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Alabama House of Representative

RE: Alabama Medical Cannabis legislation, SB46

Thank you for the opportunity to provide the House with my support for medical cannabis in Alabama.

I am a Clinical Professor at the University of Colorado School of Medicine. I recently retired after 23 years as the Distinguished Professor of Alcohol and Drug Abuse Research at UT Southwestern Medical Center and over 30 years as an addiction psychiatrist in the Department of Veterans Affairs. I have published and spoken widely on the biological effects and treatment of addictive disorders (1) and I am the Editor of *The American Journal of Drug and Alcohol Abuse* (2). My research has been funded by the National Institute on Drug Abuse (NIDA), the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the Department of Veterans Affairs.

Marijuana, or "botanical cannabis," has several known cannabinoids that are potentially useful in a number of additional debilitating conditions. In a recent report, the National Academies of Medicine, Engineering, and Sciences reported that there was *conclusive or substantial evidence* that cannabis or cannabinoids are effective for the treatment of chronic pain in adults and multiple sclerosis spasticity (3). *JAMA Internal Medicine* reported that states with medical marijuana laws saw a 25% decrease in opioid overdose deaths compared to states that did not have medical marijuana (4). This observation has been confirmed by other investigators. In states with medical cannabis, studies also show a decrease in Medicaid (5) and Medicare Part D (6) prescriptions for opioids and psychoactive drugs. A review in the *New England Journal of Medicine* by the director of NIDA states "clinical conditions with symptoms that may be relieved by treatment with marijuana or other cannabinoids" include chronic pain, inflammation, multiple sclerosis, AIDS-associated anorexia and wasting syndrome, glaucoma, and nausea (7). It is estimated there are now more than 1.2 million legal medical marijuana patients, and patient surveys consistently find that over half report using marijuana to reduce reliance on prescription drugs, primarily opioids (8).

Key Points of Controversy

- There is no perfect societal response to the dangers of substances, including alcohol, nicotine, cannabis, opioids or amphetamine. What we *do* know is that the damage caused by prohibition, including cannabis prohibition, has taken a terrible toll on our country. Legalization of cannabis accompanied by thoughtful, scientific-based regulation far outweighs the dangers of an unregulated, illicit market with easy access to minors (see dfcr.org/background). Potential misuse of cannabis is best addressed by regulation (including limitations on advertising), informative labeling, education, and prevention. *All available mediations have adverse effects*. Many have the potential for misuse. Potential side effects and misuse of a medication does not typically result in withdrawal of the medication from the market. Rather, it calls for tight oversight and regulation and education of both physicians and patients.
- From a pharmaceutical perspective, botanical cannabis is a very safe drug. In the U.S., tobacco killed almost 500,000 people last year, alcohol almost 90,000. The opioid epidemic was responsible for over 80,000 overdose deaths over the last 12 months reported (May 2019-May 2020). In Alabama, deaths from opioids has gradually increased 10-fold over the past 20 years (approximately 400 in 2018) (1), including a 20% increase in 2020 (2). In contrast, even though cannabis was first legalized in the U.S. 25 years ago and the full plant is now legal in 36 states and the District of Columbia, nobody has ever died from a cannabis overdose. In Colorado, the latest data from the Rocky Mountain Poison and Drug Safety report 973 human exposures to cannabis from Jan 2017 through June 2020 (30 months). To put that into perspective, during this same time period there were approximately 100,000 calls to Colorado Poison Control and approximately *1000 overdose deaths from opioids*. To quote Larry Wolk, the Former Executive Director of the Colorado Department of Public Health and Environment,

  > "We haven't seen any dramatic changes from a public-health standpoint . . . we haven't seen an increase in youth use or adult use, and we haven't seen an increase in DUIs. We had a little blip as far as calls to emergency control and hospital-room visits, but much of that has leveled off and is explainable by other reasons." (3)

- *Minors are protected by a regulated market*. A wealth of studies have shown that cannabis use in minors has *not* increased in states with legalized cannabis (4-6). A recent study in JAMA Psychiatry (7) found that any use and frequent use of cannabis did *not* increase in 12-17 years old individuals and cannabis use disorder was *lower* in 2013-2016 (after adult use legalization) compared to before legalization (see Figure 3, left panel). Colorado was the first state to have legal, adult-use sales. A sting operation in Colorado found that 98.5% of buyers 18-20 years old were unable to buy cannabis in a legal dispensary (8). Colorado Healthy Kids Survey [(9), Fig 5 and (10)] showed that high schoolers reported past-30 day cannabis use *decreased* from 22.7% in 2005 to 22.0% in 2011 and to 20.6% in 2019. Using different survey methodology, the CDC's Youth Risk Behavior Surveillance found 22% of Colorado high schoolers reporting past-30 day use immediately pre-legalization in 2011 and 20.1% in 2019 (11). Notably, the past-30 day use in Colorado high school students was 3-4% higher than U.S. high school students in 2003 through 2009 (using YRBS data) but has been persistently *lower* than U.S. high school students from 2011 through 2019. *These rates of past-30 day cannabis uses are very similar to the 20.1% reported in Alabama adolescents* (11).

- In 2020, a Scientific Statement by the American Heart Association on Medical Marijuana, Recreational Cannabis, and Health – while noting possible cardiac adverse effects of cannabis – concluded "Our understanding of the safety and efficacy of cannabis has been limited by decades of worldwide illegality and continues to be limited in the United States by the ongoing classification of cannabis as a Schedule 1 controlled substance." The organization called for the legalization of medical cannabis (12).

The legislative process is an admittedly unusual pathway for providing legal access to a medication. This approach is often cautioned against while we await the findings from additional research. The exploration of cannabis therapeutics is, indeed, a very exciting area of investigation and many pharmaceuticals that utilize the human body's cannabinoid receptors are in development. However, the pathway to FDA approval is a long and arduous process; it will likely be at least a decade before many of these compounds are available for use. And despite the clarion call for "more research," very little research in the U.S. is being funded in cannabis therapeutics; furthermore, this research is notoriously difficult to conduct due to government restrictions. Meanwhile, there is an *urgent need* to increase the availability of botanical cannabis for those presently suffering. Although I myself was initially skeptical of many of the claims of medical cannabis advocates, I can no longer ignore the hundreds of personal and heart-felt testimonies of changed lives, not possible with present pharmaceuticals, that I have heard over the past several years. I hope that you are similarly touched.

It is important that the ability of patients to obtain a potentially life-saving drug is not further delayed. I urge your support of the use of medical cannabis in Alabama.

Sincerely,

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Executive Vice President and Board of Directors
Doctors for Cannabis Regulation (DFCR)
"You are not obligated to complete the work, but neither are you free to desist from it." Pirkei Avot 2:21

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