

October 27, 2020

Dear Members of the California Cannabis Advisory Committee,

I am writing this letter to address an item on your October 30, 2020 agenda (Item #6) related to possible action on recommendations related to impacts of high-THC consumption research. As many in the scientific community, like myself, may be unable to participate in your virtual meeting, and because decisions such as state regulation of high THC cannabis products must be made with the best scientific evidence, I believe it is necessary for you to hear directly from a large group of scientists.

I am a tenured, full professor at the University of Southern California's Sol Price School of Public Policy and Senior Fellow in the USC Schaeffer Center for Health Policy & Economics. I have conducted NIH sponsored research on cannabis markets and their public health impacts for more than two decades, provided consultation to U.S. states and Canada regarding their cannabis liberalization policies, and currently serve on the World Health Organization's Technical Expert Committee on Public Health Risks Association with Cannabis Use and Cannabis Use Disorders. Through my research and experiences, I have nurtured a broad network of scientific scholars who are top experts in their fields, ranging from pharmacology, neuroscience, neuropsychology, chemistry, public health, medicine, toxicology, criminal justice and epidemiology, to ensure that I stay abreast of the science in each of these areas as it pertains to my own research. I drew on that network to generate the list of signatories you will find here. While we come from different fields of study, have different scientific approaches, and even different beliefs concerning the benefits and harms of a legal cannabis market, there is genuine agreement regarding the strength of the emerging evidence with respect to high THC products and their association with adverse health outcomes for specific populations.

That is not to say that there are not positive medical benefits associated with consumption of high-THC products for some individuals. However, a public health and public safety approach would require the adoption of regulations to address the unique risks, harms, and public health costs associated with consumption of high THC products, which differ from consumption of low THC products. While there is currently no clear definition of "high-THC", the current science focuses on dosage of use. There is increasing evidence of a "dose-response" relationship exists with the following negative health events, particularly identified in targeted age groups, demographic groups, and/or at -risk populations:

- Cannabis hyperemesis syndrome * psychosis and psychotic disorders, * depression, * respiratory symptoms and illnesses, * cardiovascular symptoms * gastrointestinal symptoms, * psychomotor performance (leading to increased motor vehicle injuries), * acute nonfatal cannabis poisonings * cannabis use disorder.

The science continues to grow its level of understanding regarding these relationships as well as others, so this should not be viewed as a comprehensive list. Nonetheless, there is indeed a growing consensus of the unique risks of high-THC products for particular subpopulations.

Two independent scientific workgroups, convened at the request of the states of Washington and Colorado, reviewed the most recent evidence on the topic and formulated similar consensus statements in their final reports. Both concluded that consumption of higher potency cannabis products contributes in a dose-response manner to adverse health, with an increased risk for young users and those with pre-existing mental health conditions. Similarly, just last week the American Society of Addiction Medicine (ASAM) released a public commentary on cannabis, acknowledging the therapeutic benefit of medical cannabis, the harm of prohibition, but the need to limit potency in a recreational market in light of known adverse health events. The signatories to this letter agree with the assessment that high THC products should be regulated differently from low THC products, particularly in the recreational market.

We appreciate the Committee's careful consideration of how to regulate high THC cannabis products in California, using the best available science on which to base your decision.

Sincerely,



Rosalie Liccardo Pacula, Ph.D.

Elizabeth Garrett Chair in Health Policy, Economics & Law and Professor of Health Policy and Management

Sol Price School of Public Policy

Schaeffer Center for Health Policy & Economics


University of Southern California

Enclosure

The following scientists (name, title, institution and signature) support the statement of this letter that there is adequate scientific research to support differential regulation of high-THC products for recreational use by adults.

Name: Dr. George Sam Wang

Position/Institution: Associate Professor of Pediatrics, University of Colorado Anschutz Medical Campus, Children's Hospital Colorado

Signature:  _____

Name: Dr. Wayne Hall

Position/Institution: Professor, National Centre for Youth Substance Use Research, Faculty of Health and Behavioural Sciences, University of Queensland, Australia

Signature:  _____

Name: Jane Steinberg, Ph.D., MPH

Position/Institution: Assistant Professor, Department of Preventive Medicine, Keck School of Medicine at USC

Signature:  _____

Name: Dr. Janni Leung

Position/Institution: Research Fellow, School of Psychology & National Centre for Youth Substance Use Research, Faculty of Health and Behavioural Sciences, University of Queensland, Australia.

Signature:  _____

Name: Dr. Gary Chan

Position/Institution: Research Fellow, National Centre for Youth Substance Use Research, Faculty of Health and Behavioural Sciences, University of Queensland, Australia.

Signature:  _____

Name: Katherine Keyes

Position/Institution: Columbia University Mailman School of Public Health

Signature:  _____

Name: Robin Room

Position/Institution: Distinguished Professor, La Trobe University, Melbourne, Australia

Signature: 


Name: Keith Humphreys

Position/Institution: Professor, Department of Psychiatry & Behavioral Sciences, Stanford University, School of Medicine

Signature: 

Name: Dr. Eva Hoch

Position/Institution: Head of Cannabinoid Research Group, Department of Psychiatry & Psychotherapy, Department of Psychology, Ludwig-Maximilian University, Munich Germany

Signature: 

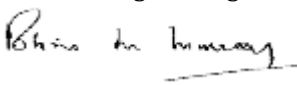
Name: Dr Nadia Solowij

Position/Institution: Professor, School of Psychology, University of Wollongong, NSW and Co-Director The Australian Centre for Cannabinoid Clinical and Research Excellence (ACRE), Australia

Signature: 

Name: Sir Robin Murray

Position/Institution: King's College, London, UK

Signature: 

Name: Dr. David Hammond

Position/Institution: Professor, School of Public Health, University of Waterloo, Canada

Signature: 

Name: Timothy Naimi

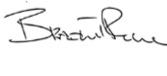
Position/Institution: Director, Canadian Institute for Substance Use Research

Signature: 


Name: Martin Y. Iguchi
Position/Institution: Senior Behavioral Scientist, RAND Corporation

Signature: 

Name: Brad Rowe
Position/Institution: Lecturer Cannabis Policy and Society at UCLA Luskin School of Public Affairs

Signature: 


Name: Anne Boustead, J.D., Ph.D.
Position/Institution: Assistant Professor, University of Arizona

Signature: 


Name: David Kerr, Ph.D.
Position/Institution: Professor, School of Psychological Science, Oregon State University

Signature: 

Name: Ziva D Cooper, PhD
Position/Institution: Director, UCLA Cannabis Research Institute, Associate Professor, Jane and Terry Semel Institute for Neuroscience and Behavior, Department of Psychiatry and Biobehavioral Sciences, UCLA DGSOM

Signature: 

Name: Yuyan Shi, Ph.D.
Position/Institution: Associate Professor, Herbert Wertheim, School of Public Health and Human Longevity Science, University of California San Diego

Signature: 

Name: Meenakshi S. Subbaraman, PhD
Position/Institution: Biostatistician, Director of Statistical & Data Services, Alcohol Research Group, Public Health Institute

Signature: 


Name: Alan J. Budney, Ph.D.
Position/Institution: Dartmouth College, Geisel School of Medicine
Signature: *AlanJBudney*

Name: Deborah Hasin, Ph.D.
Position/Institution: Professor, Columbia University Dept of Psychiatry
Signature: *Deborah Hasin*

Name: Jacob T. Borodovsky
Position/Institution: Washington University School of Medicine in St. Louis

Signature: 

Name: Benedikt Fischer, PhD
Position/Institution: Hugh Green Foundation Chair in Addiction Research and Professor; Schools of Population Health & Pharmacy; Faculty of Medical and Health Sciences, University of Auckland, New Zealand

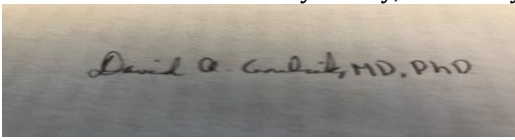
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Name: William C. Kerr, Ph.D.
Position/Institution: Senior Scientist and Center Director, Alcohol Research Group, Public Health Institute
Signature: *WC Kerr*

Name: Chinazo Cunningham, MD, MS
Position/Institution: Professor of Medicine, Family & Social Medicine, Psychiatry & Behavioral Sciences at the Albert Einstein College of Medicine

Signature: 

Name: David A. Gorelick, MD, PhD
Position/Institution: Professor of Psychiatry, University of Maryland

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Name: Steven Davenport, PhD
Position/Institution: RAND Corporation, Adjunct Researcher; Center for New Data, Co-Executive Director

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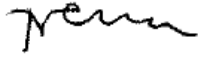
Name: Beatriz H. Carlini, PhD, MPH

Position/Institution: Research Scientist, Cannabis Research and Education. Alcohol and Drug Abuse Institute-ADAI. Affiliate Associate Professor and Director, Tobacco Studies Program. School of Public Health, Health Services, University of Washington

Signature: 

Name: Tom Freeman, PhD

Position/Institution: Senior Lecturer and Director, Addiction and Mental Health Group, University of Bath

Signature: 

Name: Brian J. Sherman, Ph.D.

Position/Institution: Assistant Professor, Medical University of South Carolina

Signature: 

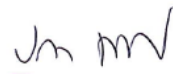
Name: John T. Carnevale, PhD

Position/Institution: President/ CEO of Carnevale Associates

Signature: 


Name: Valentina Lorenzetti

Position/Institution: Australian Catholic University

Signature: 

Name: Gregory J Tung, PhD

Position/Institution: Associate Professor, Department of Health Systems, Management & Policy, Colorado School of Public Health

Signature: 

Name: Kevin P. Haggerty

Position/Institution: Social Development Research Group, University of Washington

Signature: 


Name: Julia Dilley

Position/Institution: Epidemiologist; Affiliate Instructor, School of Public Health and Community Medicine, University of Washington

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Name: Caislin Firth

Position/Institution: Research Scientist, Alcohol & Drug Abuse Institute, University of Washington

Signature: 

Name: Nephi Stella

Position/Institution: Professor, Department of Pharmacology and of Psychiatry and Behavioral Sciences, University of Washington

Signature: 

Name: Jennifer A. Bailey

Position/Institution: Principal Research Scientist, Social Development Research Group, University of Washington

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