

BY SARENE KLOREN

*Fynbos-inspired images by photographic artist Oliver Barnett, from his collection, Polymorphic. Barnett says his own experience with depression is one of separation, and a distancing from the intrinsic nourishment of life. Making these images allowed him to spend time in nature, which has become his primary medicine. However, his experiences with psilocybin mushrooms and other "teacher plants" have shown him the interconnections of beings.*

**T**HERE'S a growing body of scientific evidence showing the potential for hallucinogenic mushrooms to work alongside conventional therapy methods to treat depression, anxiety, post-traumatic stress, and some kinds of addictions, such as alcoholism and nicotine dependence, although "magic mushrooms" are illegal in South Africa.

In 2018, a legal team will argue in the Western Cape High Court that it is unconstitutional to deny South Africans access to this potential form of medicine.

We spoke to science writer Leonie Joubert about her podcast, which explores the potential therapeutic benefits of these mushrooms, ahead of the trial starting next year.

**Question: You usually write about climate change, sustainability, and urban food security. How did you become interested in hallucinogenic mushrooms?**

LJ: I've always been fascinated by the human condition: what makes us tick, why being human can sometimes be so challenging, and how we as an animal have come up with some incredible technologies to make life easier. A hundred years ago, a simple infection like a tooth abscess could kill you; then we discovered penicillin. The "miracle" of a C-section for a mother struggling to give birth. What birth control means in terms of giving a woman agency over her body, and her educational and economic prospects. Insulin for diabetes, etc.

Over the past few years, there's been a growing body of evidence around psilocybin – which is found in hallucinogenic mushrooms – and that it may be a significant breakthrough for the treatment of mental illness:

Researchers at prestigious medical schools in the US and Europe have been using small psychedelic interventions alongside traditional psychotherapy methods, to treat certain mood disorders and addictions. Some of this work involves using psilocybin from "magic" mushrooms.

The Johns Hopkins medical team don't talk about "if" psilocybin becomes medicine, but "when".

Hallucinogenic mushrooms are illegal in South Africa – they're ranked alongside drugs like mandrax, tik and heroin, and yet there's no scientific evidence to support the idea that they are addictive, dangerous or of no medical value.

My thoughts were that we have so many people who are suffering from mood disorders and substance dependence (mostly alcohol), and we have this breakthrough medical technology potentially available to us that is



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# Strong medicine that might reconnect us

*The Psychonauts*, a local podcast, explores psychedelic psychiatry as hallucinogenic mushrooms go on trial in South Africa

as natural as penicillin.

I questioned what needed to happen that this treatment can make its way safely into our therapy rooms, and then I heard about the upcoming court case that might pave the way to allow this to happen.

**Question: Tell us about the upcoming court case**

LJ: In 2014 Monica Cromhout, a 72-year-old woman from Somerset West, was arrested for hosting what she calls mushroom ceremonies. People gather together in someone's home, with "minders watching over" them, and take a large dose of hallucinogenic mushrooms.

Some do this for spiritual awakening and others as therapy to manage depression or addictions.

In response to her arrest, Cromhout decided to ask our courts to reconsider the law which makes psilocybin mushrooms illegal here.

Early next year, her legal team will present a body of evidence to the Western Cape High Court in which they will try to show psilocybin mushrooms are not dangerous or addictive, and that they have untapped therapeutic and spiritual potential. On that basis, they'll then argue that our laws, which ban this substance, are unconstitutional, because it denies South Africans access to this substance.

I thought I'd try my hand at amateur broadcasting, in the form of podcasting, to get South Africans talking about this important issue ahead of next year's trial.

This podcast weaves together the emerging science about the therapeutic potential of these mushrooms, with stories from within a local community of people who use hallucinogenic



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mushrooms either recreationally, therapeutically or ceremonially.

**Question: What is the medical research telling us about the therapeutic potential of psilocybin mushrooms?**

LJ: The podcast expands on the emerging research which shows how psilocybin is being used in an experimental therapeutic context, to help people work with depression, anxiety, post-traumatic stress, end-of-life anxiety in terminal cancer patients, and addictions such as to alcohol and nicotine.

Research by a medical team at Imperial College London has shown that psilocybin isn't like current antidepressants, where you take a tablet a day to keep the drug constantly present in your body to have the effect. Evidently, the effects of psilocybin are rooted in the subjective experience someone has while they have a "dosing session" on it, that brings about positive mood and behaviour changes that last for weeks and even months after the substance has left the body.

The research involved a three-month programme for people suffering from treatment-resistant depression – where years of talk

therapy and antidepressants had been successful.

The weekly sessions involved traditional talk therapy, either to prepare them for a "dosing" session with the psilocybin, or to help them integrate what happens during the dosing session.

They only had two dosing sessions in the entire programme with the participants in a relaxed setting, lying on a couch, wearing an eye mask and listening to a pre-selected playlist of music, which is integral to the experience.

Two trained therapists sat with them through these four-hour sessions.

The first session used a mild dose of psilocybin and the second involved a more intense dosing.

The results were remarkable. Most participants saw an immediate and significant drop in the usual symptoms of depression, with some cases lasting for months after the treatment. A small number of the people reported no benefits during the dosing sessions, or afterwards. But most reported significant changes in their mood and state of mind. Six months after the study, most of them were still doing well; with about a third saying they were depression-free.

Some of these participants reported that the depression began to return after about three months. This parallels with the anecdotes I picked up from the local community, where some people say they need to do these ceremonial journeys about every three or four months, to keep their depression at bay. Something happens during the psychedelic experience that seems to rewire the brain away from locked-in negative emotional reactions and patterns.

**Question: What are the risks and dangers involved in using hallucinogenic mushrooms?**

This isn't a silver-bullet treatment, where one or two psychedelic trips suddenly "fix" your depression or alcoholism. The "trip" needs to be done in a safe, contained environment. The lab research, and the anecdotal reports from the local psychedelic community, indicate that there needs to be careful screening before people do it – for instance, people with a family history of psychosis or schizophrenia shouldn't try this route. It also needs to have pre- and post-dosing preparation, support and integration. This can only happen properly, though, if the substance is legalised.

**Question: What are your expectations of the 2018 trial?**

LJ: I hope that it gets a progressive judge who wants to see the best evidence presented.

In the cannabis trial that's happening in the Pretoria High Court this month, we have seen a small, but vocal lobby that's opposing the decriminalisation of cannabis. They're driving a conservative, ideological agenda.

This group's arguments aren't based on rational scientific investigations and they don't represent the majority of the medical consensus on the issue, however, because they're so vocal, they have claimed a disproportionate amount of airtime, and snarled up the courts to prevent important evidence being heard. They're also fanning moral panic.

It would be a shame if a similar agenda prevented the courts from hearing the evidence about the potential therapeutic benefits of psilocybin for treating mood disorders and addictions.

You can hear the podcast on [www.psychonauts.co.za](http://www.psychonauts.co.za) or in iTunes.