

Good afternoon. My name is Andrew Coop, and I hold a doctorate (PhD) from the University of Bristol in the UK. I have worked on the chemistry and pharmacology of substances with the potential for abuse my whole career for which I received significant NIH funding. I am now the Associate Dean for Graduate Programs at the University of Maryland School of Pharmacy. My recent focus has been overseeing six courses in our Masters in Medical Cannabis Science and Therapeutics program, including a course on medical psychedelics, and I have worked with the US Department of Justice as an expert witness in criminal trials concerned with psychedelics.

I support SB1009 - Task Force on Responsible Use of Natural Psychedelic Substances.

Natural psychedelic substances have been used for millennia, and rose to wide prominence in the middle of the last century. Although associated with the counterculture, much research was performed on the agents, especially at institutions in Maryland. Several psychedelic substances are already FDA approved showing they can be safely used. The natural psychedelic substances named in this Bill have all shown to be beneficial in the treatment of a wide range of mental health conditions, including PTSD, depression, substance use disorder (including smoking), and also for the treatment of chronic pain. These are areas of critical need, as current treatments can lack efficacy, and many of our fellow citizens of Maryland suffer tremendously.

Importantly, there are clinical trials funded by the National Institutes of Health (NIH) concerned with the safety and beneficial effects of psychedelics, demonstrating the potential seen by the federal government. A search showed 54 such trials in Maryland. Studies have shown a safety profile that is almost unheard of, and low abuse potential (read: addition, dependence); many states already have religious exemptions for dimethyltryptamine and the widespread use shows their safety.

One area where education is critical is the difference between the natural source (plant, such as peyote) and the active substance (mescaline). An analogy illustrative of this is coffee/caffeine: coffee comes from coffee beans (plant), but the active substance is caffeine.

Scientists have shown the effects are almost certainly due to what is called neurogenesis and neuroplasticity, after activating the brain's serotonin system – this is the same system through which many currently approved antidepressants work. Mental health conditions are chronic diseases of the brain, where connections between brain cells (neurons) are different - psychedelics create both new neurons and “correct” connections between the neurons. This is fascinating science, and explains why so many mental health conditions can be treated with natural psychedelic substances.

Product quality is a critical component of safe access to these medications by all citizens of Maryland – we need regulations to prevent unregulated (and potentially unsafe) products. The program we created at the University of Maryland shows my commitment to education, and education is a critical component of this Bill. I fully support SB1009.

Sincerely,



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Resources:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6851782/>
<https://www.science.org/doi/full/10.1126/sciadv.abp8283>
<https://pubmed.ncbi.nlm.nih.gov/32098487/>
<https://reporter.nih.gov/search/GQyhb6SXwEG-8OMfl18azA/project-details/10187739>
News release: <https://www.hopkinsmedicine.org/news/newsroom/news-releases/johns-hopkins-medicine-receives-first-federal-grant-for-psychedelic-treatment-research-in-50-years>
<https://psychedelicinvest.com/psychedelic-laws/>
<https://nida.nih.gov/news-events/meetings-events/2022/01/nih-workshop-psychedelics-therapeutics-gaps-challenges-opportunities>
<https://journals.sagepub.com/doi/abs/10.1177/0269881114548296?journalCode=jopa>
<https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2772630>
<https://www.nature.com/articles/s41591-021-01336-3>
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<https://www.nature.com/articles/s41386-022-01389-z>
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