilege to ask why certain items of information among thousands, we have these two dozen to rely on.

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THE COURT: Well, I mean, the fact of the matter is that he's been referred to a number of other studies, that's just a fact practically speaking, do we need to know why he's referring to these studies as opposed to others beyond the fact that he is referring to these studies and not others? I mean, you're going to say, Look, you referred to this particular study, but you didn't refer to that one. Isn't that really the issue or do we need to know why. I mean, you can ask him, 'Why didn't you refer to this other study? Why didn't you refer to that other study?' Without going into why he referred to the particular study in question. Isn't that possible? Would that not avoid the issue?

K. BENZAKEIN: I can, thank you.

5 THE COURT: Mr. Lewin, would that satisfy you? I mean, we're not going to be asking why he referred to this particular study, but I mean, the fact is you referred to this study, but you didn't refer to that one, right?

10 P. LEWIN: No, I think that's a reasonable question, 'Why didn't you mention this? This is really important', perfectly reasonable. But not 'Why did you refer to what you did?' So, yeah, I'm in 100 percent agreement with Your Honour.

15 THE COURT: I mean, he may in fairness, say because it wasn't referred to me by Mr. Lewin, he only referred me to this one. I don't know what he's going to say, but I mean, the point is he may be familiar with other studies which conflict with the ones that he's told us about, and the fact will be, I suppose, that he hasn't referred to those other studies that he knows about.

20 P. LEWIN: Yeah. I mean, I guess - Your Honour brings up a good point. It kind of depends on - like, if the point is there's some contrary study that he didn't acknowledge that could go to - and he's wilfully ignoring that science, then that's a fair question.

25 THE COURT: Right.

30 P. LEWIN: But anything getting towards why I chose to put certain studies to him and not other studies is litigation privilege.

THE COURT: All right. Well, it sounds like, Ms. Benzakein, you don't really need to go there at

5 this point. If that changes, let us know and we can argue the issue of litigation privilege. But I mean, at this point if you're going to say, 'Look, here's another study that says something different than the one you've been referred to, are you familiar with this study?' 'Yes.' 'You didn't refer to it in your evidence. Is there a reason why you wouldn't have referred to this evidence which is in conflict with the evidence that you've given.'

10 K. BENZAKEIN: I'll say, Your Honour, that I don't anticipate - I don't have the same breadth of knowledge as the witness has, so I'm really not in a position to ask him those questions if he hasn't been directed to them. I will say - and I would have to really refresh my memory about litigation privilege, but that I would like to ask how he chose the studies that he referred to. And I'm saying this now because if my friend is objecting to that, then I don't want to ask the question now without -
20 you know, without again, having an opportunity to refresh my memory about litigation privilege. So, I'll just ask my friend is that something that would generate an objection?

25 P. LEWIN: Absolutely. Litigation privilege is about there being a zone of privacy where you can prepare for a case, and you don't have to worry about questions or document disclosure. We have the zone of privacy and that's a hallowed, a very important privilege which the Supreme Court of
30 Canada has upheld. It's part of the adversarial system. In order to prepare properly, you have to

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have your zone of privacy. And if the other side is allowed to ask questions about that zone of privacy, this is right bang on that in which 'How did you guys decide on these?' Well, that was the legal decision that I made. I put certain studies to him. That is absolutely litigation privilege. So, I would be opposed to that question.

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THE COURT: So, do you intend to ask that question and require a ruling from me? If that's the case, I'd like to see some case law on it from you, Mr. Lewin, but....

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K. BENZAKEIN: I think, Your Honour, if I may suggest, let's put a pin in this. There's a lot of material, and if my friend wants to forward me the cases he'll refer to, I'll read them tonight and then I'll move on...

THE COURT: All right.

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K. BENZAKEIN: ...and then I'll return to this later, if I'm not convinced by my friend's....

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THE COURT: All right. So, why don't we do that, Mr. Lewin? You can discuss it tonight, send whatever case law you have to the Crown, and if necessary to myself as well through our judicial secretary, and if it needs to be argued we can do that tomorrow morning and you'll hold off, Ms. Benzakein, on asking that particular question. So, thank you, that would be of assistance. All right?

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K. BENZAKEIN: Thank you, Your Honour.

THE COURT: All right, let's bring the witness back. Thank you.

... WITNESS REJOINS

THE COURT: All right, thank you. Ms. Benzakein, continue then.

K. BENZAKEIN: Thank you.

5 Q. So, Professor, I want to just get through a few more preliminaries. I just want to know what you got, what you know, before I move into substantive questions. So, did you review any of the material that the Crown filed in this proceeding?

10 A. I read the reports, yes. I've forgotten the name of who he was. There was, I'd agree that Crown reports, yes.

P. LEWIN: I'm not sure that he's talking about - that you're both talking about the same thing.

THE COURT: Well, let's find out.

K. BENZAKEIN: I will clarify. Thank you.

15 Q. Who wrote that report that you read?

A. Um, I don't have it with me, so do you want - maybe um....

20 Q. Let me see if I can help you. Was it written by Dr. Rosenblatt?

A. I don't remember, I'm afraid. I haven't read it recently, so.... I read it before the last meeting, I think.

Q. Do you have a way to dig up a copy of what you reviewed?

25 A. Um, well, if it's on my computer I suppose I can have a look. Well, can you share it with me now. I'll just see if I've read it. I honestly - that was some time ago.

30 K. BENZAKEIN: You know, perhaps I could just speak to my friend very briefly in a breakout room and we can figure it out without needing you to tax your memory. Would that be agreeable, Your Honour?

THE COURT: Sure. Put Ms. Benzakein and Mr. Lewin into a breakout room briefly.

COURT CLERK: Yes, Your Honour.

... PAUSE

K. BENZAKEIN: Thank you for that indulgence, Your Honour.

5 Q. Professor, maybe I'm gonna say to you the same thing. If you could, over the lunch recess, try to dig it up. We don't need to use court time for that, but I'm interested in knowing what report you mean.

A. Okay.

10 Q. Have you had any discussions with any of the other proposed witnesses in this case?

A. I have not.

Q. Any discussions with any of the proposed expert witnesses?

A. I didn't know there were any.

15 Q. Okay. And what about any civilians?

A. I have not.

20 Q. Okay, thank you. So, on to some more technical and boring things, in your affidavit you sometimes indicate that you are adopting or relying on a study that you reference?

A. Yes.

Q. And when you say that, I take it that means that you're familiar with the contents of that study?

A. Yes.

25 Q. And when you say you adopt it, does that mean you agree with it?

A. Well, if I say I - yes, I think I do, yes.

30 Q. Okay. I just want to make sure that we're all using the same nomenclature. So, if you say 'I rely and adopt on [sic] this study', you mean 'It's part of my evidence, I agree with it', right?

A. Yes.

Q. Okay. All right, so moving on if we could, to the contents of your affidavit itself.

A. Mm-hmm.

Q. You - I'm just being mindful of my friend's objection before - you wrote this affidavit?

A. Well, I certainly worked on it. I wrote it with Mr. Lewin, absolutely.

Q. Okay. And you read it carefully before you signed it?

A. I did.

Q. You provided the content?

A. I did.

Q. Okay. So, I just want to - I'm gonna sort of walk you through the affidavit in a very broad way...

A. Mm-hmm.

Q. ...to get sort of an overview of what it contains. There are several sections to the affidavit. The first is your background and personal qualifications, I'm gonna suggest that's paragraphs 4 to 20, right?

A. Yes.

Q. And then the next, I'm not gonna get into that with you except in a really cursory way. The second section is basic scientific information about psilocybin, so that's paragraphs 22 to 26?

A. Correct.

Q. And I'm not going to get into that really with you either, the science part, okay?

A. Mm-hmm.

Q. Where we'll start to sort of get really into the meat is starting at paragraph 27 where you talk about the thought-related effects of psilocybin use, right?

A. Yes.

Q. And then in paragraphs 28 to 35, you talk about the beneficial effects of psilocybin?

A. Yes.

Q. And then in paragraphs 37 to 49, the risks of psilocybin use?

A. Yes.

Q. Okay. I'm sure you'll agree with me that you're a preeminent expert on drugs and drug harms, right?

A. Yes.

Q. Perhaps, I think you said at the *voir dire*, that you may be the most experienced person in this area, would you agree with that?

A. Um, in terms of drug harms or....

Q. No, in.... Go ahead, sorry.

A. So, I don't think there's anyone that has both done as much research on psilocybin and psychedelics as me and has broad an expertise and training in the harms of drugs as well.

Q. And you wrote a book about drug harms as well?

A. I have, yes.

Q. *Drugs Without the Hot Air*?

A. Correct.

Q. Can you see it?

A. Yes. Yes.

Q. Okay. And you wrote this book - the most current updated version is from 2020, right?

A. Correct.

Q. Okay. And is the second edition or the second version?

A. That's the second edition, yes.

Q. Okay. So, we may get - do you have a copy of that available to you?

A. I hope so. [Indiscernible] given them all away.

Q. Okay. Well, let's put a pin in this too. Oh, you have it? Okay.

A. I have a copy there, yes. Do you want it now?

Q. No, we won't need it until later.

A. Okay.

Q. I just want to make sure that we have everything we need.

A. All right.

Q. Okay.

THE COURT: Am I getting a copy?

K. BENZAKEIN: Your Honour, so I expect - there are very few pages I want to refer to...

THE COURT: All right.

K. BENZAKEIN: ...if I refer to them at all. And what I'll do is I'll scan and - I don't want to violate Professor Nutt's copyright...

THE COURT: All right.

K. BENZAKEIN: ...so I didn't make copies yet. I wanted to see where we got.

THE COURT: All right.

K. BENZAKEIN: And everybody's grinning, but I was a bit worried about the Crown violating copyright.

WITNESS: I'm very happy if you can make copies.

K. BENZAKEIN: Well, we'll see if we need it.

Q. So, I now want to talk about the MCDA approach to rating drug harms, that was a big part of your work, we got into it in some detail yesterday. I'd like to just ask some clarifying questions. I had misunderstood initially, I thought that you developed this assessment criteria, but it was developed in the context of nuclear proliferation, do I have that right now?

A. No. So, decision conferencing is a new form of what you might call psychological economics. It was developed

in the late, I think late '70s, early '80s by some very eminent economists trying to work out the best way of coming to a decision where you have complex variables and you have pros and cons for each. It then became a methodology which was adopted by the British government to answer a very difficult question: What is the best way of dealing with nuclear waste? And as some of you will know, there are various options, you can dig a hole in the ground, you can shoot it into space, you can store it in huge concrete bunkers over ground. And each of those has their advantages and disadvantages, and each of those also, some of them at least, have impacts on communities.

So, for about a year, I believe, the British government used this MCDA approach, and the expert they used to help work out what the best solution for nuclear waste was was Professor Larry Phillips who was at the London School of Economics, and who has written and may be the world's preeminent expert on MCDA currently for making decisions relating to drugs and medicines. And so, that technology has been proven in complex fields like nuclear waste. And he brought it - he brought it to me to look at the harms of drugs. But I should say, on top of that, he was employed by the European Medicines Agency, the European equivalent of the FDA, for several years to apply the same technology to looking at the benefits and harms of pharmaceutical medicines.

THE COURT: And sorry, his name again, Dr. Nutt, was?

A. Professor Larry Phillips.

THE COURT: Thank you.

K. BENZAKEIN: Q. So, thank you for that clarification. I think I now understand that you, perhaps along with Mr. Phillips or Dr. Phillips, your iteration of the MCDA, what's unique about it is that now you're applying it to experiential drugs or drugs of abuse, now do I have it right? Is that closer?

5 A. Well, that's what - we used it to assess harms of drugs. We have also used it, and I haven't had time to tell you about this, to assess the benefits of drugs too, and he has done that more extensively, but for the purposes of illegal drugs, we currently largely looked at the harms using this technology.

10 Q. All right. And that, I'm gonna suggest, has become the sort of - your MCDA model has become the primary yardstick against which drug harms are measured internationally, is that right?

15 A. Well, it certainly seems to be. It's been adopted in Europe, Australia, New Zealand, Canada, and there's also a study which has yet to be reported, from the USA.

20 Q. The MCDA has been applied to drug assessments in Canada?

25 A. It has, yes.

30 Q. Is there a report that was generated?

A. It's not yet in the public domain.

35 Q. I see.

40 A. But I could say, because it was sent to me yesterday, I think if you wish to see it, I have little doubt that the authors would allow you to.

45 Q. Who are the authors?

50 A. The authors are a group of Canadian experts in addictions. I can - would you like me to tell you who they are?

55 Q. Yes, please.

60 A. Okay. I'll have to just move down a section. So, the first author is - I can probably - hang on here. I haven't been able to [indiscernible]. So, the two authors I can say categorically are J.F. Crepault, C-R-E-P-A-U-L-T, from CAMH.

65 Q. Mm-hmm?

70 A. And Professor Jurgen Rehn, R-E-H-N, from CAMH.

Q. Okay, thank you. We can work with that.

5 A. And as I say, if you want, I can send you an email and put you in touch with them, and I'm sure they would - and I can say also that the results in relation to all the other international assessments are almost identical. And I had no part in that study.

10 Q. Okay, thank you. And I mean, I'm sure you'll agree with this too, given your academic position and your experiential position, you're not just an expert on drug harms, you're one of the most experienced experts about psychedelics and magic mushrooms in particular, you'd agree with that?

A. Well, certainly on psilocybin and psychedelics. We've never studied mushrooms.

15 Q. I'm sorry, never studied mushrooms?

A. No, because our studies - we're not allowed to use mushrooms because we cannot validate or verify the exact quantity in the mushroom. So, we have - all our research, extensive research on psilocybin has been done using the pure molecule rather than the mushroom.

20 Q. Okay, thank you for that clarification because I think often we use them interchangeably. But when you say psilocybin, you mean only the synthetic - the measured synthetic product, correct?

A. That is correct.

25 Q. Okay. And when you say mushrooms, you mean the fungus itself?

30 A. Yes. Well, one of the many, there are several hundred different species of magic mushrooms. And that's one of the reasons, just to sort of elaborate a bit on what I said earlier before lunch, knowing exactly what you're getting is determined by how much mushroom you get and also what's in the mushroom, and mushrooms vary in amount of psilocybin they make.

THE COURT: And I think you'd mentioned yesterday, you spoke of extract and synthetic, are they two different things, I assume?

5 A. So, yes, you can take magic mushrooms, you can extract from them the active ingredient, psilocybin, you can purify it, and then it becomes a powder in the same way as synthetic psilocybin. It's for all practical purposes, indistinguishable.

THE COURT: All right.

10 K. BENZAKEIN: Q. And on that subject, again, I just want to make sure everyone's operating with the same nomenclature. In your evidence about psilocybin access in the Netherlands, you made repeated reference to the truffle of the mushroom. Can you just - what does that mean?

15 A. So, psilocybin mushrooms live underground, they grow underground; the underground bit is called a truffle. It's like other truffles that people dig up and get boars to dig up and eat, but this truffle is white, lives underground and every now and then it sends up a mushroom which is the fruiting body, 20 so the mushroom contains psilocybin and the underground part contains psilocybin. So, the Netherlands decided that the UN Conventions banning psilocybin mushrooms did not extend to the truffle, so they allowed access to the truffle and still stayed within the UN Conventions on making the mushroom illegal.

25 Q. Generally speaking, is the truffle more or less - I'm going to ask this a different way. Is the amount of psilocybin in the truffle of the mushroom the same as the amount of psilocybin in the fruiting body of the psilocybin mushroom?

30 A. It's generally less.

Q. The truffle has less psilocybin than the fruiting body?

5 A. Yes, but people when they buy the truffle they get sold the amount which is equivalent to the mushroom, so it's not as if the truffles have less effect. People titrate the dose of truffle, or they're educated by the shop owners to take the appropriate or buy the appropriate level of truffle.

Q. Okay. Professor, I'm gonna suggest to you that the science of psilocybin took a 50-year hiatus due to its illegality following the 1970s UN Conventions, you agree with that?

A. [Indiscernible].

10 Q. And I'm gonna suggest further that as a result of that hiatus, the renewed science of psilocybin is really in its nascency now?

15 A. Well, I would say two things about that. The science didn't disappear, and the molecular science continued. So, even when it was illegal you could still research it at the bench level, and that is when it became clear that it was working through a particular subtype of serotonin receptor. So, the pharmacology of psilocybin was characterized whilst it was illegal. It's in the last 25 years that the human science of psilocybin has come into a renaissance.

20 Q. So, when you talk about the bench work, that's the work that allowed scientists to isolate the receptor, the five two....

A. [Indiscernible], that's right.

25 Q. Okay. And that.... Go ahead.

30 A. We have known since the early 1950s that LSD was working on some sort of serotonin system, but the receptor - the sophisticated nature of the serotonin receptors wasn't really understood 'til the '70s and '80s, and then with genetic analysis it became clear there were 14 or 15 perhaps subtypes of the serotonin receptor and it turns out that one of them, the 5HT serotonin 2A receptor, is the receptor that is targeted by

5 psychedelics like psilocybin. And that research really began to come to its clarity of targeting in the late '80s, early '90s. And subsequently, we now know an awful lot more about that receptor because not only is it cloned but it's also got its full protein structure analyzed, so we have models of it on our computers and we know where in the molecule psilocybin binds and what it does when it binds.

10 Q. I'm gonna suggest to you that it's really only in the last 10 years that you've been able - scientists like you have been able to assess the impact of psilocybin on humans, do you agree with that?

15 A. Well, no, we did our first study in 2005 or six. Obviously, Griffiths published his first study in 2006, so I think at least 20 years we've been working on it.

20 Q. All right. And despite those 20 years, I'm going to suggest that there's still a lot of work to be done before you fully understand the mechanism of psilocybin on the brain, do you agree with that?

25 A. No, I don't. I would say two things about that. The first is we've got more understanding of how psilocybin changes the brain than we do of antidepressants, and so it's actually quite a remarkable amount of insight we have. And the second thing I would say - and you may think this is not particularly relevant, but we have more understanding of psilocybin than we have probably of any drug that has been licensed as a brain medicine over the same period. The body of knowledge of psilocybin way, way exceeds that of any new treatment for epilepsy or for depression or for anxiety, because the brain systems that it works on are very characterized and its effects are actually quite easy to study so we get - we have very clear insight into
30 what it's doing in the brain.

Q. The number of the authors cited in the studies that have been provided as part of this application, use phrases like, "the nascent field of psychedelic science". That's from Belser, one of the reports my friend mentioned earlier today. Do you disagree with Belser that this field is - and this is from 2017, but do you agree that this is a nascent field, the psychedelic study?

A. I think we've gone from being born, I think we're more now into sort of early teenage years. We're growing and expanding substantially. And I think we can prove that with a number of publications each year. So, I think the field is - it's not necessarily mature, but it's definitely not nascent.

Q. All right. Well, in 2021 Kettner, who was also referred to this morning, called it "promising but preliminary", do you agree with that assessment?

THE COURT: Sorry, in 2021?

K. BENZAKEIN: Yes, it's at page 11 of the study.

THE COURT: And which study was that?

K. BENZAKEIN: Kettner, 2021.

THE COURT: Yes. And that referred to it as?

K. BENZAKEIN: "Promising but preliminary".

A. Well, I would disagree that it's - it's definitely promising, I don't disagree with that.

K. BENZAKEIN: All right.

A. Because clearly - I mean preliminary, I think we're probably referring, I don't exactly know the thinking behind that statement, he is only a PhD student, but I think it would be reasonable to say that we now have seven - he's talking about depression, I believe, and we now have seven, at least seven studies showing that psilocybin can treat depression and we have other studies showing that other psychedelics. So, "promising",

5 I don't know what he meant by "preliminary". As I said in my answer to your previous question, we probably have more data on psilocybin in depression than we had for many antidepressants getting approval to be used as medicines. And on top of that, we've got this enormous literature that Kettner himself was party to generating, of its safety and impact in healthy volunteers. So, our knowledge base is exceptional in comparison with other drugs which might become or have become medicines for the brain.

10 Q. Court's indulgence, please. I just want to make sure I understand your last statement. You're saying the knowledge base in psychiatry about psilocybin's effects, including benefits and risks, far exceeds the evidence of pharmacological treatments for depression, is that what you're saying?

15 A. I'm saying if you were to compare the amount of knowledge of recently licensed treatments for depression and compare that evidence and that knowledge with the knowledge and evidence we have for psilocybin, psilocybin would have greater number of exposures to people, particularly people with severe depression, and a much greater safety database than modern new antidepressants. I think that is unquestionably true.

20 Q. And when you say that, are you folding in the thousands of years of use of psilocybin in Mesoamerica, is that part of your opinion?

25 A. No, I think we can since the late '50s when it was made available for medical research by Sandoz as Indocybin and now as psilocybin, we have just an enormous number of individuals who have been exposed to psilocybin and safely exposed. And I think it would be interesting to reflect on why, given psilocybin was made illegal under the UN Conventions in 1971, why there weren't any papers, or any major papers published showing it does have harms. You'd have thought if people really cared or believed
30 it caused harms, they might have published some papers, but there

aren't any showing any particular problems with psilocybin, which suggests to me that the harms aren't really very great. People would have surely pounced on them to justify the ban if they had found them. I mean, they certainly pounced on them with LSD.

Q. We'll return to that issue this afternoon, the issue of harms in particular, but I'd just like to continue talking about some of the other commentary from your industry about the newness - or the adolescence now, I'll take your - well, it's not by phrase, but your assessment of the research. So, we just talked about Kettner, that's his 2021 report, and in 2022 Schlagg and her colleagues also indicated that there was much work to be done when it comes to understanding psilocybin because the sample sizes remain small, the potential range of risks remain to be fully understood, and the evidence is not yet of the highest quality, do you agree with those statements by Dr. Schlagg?

A. Well, I'm an author on the paper, so I think - I don't disagree with them. I think we can always improve our knowledge; we can always improve our evidence. We were, typically as scientists do, being cautious in what we say. But I think even since that paper was published there's been considerably more data accumulated to support the view....

Q. Well... Go ahead, to support the view of?

A. My view. To support my view that the drug is safe and effective.

Q. So, in 2022 in Gukasyan's paper, she also indicated that there was work to be done because little was known about the long-term efficacy and safety of psilocybin as a medicine. So, I don't have any question for you about this except - well, I suppose do you agree with that, or do you disagree?

5 A. Well, again, this is the kind of caveat and
caution that people - scientists would prefer to err on the
side of caution, but that doesn't mean that harms would emerge
and the same - I mean, I can give you an example. So, over the
same period that I have been working with psilocybin, I've also
been working with another antidepressant called Vortioxetine, a
new antidepressant, similar time period. And we can say confidently
that Vortioxetine was licensed after about 10 years of research
on several hundred people with, I think at the maximum six-month
10 post-treatment data, and without any studies, good studies of
brain mechanisms. So, it was a very focused program to get a
drug licensed, and the data we have for psilocybin far exceeds
that, both in terms of our knowledge of historical safety and
you know, the emerging evidence from trials. I mean, let's
15 face it, our first depression study, we have patients who were
treated with one dose in 2014 who are still well today, and we
haven't seen negative impacts 10 years after that study and
five years after the second study.

20 So, I think it's not really reasonable to say that
there isn't some confidence that these drugs don't suddenly
develop complications in the long-term. And to be honest, it's
pretty hard to see why they would, because you only give them
once, whereas with drugs like Vortioxetine, you're giving it
every day for perhaps decades. So, I think what people are
25 trying to do is not - is not hold themselves hostage to fortune,
but you shouldn't assume that those caveats mean that there is a
real worry behind them, it's more sort of a generic statement, we
can never be sure.

30 ... COURT REPORTER REQUESTS SPELLING

THE COURT: Oh, the antidepressant, can you just us
the name of that, perhaps spell that for us?

WITNESS: Sure. V-O-R-T-I-O-X-E-T-I-N-E, Vortioxetine.

THE COURT: All right, thank you. Go ahead.

WITNESS: Which is on the Canadian [indiscernible].

THE COURT: Thank you.

5 K. BENZAKEIN: Easy for you to say Professor. The rest of us don't have a lot of experience saying it.

10 Q. All right. We'll get into some of the papers that identify limits or harms or side effects, but again, I just want to - I just have one more place I want to take you, which is your own work, the paper you wrote with Lyons and Spriggs in 2024 about human brain changes.

A. Mm-hmm.

15 Q. And in that paper as well you indicate that one of the motivators for running the study was to address knowledge gaps with respect to the physical actions of psilocybin, right?

A. Mm-hmm.

20 Q. You're nodding. Sorry, you just have to give a verbal answer.

25 A. Yes. Yes, that study was designed to ask what is, I think, a fundamental question: How does psilocybin change the way people think in the long term? And so that study was designed to explore the impact of psilocybin in people who've never taken it before or any psychedelic before, and measure the impact on their brain during the experience and then see a month later whether there were changes - enduring changes in brain connectivity and activity that might relate to the beneficial effects of psilocybin.

30 THE COURT: I'm sorry, which study was this you're referring to again. I apologize for interrupting you.

A. It's the Lyons study, the Lyons Insight study. Um....

THE COURT: That's fine.

K. BENZAKEIN: Q. And how many patients did you have in the Lyons Insight Study?

A. Those were healthy volunteers. Those were healthy volunteers.

5 Q. Sorry, how many healthy volunteers did you have? Twenty-eight is what I have noted, is that right?

A. Sounds right, yes.

10 Q. So, I'm gonna suggest that this study was conducted in order to try to answer the question how does psilocybin affect the brain in a mechanistic way? Is that right?

A. Correct.

Q. And you tested 28 people, right?

A. Yes.

15 Q. And are you now saying that the results you got from those 28 people filled the knowledge gap that you were seeking to address?

20 A. Well, they certainly moved it on a bit, yes, because they showed two - they showed, yes, there were changes in connectivity which there were changes in mental experience in a positive direction, that the experience during the trip and the physiological measures during the trip also predicted the psychological benefit subsequently. And so, it was really the first study to show clearly that psilocybin could produce enduring changes in the brain, consonant with its reported
25 beneficial effects, so that's quite remarkable.

30 Q. Is it your position today that you went from seeking to address knowledge gaps in the physical action of psilocybin before the study, to now understanding those gaps have been filled?

A. Well, there's - certainly the findings we had in that study accord very well with other studies which have looked at the mechanistic effects of psilocybin, but it was an

5 unusual study, a special study because it was done in people who were psychedelic naïve. Up 'til that point many of the brain imaging studies had, of necessity, involved people who had taken psychedelics before because it was thought challenging and possibly unethical to give people psychedelics, particularly in a scanner if they'd never had them before because they could potentially find the environment challenging and the experience challenging. Having shown it was possible to do studies looking at the brain under psychedelics in a brain scanner, we then took on the challenge of doing it in people who've never had them before, with a lot of preparation but with the success that we're confident now that those changes occur the first time you take a psychedelic. And that's why that study is particularly important.

10
15 Q. I just want to try to sum up this area by sort of reflecting back to you what I understand your evidence to be. So, you're of the view that there is more evidence - more information about the way psilocybin works on the brain than there is about any other medical intervention that's been licensed to date, is that right?

20 A. Yes.

Q. Okay. Okay, I understand.

A. And I can explain why, if you like.

Q. Sure.

25 A. So, just to say we have been prescribing antidepressants for 70 years, nearly, and we still do not know how they work in the brain. We know their pharmacology, but we cannot measure reliably a brain signature of their effect nor their benefit. We've been doing the same for 70 years with drugs for ADHD, and for 70 years for drugs for psychosis, and we still cannot use imaging technology and answer the question how are these drugs actually changing the brain? But with psychedelics we can. Now, that is in part because psychedelics do change the

30

brain in a way which is both acute and powerful. But I would say that our knowledge of how psychedelics work is better than that of any antidepressant, anti-ADHD treatment, antipsychotic we have today.

5 K. BENZAKEIN: Okay. Thank you. Your Honour, it's five to 1:00....

THE COURT: All right.

10 K. BENZAKEIN: I would next get into a different area, so I would ask that we take the lunch recess now, if you don't mind.

15 THE COURT: That's fine. I'm just in terms of scheduling Ms. Benzakein, you expect to go into tomorrow with your cross-examination of this witness, and as I understand it, is tomorrow our last day of evidence that we have, because I thought we'd given the rest of the week back to the court, but I could be wrong.

20 K. BENZAKEIN: We gave the week of March 3rd back to the court, next week.

THE COURT: All right. So, you're expecting to continue on Thursday and perhaps Friday of this week?

25 K. BENZAKEIN: We hope not. We are going a little bit slower than we'd anticipated, but we do have - we hope that the next witnesses will be a bit briefer. I do think I'll go into tomorrow with Professor Nutt, but I don't think we'll need Friday but now I do think we might need Thursday.

30 THE COURT: All right. All right, that's fine. Let's return then at 2:30. Thank you.

K. BENZAKEIN: Thank you.

U P O N R E S U M I N G :

THE COURT: Good afternoon.

COUNSEL: Good afternoon, Your Honour.

5 THE COURT: Yes, so before we get started this afternoon, I was just checking my schedule. If we do not finish the evidence tomorrow, would it be possible, if we need another day, to continue on Friday as opposed to Thursday?

10 P. LEWIN: That's fine with me. Well, it depends on the witnesses being called, but....

THE COURT: Right. I guess that's my question, Ms. Benzakein, you have two witnesses, I think, is that correct?

15 K. BENZAKEIN: Yes, Your Honour. I will have to defer to Mr. Mazza since he's been corresponding with them.

20 THE COURT: All right. I thought we were going to be done on Wednesday, tomorrow, and so I've been booked in for the next two days at another court. I can get out of Friday, but Thursday might be an issue, so....

25 V. MAZZA: I think what's most important - and I alluded to this when we last spoke about our order of operations that Dr. Rosenblatt may be completed tomorrow. I can inquire with the remaining two civilian witnesses who I think - I think will be relatively short, especially as compared to all our other testimony so far. I imagine that both of them would be at most 45 minutes in and out, but....

30 THE COURT: All right. Well, let's revisit. Maybe you can revisit the matter tomorrow morning, you can check and see what their availability is, Mr. Mazza.

V. MAZZA: I'll email them now about Friday.

THE COURT: All right.

V. MAZZA: But again, the only disclaimer I need is that Dr. Rosenblatt will hopefully and can only continue tomorrow.

THE COURT: He can't continue Thursday or Friday?

V. MAZZA: Not - I can ask about Friday but again, just given his practice, tomorrow was the day that we very specifically allotted for him.

THE COURT: Okay.

V. MAZZA: I'll ask nonetheless, but I think that's what he might just say.

THE COURT: All right. Well, let's revisit that tomorrow then. All right, so we'll continue with cross-examination then, Ms. Benzakein. Go ahead.

K. BENZAKEIN: Thank you, Your Honour.

DAVID NUTT: PREVIOUSLY AFFIRMED

CROSS-EXAMINATION BY K. BENZAKEIN CONTINUES:

Q. Getting myself back to where I was. All right. I want to move on now to trying to get some agreement on some points that I think are not controversial. So, first, you agree with me that all drug use carries risks, right?

A. Well, yes, as does drinking water.

Q. Yes, of course. But I'm actually going to ask that we stay away from the relative risk for a moment. I'll have lots to say about that, I know you do too, but I'm just trying to get some ground rules set. So, the use of all drugs carries some risk, right?

A. Mm-hmm. Yes, correct.

Q. And the use of psilocybin carries risk, right?

A. Correct.

Q. And you'd agree with me, I hope, that the best way to assess safety of medication in humans is to conduct clinical trials, right?

A. That is completely wrong.

Q. Okay.

A. Clinical trials do not determine safety. They measure side effects, adverse effects, but they don't give you a measure of overall safety because they are conducted in [indiscernible] small numbers of people or over short periods of time. To know the true safety of any medicine you have to ideally have a couple of decades of use, that's the only way you can be absolutely sure any medicine is safe. Of course, as we just agreed, no medicine is safe, so in the end over time, data is collected from all medicines and a determination is made whether benefits outweigh the risks, and if they don't the medicine is then removed from the [indiscernible].

Q. I'm gonna suggest to you that when it comes to pharmaceutical and drug safety, that the gold standard for testing efficacy and safety is a double-blind, placebo-controlled trial, do you agree with that?

A. No, I've just explained that safety has - RCTs are not capable of assessing safety. The way drugs' safety is determined, and new drug safety is determined through doing trials, some of which may be RCTs, to a point where there is enough evidence of efficacy, and then afterwards, post-marketing surveillance takes place to look at safety.

THE COURT: But prior to approval...

A. No, after approval.

THE COURT: No, but to approval, the best method for determining risk, I think is that what you're asking, Ms. Benzakein, prior to approval?

K. BENZAKEIN: Yes, thank you.

5 A. Well, certainly a placebo-controlled trial will give you a comparative - a comparison of the risk of adverse effects of a drug versus the adverse effects of placebo, and that's an important consideration, absolutely. But I could also point out, as you might expect, most drugs are licensed after trials against comparators which, to be honest, is why our study comparing psilocybin with Escitalopram is particularly important in this discussion because it showed very clearly across most of the adverse effects psilocybin essentially performed better than the gold standard currently used antidepressant in terms of adverse effects in a randomized controlled trial.

10 K. BENZAKEIN: Sorry, I'm going slowly because I want to make sure that I'm accurately putting my suggestion to the witness, Your Honour, in circumstances where my knowledge does not go that far.

15 Q. When it comes to licensing medicines, you've told us that you're confident that psilocybin is safe in part because of the use of Indocycin as a licensed pharmaceutical, have I got that right?

20 THE COURT: The use of what?

K. BENZAKEIN: Indocycin, the Sandoz - actually, I think the Professor's - that's how it reads but I think that's not how it's pronounced.

25 Q. Anyway, in any event, the Indocycin drug that was marketed by the pharmaceutical company Sandoz, that contributed to your opinion that psilocybin is safe, right?

A. It certainly does, yes.

30 Q. All right. And I'm sure you'll agree with me that before Indocycin could be sold, it had to undergo rigorous tests by the FDA, right, the Federal Drug Administration in the United States?

A. I think it didn't. I don't think any drugs at that time went through rigorous testing by the FDA because the principle of testing that you're alluding to really didn't emerge until the late '60s, early '70s.

5 Q. All right, I understand.

... COURT REPORTER REQUESTS SPELLING

Q. As a matter of drug regulation in Canada....

THE COURT: Sorry, just one moment.

K. BENZAKEIN: I'm sorry, Your Honour.

10 THE COURT: Can you spell Indocybin?

K. BENZAKEIN: I-N-D-O-C-Y-B-I-N.

WITNESS: Your Honour, just to be clear, that is just a trade name for a psilocybin tablet...

THE COURT: All right.

15 WITNESS: ...manufactured by Sandoz.

THE COURT: All right. So, it's just psilocybin in tablet form?

WITNESS: Correct.

THE COURT: All right.

20 K. BENZAKEIN: Q. I'm gonna suggest to you, Professor, that we'll hear that drug regulation in Canada is premised on clinical trials testing safety and efficacy. Do you know anything about that? Can you assist us with that?

25 A. Well, I have no doubt that Canadian regulators apply very similar rules to other regulators, you know, I think they're equally competent as Americans and British and Europeans and Australians, yes.

30 Q. So, I'll just break down the question a little further. I'm gonna suggest that what the regulators are testing or sorry, assessing is both safety and efficacy using placebo-controlled clinical trials, can you assist us with that?

5 A. Well, very often they use placebo-controlled trials but there is no absolute requisite, I don't believe, in any regulatory system to insist on placebo-controlled trials, but very often they are used and they are the only way to clearly distinguish the true level of adverse effects from those that occur under placebo, yes, that is correct.

Q. And you'd agree that that is again, the gold standard for proof of adverse effects?

10 A. Well, it is the gold standard for looking at the comparative frequency of adverse effects against no treatment, correct. But it isn't the measure of safety, which is what, if you're alluding to safety, that is, it is a very poor measure of safety, but it is a measure largely of tolerability.

15 Q. All right. Does the phrase "first in humans" mean anything specific to you?

A. Well, yes, it means the first time a drug is given to humans is the first in-human experiment.

20 Q. Okay. So, you've already agreed with me that all drugs, use of drugs carries risk and I'm sure you'll agree with me also that the use of psilocybin also carries risk, right?

A. Correct.

Q. Okay. And I think you'll also agree with me that the risks posed by psilocybin are more than zero, right?

25 A. Yes, but as I might point out, less than water, so that is, I think, is an interesting comparison. In Britain seven people a year die of water intoxication. It's not banned because there are benefits of water, even if it's not a medicine. So, the idea that any - you know, if you are alluding to the -
30 if you're leading - coming to the conclusion that an harms preclude the use of a medicine, then you're clearly - that is obviously wrong because all drugs can cause harm as we've established and

therefore all medicines can cause harm, and therefore all licensed medicines can cause harm. So, it's about how much harm, not whether they can cause harm.

5 Q. I understand. So, in furtherance of your - I want to get back to the MCDA comparisons that we went over, or that - yeah, you went over yesterday with my friend, Mr. Lewin. So, we heard about the purpose of this - and you helped, thank you, to clarify my understanding - of this analysis method. So, I understand that over the course of several years, your team, sometimes with you involved, sometimes with you just supervising, 10 conducted the MCDA analysis in three geographical locations, right? The UK, that's the original one, Australia and then Europe, right?

15 A. So, the order was the UK, Europe, Australia, New Zealand and now Canada.

Q. Okay, so....

A. Sorry....

Q. Go ahead.

20 A. I just wanted to say, I have now located the full list of the Canadian experts, which I've mentioned in the chat. If you want it, I will supply that to you now or after.

Q. Okay, I'm not sure that there will be the opportunity to take it in as part of this hearing, but I appreciate you doing that.

25 THE COURT: Sorry, could we just stop proceedings?

K. BENZAKEIN: Yup. Of course.

THE COURT: Madam Clerk was just alerting me to the fact that the accused is offline.

30 K. BENZAKEIN: Oh. I'm sorry, Your Honour, I didn't notice.

THE COURT: Madam Clerk?

... PAUSE

P. LEWIN: I just messaged him, Your Honour.

... PAUSE

P. LEWIN: I'm going to try phoning him, Your Honour.

I'll just put myself on mute.

THE COURT: Please. Thank you.

... PAUSE

P. LEWIN: He's joining now, Your Honour.

... PAUSE

THE COURT: All right, Mr. Akila is now back in the Zoom meeting, thank you. Continue.

K. BENZAKEIN: Thank you, Your Honour.

Q. So, sorry, just before the interruption, you indicated that the order in which these reports - these analyses were conducted were first in the United Kingdom, then in Europe and then in Australia, and is Australia combined with New Zealand or is it New Zealand a fourth study?

A. That is a fourth study, it was published last year.

Q. Okay. And then you indicated Canada but that's not fit for public consumption - or that's not approved for public consumption yet, is that right?

A. Yes, it's about to be submitted, I believe, for review but I think the authors would be pleased to share it with you if you were to approach them.

Q. All right. Okay. So, I hope I won't have to pull up the charts because I'll be incredibly bad at it, but I think we can probably just discuss the results, we did see the charts earlier. So, in all three studies that have so far been filed, you'll agree with me that a score of zero means no harm, right, a rating of no harm?

A. That is correct.

Q. Okay. And in the three studies that have been produced in this trial so far, none of the substances tested scored a zero, right? Sorry, yes?

A. Correct. That is correct.

Q. Okay, thank you. Sorry, I didn't you.

THE COURT: Sorry, when you said three studies, there's a number of studies that have been submitted.

5 K. BENZAKEIN: I'm sorry, Your Honour, the three MCDA studies, so I'll be more specific for the record. So, the first is the one from the United Kingdom, that's Appendix D to Professor Nutt's affidavit.

THE COURT: Yes?

10 K. BENZAKEIN: And in that study... well, I'll complete this for Your Honour. And then the second study is the "European Ratings of Drug Harms", that's Exhibit 5 on these proceedings, it was tendered during Professor Walsh's evidence.

THE COURT: Mm-hmm?

15 K. BENZAKEIN: And then the third, which is the last one we have in evidence, is the "Australian Drug Harms" study, that's Exhibit E to Professor Nutt's affidavit.

20 WITNESS: Appendix E.

K. BENZAKEIN: Oh, I'm sorry, yes, Appendix E.

THE COURT: D?

K. BENZAKEIN: Yes, Appendix E to Professor Nutt's affidavit.

25 THE COURT: Yes, all right. Thank you.

K. BENZAKEIN: Thank you.

Q. So, in all three reports a drug that scored a zero, that's a rating of no harm, right?

A. Correct.

30 Q. Okay. And in all three reports psilocybin is rated one of the least harmful drugs and sometimes the least harmful drug, right?

A. That is correct.

Q. And in your report, the UK report, the score that psilocybin received was a six, right?

A. I need to double-check.

Q. Sure.

A. (Pause) Well, I'll take your word for it. I'm sure you're reading it correctly.

Q. I hope so.

THE COURT: Is that Appendix D or Appendix E?

K. BENZAKEIN: That's D like David, Your Honour.

You'll find it on page 107 of the application record, and Professor, I don't know how you have it.

WITNESS: I have it now.

K. BENZAKEIN: Okay, great.

WITNESS: Six, correct.

K. BENZAKEIN: Q. You agree it's six?

A. Yes.

Q. And then for the European study, it's a little harder to say, but I'm gonna suggest it's between four and five. Do you have a copy of that study?

A. I do. I do.

Q. Okay. It just isn't the same numbering system, you see that?

A. Yes, four to five.

Q. Four to five. And then finally with Australia, the rating was a five, but it's with LSD, right?

A. Correct, it's a five with LSD, yes.

Q. All right. And when you were giving your evidence yesterday, you told us, and I understand based on the MCDA results, that there was only a tiny harm to society presented by the use of psilocybin, do you remember giving that evidence?

A. Correct, yes.

Q. Okay. And I've put it to you correctly, a tiny harm to society?

A. On those scores, yes. It's how the UK score of six was one to society and five to the individual.

5 Q. Right. And I think you said yesterday that the risk presented by magic mushrooms in the context of this analysis, almost all of it is concentrated on risk to the user, right? Five points for risk to the user, one point to society, right?

A. Mm-hmm.

10 Q. And just for completeness, would you say that's the same for all of the three studies that we've talked about more or less?

A. I think we can probably see that here. Um, looks similar in the Australian one. I don't think I can tell you about the European one, it's not possible to....

15 Q. It's not broken down the same way, right?

A. It's very likely to be the same, yes.

20 Q. Okay. And I also think that you said yesterday that the only risk to society would really come from the effects of the risk to the individual, in the sense that the person might have a bad trip and then cause some damage or something like that. Have I got that right?

A. You have, yes.

25 Q. Okay. So, your position is that with respect to psilocybin, there's no risk or danger to other people, right?

A. Well, no, I didn't say that.

Q. Okay, explain, please?

30 A. So, these scales are relative. You need to understand the MCDA is not an absolute risk, it is a relative risk to all the other drugs in the assessment. So, you have to compare across the different drugs. So, if you go to the UK assessment, you will see that the almost obvious distinction is between psilocybin where harms to society is one, and alcohol,

where harms to society is, I suspect - I will double-check, harms to society is about 46. So, on this assessment, alcohol is 46 times more harmful to society than psilocybin.

5 Q. I actually - I understand the relative harm and risk demonstrated by the MCDA. I actually am trying to ask, and maybe I'm not being clear, about your evidence yesterday where I have you saying that the only risk to society represented by the five or the six or the somewhere between three and four, is the risk posed by - that there is no risk to society, that's what I understood you to say. Did I misunderstand?

10 A. There will be some risk to society from people who are intoxicated with psilocybin. We know there are risks. We know there are cases of individuals attacking other people. It's rare, very rare, but we know they exist, yes.

15 Q. Okay, so you acknowledge that a person who has consumed psilocybin might cause harm to someone else?

A. Yeah, there's no question, of course they might. Yes, absolutely.

20 Q. Okay. And I'm gonna suggest to you that that risk is more than fanciful, that it does happen and that those occasions are recorded, do you agree with me?

A. I do agree with you, yes.

Q. All right.

25 A. I'll just say that's one of the reasons why we spent some time talking about the way of mitigating risk by having someone with them who isn't taking the drug, preferably a professional or a guide, yeah. Of course, there's always a risk, yes.

30 Q. And it's more than saying, you know, there's a risk to drinking water, it's that we know and have documented instances of people killing and injuring others while under the influence of psilocybin, right?

5 A. We do, yes. We do have some examples of that, yes. I think I should also emphasize that's always outside of clinical settings, and as far as we know, outside of therapy sessions such as retreats and that, but I haven't heard of such events where these drugs, mushrooms have been administered in controlled settings. But yes, there are people who have become really quite psychotic taking large doses of mushrooms and acted out in a very unsatisfactory way, yes. It's rare but true.

10 Q. Right. So, I think this is a good way to segue into the safety of psilocybin, which I think you'll agree that with protocols put in place the consumption of psilocybin can be very safe, right?

15 A. Yes, it can be. And I would also qualify it is important to emphasize given the very extensive use of psilocybin over many decades, the incidence of these unfortunate events are very, very low as we saw from the analyses yesterday of the Johnson paper. But I will concede they can be minimized. Ideally, we would not have any at all, yes.

20 Q. Well, let's talk a little bit about - I'm just gonna call it - you tell me if there's a better way to say this, I'm gonna call it use in the wild versus use in a laboratory or clinical studies.

A. Sure.

25 Q. You prefer the term "naturalistic", is that the proper term?

A. "Wild" does have some other connotations. You might be surrounded by bears or something which might not be...

THE COURT: Why don't we say clinical versus non-clinical use, how 'bout that?

30 K. BENZAKEIN: Okay, that sounds great. I'll use that, but I really like using in the wild, but I can adjust.

Q. So, I'm gonna suggest to you that the literature draws a bright line between non-clinical use and clinical use when it comes to the safety profile of psilocybin, do you agree with me?

5 A. I do not, no.

Q. Okay?

A. Actually, the safety profile of psilocybin has essentially been established by the vast amount of use. I mean, we said yesterday probably 13 million Americans have used
10 psilocybin and there are almost no incidents of death from it, very low incidents of attendance to emergency rooms. So, I think if you were to look at the same data for other brain active drugs like antidepressants, I suspect you'd find considerably more problems. And certainly, with some of the older antidepressants
15 you would find vastly greater numbers of death from those drugs.

Q. You'll agree with me that death isn't the only measure of negative side effects, right?

A. I would agree with you there, yes.

Q. Because people can suffer persistent side effects
20 that significantly interfere with their lives without them needing emergency services, right?

A. That is true, yes.

Q. Okay. And sorry, I sort of got ahead of myself
25 in what I wanted to talk about with you now, but in your affidavit and in sort of what you've said yesterday and just now, you've indicated there's no evidence of widespread significant harm from the use of psilocybin, am I putting your position correctly?

A. Correct, yes.

Q. All right. You'll also agree with me, I'm sure,
30 that there are examples of harm even in the context of clinical trials, right?

A. Um, I'm not sure. I couldn't cite one, but maybe you can.

5 Q. Well, for instance in the paper, your 2024 preprint, one of the risks of harm that was identified was the - I hope I've understood this correctly, but decreased axial diffusivity. Madam Reporter, that is axial, A-X-I-A-L, and diffusivity, if I've written it right, is D like David, I-F-F-U-S-I-V-I-T-Y. Professor, that's at lines 354 and following of the 2024 preprint. Have I understood that correctly that that's
10 a negative result?

A. No, it's a positive result.

Q. I see. What does it mean?

A. Well, it's a reflection of, we believe because
15 of some of the correlations we had with the mood and cognitive benefits, it is an underlying change in the brain which allows the brain to be more flexible. We think this is another example of the physiological changes that psilocybin produces in the brain to empower cognitive flexibility and wellbeing.

Q. And halfway down the same page - or sorry, just
20 a few lines later, I can pull it up if we need to....

THE COURT: What's the study again?

K. BENZAKEIN: Sorry, this is Professor Nutt's
25 study with Professor Lyons, that 2024 study - moment's indulgence.

WITNESS: The Insight Study.

THE COURT: Yes, I have it.

K. BENZAKEIN: Oh, thank you.

THE COURT: You're saying lines 354, you referred
30 to, now you're going to what line?

K. BENZAKEIN: I'm going to line 372.

THE COURT: And just for the record, this is
Exhibit 16.

K. BENZAKEIN: Thank you, Your Honour. Sorry, moment's indulgence, please.

THE COURT: And it's the Lyons, Spriggs study.
... PAUSE

5 K. BENZAKEIN: Q. At line 376 of this study - everyone can let me know when they're there.

THE COURT: Mm-hmm, I am.

10 K. BENZAKEIN: Q. Thank you. You indicate - your co-author indicates that this could also signal neurogenesis with under myelinated axons.

A. Correct.

15 Q. Have I read that correctly? And Madam Reporter, myelinated is M-Y-E-L-I-N-A-T-E-D. That - is it a positive or a negative effect to have under myelinated axons?

20 A. Well, I think the positive is neurogenesis. Neurogenesis means growing new brain cells, and psychedelics can potentially do that, which is one of the reasons why I believe they can lead to long-lasting, maybe permanent changes in mood, behaviour, attitude, etcetera. Those new neurons - this study was only a month. It takes quite a long time to myelinate a new neuron. So, one would imagine that if we were to repeat the study in a year's time, those neurons would have been myelinated and therefore working like other neurons but obviously serving a different network function we would believe and improve network
25 function. So, that's not a bad thing, that's just the inevitable time course of neurogenesis. And neurogenesis is seen as a very important, necessary in some ways phenomenon to allow significant changes in the way the brain works.

30 Q. But if those - we may be getting too far into the weeds, I'll just ask one more question. If those axons remain under myelinated, that could lead to - I'll put it this way, I

5 don't know if you know, but under myelination - problems with myelination are associated with things like multiple sclerosis and other neurodegenerative disorders, right?

A. No, those are localized demyelinations...

Q. Okay.

A. ...the destruction of a myelin sheath in a particular part of the network or a particular group of neurons which interferes with transmission. It's not the same.

10 Q. Okay. Thank you. I had a feeling I had that wrong. All right. Are you familiar with a study by Mason et al called "Spontaneous and deliberate creative cognition"?

A. Tell me some more authors, please.

Q. Okay, moment's indulgence, please. The other authors are - oh boy, Kuypers, K-U-Y...

15 A. Kuypers. I know the study. I know the study, yes.

Q. Okay. All right. Your Honour, this study has not yet been made an exhibit.

THE COURT: Is this one of the ones you sent in this morning?

20 K. BENZAKEIN: I did not send it. I don't know if my friend sent it, because I got it from him. It hasn't been tendered. I know he doesn't intend to rely on it, but....

THE COURT: What's the name of the study again?

25 K. BENZAKEIN: It's called....

P. LEWIN: [Indiscernible]

K. BENZAKEIN: Sorry?

P. LEWIN: I didn't think it was emailed.

THE COURT: I don't have it.

30 K. BENZAKEIN: Oh, I'm being advised by Ms. Pashuk that it's Exhibit 6, "Spontaneous and deliberate creative cognition during and after psilocybin

exposure", it's Exhibit 6, it was submitted during Professor Walsh's....

THE COURT: Yes.

5 K. BENZAKEIN: Q. All right. So, are you familiar with this study, Professor?

A. I am.

Q. So, this was a study about creativity and its intersection with psilocybin, right?

A. Correct.

10 Q. Okay. And you know that the results of the study were - were mixed, that there were some negative impacts and there were some positive impacts when it came to creativity and psilocybin, right?

A. Yes. Give me just one second to re-read the abstract.

15 Q. Of course.

A. Okay. Yeah, I'm with you there.

20 Q. Okay. So, and when I say it was mixed, it's because in the short term there were a set of results that were not positive for creativity, but in the long term it seemed like there were some positive impacts, right?

A. Well, it was complicated.

Q. Okay.

25 A. Because as they say, "Acutely, psilocybin increased ratings of spontaneous creative insights"...

Q. Mm-hmm.

30 A. ...but when they were asked to perform tasks that measured creativity, they didn't do so well. Now, this highlights a fundamental problem. Measuring creativity is almost impossible because creativity isn't - well, no one has ever managed to really address how you measure serious creativity, the creativity that allows Picasso to suddenly draw people square.

5 What we do to measure creativity is a task which - the alternative
uses task, you give someone a brick and say how many uses can
you find for a brick? If you give that to someone who's having
a trip, they kind of feel well, I've got more important things
to do rather than work out what I can use a brick for, so that
kind of forced creativity is not going to be enhanced by having
a psychedelic drip because people are during the trip engaged in
their own spontaneous creativity, so there's a conflict there.
10 But after the trip they did find some evidence of enhanced
creativity afterwards.

15 Q. So, luckily for us, I actually don't want to
talk about creativity, I wanna talk about the attention-related
effects that were noted in the study, which were negative. You're
aware that the authors concluded that the use of psilocybin
disrupted attention and interfered with learning, do you recall
that conclusion? It's at page 10, and it was - it resolved but
do you recall that conclusion?

A. I don't, but I will remind myself of it, if I may?
Page 10?

20 Q. Page 10. And let me see if I can help you.

... PAUSE

A. Okay, I think you're referring maybe to page nine?

Q. Yes, I see that now. I apologize for that confusion.

25 A. So, they refer to potentially impairments of
attention due to the inability to ignore task or relevant stimuli.
People under psychedelic have a much broader range of cognitive
engagement with internal and external concepts and percepts,
etcetera. So, yes, I wasn't sure - but I mean, I can tell you
we found the same. During a trip standard tests of attention
30 are impaired because they rely on networks which are disrupted
during the trip, and that is a necessary corollary of changing
network connectivity, but afterwards they come back - and in

depression they come back with better attention. I'm not sure that people have improved attention after healthy volunteers come back with improved attention. I'm not sure this study actually tells us one way or the other whether there was any enduring effect on attention.

Q. Well, let me ask you this, how long do you say the effects of a psilocybin trip last, based on the research you're aware of?

A. Well, we can say fairly confidently they last for a month in terms of the brain imaging studies, the physiological changes. If we look at - obviously, we look at people's memory, I mean, you know, people almost always remember the trip for the rest of their lives, so the memory goes on forever. In terms of the alterations in cognitive flexibility and spirituality and that, they tend to last quite a long time for some people. If there's a profound insight they may last forever. In terms of wellbeing, well we've got data, we talked a bit about it yesterday, up to a year in patients. We've got the follow-up of the spirituality study from the mass general study, The Marsh Chapel Experiment that Leary did which was followed up at 25 years in priests who found that for the majority of them a significant impact. So, the conceptual changes, the insights can be very long lasting. The physiological changes, we don't know whether they last for a long time or not, but they certainly last for up to a month.

Q. And that would be true also of negative physical effects, right?

A. I don't think we can conclude that, no.

Q. Well, we can't say that it doesn't happen, right?

A. Well, I think if it did happen we might have some evidence, but we don't.

Q. Well, we certainly have evidence from the Johnson study in 2018 that there were harmful, or at least disruptive negative effects reported in the literature. For instance, headaches were common, although they resolved, right?

5 A. Well, yes, I can talk to that. Headaches in our studies are the most common adverse effect, they occur during the trip, and they may persist for the day after, but then they resolve.

10 Q. Thirty-nine percent of the participants in the Johnson study reported extreme fear and anxiety at the highest doses, you're familiar with that finding?

15 A. Yes, anxiety, especially on the rising phase of a psychedelic trip, is very common and it certainly makes you less likely to have a beneficial trip, which is why we try to mitigate it. But it doesn't lead to long-lasting anxiety, it is a feature of the experience itself and the uncertainty and the novelty of the experience rather than something that is changed. We discussed this earlier today, trait anxiety is generally reduced over time in people who've had a psychedelic
20 experience, it's not increased.

Q. In your affidavit and then again in your evidence, you've talked about significant adverse effects. Is that the language that you tend to use?

25 A. Yes. I think in the context of clinical trials, yes, we would be talking about significant or severe adverse effects, yes.

30 Q. Now, I'd like to talk about that for a moment. When you say that there have been no observations of significant adverse effects, do you mean something different from a severe adverse effect as that's understood in the medical literature?

A. Well, I'm not entirely sure what the question is but...

Q. Sure.

5 A. ...when I'm talking about significant adverse effects, I think I was talking in the context of these population studies, and I will give you an example which I mentioned in my affidavit but we didn't discuss today. So, in the UK we know hundreds of thousands of people take mushrooms on an annual basis and have done for over 30 years. We also know there has been only one death that has been attributed to psilocybin in the UK. So, that's a very significant adverse effect but it is very rare, 10 and it's certainly massively less than deaths occasioned by drugs like alcohol and tobacco.

Q. So, when you use the phrase "significant adverse effect", are you tethering that to the definition of severe adverse effect? Sorry, let me....

15 A. Well, they would....

Q. Go ahead.

A. They would but - yes, I mean, if it were to be the case in a clinical trial that someone died as a direct result of taking psilocybin, that would definitely be a severe adverse effect. 20

THE COURT: Are you using those terms interchangeably?

A. No, I'm not, and I think we need to be careful here because there are technical terms in relation to clinical trials. There are two technical terms, one is severe adverse effects, and the definition of those is that people need medical care effectively, and then there's serious unexpected effects, which are events which have not been noted before for the administration of a drug. 25

30 So, in a case of psilocybin for instance, if someone took psilocybin and became very, very anxious and had to visit the hospital for a panic attack, that would be a serious adverse effect. But if they developed something like renal failure,

5 which is not known to be a side effect, then that would be a serious unexpected side effect, adverse reaction. When I was talking about significant, I was talking essentially sort of a collation of the two. We don't see very many people, although we do see some going to emergency rooms, or anxiety attacks from psilocybin, we see very, very few people having significantly unexpected side effects, which of course the most dangerous and terminal is obviously death, those are very rare. So, that's the point I was making.

10 Q. So, to be 100 percent clear, I hope, when you say, "no significant side effects", you mean no significant adverse effect?

15 A. Well, it depends on the context of what - are you referring to clinical trials or are you referring to population studies?

Q. Well....

20 A. In clinical trials there's a specific definition of a severe adverse effect, which is basically being admitted to hospital. Those have not occurred, to my knowledge, in modern trials of psilocybin.

Q. They haven't occurred in modern trials of psilocybin, but they have occurred in non-clinical consumption of psilocybin, right?

25 A. Yes, they have, that's right.

Q. Okay.

30 A. That is what the Johnson study tells us. It tells us that a very - a thousand or so people went to emergency rooms as a result of using psilocybin out of over five million attendees. So, yes, people do get effects, particularly anxiety, which lead them to seek help, yes.

Q. People.... Court's indulgence, please. This is addressed in your affidavit beginning at paragraph 43, and

you acknowledge that there are some documented harms with the use of psilocybin?

A. Yes.

5 Q. And I'm just going to read to you what you wrote: "In modern trials, over 1000 patients have been treated with psilocybin without significant harms emerging", and then you cite for that the Schlagg study, which we've been in and out of over the last two days.

A. Mm-hmm.

10 Q. And the sentence goes on, "consistent with the earlier clinical data", right?

A. Correct, yes.

15 Q. And you go on to say, "To my knowledge, there have been few, if any, cases of the treatment actually worsening the condition". So, that's the first thing you say about the harms that have emerged, right?

A. Correct.

20 Q. Second - I'm adding the "second", "There are no reported cases of healthy volunteers experiencing an emergence of a psychiatric state following a research treatment with psilocybin", right?

A. Correct.

25 Q. Can you show me where else you set out the negative effects of psilocybin use?

A. I'm not sure I did. Yes, on page 22.

Q. What paragraph?

30 A. Page 22, para. A, "Can lead to people" - "This can lead to them coming to accidental harm through disregarding or misinterpreting risks associated with actual behaviour. This is really repeating what I've said before.

Q. Mm-hmm.

A. And then I talk about fatality in paragraph C.

THE COURT: Sorry, you're referring to which paragraph?

5 A. So, on page 22, Your Honour, in paragraph A, I talk about the unpredictability of the mental content of the psychedelic state and how that can lead to people behaving very differently to the way they normally do, and that can potentially lead them coming to accidental harm, regarding misinterpreting risks associated with their actual behaviour.

10 And then I go on to paragraph C, reference the data I mentioned earlier about the use of magic mushrooms leading to, as far as we know, only one fatality in the UK in 20 years, which is remarkably low compared with drugs like alcohol and opioids. And then I talk about the risk of psychosis, which is clearly something that we have worked hard to minimize by excluding people with psychosis. But it is interesting isn't it, that given the vast number of people who've used mushrooms, many of them must have first-degree relatives with psychosis 'cause one percent of the population have psychosis. We don't see psychosis developing from psilocybin use even when it's used recreationally, or it's not common. It's much more common to see psychosis from cocaine or cannabis.

25 And then I go on at paragraph I, to comment that combinations of psilocybin with other drugs like alcohol, or stimulants can make the harms greater.

30 K. BENZAKEIN: Court's indulgence, please. Or actually, Your Honour, I see the time. I don't know what your practice is.

THE COURT: Let's take a brief recess now for 15 minutes and we'll return.

K. BENZAKEIN: Thank you, Your Honour.

THE COURT: Thank you.

R E C E S S

U P O N R E S U M I N G :

DAVID NUTT: PREVIOUSLY AFFIRMED

THE COURT: Yes, good afternoon. All right, Mr. Akila is here. All right, Ms. Benzakein, when you're ready.

K. BENZAKEIN: Thank you, Your Honour.

CROSS-EXAMINATION BY K. BENZAKEIN CONTINUES:

Q. So, Professor, I want to talk a little bit more about harm - surprise, surprise. You'll agree with me that the clinical trials of psilocybin do their utmost to minimize harm to the patient, right?

A. Correct.

Q. And to that end, protocols have developed that aim specifically to minimize that harm, right?

A. Yes.

Q. And those are, and you'll tell me if I've got this right, screening?

A. Yes.

Q. Preparation?

A. Yes.

Q. Dosing?

A. Well, dosing in a secure environment with surrounding facilities to help people relax and be calm and be reassured, and a door that closes so if they do get anxious they don't run out essentially, yes.

Q. So, let me put this a different way. Control of dosing, is that better?

A. Oh, yes. Yes, absolutely. Specified control of dosing.

Q. Like, attention to dosing?

A. Well, I mean, dosing is an absolute - knowledge of dosing is a fundamental requirement of any trial, yes.

Q. And then set and setting?

A. Correct, yes.

Q. And finally, integration, right?

A. Yes.

Q. Okay, I want to go over each of these in a little bit more detail. So, we'll start with screening.

A. Mm-hmm?

Q. And what occurs in screening is that the facilitator speaks with the patient or participant and asks questions about things like prior medical history, right?

A. Correct.

Q. And that includes some questions about the prior medical history of, I think....

A. First-degree relatives.

Q. Thank you, first-degree relatives, yes. Sorry about that. I have trouble with the letter F sometimes. And that's because there are some known contraindications - oh, sorry, I've gotten beyond myself. You're concerned that if a patient or participant has a history of psychosis or a family member with psychosis that that might lead to dangerous result, right?

A. Correct.

Q. Okay. I'll try not to say any more Fs. The other thing that is controlled during screening is ensuring that the person is not taking an MAOI or lithium, right?

A. Correct.

THE COURT: Sorry, M?

K. BENZAKEIN: Oh, an M-A-O-I, oh Doctor - Professor, can you help me with what those letters stand for?

A. Monoamine oxidase inhibitor.

THE COURT: Go ahead.

K. BENZAKEIN: Thank you.

Q. You're also going to screen to make sure that the participant or patient is not pregnant, right?

A. Correct.

Q. And that they're over, in Canada 18, and in the States over 21, right?

A. I can't comment on America or Canada. I can tell you in Britain it will be over 18, yes.

Q. Okay, that's my fault, I shouldn't have asked you about those other jurisdictions. Age 18. Okay. And then the next - so we've done screening and then the next important criterion is preparation, right?

A. Yes.

Q. And the reason that - you've explained a little bit to us earlier in your evidence about what the preparation means, and I understand that the reason for the preparation is because it ensures less anxiety and a more successful psilocybin experience, right?

A. Correct.

Q. Okay. Now, I should have asked you about the screening. I'll ask you after I ask about the preparation. You can control for preparation in a clinical trial, but you can't control for it in a non-clinical context, right?

A. No, I mean, obviously anyone can grow mushrooms, they can grow and harvest mushrooms, they can take mushrooms, so we can't control that, no.

Q. You can't ensure that people consuming psilocybin outside the recreational context have prepared themselves for the experience, the same way you would in the clinic, right?

5 A. Yes, one cannot prepare the population in the same way, no.

Q. Of course. And similarly, you can't be sure that people taking psilocybin in a non-clinical environment are not pregnant, right?

A. Indeed, you cannot.

10 Q. Nor that they aren't taking lithium, that they don't have a history of psychosis in their first line relations, etcetera, right?

A. One cannot control for that, no. As I said before, one can educate but we cannot control.

15 Q. Of course. So, we've done screening, preparation, and now I want to get into dosing. I'm gonna suggest that the existing research indicates that the higher the dose, the greater the risk of a negative outcome, right?

20 A. Above - when you go beyond 30 milligrams of psilocybin then yes, the risks of adverse effects get larger, and most of us experts agree that the benefits don't - the benefits plateau between about 25 and 30 milligrams in most people. There are some patient populations we're exploring when you might need a higher dose, but that's not yet proven.

25 Q. The other thing that is important in the clinical context is ensuring that there's purity in the sample, right?

A. Correct. Although maybe I should qualify what I've just said. There's very little evidence of impurity in mushrooms, but we have to use pure samples, yes.

30 Q. Well, are you aware of the finding reported in the Johnson study that street samples of mushrooms vary in content by an astonishing, say the authors, factor of 10?

A. Yes.

Q. So, there is that concern, right?

THE COURT: That's more potency though, right, not purity necessarily?

A. That's right, that's potency not purity, yes.

Purity usually refers to things being there that are impure and not expected and may be toxic.

THE COURT: Right. Adulterants. Yes, all right.

K. BENZAKEIN: Q. And again, I'm sure this seems a bit silly, but I just want to make sure the record is clear, the

non-clinical consumer of psilocybin - sorry, let me ask that again. Within the population - no, I still didn't get it right.

We cannot be certain that users of psilocybin outside the clinical context are not using psilocybin in conjunction with other substances, like MAOIs or alcohol or cannabis, right?

A. Well, we cannot be certain although there are very few people on MAOIs, but obviously cannabis and alcohol is very common, yes. We have done - just to be clear though, this may be relevant to the court, we have survey data of people who are using cannabis and psychedelics and if anything, they seem to have less anxiety, so there's no evidence that cannabis makes psilocybin more problematic, but alcohol may.

Q. Moment's indulgence. All right, we've done screening, preparation, dosing and now we're at setting, and that's sometimes referred to as set and setting, right?

A. Correct.

Q. And I understand, you tell me if I've got this wrong, but that set refers to the mindset of the person consuming the psilocybin?

A. Correct.

Q. And the setting refers to the physical place where the psilocybin is consumed?

A. Well, it's more than that. It's also the presence of other people, confidence in the other people, etcetera, but yes, it's things outside of the individuals' mental intentions.

5 Q. Okay. And that's kind of what I was getting at. So, the term setting encompasses the use of trained guides?

A. Yes.

Q. Okay. That's part of the setting criterion?

A. Mm-hmm.

10 Q. Okay. And I'm gonna suggest that researchers like yourselves have determined that this setting component is really critical to the success of psilocybin treatment, right?

A. No, we haven't, because we believe it's unethical to do the treatment without that because we do know that patients like it, prefer it. And we do have examples from the past, particularly with LSD, where those experiments were done when the setting was made extremely unpleasant, those experiments were done to try to show that LSD didn't work. Of course, it didn't work very well if you chain people to the beds as they did, and gave them LSD and said 'Look, it doesn't cure them'. So, we do know that at least with LSD, a very hostile environment leads to poor outcomes, so we always err on the side of safety and give people what we think - the best kind of setting we can because we believe that's ethical and likely to give them the best outcome.

25 Q. In that paper that you wrote with - I don't know how to pronounce his name, Wees (ph) W-E-I-S-E?

A. Gerhard Weise, I think Wyce, mm-hmm.

30 Q. Wyce? You note - or the authors including you note in the 2024 study that - the way it's expressed is that the standard package for psilocybin therapy is psilocybin plus preparation, plus supervision, plus music, plus integration, right?

A. Yes, that's what we do when we are treating patients, yes, absolutely.

Q. And so, fair enough, we don't - we wouldn't have much data about what would happen if the setting was changed, right, from a clinical trial perspective?

A. We do not, no. We wouldn't get ethical permission not to do that.

Q. Right.

A. Don't think you could do the experiment, no.

Q. And just to circle back on the supervision aspect, the setting aspect of it, that's in part because the effects of psilocybin are unpredictable and so you can't be sure exactly what will happen, right?

A. Yes, you need to be secure against any severely disturbed behaviour which could happen, has happened. It's rare but we have to protect against that.

Q. Of course.

A. And which I can say we have not seen with psilocybin but there are reports obviously of people using them non-clinically [indiscernible].

Q. And then... I'm sorry, I cut you off at the last sentence, I'm sorry.

A. No, no, you didn't. I was just saying the reports are for non-clinical use that people can have disturbed experiences.

Q. Sorry, I lost my place when I turned my head. Moment's indulgence. Ah, the last component of the package is integration, right?

A. Mm-hmm.

Q. I see you're nodding.

A. Yes.

Q. And that's further therapy with psychotherapists or a social worker, someone who has training in mental health, right?

A. Correct.

Q. And that's - well, as it says, it's to integrate the trip experience with their future mental health, is that right?

A. Correct.

Q. And in some cases, the research has identified incidents where the tripping individual experiences a re-living of a very traumatic incident, you're aware of those incidents in the literature?

A. Well, we have reported some of them yes, in the Watts paper, yes.

Q. Yes. And in the paper, you and your co-authors indicate that it was the ability to integrate those difficult experiences with therapeutic help that gave rise to positive outcomes, right?

A. Well, it definitely improved the outcome, yes.

Q. Okay. And what I'm gonna suggest is that to experience or re-experience a trauma like that in the absence of psychological support really could lead to mental health damage in the tripping individual?

A. It could. I think you're right, yeah, it could.

Q. So, we've been talking a lot about the clinical context, and we've talked a little bit about the non-clinical context in what I called, you know - we'll call it recreational, experiential experience or use of psilocybin, okay? Now I want to talk about the experiential use of psilocybin outside a clinical trial.

A. Mm-hmm.

Q. And I'm gonna suggest that we can get information about that from Oregon, would you agree with me?

A. Well, I hope we will, yes.

Q. Okay. So, you're familiar with the protocols in Oregon?

A. Not that familiar but I've got a - I know that they're developing protocols which seem to be based on the standard principles we've already discussed, yes.

5 Q. Okay, I don't want to ask you about something you're not familiar with. Maybe let's start and we'll see how far we get. So, first of all, the use of psilocybin, recreationally or experientially is legal in Oregon, right?

A. Yes.

10 Q. And the State has created a series of safety protocols to ensure that that recreational or experiential use does not cause harm, right?

A. Correct.

Q. Are you familiar with those protocols?

15 A. Well, I did help develop them several years ago, but I haven't followed that up since, to be honest with you. I'm letting them get on with it.

Q. Okay, fair enough. I'm going to show you something, you tell me if you've seen it before and are familiar with it. Of course, you guessed it, I've lost it.

20 THE COURT: Is this an exhibit somewhere else already?

K. BENZAKEIN: No, it's not, Your Honour, but Mr. Mazza sent it to your clerk. It's called.... Okay, I'm just gonna share my screen because I don't know how else to....

25 THE COURT: Oregon Informed Consent?

K. BENZAKEIN: Yes, that's right. A moment's indulgence. (...Pause...) Did it work? Can anybody see my screen?

30 WITNESS: No.

THE COURT: We have to enable screen sharing. Have you done that?

COURT CLERK: Yes, it's enabled Your Honour. It's already enabled.

K. BENZAKEIN: Oh, thank you. I see. Thank you, I see I missed a button. Okay.

Q. All right, do you see this, Professor?

A. Yes, I see the top of the page, yes.

Q. Okay. Have you ever seen this before?

A. I have not.

Q. Okay. So, you didn't have a part in creating the Informed Consent for the Oregon study - sorry, the use of psilocybin in Oregon?

A. I did not, no.

Q. Okay. Moment's further indulgence, please.

(...Pause...)

THE COURT: I believe this was part of the materials that were filed with your expert, Ms. Benzakein, was that not the case?

K. BENZAKEIN: There's something different.

THE COURT: Oh, okay.

K. BENZAKEIN: And I just wanted to see if this witness knew about this one.

THE COURT: All right.

K. BENZAKEIN: He doesn't, we'll move on.

THE COURT: That's fine.

K. BENZAKEIN: Professor, the good news is that I'm starting to get to the end, the bad news is that this starts to become a little choppy while we cover off different areas.

WITNESS: That's okay.

K. BENZAKEIN: Q. Okay. When it comes to the safety profile of psilocybin, you'd agree with me that because of the

limits on the studies we don't have any information about the impact of psilocybin on pregnant women, right?

5 A. Well, we do know from very early reports of the Leary Metzner team, there was one woman who took psilocybin repeatedly through her pregnancy, at the recommendation of her physician, and had a perfectly normal baby, so.... And it is inconceivable that there haven't been hundreds, maybe thousands of pregnant women who have taken mushrooms and to date we have not had any reports of any kind of fetal abnormality. And I think, to be honest, we'd have known that from the indigenous use, if there were any cases. So, I think we cannot say it's safe in pregnancy, but we don't have any pointers to harm. I still wouldn't recommend pregnant women using it.

10 Q. Sure. That sounds prudent and safe but when you talk about the reports from indigenous women using psilocybin, we really don't have any reliable evidence about things like how much they used, right, the dosing? Do we know that?

15 A. No, our dosing - the dosing we use is very similar to the dosing that was used by [indiscernible] and has been used for probably several thousand years in Mexico. We're using the same dosage to produce the same effects.

20 Q. You said, I think yesterday although it could have been today, that the record-keeping about the impact - or the results of the use of drugs, that record-keeping is very important, right? You said that yesterday?

25 A. No. Well, that is generally - so, if you want to measure a variable like blood pressure and see if that is changed by a drug, yeah, you have to record the blood pressure in a systematic way repeatedly after the drug. If you're looking for something extreme, for instance like thalidomide causing phocomelia, short arms, I mean record-keeping is an irrelevance

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5 because you have seen something that is so utterly different and abnormal, that it's a fact, you don't need to do statistics, you don't need numbers. So, if there were powerful teratogenic effects of mushrooms like thalidomide, they would have been seen. I mean, that's the reality.

THE COURT: But we wouldn't know, for example, if it impacted ability to learn. Like, nobody's there to measure it at the time, how would we know?

A. Well, that's a fair point. It's....

10 THE COURT: And that's why we say it's safe not to do it, I suppose, but there are other impacts that we just haven't been able - we haven't recorded in terms of measuring.

15 A. That is - well, I don't think that's entirely true, but I think you're right, we don't have very good data on the impact of psilocybin on prenatal children, certainly not as good data as we have for alcohol and tobacco and cannabis, yes. What I'm saying is the effects, if they're there, will probably be subtle, but I can't really say more than that. And I think the truth is we won't know until it's much more widely used and there is data being collected.

25 I will give you an interesting example, which kind of touches on this which is sodium valproate. So, sodium valproate is an anticonvulsant, it's also now used to treat bipolar disorder. It's been used for both those indications for 40 years, went through full clinical trials with safety assessments, and it's only 40 years later, after very large numbers of individuals being studied, we now know it does have

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5 a small but significant impact on the fetus. But that data couldn't - that was not known in the beginning because it only occurs when you have - you find the data from exposure of very many subjects. So that's why clinical trials do not tell you about safety, they tell you about efficacy and side effects, but they don't tell you about safety.

10 My contention would be that the massive number of people who have used psilocybin in pregnancy must tell us that there aren't any overt problems like thalidomide. But you're right, we cannot say there aren't any subtle changes and we know that tobacco causes problems, we know that cannabis can cause problems, and alcohol is the leading cause of 15 mental disability in children, way more than disorders like Down Syndrome and Fragile X. We encourage women not to drink in pregnancy, we should do the same, I think, with any medication.

20 K. BENZAKEIN: Q. Similarly, psilocybin hasn't been robustly tested in people under 18, right?

25 A. Psilocybin hasn't, no, that is true. Um, we are doing a study in 18-year-olds who do self-harm to see if we can remedy that, but there aren't any studies I know taking place in children younger than 18. What I can tell you is that certainly indigenous use starts before the age of - children or adults before the age of 16. And certainly, in Brazil there are several churches which allow the use of ayahuasca which is another plant-derived psychedelic not dissimilar to psilocybin, and there it's 30 used in children attending church. In non-psychedelic doses albeit, but with, if anything, evidence of improved sociability and communality, certainly without any evidence of harm.

Q. And finally, in terms of the populations who have not been tested, the clinical trials are deliberately excluding people with certain mental illnesses, or with a family history of mental illness, right?

5 A. That is correct, yes. I could give you a coda there though. There has been one study from University of California, San Francisco, who looked at people who had a milder form of bipolar disorder called bipolar 2 disorder who hadn't been fully manic, and they showed that psilocybin was safe and somewhat effective in their depressions, but no one has done a study in people who have had a full-blown mania or schizophrenia, and I would caution against that.

10 Q. Against the use of psilocybin or against testing the population or maybe you meant the same thing?

15 A. Against - yes, I think at present it would be safer not to expose people who we believe are that vulnerable. I think we need to learn more about whether we can use it in people who have been psychotic. It's too early to do that at present.

20 K. BENZAKEIN: Okay.

... PAUSE

THE COURT: Ms. Benzakein...

K. BENZAKEIN: Yes, Your Honour?

25 THE COURT: If you want, I'm content to adjourn to tomorrow and you can review your notes to see if you have any further questions. I take it we're getting towards the end?

30 K. BENZAKEIN: I certainly have more questions. I'm just trying to prune.

THE COURT: Sure.

K. BENZAKEIN: So, I'm happy to do it overnight or I'm happy to use the next 15 minutes - or 10 minutes to - either way.

THE COURT: Are you likely to finish?

5 K. BENZAKEIN: Oh, no, I'm not gonna finish. But I don't think I have more than an hour tomorrow and I certainly will be shorter if, you know, I'm given more time to prepare, so I'm in really in your hands.

10 THE COURT: All right, let's do that then. Professor, we'll have you return tomorrow at ten o'clock our time...

WITNESS: Thank you.

THE COURT: ...and we'll continue with your evidence. So, thank you, you can leave now.

15 P. LEWIN: Your Honour, I'll just - sorry to interrupt, Your Honour. I feel very bad because I'd advised Professor Nutt that it would be Monday and Tuesday and of course it's not. Professor Nutt, am I correct, you can make yourself available for tomorrow morning? I take it you can and also my apologies for this.

20 WITNESS: That's okay. Ideally, if we could conclude within a couple of hours tomorrow...

THE COURT: All right.

25 WITNESS: ...I've got two hours I've made available, if that's all right.

THE COURT: All right. We should be able to finish in that time, Ms. Benzakein and Mr. Lewin?

K. BENZAKEIN: I should think so, yes, Your Honour.

30 THE COURT: All right. Thank you very much for that Professor.

WITNESS: Thank you.

THE COURT: We'll see you tomorrow morning then.
Thank you. All right, any update on the scheduling,
Mr. Mazza?

... SCHEDULING DISCUSSION

THE COURT: All right, so we'll return tomorrow
then, ten o'clock everyone.

K. BENZAKEIN: Thank you, Your Honour.

THE COURT: All right, thank you.

... PROCEEDINGS ADJOURNED TO FEBRUARY 26TH
FOR CONTINUATION

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FORM 3
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