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Introduction to a Debate: “Marijuana: Legalize, Decriminalize, or Leave the Status Quo in Place?”

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Introduction to a Debate: “Marijuana: Legalize, Decriminalize, or Leave the Status Quo in Place?”

Paul J. Larkin, Jr. *

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INTRODUCTION

What someone thinks of marijuana can depend on who that person is. To a botanist, marijuana is a plant known as *Cannabis sativa L* that traces its lineage to the first quintile of the Holocene Epoch.¹ To a chemist, marijuana is a source of the psychoactive substance Δ^9 -tetrahydrocannabinol (THC).² To a student of international affairs, marijuana is the third

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¹ So labeled by Swedish botanist Carl Linnaeus in 1753. Paul J. Larkin, Jr., *Medical or Recreational Marijuana and Drugged Driving*, 52 AM. CRIM. L. REV. 453, 456 n.11 (2015). Archaeological evidence shows that man used naturally growing marijuana more than ten thousand years ago. See, e.g., BRITISH MED. ASS’N, THERAPEUTIC USES OF CANNABIS 7 (1997) [hereinafter BRITISH MED. ASS’N]; Sunil K. Aggarwal et al., *Medicinal Use of Cannabis in the United States: Historical Perspectives, Current Trends, and Future Directions*, 5 J. OPIOID MGMT. 153, 153–57 (2009); Solomon H. Snyder, *Foreword* to LESLIE L. IVERSEN, THE SCIENCE OF MARIJUANA, 12–13, 17–18, 21–24, 116, 121 (2d ed. 2008).

² BRITISH MED. ASS’N, *supra* note 1, at 7, 10–11 Tbl. 1; NAT’L INST. ON DRUG ABUSE,

most commonly used recreational drug worldwide, following only alcohol and tobacco.³ To a narcotics officer, marijuana is contraband.⁴ To a judge, marijuana is a Schedule I controlled substance whose cultivation, possession, and distribution, until recently, has been a federal and state crime for more than eighty years.⁵ To a movie critic, marijuana is the subject of a stoner film.⁶ To students of public policy, however, marijuana is the focus of a debate that has raged for the last fifty years.⁷

MARIJUANA 6 (Apr. 2017) [hereafter NAT'L INST., MARIJUANA]; IVERSON, *supra* note 1, at 27–65, 189.

³ IVERSEN, *supra* note 1, at 222. Estimates are that approximately 40 percent of Americans have tried marijuana. Marijuana is the world's most widely used illicit drug, despite having been under international control for eight decades. *Id.*; R. Andrew Sewell et al., *The Effect of Cannabis Compared with Alcohol on Driving*, 18 AM. J. ON ADDICTIONS 185, 185 (2009).

⁴ See, e.g., Controlled Substances Act, Pub. L. No. 91-513, 84 Stat. 1242 (1970) (codified as amended at 21 U.S.C. § 801–904 (2012)).

⁵ See, e.g., Marijuana Tax Act of 1937, ch. 553, 50 Stat. 551 (1937), *held unconstitutional* by *Leary v. United States*, 395 U.S. 6 (1969), *repealed* by Comprehensive Drug Abuse Prevention and Control Act of 1970, § 1101(b)(3), Pub. L. No. 91-513, 84 Stat. 1236, 1292 (1970); Richard J. Bonnie & Charles H. Whitebread, II, *The Forbidden Fruit and the Tree of Knowledge: An Inquiry into the Legal History of American Marijuana Prohibition*, 56 VA. L. REV. 976 (1970).

⁶ See, e.g., CHEECH & CHONG'S UP IN SMOKE (Paramount Pictures 1978); GROW HOUSE (Rocky Mountain Films 2017); LEAVES OF GRASS (Millennium Pictures 2010); REEFER MADNESS (Motion Picture Ventures 1936).

⁷ The private and public sector medical and public policy literature discussing the pros and cons of marijuana use is enormous. For a sample, see INST. OF MED., MARIJUANA AND MEDICINE: ASSESSING THE SCIENCE BASE (Janet E. Joy et al. eds., 1999) [hereinafter INST. OF MED.]; NAT'L ACAD. OF SCI., ENG'G, & MED., THE HEALTH EFFECTS OF CANNABIS AND CANNABINOIDS: THE CURRENT STATE OF EVIDENCE AND RECOMMENDATIONS FOR RESEARCH (2017) [NAT'L ACAD. REPORT]; OFFICE OF NAT'L DRUG CONTROL POLICY, MARIJUANA MYTHS AND FACTS: THE TRUTH BEHIND 10 POPULAR MISCONCEPTIONS (2014); U.S. COMM'N ON MARIJUANA & DRUG ABUSE, MARIJUANA: A SIGNAL MISUNDERSTANDING (1972); WORLD HEALTH ORG., CANNABIS: A HEALTH PERSPECTIVE AND RESEARCH AGENDA (1997); WILLIAM J. BENNETT & ROBERT A. WHITE, GOING TO POT: WHY THE RUSH TO LEGALIZE MARIJUANA IS HARMING AMERICA (2015); RICHARD J. BONNIE & CHARLES H. WHITBREAD II, THE MARIJUANA CONVICTION: A HISTORY OF MARIJUANA PROHIBITION IN THE UNITED STATES 1–2 (1999); JONATHAN P. CAULKINS ET AL., MARIJUANA LEGALIZATION: WHAT EVERYONE NEEDS TO KNOW 74 (2012) [hereafter CAULKINS ET AL., MARIJUANA LEGALIZATION]; JONATHAN P. CAULKINS ET AL., CONSIDERING MARIJUANA LEGALIZATION: INSIGHTS FOR VERMONT AND OTHER JURISDICTIONS (RAND Corp. 2015); MITCH EARLEYWINE, UNDERSTANDING MARIJUANA: A NEW LOOK AT THE SCIENTIFIC EVIDENCE (2002); TODD GARVEY & BRIAN T. YEH, CONG. RESEARCH SERV., R43034, STATE LEGALIZATION OF RECREATIONAL MARIJUANA: SELECTED LEGAL ISSUES (2014); TODD GARVEY, CONG. RESEARCH SERV., R42398, MEDICAL MARIJUANA: THE SUPREMACY CLAUSE, FEDERALISM, AND THE

At the center of that debate has been the issue whether marijuana has legitimate medical uses, is addictive, and is actually or potentially physically or psychologically harmful. Numerous studies and articles have examined each of those issues. Powerful arguments have been made for and against the liberalization of federal and state marijuana laws.⁸ The debate centers around three issues: (1) Does marijuana or one of its components (known as cannabinoids) have a legitimate medical use?; (2) Is marijuana or one of its components physically or psychologically harmful?; and (3) Is marijuana or one of its components physically or psychologically addictive? The arguments offered by advocates for and opponents of reform can be summarized in three parts, discussed below.

I. THE ARGUMENTS IN FAVOR OF REFORM OF THE MARIJUANA LAWS

Advocates for reform contend that marijuana has legitimate medical uses, particularly when smoked,⁹ to treat chemotherapy-induced nausea and vomiting, to increase appetite and decrease weight loss associated with HIV/AIDS, to address the neuropathic pain and spasticity afflicting victims of multiple sclerosis, to alleviate the chronic pain in adults that

INTERPLAY BETWEEN STATE AND FEDERAL LAWS (2012); WAYNE HALL, CANNABIS USE AND DEPENDENCE: PUBLIC HEALTH AND PUBLIC POLICY (2003); JOHN KAPLAN, MARIJUANA: THE NEW PROHIBITION (1969); MARK A.R. KLEIMAN, MARIJUANA: COSTS OF ABUSE, COSTS OF CONTROL (1989); DAVID F. MUSTO, THE AMERICAN DISEASE: ORIGINS OF NARCOTICS CONTROL 217 (3d ed. 1999); ROBIN ROOM ET AL., CANNABIS POLICY: BEYOND STALEMATE (2010); KEVIN A. SABET, REEFER SANITY: SEVEN GREAT MYTHS ABOUT MARIJUANA (2013); LISA N. SACCO & KRISTIN FINKLEA, CONG. RESEARCH SERV., R43164, STATE MARIJUANA LEGALIZATION INITIATIVES: IMPLICATIONS FOR FEDERAL LAW ENFORCEMENT (2014); Wayne Hall, *What Has Research Over the Past Two Decades Revealed About the Adverse Health Effects of Recreational Cannabis Use?*, 110 ADDICTION 19 (2014); Alex Kreit, Commentary, *The Future of Medical Marijuana: Should the States Grow Their Own?*, 151 U. PA. L. REV. 1787 (2003); Rosalie Liccardo Pacula & Eric L. Sevigny, *Marijuana Liberalization Policies: Why We Can't Learn Much from Policy Still in Motion*, 33 J. POL'Y ANALYSIS & MGMT. 212 (2014).

⁸ The paragraphs that follow summarize a subset of the arguments made by each side in this controversy. For detailed presentations, see the books and articles cited elsewhere in this Introduction, particularly CAULKINS ET AL., MARIJUANA LEGALIZATION, *supra* note 7.

⁹ Smoked plant-form marijuana, supporters contend, is superior to other, synthetic THC delivery vehicles (*e.g.*, pills, inhalants, and suppositories) approved by the U.S. Food and Drug Administration (*e.g.*, Dronabinol) or other nations (*e.g.*, Nabiximol), NAT'L ACAD. REPORT, *supra* note 7, at 54 Tbl. 2-2, because inhalation works more effectively and more quickly, reaching the brain within seconds. *See, e.g.*, IVERSEN, *supra* note 1, at 41-47; Aggarwal et al., *supra* note 1, at 164.

over-the-counter analgesics cannot assuage, and to help with sleep disturbances attributable to several different diseases.¹⁰ Marijuana is no more harmful than alcohol or tobacco.¹¹ Any potential long-term health problems, moreover, are hardly risks for someone presently suffering from intractable pain, nausea, and vomiting or who is in the end stages of a terminal disease.¹² Marijuana generally produces pleasant sensations in the individuals that use it,¹³ and it is reasonably safe, far more so than some other drugs that physicians can prescribe, such as opiates.¹⁴ In fact, there are no reported deaths from a marijuana overdose.¹⁵ For that reason, marijuana can be used for pain relief in lieu of morphine,¹⁶ a particularly important alternative considering the number of people—more than 64,000—who fatally overdosed on opioids in 2016.¹⁷ The synthetic forms

¹⁰ See, e.g., NAT'L ACAD. REPORT, *supra* note 7, at 128 Box 4-1 (listing conditions for which marijuana is a treatment for which there are varying degrees of scientific support); IVERSEN, *supra* note 1, at 56–63, 131–48, 162; Aggarwal et al., *supra* note 1, at 156, 163; Nora D. Volkow et al., *Adverse Health Effects of Marijuana Use*, 370 NEW ENG. J. MED. 2219, 2224 (2014) (listing clinical conditions with symptoms marijuana may alleviate); Penny F. Whiting et al., *Cannabinoids for Medical Use: A Systematic Review and Meta-Analysis*, 313 J. AM. MED. ASS'N 2456 (2015).

¹¹ See, e.g., Wayne Hall & Louisa Degenhardt, *Adverse Health Effects of Non-medical Cannabis Use*, 374 LANCET 1383, 1389 (2009) (“The public health burden of cannabis is probably modest compared with that of alcohol, tobacco, and other illicit drugs.”).

¹² See, e.g., INST. OF MED., *supra* note 7, at 4; Jerome P. Kassirer, *Federal Foolishness and Marijuana*, 336 NEW ENG. J. MED. 366 (1997).

¹³ See, e.g., NAT'L INST., MARIJUANA, *supra* note 2, at 8 (“Many people experience a pleasant euphoria and sense of relaxation. Other common effects, which may vary dramatically among different people, include heightened sensory perception (e.g., brighter colors), laughter, altered perception of time, and increased appetite.”). The pleasurable feeling from marijuana use, the argument goes, should count for as much of a benefit as the comparable feeling from alcohol use. CAULKINS ET AL., MARIJUANA LEGALIZATION, *supra* note 7, at 75–76.

¹⁴ See, e.g., INST. OF MED., *supra* note 7, at 6 (“[E]xcept for the harms associated with smoking, the adverse effects of marijuana use are within the range of effects tolerated for other medications.”); IVERSEN, *supra* note 1, at 56, 162.

¹⁵ See, e.g., CAULKINS ET AL., MARIJUANA LEGALIZATION, *supra* note 7, at 42–44; Aggarwal et al., *supra* note 1, at 162 (“In its 4,000+ years of documented use, there is no report of death from overdose with cannabis. In contrast, as little as 2 grams of dried opium poppy sap can be a lethal dose in humans as a result of severe respiratory depression.”).

¹⁶ See, e.g., CAULKINS ET AL., MARIJUANA LEGALIZATION, *supra* note 7, at 214; David Powell et al., *Do Medical Marijuana Laws Reduce Addictions and Deaths Related to Pain Killers?*, Nat'l Bureau of Econ. Research, Working Paper No. 21345 (2015), <http://www.nber.org/papers/w21345.pdf>.

¹⁷ See, e.g., President Donald Trump, Remarks on Combating Drug Demand and the

of marijuana cannot provide the same relief as the plant variety due to the “entourage effect”—*viz.*, the combined effect of various cannabinoids.¹⁸

As a matter of social policy, the criminal justice system cannot deter marijuana use at a cost society deems acceptable. Aggressive enforcement of the marijuana laws has not and cannot prevent the supply of an easily cultivated drug that can be grown almost anywhere for which consumers have an enduring demand on a widespread basis. Continued pursuit of contemporary drug enforcement policy will only waste the criminal justice system’s scarce resources, but also exacerbate further the disproportionate effect that our drug laws have on racial and ethnic minorities.¹⁹ Finally, a free society generally permits adults to make informed decisions whether to knowingly engage in even dangerous activities.²⁰ Marijuana use harms no one but the user, so society should let each

Opioid Crisis (Oct. 26, 2017), <https://www.whitehouse.gov/the-press-office/2017/10/26/remarks-president-trump-combatting-drug-demand-and-opioid-crisis> (“Last year, we lost at least 64,000 Americans to overdoses. That’s 175 lost American lives per day. That’s seven lost lives per hour in our country. Drug overdoses are now the leading cause of unintentional death in the United States by far.”); CTRS. FOR DISEASE CONTROL, NAT’L CTR. FOR HEALTH STATISTICS, PROVISIONAL DRUG OVERDOSE DEATH COUNTS (Oct. 2017), <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm> (noting that more than 65,000 persons died from opiate overdoses in the year ending in March 2017); Marcus A. Bachhuber et al., *Medical Cannabis Laws and Opioid Analgesic Overdose Mortality in the United States, 1999–2010*, 174 J. AM. MED. ASS’N: INTERNAL MED. 1668 (2014) (reporting that there were fewer opioid overdoses in states with medical marijuana laws); David Brown, *Opioids and Paternalism*, AM. SCHOLAR 23, 24 (Sept. 5 2017), <https://theamericanscholar.org/opioids-and-paternalism/#> (“The proliferation of opioid use in the United States is called an epidemic, but it more resembles metastatic cancer. The malignant effects extend far beyond the 300,000 Americans who’ve died since 2000.”).

¹⁸ See, e.g., CAULKINS ET AL., MARIJUANA LEGALIZATION, *supra* note 7, at 67–68, 88–89. The marijuana plant contains more than 500 other chemicals, including more than 100 compounds that are chemically related to THC, known as cannabinoids. NAT’L INST., MARIJUANA, *supra* note 2, at 6.

¹⁹ See, e.g., AM. CIVIL LIBERTIES UNION, THE WAR AGAINST MARIJUANA IN BLACK AND WHITE (2013), <https://www.aclu.org/report/report-war-marijuana-black-and-white>.

²⁰ Such as playing in the National Football League. See, e.g., BENNET OMALU, TRUTH DOESN’T HAVE A SIDE: MY ALARMING DISCOVERY ABOUT THE DANGER OF CONTACT SPORTS (2017); Brandon E. Gavett et al., *Chronic Traumatic Encephalopathy: A Potential Late Effect of Sport-Related Concussive and Subconcussive Head Trauma*, 340 CLINICAL SPORTS MED. 179 (2011); Anna McKee et al., *The Spectrum of Disease in Chronic Traumatic Encephalopathy*, 136 BRAIN 43 (2016); Jesse Mez et al., *Clinicopathological Evaluation of Chronic Traumatic Encephalopathy in Players of American Football*, 318 J. AM. MED. ASS’N 360 (2017); Bennet L. Omalu et al., *Chronic Traumatic Encephalopathy in a National Football League Player, Part II*, 59 NEUROSURGERY 1086

person decide whether and how to consume it. Accordingly, society should legalize and regulate marijuana cultivation, distribution, and use just as it does for alcohol and tobacco.²¹

II. THE ARGUMENTS AGAINST REFORM OF THE MARIJUANA LAWS

Defenders of the current regulatory regime, such as the federal government—in particular, the Food and Drug Administration (FDA) and the Drug Enforcement Administration—and highly respected medical organizations—the American Medical Association, the American Cancer Society, the American Academy of Ophthalmology, and the National Institute for Drug Abuse—maintain that today’s marijuana is not only more potent than your grandfather’s marijuana²² and is addictive,²³ but it also has a number of adverse short- and long-term health effects,²⁴ particularly

(2006); Bennet L. Omalu et al., *Chronic Traumatic Encephalopathy in a National Football League Player*, 57 NEUROSURGERY 128 (2005).

²¹ CAULKINS ET AL., MARIJUANA LEGALIZATION, *supra* note 7, at 131–57. Legalizing marijuana also does not require legalization of dangerous drugs such as heroin. *Id.* at 129–30.

²² *See, e.g., id.* at 11–13.

²³ *See, e.g.,* NAT’L ACAD. REPORT, *supra* note 7, at 333–52 & Box 13-1 (discussing “problem cannabis use”); NAT’L INST., MARIJUANA, *supra* note 2, at 14 (“Marijuana use can lead to the development of problem use, known as marijuana use disorder, which takes the form of addiction in severe cases. Recent data suggest that 30 percent of those who use marijuana may have some degree of marijuana use disorder.”) (footnote omitted); Letter from Director Nora D. Volkow, in NAT’L INST., MARIJUANA, *supra* note 2, at 3 (“[C]ontrary to popular belief, marijuana can be addictive, and its use during adolescence may make other forms of problem use or addiction more likely.”); WAYNE HALL & ROSALIE LICCARDO PACULA, CANNABIS USE AND DEPENDENCE: PUBLIC HEALTH AND PUBLIC POLICY (2003) (“A cannabis dependence syndrome occurs in heavy chronic users of cannabis. Regular cannabis users develop tolerance to THC, some experience withdrawal symptoms on cessation of use, and some report problems controlling their cannabis use. The risk of dependence is about one in ten among those who ever use the drug, between one in five and one in three among those who use cannabis more than a few times, and around one in two among daily users.”); David A. Gorelick et al., *Diagnostic Criteria for Cannabis Withdrawal Syndrome*, 123 DRUG & ALCOHOL DEPENDENCE 141 (2012); Deborah S. Hasin et al., *Prevalence of Marijuana Use Disorders in the United States Between 2001-2002 and 2012-2013*, 72 J. AM. MED. ASS’N PSYCHIATRY 1235 (2015). Worse, according to a 2015 publication by the Centers for Disease Control and Prevention, individuals who are addicted to marijuana are three times as likely to wind up addicted to heroin. CTRS. FOR DISEASE CONTROL, TODAY’S HEROIN EPIDEMIC INFOGRAPHICS (2015), <https://www.cdc.gov/vitalsigns/heroin/infographic.html>.

²⁴ *See, e.g.,* AM. ACAD. OPHTHALMOLOGY, COMPLEMENTARY THERAPY ASSESSMENT: MARIJUANA IN THE TREATMENT OF GLAUCOMA 1 (2014); AM. CANCER SOC’Y, MEDICAL USE OF MARIJUANA: ACS POSITION 3 (2013); AM. MED. ASS’N HOUSE OF DELEGATES,

for minors.²⁵ Defenders of the status quo would argue that there is no good reason to exempt marijuana from the approval process demanded by the drug safety laws.²⁶ The FDA cannot find that marijuana is “safe and effective” for medical use for two simple reasons: there is clear proof that cannabis has actual and potential adverse short- and long-term health effects, and there is no clear proof that it has valuable medical benefits, certainly none that other, approved pharmaceuticals cannot also deliver.²⁷ So-called “medical marijuana” is a ruse because, as California’s experience shows, anyone can receive a “recommendation” for marijuana use, as the sponsors of that initiative had apparently hoped.²⁸ Legalization will

REPORT OF REFERENCE COMMITTEE K 6–7 (2014); HALL & PACULA, *supra* note 23, at 214–17 (discussing adverse effects to cells and to immunological, reproductive, cardiovascular, respiratory, and gastrointestinal systems, as well as the risk of precipitating psychosis in vulnerable individuals); Volkow et al., *supra* note 11.

²⁵ See, e.g., NAT’L INST., MARIJUANA, *supra* note 2, at 14 (“People who begin using marijuana before the age of 18 are four to seven times more likely to develop a marijuana use disorder than adults.”) (footnote omitted); Letter from Director Nora D. Volkow, in NAT’L INST., MARIJUANA, *supra* note 2, at 3 (“[Marijuana] affects brain systems that are still maturing through young adulthood, so regular use by teens may have negative and long lasting effects on their cognitive development.”).

²⁶ See 21 U.S.C. § 355(a) (2012) (forbidding a new drug from being distributed in interstate commerce without prior FDA approval).

²⁷ See, e.g., BRITISH MED. ASS’N, *supra* note 1, at 65–70; ROBERT L. DUPONT, THE SELFISH BRAIN: LEARNING FROM ADDICTION 143–47 (rev. ed., 2000); IVERSEN, *supra* note 1, at 124, 131, 163, 167–68, 175–81, 185; Manzar Ashtari et al., *Diffusion Abnormalities in Adolescents and Young Adults with a History of Heavy Cannabis Use*, 43 J. PSYCHIATRY RES. 189, 201–02 (2009) (concluding that heavy cannabis use by adolescents may lead to brain damage); David M. Fergusson & Joseph M. Boden, *Cannabis Use and Later Life Outcomes*, 103 ADDICTION 969 (2008) (finding that increasing cannabis use in late adolescence and early adulthood correlated with adverse outcomes later in life); Jodi Gilman et al., *Cannabis Use is Quantitatively Associated with Nucleus Accumbens and Amygdala Abnormalities in Young Adult Recreational Users*, 34 J. NEUROSCIENCE 559 (2014); Hall & Degenhardt, *supra* note 12, at 1383; Madeline H. Meier et al., *Persistent Cannabis Users Show Neuropsychological Decline from Childhood to Midlife*, 109 PROCEEDINGS NAT’L ACAD. SCI. E2657 (2012); Rajiv Radhakrishnan et al., *Gone to Pot—A Review of the Association Between Cannabis and Psychosis*, 5 FRONTIERS PSYCHIATRY 54 (2014); Nadia Solowij et al., *Cognitive Functioning of Long-Term Heavy Cannabis Users Seeking Treatment*, 287 J. AM. MED. ASS’N 1123 (2002). See generally Volkow et al., *supra* note 11, at 2220 Tbl. 1, 2225 (2014) (“Marijuana use has been associated with substantial adverse effects, some of which have been determined with a high degree of confidence[.]”) (citation omitted).

²⁸ See, e.g., Jonathan P. Caulkins, *The Real Dangers of Marijuana*, 33 NAT’L AFFAIRS 21 (2016) [hereafter Caulkins, *Real Dangers*]; Larkin, *supra* note 1, at 512 (“[A] large segment of the nation’s population justifiably believes that the medical marijuana movement is merely a Trojan Horse for legalization. To them, the sponsors of those initiatives

not eliminate a black market for cannabis, in part because state taxation will raise its legal price above what the black market will offer and in part because recreational marijuana laws do not permit sales to minors.²⁹ Liberalized use of marijuana, whether for medical or recreational purposes, will lead to an increase in highway morbidity and mortality³⁰ because

took advantage of the natural sympathy that people have for others in extremis to achieve dishonestly what could not be done openly: legalize marijuana use. Many people quite reasonably believe that medical marijuana initiatives rest on the deceit that their purpose and effect would be limited to alleviating the suffering of parties desperate for relief from unrelenting pain or a crippling malady, some of whom have no hope for anything other than to limit their suffering before they die. Many people would have favored decriminalizing or legalizing marijuana—for example, people who may have supported Colorado and Washington’s decisions to allow marijuana to be consumed for recreational use—but only if it were done openly, with a public debate followed by a vote of the legislature or, more likely, the state’s voters. Now, however, they feel lied to and cheated. Worse still, they feel insulted. In their mind, the supporters of medical marijuana initiatives believe that the average person is so dim-witted that he will never realize what is really going on.”); Opinion, *Marijuana for the Sick*, N.Y. TIMES (Dec. 30, 1996), <http://www.nytimes.com/1996/12/30/opinion/marijuana-for-the-sick.html> (“Supporters of the California measure did their cause no good by immediately lighting up marijuana cigarettes after it passed last month and proclaiming that a legitimate medicinal use would include smoking a joint to relieve stress. Dennis Peron, originator of the California initiative, said afterward, ‘I believe all marijuana use is medical—except for kids.’ These actions made it obvious that the goal of at least some supporters is to get marijuana legalized outright, a proposition that opinion polls indicate most Americans reject.”); Hank Campbell, *Junk Science and the Hypocrisy of Medical Marijuana*, SCIENCE 2.0 (July 23, 2013), http://www.science20.com/science_20/junk_science_and_hypocrisy_medical_marijuana-96254 (“While *medical* marijuana was sold to states for serious illness, Edward Gogek, M.D. notes, it is not the case in practice. Instead, it is sold for ‘pain’ 90% of the time, which is a symptom so non-specific and subjective that Ferris Buehler got a whole day off school with it.”).

²⁹ See, e.g., Jonathan P. Caulkins, *A Principled Approach to Taxing Marijuana*, 33 NAT’L AFFAIRS 22, 22–23 (2017).

³⁰ See, e.g., AAA, FOUND. FOR TRAFFIC SAFETY, PREVALENCE OF MARIJUANA INVOLVEMENT IN FATAL CRASHES: WASHINGTON, 2010-2014 (2016); AAA, FOUND. FOR TRAFFIC SAFETY, CANNABIS USE AMONG DRIVERS SUSPECTED OF DRIVING UNDER THE INFLUENCE OR INVOLVED IN COLLISIONS: ANALYSIS OF WASHINGTON STATE PATROL DATA (2016); ROOM ET AL., *supra* note 7, at 18–19 (“Better-controlled epidemiological studies have recently supplied credible evidence that cannabis users who drive while intoxicated are at increased risk of motor vehicle crashes[.]”); D. Mark Anderson et al., *Medical Marijuana Laws, Traffic Fatalities, and Alcohol Consumption*, 56 J. OF L. & ECON. 333 (2013); Ed Wood, *Skydiving Without a Parachute*, 4(1) J. ADDICTION MED. & THERAPY 1020 (2016); see generally Larkin, *supra* note 1, at 476–77 (collecting studies). But see NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., DRUG AND ALCOHOL CRASH RISK: A CASE-CONTROL STUDY, REPORT NO. DOT HS 812-355, 67 (2016) (finding no significant increase in crash risk attributable to marijuana).

THC hampers the ability of drivers to quickly and effectively process and respond to unexpected or rapidly changing driving scenarios.³¹ Finally, legalizing marijuana eliminates leverage that can be used to compel physically dependent users to seek treatment while also weakening the nation's efforts to prevent or reduce the physical, social, and financial harms wreaked on communities by other illicit drug use.

III. THE STATUS OF THE DEBATE TODAY

There are several reasons that neither the advocates for nor the critics of marijuana reform have completely prevailed in the public policy arena. One is that there is no standardized form of agricultural marijuana. Its potency can vary according to the strain or locale where it is grown, the manner by which it is consumed (cigarettes versus edibles), and the other psychoactive chemicals a particular batch contains.³² Despite years of debate and scores of studies, there still is no consensus on the effectiveness of marijuana as a treatment for the symptoms of disease or for the side effects of other treatments.³³ The result is that each side in the

³¹ See, e.g., NAT'L INST., MARIJUANA, *supra* note 2, at 10, 12–13 (“THC also disrupts functioning of the cerebellum and basal ganglia, brain areas that regulate balance, posture, coordination, and reaction time. This is the reason people who have used marijuana may not be able to drive safely.”); Letter from Director Nora D. Volkow, in NAT'L INST., MARIJUANA, *supra* note 2, at 3 (“Because marijuana impairs short-term memory and judgment and distorts perception it can . . . make it dangerous to drive.”); U.S. DEP'T OF HEALTH & HUMAN SERVS., NAT'L INST. ON DRUG ABUSE, DRUGFACTS: DRUGGED DRIVING 2 (2013), http://www.drugabuse.gov/sites/default/files/drugfacts_druggeddriving_2014.pdf (“Considerable evidence from both real and simulated driving studies indicates that marijuana can negatively affect a driver's attentiveness, perception of time and speed, and ability to draw on information obtained from past experiences.”); WORLD HEALTH ORG., *supra* note 7, at 15.

³² See, e.g., CAULKINS, MARIJUANA LEGALIZATION, *supra* note 7, at 55 (“One reason for the lack of consensus is that marijuana is not a standardized good[.]”), 55–56, 68 (“So asking about, or trying to study, the benefits (or harms) of marijuana generically is a little bit like asking what wine tastes like, as if merlot and champagne were interchangeable.”); IVERSEN, *supra* note 1, at 5, 115–86.

³³ There does seem to be a consensus, however, on two narrower propositions. First, additional medical research into potential uses of different cannabinoids for medical treatment should be undertaken because there may be small groups of people for whom those compounds may be the only effective medication. Occasionally, orthodox treatments will not remedy a patient's ills because he belongs to a small subpopulation for whom accepted treatment regimens do not work. Further research may discover how the ingredients of cannabis can be used to treat those individuals. Second, smoking marijuana is not an acceptable medical delivery system for long-term use. Smoking marijuana, like smoking cigarettes, does not deliver a uniform dose of medication and poses a risk of causing respiratory disease and cancer over the long haul. Accordingly, medicine must learn not

debate can—and does—rely on different studies and interpret the same scientific data differently to suit its own medical, legal, and political purposes.³⁴

In the meantime, the legal background to the debate has markedly changed. Over the last twenty years, numerous states, by ballot initiative or via legislation, have permitted marijuana to be used for medical purposes.³⁵ Four states and the District of Columbia have gone even further and have decriminalized under state law the possession and use of small amounts of marijuana.³⁶ Perhaps ten or more additional states will consider similar laws in 2018.³⁷ Those decisions complicate the question of how the criminal justice system should treat cannabis use. For example, the criminal justice system will need to address the distinct problems that arise when those new medical and recreational marijuana laws intersect with the statutes criminalizing reckless driving and driving under the influence of alcohol. It may or may not be the case that the current legal framework is adequate to address the risk that drugged driving will contribute to the mortality we already witness from the combination of alcohol and motor vehicles. If our existing framework is not sufficient, then we will need to identify and implement new remedies to deal with the intersection of those important and controversial public policies.

Most of today's debate over marijuana's legal status has involved

only whether there are any therapeutic benefits from cannabinoids in marijuana, but also how to incorporate them into effective treatment modalities in order for them to be used without harming a patient in the process. See BRITISH MED. ASS'N, *supra* note 1, at 10, 14–15 Tbl. 2, 21–64, 68, 77–81; INST. OF MED., *supra* note 7, at 2–4.

³⁴ See CAULKINS, MARIJUANA LEGALIZATION, *supra* note 7, at 54–55; INST. OF MED., *supra* note 7, at 1; IVERSEN, *supra* note 1, at 5, 115–86; Magdalena Cerdá et al., *Medical Marijuana Laws in 50 States: Investigating the Relationship between State Legalization of Medical Marijuana and Marijuana Use, Abuse and Dependence*, 120 DRUG & ALCOHOL DEPENDENCE 22, 25 (2012) (“[N]o consensus exists at this time on the effectiveness of marijuana as a treatment for symptoms of pain, nausea, vomiting, and other problems caused by illnesses or treatment. . . . The lack of medical consensus means that both pro and con proponents of medical marijuana can find research support for their positions, and the medical profession has not delivered a clear message to the public.”).

³⁵ See Larkin, *supra* note 1, at 457 n.16 (collecting statutes and referenda).

³⁶ See *id.* at 458 n.17.

³⁷ Caulkins, *Real Dangers*, *supra* note 28, at 21; Linley Sanders, *Marijuana Legalization 2018: Which States Might Consider Cannabis Laws this Year?*, NEWSWEEK (Jan. 2, 2018), <http://www.newsweek.com/marijuana-legalization-2018-which-states-will-consider-cannabis-laws-year-755282>; Samuel Stebbins et al., *Pot Initiatives: Predicting the Next 15 States to Legalize Marijuana*, USA TODAY (Jan. 5, 2018), <https://www.usatoday.com/story/money/2017/11/14/pot-initiatives-predicting-next-15-states-legalize-marijuana/860502001/>.

many of the same issues that society has mooted since marijuana use became an icon for a rebellious generation in the 1960s. Does marijuana have a legitimate medical use? Can it redress the consequences of disease and alleviate suffering? What physical and psychological harm does marijuana cause? Is it addictive? Can a distribution system for medical marijuana prevent that drug from being diverted to unauthorized parties? What is the risk that liberalization will lead to large-scale commercialization that resembles and generates the same harms as Big Tobacco? The passage of state medical and recreational marijuana laws has rekindled public discussion of those public policy issues along with new ones.

In the Articles that follow, two experts debate those issues. Kevin Sabet, Ph.D., co-founder and President of Smart Approaches to Marijuana and a fellow at Yale University, analyzes several different issues that underlie the current discussion: Is marijuana a so-called “gateway” drug that leads to more harmful controlled substances? What is the proper relationship between the state and federal governments in terms of who should control drug policy? What effect will liberalization have on the incidence of marijuana-related crimes? And what impact will liberalization have on communities of color, on homelessness, on the environment, on the workforce, and on driving safety?³⁸ For example, Sabet maintains that despite the crisis proportions of the current opiate overdose problem, we should continue efforts to prevent individuals from starting off with marijuana because it “primes the brain” for use of more dangerous controlled substances, such as heroin. By contrast, Tamar Todd, Senior Director of the Office of Legal Affairs and Acting Director of the Drug Policy Alliance, maintains that California and other states are wisely moving toward greater legalization and regulation of marijuana.³⁹ The passage of medical and recreational marijuana initiatives, Todd argues, shows that a majority of Americans have decided to abandon our futile, decades-long effort to treat marijuana as if it were heroin in favor of the more sensible approach of limiting the misuse of that drug—by minors, for example—through sensible regulatory programs.

Only by encouraging inquiry and debate by experts such as Sabet and Todd can society decide what course is best. The following debate will help push the ball downfield toward a sensible marijuana policy.

³⁸ Kevin A. Sabet, *Marijuana and Legalization Impacts*, 23 BERKELEY J. CRIM. L. 84 (2018).

³⁹ Tamar Todd, *The Benefits of Marijuana Legalization and Regulation*, 23 BERKELEY J. CRIM. L. 99 (2018).