Testimony of Mowgli Holmes, PhD

Joint Committee on Implementing Measure 91 -1 Amendments to HB 3400

My name is Mowgli Holmes. I am the Chief Scientific Officer of Phylos Bioscience, a Portland-based biotechnology company developing genomic tools for the Cannabis agriculture industry. I'm also a founding board member of the Cannabis Safety Institute, and, now, a member of the OLCC Rules Advisory Committee for Measure 91 implementation.

I regret I am not able to join you today and thank Representative Buckley for promoting the Research Certification in Sections 119. For the record, I am also submitting a detailed paper we wrote last month outlining the necessity of state support for research on Cannabis. In that document, we explain the economic and public health problems associated with structuring a new agricultural industry for which very little scientific data exists. We outlined the various types of research that are needed, and suggested several ways to address the issue.

I am submitting this testimony in order to suggest the brief and practical legislative steps that we consider critical at the moment. I won't reiterate the urgency that exists for this research -- those topics were covered in the previous document -- but I will say that we do not believe it is possible for this industry to operate in a safe and sustainable manner without immediate state support for both agricultural and medical research efforts.

We are advocating for a two-pronged approach that will enable both public and private research programs. The public research component is significantly more complex, but we have precedent in programs begun by both Colorado and California, both supported with about \$10M of state funds. The directors of these programs have given us extensive feedback as we developed our recommendations here.

Publicly supported Cannabis research

An Oregon state Cannabis research program should be created -- and funded -- in statute. It should consist of a committee chosen for specific expertise, and operating under the direction of the Oregon Health Authority. This committee would be directed to identify and support important research projects in three categories:

1. Federally approvable research that can be carried out through existing federallyfunded academic institutions, but that will be strongly enabled by state funding. 2. Public health research that can be carried out by state agencies, in particular the OHA and the ODA, given adequate funding and structural support.

3. Public health and agricultural research that can only be effectively accomplished by creating a new state-supported research institute that will allow established researchers to drive critical projects that will *not* be amenable to federal approval, cannot be performed in university settings, and are beyond the scope of existing state agencies. Because of the complete integration of federal funding with the university system, a large proportion of significant Cannabis research is likely to fall into this category. Earlier we submitted a document prepared by the University of Colorado, outlining the difficulties in obtaining federal approval for Cannabis research, and the limitations on those types of research.

The OHA Cannabis Research Committee created to pursue these avenues would need to be allocated significant research funding, and instructed to institute a system of comprehensive grant proposal review as well as internal program development.

Privately supported Cannabis research.

Many research issues can be effectively and rapidly addressed by private entities in ways that are not possible in public settings. A licensure or certification class should be established immediately that will allow private (either commercial or non-profit) organizations to perform Cannabis research. Such research will drive the development of an effective Cannabis industry that brings enormous economic benefits to the citizens of Oregon. Many commercial participants in the Oregon Cannabis industry are facing public health-related issues as well, and we ask the committee members to consider the idea that private research will likely be an effective way of addressing a number of pressing public-health issues as well. For instance, one of the Cannabis testing labs in Oregon (Oregon Growers Analytical) recently completed a large-scale study of pesticide use in the state. This document will be published in several weeks and will set the stage for a comprehensive, and nation-wide, review of pesticide guidelines for the industry. Oregon Cannabis companies are at a disadvantage because of the lack of basic scientific data such as this, and they are generally eager and willing to participate in research projects that protect public health and modernize and support the industry as a whole.

At the moment, there are a number of companies and non-profit organizations in Oregon that would engage in such research, but are not able to because of legal restrictions on handling Cannabis. A state-administered research license or certification would alleviate this barrier to entry and enable a great deal of critical research that the state will *not* have to fund. Criteria for identifying and licensing such organizations should be laid out in statute. These research licenses should be administered by the OLCC, and should be made available as soon as is feasible.

Thank you for your consideration of these recommendations.

Mowgli Holmes