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# PAYTON NYQUVEST

## WHAT DRIVES THE CEO OF NUMINUS TO EXPAND?

INTERVIEW BY TOM ZUBER / ZUBER LAWLER

**Payton Nyquvest leads one of the most dynamic companies in the psychedelics space,** with Numinus Health treating patients on the clinical side, and Numinus Biosciences on the product research and development side.

But before becoming CEO of Numinus, Nyquvest was brought into the world of psychedelics as a patient, a life-changing experience that brought him back from the brink of despair.



**Where did you grow up? And what led you to knock on the door of this industry and then find yourself leading one of the top companies within the space?**

I grew up in Vancouver, and my pathway to psychedelics really is as a patient, first and foremost. I had struggled with severe chronic pain, really since birth, and grew up in a household that struggled with substance abuse. When my mum got sober when I was 12, she said, “Sorry about the last 12 years. You might want to start working with somebody to address some of the stuff that might come up.” And I took that to heart, especially with the associated chronic pain issues that I continued to have.

In my early to mid-teens, I became very passionate about my own mental health and through that became something of a mental health advocate as well. That really stayed with me my whole life. But my chronic pain, no matter what I was doing, continued to get worse and worse and worse. I turned to psychedelic therapy as a last ditch-effort to try and save my own life.

I came out of that experience trying to figure out how I could give back to something that had saved my life. At the time, there wasn't really any corporate interest in the psychedelic space. It was primarily just not-for-profit and academic institutions that were doing research. Through a lot of conversations with these not-for-profit organizations, I recognized there was more than just simple philanthropy that I could do to try and support the space. And that's really where Numinus was birthed from: How can we support research, but also how can we build and create the infrastructure necessary to get psychedelic therapy out of a research context and into an accessibility model for so many people who could greatly benefit from this therapy?

**Are you willing to dive deeper into the chronic**

**conditions you had, including any mental health issues, and how psychedelics helped?**

Yeah, essentially, the diagnosis was severe chronic gut pain. So things would manifest in the gut and then go into extreme autoimmune issues. It was debilitating to the point where I was racing to the emergency room about three or four times a week. Chronic pain is very debilitating, and you're in a state of despair. The pain gets so consuming that you lead yourself to some pretty dark places. So associated with that, I was diagnosed with complex post-traumatic stress disorder.

There were a few (experiences with psychedelics) that were very, very helpful for me. One of my first experiences with psychedelics was ayahuasca in Costa Rica, where there's a more favorable legal environment for psychedelic therapy.

**How old were you at the time?**

This was about four or five years ago now, so I was in my early 30s. And it was very, very profound. It gave me the first relief from my chronic pain symptoms, really, that I'd had in my life. You never want to over-promote something or make it sound like it's a panacea, but for myself, it took just that one week, and I have not had any chronic pain issues since then.

**Wow. To be clear, you had chronic pain issues all the way up to your trip to Costa Rica. And in Costa Rica, you tried ayahuasca for the first time, and you have not had those chronic pain issues since that first experience. Right? Correct.**

**Did your psychological issues disappear as well or did that take more time?**

They absolutely did. I continued with psychedelic therapy and still continue to work on my mental health as well. But it gave me the opportunity to approach some of those things from a much

safer place, and an ability to just recognize that, yes, there were events in my life that that had led to some challenges for myself, but those now I see as opportunities to better myself.

**Let's talk a bit about Numinus. The Numinus website speaks to a “holistic, integrated approach to healing.” What does “holistic” mean in this context?**

“Holistic” is an interesting word that has almost as much stigma attached to it as “psychedelics” does. Psychedelic-assisted psychotherapy is two fairly distinct things. It's a drug or a molecule, and then it's the therapeutic container able to hold it. So for us, we're looking at both the molecule and the therapeutic container, and how they interact with one another. We have two lines of the company that are the main focus: Numinus Bioscience is our Health Canada-licensed lab and production facility, where we're licensed to work with pretty much all the main psychedelics; and then Numinus Health is our clinical infrastructure that that can actually hold the therapies as well.

**What compounds on the product side are of greatest interest to Numinus and why?**

Ketamine is legally available, so we've developed protocols for ketamine-assisted psychotherapy that are, I would say, a little bit different than a lot of the work that you see with ketamine today, which has primarily been more IV-based. Ours is very much a psychotherapy container using ketamine.

After ketamine, our two main focuses at the moment are with psilocybin and MDMA. Most people know MAPS — the Multidisciplinary Association for Psychedelic Studies — which really is the reason why psychedelics are where they are today. MAPS has been moving MDMA through the clinical trial process for more than 35 years now, and is currently

in Phase III. We're the first industry collaboration with MAPS. We've been working with them for a couple of years now. And I'm really grateful to be able to help move MDMA along.

And then psilocybin, we've been working on providing a natural psilocybin product that is standardized and able to be used in research, as well as be a product that's going to be available for the market. Health Canada amended our license to allow us to harvest, cultivate, and extract psilocybin from naturally occurring psilocybin-containing mushrooms. About a year and a half ago, we grew what we believe are the first legal psilocybin mushrooms since they were scheduled. Since then, we've been getting an extracted product ready for Phase I clinical trials and then moving into a host of Phase II and Phase III clinical trials as well.

**What are your plans with psilocybin commercially? Do you have a notion of what types of products you're going to launch?**

Yeah. One is that we have a couple of single-arm, open-label clinical studies using psilocybin in clinics. We sort of refer to that as implementation science, so it's figuring out the protocols, figuring out the client care pathway, training practitioners, and building up the infrastructure to be able to hold psilocybin-assisted psychotherapy while also creating a data set. Most patients are referred by medical professionals, so having that data for medical professionals to refer back to is valuable and important.

On the product side of things, obviously most of the psilocybin to date in research has been synthetic, and we've been creating a standardized psilocybin product that is extracted. We believe there's probably going to be a market for both psilocybin synthetic and extracted.

**It was big news when Numinus became the**

**first company in Canada to receive a license to extract psilocybin from mushrooms. Are there other companies that have now received this license?**

Yeah, we've seen a few more licenses, but there's a significant difference between a license holder who has built the infrastructure and expertise to be able to actually activate that license, and someone who's just holding a license. Numinus Bioscience has been operating for more than 10 years working on ethanol botanical extraction, as well as analytical testing. We feel that we're very, very advanced. Yes, we've got the licensing, but more importantly, we've got the infrastructure and expertise in-house to be able to really activate that license and move forward.

**MDMA is currently on Schedule I of the Canadian Controlled Drugs and Substances Act. What's the outlook to remove MDMA from Schedule I in Canada?**

Yeah, it's a great question. We saw some really interesting things from Health Canada last year. We have something in Canada called the special access drug program, which is similar to the expanded access drug program in the U.S., but different in that the special access drug program is built to provide unlimited amounts of Canadians access to drugs or therapies that have not been previously approved by the Food and Drug Administration. MDMA, psilocybin, and other psychedelics were thrown in something called Schedule J, which doesn't allow them to be included in the special access drug program. We prepared a briefing note and sent it to Health Canada last year, and in December, they posted their intention to change the special access drug program to include MDMA and psilocybin. Health Canada has indicated about a nine- to 12-month process from the closing of the comment period

(in February) to actually make that change.

What that will mean is that patients or clients will be able through their general practitioner to be referred to the special access drug program for MDMA-assisted psychotherapy. It's not a full fix, but it's certainly a strong step in the right direction from Health Canada, and it gets the ball rolling.

I think with the mix of the special access drug program, and the completion of some of these clinical trials, you can see regulation change happening in Canada, maybe even more quickly than in the United States.

**Numinus had CA\$562,000 of revenue in the quarter ending May 2021, which is more than double the company's revenue of CA\$231,000 from the previous quarter. Where's that revenue increase coming from?**

A large portion of it is from our clinical services. Our clinical locations across the country are currently operating, providing traditional psychotherapy services, as well as starting to work with ketamine. I would say two-thirds comes from clinical services, and one-third comes from Numinus Bioscience, which is doing analytical testing and starting to do more and more work on the drug production side of things. We're seeing activity really pick up at the lab. As you know, there have been more and more companies that have raised capital and are looking to do work in the psychedelic space, so we've been getting the lab prepared to be able to hold a lot of that work.

On the clinical side, we plan to expand by somewhere in the neighborhood of five to 10 locations in 2022, which would more than double our clinical capacity.

**Numinus recently acquired the Neurology Center of Toronto. How does this acquisition fit into your overall acquisition strategy for Numinus?**

The Neurology Center of Toronto is really exciting to us. We were talking about chronic pain earlier; there's things like concussion, traumatic brain injury, all the way to chronic pain, where we've treated the physical aspects to some of these serious indications, but more often than not, there's underlying mental health conditions that greatly attribute to the way somebody is feeling.

What we've seen at the Neurology Center of Toronto is that there's an opportunity to integrate psychedelic-assisted psychotherapy into a care pathway for someone who might have concussion symptoms, and what they've seen is that those conditions have greatly exacerbated their mental health issues. Anxiety is something that you regularly see with someone who's suffering from depression or concussion symptoms. And if we can alleviate some of those mental health issues, their physical condition should also improve as well.

**Aside from Canada, what countries are you focused on?**

Right now, the focus is on Canada and the United States. We do expect to have a presence in the U.S. by the end of the year. And everything that we've been creating in Canada has been something that we can scale in the U.S. and potentially abroad as well. Our licensing at the lab is international licensing, so we can work with anybody around the world, but the focus is definitely on North America from a purpose-built standpoint.

**What are you looking at in the United States? Are you looking at Oregon and potentially acquiring psilocybin clinics there?**

Yeah, we're looking at Oregon. We've really prioritized states that are going through a decriminalization movement, but also have a commu-

nity or a population that is more educated or aware of this kind of work. So California, Colorado, Oregon, that's really where we see some of our first expansion going in the U.S.

Ketamine is much more broadly available in the U.S., and we're staying fairly measured in terms of our approach with ketamine.

**What are the biggest challenges for you as CEO in getting Numinus from where it is today to where you want it to be five or 10 years from now in the context of widespread prohibition around the world?**

Being at the mercy of regulators is always tough. One of the bigger challenges is that psychedelic-assisted psychotherapy is complex. If you look at the model, it's something very different than the way we've treated mental health, in particular. So one of the biggest challenges is making sure that there's enough education out there, getting people's mindset shifted around the idea of a (psychedelics-based) product or a therapy having curative intent for mental health issues.

(Another challenge is) just making sure that we're looking at this from a broader time horizon. You've seen huge amounts of interest in the psychedelic space very, very quickly, and the opportunity to raise lots of capital. But (it's about) making sure that you're being intentional with the capital that you raise, and making smart decisions, and not getting caught up in needing to make sure that there's a news release out every week, and ending up in a challenging position from a financial standpoint. ■

*This interview has been edited for length and clarity.*



Tom Zuber is the managing partner of the law firm Zuber Lawler, which has been representing leading plant medicine companies for more than 15 years.