



Testimony Supporting HB 2919  
House Health Care Committee

5 April 2013

Chairman Greenlick, members of the House Health Care Committee Members,

I've been asked to address some points relevant to HB 2919. I am a professor of medicinal chemistry in the Pharmacy program at the University of Montana. I teach Medicinal Chemistry in the professional Pharmacy program, and I am the director of the Medicinal Chemistry Graduate program. I have a Ph.D in organic chemistry (Drexel 1979), I have 92 peer-reviewed publications, my research group has presented 272 published abstracts and presentations at scientific meetings, and I've delivered 87 invited lectures. I've been the mentor to 33 successful graduate students.

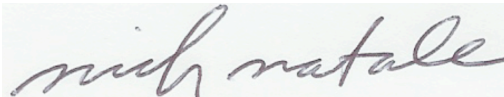
I teach the cancer therapeutic section of the medicinal chemistry course for professional pharmacists, which includes the drugs used to treat cancer pain. Two ethical pharmaceuticals in general medical practice are isolated from or analogs of cannabis: Marinol and Nabilone. In my research, one of my projects studies the signal transduction in the Central Nervous System. We have recently developed a research tool for the study of endocannabinoid transport. There is intense interest in pharmaceutical industry labs in developing molecules that modulate the cannabinoid receptors as potential treatments for pain, epilepsy, and other disorders.

There is an opportunity for HB2919 to place Oregon in the forefront of the rational regulation of medical cannabis. Familiarity with the difficulties that other states have encountered indicates that the approach to inevitable development can be improved. One issue that arose in Montana was that legitimate health care workers were offended by the idea that anyone with a grow lamp and peat pot was labeled a "caregiver". Clearly, certified competent caregivers who spend years in training are in the best position to determine the benefits and risks of a therapy, and there are clear scientific guidelines used in studies as milestones and endpoints for health outcomes. A statewide study with data that stands up to peer review scrutiny would be useful to health care providers worldwide. It was recognized thousands of years ago that "the dose makes the poison", and we wouldn't even consider alcohol presented for public consumption without analysis of the composition of each and every batch. Medical cannabis cannot rationally be expected to have lower standards than any other medication, and the program to assess outcomes should fit the purpose of measuring medical effects. In addition, certified health care providers and certified analytical chemists should provide for local and non-outsourced employment for trained professionals.

A final point for consideration is funding for research that would be derived from a small percentage of taxes or fees. An analogous example is paclitaxel, the natural plant-derived anticancer drug that was improved by pharmaceutical scientists. A worthy pursuit would be to perform research on marijuana plant extracts to improve desired properties (pain management) while minimizing undesirable side effects.

In conclusion, my professional opinion is that taxpayers deserve a program for medical marijuana that is scientifically validated and has professional oversight.

Sincerely,

A handwritten signature in cursive script that reads "nich natale". The signature is written in black ink on a light-colored background.

Nicholas R. Natale  
Professor of Medicinal Chemistry  
Director, Medicinal chemistry Graduate Program