Maryland legislative session 2023, HB 1135 and SB 587

Supporting the Compassionate Access to Medical Cannabis Act

Plant cannabis is medicine. Our federal agency says it is. The Department of Health and Human Services (HHS) funded cannabis research in Israel, decades ago. The research results, discovered by Israeli scientist, Dr. Raphael Mechoulam and his research team, were so strong, the United States federal HHS placed a patent on cannabidiol (CBD). CBD is a chemical constituent (one of many) in the cannabis plant. This patent is dated October 7, 2003.

Most of the research supporting cannabis constituent, CBD was completed by this Israeli team, lead by Dr. Raphael Mechoulam, and funded by the US federal government. (Click hyperlink <u>US6630507B1</u> - <u>Cannabinoids as antioxidants and neuroprotectants</u> - <u>Google Patents</u>)

Cannabinoids have been found to have antioxidant properties, unrelated to NMDA receptor antagonism. This newfound property makes cannabinoids useful in the treatment and prophylaxis of wide variety of oxidation associated diseases, Such as ischemic, age-related, inflammatory, and autoimmune diseases. The cannabinoids are found to have particular application as neuroprotectants, for example in limiting neurological damage following ischemic insults, Such as Stroke and trauma, or in the treatment of neurodegenerative diseases, Such as Alzheimer's disease, Parkinson's disease and HIV dementia. Non psychoactive cannabinoids, Such as cannabidiol, are particularly advantageous to use because they avoid toxicity that is encountered with psychoactive cannabinoids at high doses useful in the method of the present invention. A particular disclosed class of cannabinoids useful as neuroprotective antioxidants is formula (I) wherein the R group is independently Selected from the group consisting of H, CH, and COCH. ¹

Cannabis is medicine and the US government acknowledges this, by placing a patent on part of the plant. How can this plant medicine continue to be a federally illegal schedule one class drug? Clearly, the research has been done. Myth buster: we need more research, first. Indeed, there is solid, peer reviewed research, as demonstrated by the above US patent. Also, the International Alliance for Cannabinoid Medicines (IACM Homepage | IACM (cannabis-med.org) never stopped the research. Another organization founded in the United States, the Society for Cannabis Clinicians SCC SCC SCC Library-Society of Cannabis Clinicians), has a plethora of excellent peer reviewed cannabinoid (cannabis) research. Indeed, the research is there.

While the United States continued with the decades of cannabis illegalization, much of the world's scientific and medical clinicians, continued to explore cannabis as medicine. The research is peer reviewed and compelling.

The human endocannabinoid (ECS) system? Yes, discovered by scientist in 1988. Yet, few US medical, nursing, pharmacy schools educate our emerging professionals about this master regulator of every other body system. This is the essence of why plant cannabis promotes, health, wellness and reduces disease burden. Every cell in our body, as we now know, has a CB1, CB2 receptor, primed to process and transmit our own human body's anandamide (chemically similar to plant TCH) and 2 Arachidonoyl

glycerol (2 AG, chemically similar to plant CBD). Through the constantly changing needs of our human ECS, these chemicals and receptor sites are in a constant state of balance, to maintain wellness/or homeostasis, within our human body. Now that we know this, the stigma and illegalization of plant cannabis, needs to cease. We would never shame a diabetic for using insulin. The shame and stigma of using plant cannabis needs to stop. Imagine a hospital system that would not allow a diabetic to utilize insulin, or to bring in their own insulin for use. Preposterous!

"The human endocannabinoid system (ECS) is the master tone-setter (regulator) of the human body. Anandamide and 2-AG (2-Arachidonolyglycerol) are neuromodulators, in that they work by a process called 'retrograde signaling' Conventional neurotransmitters-serotonin, dopamine, etc. -cross the gap (synapse) between a 'presynaptic' sending cell and a 'postsynaptic' receiver cell. Endocannabinoids are made on demand in the post synaptic neuron and sent back across the synapse to tell the sending cell to tone it down or speed it up. Endocannabinoids, (Anandamide and 2-AG) send their stay-on-aneven-keel signals in systems that regulate appetite, movement, learning (and forgetting), perception of pain, immune response and inflammation, neuroprotection, and other vital processes. Think of a conductor facing an orchestra and directing the tempo and volume at which the instruments produce their sounds." ²

Furthermore, "At the 2013 meeting of the International Association for Cannabinoid Medicine, Dr. Raphael Mechoulam approvingly quoted a paper that conclude "modulating endocannabinoid activity may have therapeutic potential in almost all diseases affecting humans." ³

Moving away from the science of plant cannabis, we enter the political realm. Whom is in charge? Maryland Legislators created a high-quality, stellar, medical cannabis program. This program launched in December 2017, via the Maryland Medical Cannabis Commission (MMCC (maryland.gov). It was orchestrated by the passage of the 2014 Natalie LaPrade medical cannabis legislation (Cannabis [Marijuana] Commission, Maryland Natalie M. LaPrade Medical - Origin & Functions). Our Maryland legislators have already completed the hard work to allow medical cannabis use in Maryland. Sadly, and unbeknownst to most, Maryland health care conglomerates have under minded the spirit of this legislation.

The legislation noted above, never forbid the use of medical cannabis in our health care facilities. This is the work of health care conglomerates. This creates a disconnect, between a medical cannabis patient's access to their plant medicine, caused and is continuing to cause immeasurable harm and suffering. This was clearly not the intent of the Maryland legislators in 2014.

Again, whom is in charge? The Maryland for profit health care systems? Or the Maryland legislators? Per our beloved Maryland congressman, Elijah Cummings, "We are better than this. We are so much better!"

Please consider passage of this bill to promote health and ease disease suffering of our population.

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References

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- 2 Cervantes, Jorge. *The Cannabis Encyclopedia*. 3rd ed. Van Patten Publishing. USA. 2015. Page 19.
- 3 Cervantes, Jorge. *The Cannabis Encyclopedia*. 3rd ed. Van Patten Publishing. USA. 2015. Page 19.