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Dear Senators,

I am a faculty member of Johns Hopkins University School of Medicine in the Department of Psychiatry. My specialty is conducting research on novel drugs of abuse, and understanding the nature of addiction and its treatment.

In my role in representing Johns Hopkins University School of Medicine, I wish to state that if Salvia divinorum is to be made a Schedule I drug, I support amendments which would close the legal loophole for allowing for my currently FDA-approved and Johns Hopkins Institutional Review Board-approved study to conduct human research with salvinorin A, the active constituent of Salvia divinorum. The current mechanism for exemption for Schedule I drugs in Maryland requires Federal legal exemption for research with the Schedule I drug. However, because this drug is not scheduled under Federal law, no such exemption is possible from DEA, which administers such Federal exemptions.

However, speaking beyond my role as a representative of Johns Hopkins, I, as scientist who specializes in drug abuse, addiction and its treatment, along with my research colleague Dr. Roland Griffiths, a Professor and Psychiatry and Neuroscience at Johns Hopkins School of Medicine who has been studying drug abuse for over 30 years, recognize that there is a larger issue here that is not being considered by the Senate. That is, putting the drug into Schedule I will inevitably hamper research, regardless of potential research exemptions. Some legislators have stated that research would continue as normal should a research provision be included in the Schedule I bill. Our experience in the drug abuse research field has shown us that this is a well-intentioned, yet drastic misunderstanding of modern drug development research.

For example, I can guarantee that virtually no pharmaceutical company would invest the millions of dollars, that are required for medications development, into a Schedule I drug, or its derivatives, which would also be considered as Schedule I. There is simply no commercial feasibility for a Scheduled I drug or a derivative of it.

This is alarming considering that this compound is completely unique, and there is good reason to think a derivative of the drug could one day provide a breakthrough medication for chronic pain, Alzheimer's disease and other forms of dementia, schizophrenia, bipolar disorder, or cocaine dependence, potentially saving thousands of lives in the long run. Therefore, scheduling the drug, even if our study is protected, could quite realistically prevent (or delay by decades) potential significant medical advances in the treatment of these life-threatening diseases.

Besides the pharmaceutical industry, large segments of academic research would also be prevented. For example, researchers doing rodent studies on models of Alzheimer's disease are extremely unlikely to be currently working with scheduled drugs, and will not realistically be willing or able to meet the incredibly high thresholds for gaining exemptions for scheduled drugs. Only a small minority of researchers such as myself, who study drugs of abuse have the institutional history and resources to gain these exemptions. For example, we literally have a bank vault for drug storage, 24 hour guarded security at the front desk, etc.

We would encourage legislators to read our included documents. One is a somewhat lengthy synopsis written by Dr. Griffiths and myself, of the known science about *Salvia divinorum* and its potential areas of danger as well as its promising role as a research tool and its potential for medications development.

However, what may be more useful to legislators is the chart we provide about the wide variety of potential ways of regulating this drug, along with examples of a wide variety of dangerous drugs and how they are regulated. In addition to this, I am providing a 1-page synopsis sheet that distills the known potential dangers of *Salvia divinorum* across important domains relevant to drug abuse, and compares *Salvia divinorum* relative to other drugs. We would encourage legislators to review the chart, along with our 1-page comparison sheet, and use these to judge the appropriate way to regulate *Salvia divinorum*.

We recognize the well-intentioned effort to schedule this drug into Schedule I. We believe a primary reason is the tragic death of the teen in Delaware. We understand the incredible heartache caused by his death. However, from a scientific perspective, there are over 4,000 teen suicides per year, and there is no claim or evidence that the teen was on the drug when he committed suicide. It is scientifically impossible to attribute this death to *Salvia divinorum*. In contrast, many teens unambiguously die every year from causes directly caused by drugs, including the abuse of solvents (very little regulation) and over the counter medicines (minimally regulated), to alcohol (moderately regulated), and to Scheduled II-V drugs such as cocaine, amphetamine, Oxycontin®, and anabolic steroids, all of which are Scheduled lower than Schedule I.

Considering the greatest good for society, it is worth considering a wide range of legislative options for regulating this drug that fall below Schedule I control.

Sincerely,



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