

**Article:**

Steven W Cotten, Frederick G Strathmann, Frederick S Barrett, Laura Labay, James Mullally, Alexander M Sherwood, Frank Wiegand.

Psychedelics for Medicinal Use: How Will This Alter the Collective Laboratory Consciousness?

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Guest: Dr. Frederick Strathmann is the Senior Vice President of the Applied and Clinical Business Segments at MOBILion Systems in Chadds Ford, Pennsylvania.

Bob Barrett:

This is a podcast from *Clinical Chemistry*, a production of the American Association for Clinical Chemistry. I'm Bob Barrett. Psychedelic compounds have recently been thrust into the spotlight by a number of high-profile clinical studies that have shown promise in the treatment of a variety of mental health conditions. Patients with depression, anxiety, and substance abuse disorders may benefit from the use of psychedelic compounds, but this represents uncharted territory for drug development companies and clinical laboratories alike. Historically, the role of the clinical laboratory has been limited to the measurement of selected psychedelic compounds in cases of suspected abuse or overdose.

With routine prescription of psychedelics becoming a very real possibility, clinical laboratorians may need to change their approach to support this evolving field. A Q&A feature appearing in the April 2023 issue of *Clinical Chemistry* explores the regulatory landscape surrounding psychedelics, specifically focusing on the expected impact on clinical laboratories and drug development companies should these compounds receive FDA approval.

In this podcast, we're excited to talk with one of the moderators of that Q&A feature. Dr. Frederick Strathmann is the Senior Vice President of the Applied and Clinical Business segments of MOBILion Systems in Chadds Ford, Pennsylvania. He oversees development and commercial efforts to address industry and research needs in laboratory medicine and bring transformational discoveries to the laboratory. Dr. Strathmann, where did the idea for a Q&A on this topic originate and why do you think it was selected for a feature article?

Frederick
Strathmann:

The idea really originated with Steve Cotten. He had the idea back in the fall of 2021 to put in for a symposia for the following annual scientific meeting for 2022 on psychedelics. He was interested in the business landscape and really some of the patent aspects that were heating up. At the time, I was working at a national reference lab with a background in toxicology. We knew we had something of interest and so we

reached out and found a great colleague from the Maastricht University in the Netherlands, Kim Kuypers.

We put together what we thought was a really compelling symposia. It was well attended and so we had a good time. I thought the topics were well represented. Then it really turned into a request from the journal to then do a Q&A on the topic. To me, it's not too surprising given the fact that I think -- to Steve's credit, we were really well timed. We weren't too early to the point where nobody was aware that psychedelics were starting to really take off and starting to emerge as something that everybody was paying attention to. But we also were not so late that it had become old news at that point.

Really good timing as there are in a lot of things. I think that really is what makes the Q&A a very interesting study for psychedelics. I think also the journal -- I think does a really nice job of trying to find topics where laboratorians may be talking amongst themselves, maybe thinking about 'what do we need to know' and 'have you heard of this,' have you seen this?' Getting an expert panel together to get some various different viewpoints is a really great way to make sure that the average laboratorian is well read when it comes to some emerging topics like this.

Bob Barrett:

In what ways did this Q&A article differ from the scientific session?

Frederick
Strathmann:

We intentionally brought part of the same perspectives, but we did want to extend the viewpoints into a little bit more diverse areas. We brought Laura Labay, who helped to add the lab perspective, which we did have in the symposia, and that's important because that's central to the theme of the journal as well as to the readers for sure in terms of what they might be most interested in. We had Fred Barrett who brought his expertise with research on psychology of psychedelics in a very similar way that Kim Kuypers was able to do at the annual scientific meeting. We really started to think about what other dimensions of information are we really wanting to bring into this? We brought in a basic researcher in the area of medicinal chemistry with Alex Sherwood, and then we had Frank Wiegand who added a really insightful clinician perspective as well as an industry perspective, and he'd had a lot of experience and continues to put effort towards bringing psychedelics to market.

We were really excited to have James Mullally, who provided a really great regulatory perspective, having been at the FDA, still very actively involved in regulatory affairs as well. So, we really felt like this expert panel that we really felt fortunate to assemble hit every facet of the topic that Steve and I hoped to explore. I think that really comes through in the way the

answers provide very distinct, yet sometimes overlapping viewpoints.

Bob Barrett: One of the questions posed to the experts was about media portrayal and potential impact on that regulatory process. Why were you particularly interested in asking this question?

Frederick Strathmann: I think it's impossible to discuss any medical or scientific topic without considering the impact that media has on shaping public perception and potentially the outcomes around topics as controversial as psychedelics and medicine. There's mainstream documentaries, there are celebrity testimonials, and then you just have the history around psychedelics, which is both good and bad. And like many things, the truth is somewhere in the middle of all of those extremes that are being presented through various different channels, but unfortunately there's often little control over which study or researcher or outcome gets amplified the loudest. Really more than anything, too, laboratorians, even though we are predominantly scientists and we have that scientific background, we all have our biases, and I think exploring how media attention might shape how the laboratory responds was an intriguing area for us to explore.

Bob Barrett: Were you surprised by any of the expert's responses?

Frederick Strathmann: I think it was surprising perhaps to see the depth of challenges that are still out in front of the pursuit of psychedelic-based treatments. For me personally, when I heard about the complexity of the research studies, the clinical trial designs, and even further discussion into the degree of clinical oversight that's anticipated with the administration of these therapies, it really became more obvious how much is left for us to understand not only about these compounds, but also the treatments that are associated with them. I think a pleasant surprise was how every expert, from every unique viewpoint, emphasized the importance of all efforts contributing to better patient care, and without explicitly trying to do so on our line of questioning, the conversation really captured the value that laboratory medicine and related research brings to improving patient lives.

Bob Barrett: Did you expect the expert's answers to be so similar, or did you think there would be some diversity of opinion?

Frederick Strathmann: We were initially surprised by the degree of overlap in the answers given with how diverse the backgrounds of the experts on the panel were. And even though every expert started their answer from a very different origin, each one ended up on some degree of a common path, which was enjoyable, but was also slightly surprising at times. And after

reading the answers for the first time, I was sort of imagining that if we took their responses and turn them into a word cloud or some kind of a Venn diagram, it'd be a very visually stunning way to see just how integrated the practice of laboratory medicine is with the numerous facets of research, regulation, and testing.

Bob Barrett: Finally, doctor, what are one or two key points you'd expect the typical laboratory to take away from this article?

Frederick Strathmann: I think beyond some of just the really fascinating viewpoints on the topic of psychedelics and medicine in general, I would say more than anything is that the lab should be acting now to help support this area of medicine. As it always has been, it's crucial that the laboratory leadership proactively get engaged in their physician communities with those using their laboratory services to understand testing needs in this area, as well as ways we can help remove any stigma around these compounds. And basic things like rethinking test interpretations, reference intervals, and even analytical test design are all aspects that may need reconsideration given how these compounds are, and may be, used in the future.

I think something as simple as having a psychedelics panel that bypasses a non-specific drugs of abuse screen may be a small yet visible way to help do that. I think all of these immediate term possibilities are exciting because they continue to highlight how the laboratory contributes to patient care, but also how the laboratory can impact the perception and potentially the acceptance of emerging therapeutic treatments.

Bob Barrett: Do you expect to see any changes to their daily practice as a result?

Frederick Strathmann: I definitely think there's going to be some need to explore, from the very beginning, test menus and test design and how are they actually conducting this testing now and at the annual scientific meeting and something that comes through in the Q&A as well. I think one of the most important aspects is a lot of these compounds right now exist in drug abuse panels, and we certainly are not wanting to have any more stigma put to these compounds as they're being studied. I definitely think there's going to have to be some repositioning and some reconsideration to where these tests lie and how these tests are advertised and provided to clinicians that are looking to order them.

Bob Barrett: That was Dr. Frederick Strathmann from MOBILion Systems in Chadds Ford, Pennsylvania. He served as a moderator for the Q&A feature on medicinal use of psychedelic compounds in the April 2023 issue of *Clinical Chemistry*, and he's been

our guest in this podcast on that topic. I'm Bob Barrett.
Thanks for listening.