

“UNREASONABLE, ARBITRARY, AND CAPRICIOUS:”¹
THE UNITED STATES’ SECOND CIVIL WAR

by

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ABSTRACT

*Unreasonable, Arbitrary, and Capricious*¹ brings into cold relief the hypocrisy of the war on drugs, specifically the war on cannabis, by tracing the history of cannabis prohibition in the United States from the early days of *Reefer Madness* and Harry Anslinger's proverbial witch-hunt, through the 1960s-1970s, to the current surge in efforts to decriminalize on state and local levels. Making the argument that the war on non-violent cannabis users is unreasonable, arbitrary, and capricious and has done far more harm than good, the focus then moves to chronicling the struggles to bring sanity back to the drug policy of this country by Washington, Oregon, and Colorado in the election of 2012, and the success and early implementation of the laws in Washington and Colorado. Although cannabis remains a schedule one drug under federal law, the successes in Washington and Colorado have led to several smaller victories, each of which tug at the remaining shreds of integrity of the arguments for continued cannabis prohibition. With the medical cannabis industry having operated with a large amount of freedom under the Obama administration, the 2016 election of Donald Trump brought with it an immense amount anxiety for all. However the will of the people in regards to cannabis was also to be noted that evening as Arkansas, Florida, Montana, and South Dakota all passed medical cannabis initiatives, while California, Massachusetts, Maine,

¹ Julie Holland, *The Pot Book* (Rochester: Park Street Press, 2010), xvi.

and Nevada passed laws that allowed for adult consumption of cannabis very similar to those of Colorado and Washington.

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This thesis is dedicated to my family for their love and support and encouragement through my degree, and to the countless lives sacrificed to the unwinnable war on drugs.

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CHAPTER I

INTRODUCTION

According to a ten-year study done by the ACLU, “in 2010, there was one marijuana arrest every 37 seconds.”² Even more alarming is the fact that “on average, a Black person is 3.73 times more likely to be arrested for marijuana possession than a white person, even though Blacks and whites use marijuana at similar rates.”³ Illustrative of the deeply ingrained racist origins of much of the United States drug laws, specifically those related to cannabis, the war on drugs has led to the mass incarceration of nonviolent citizens, and over 40 million arrests in the United States over the past 40 years.⁴ Beginning with the Marijuana Tax Act of 1937 and dramatically increasing under the direction of President Richard Nixon and just about every president since, the war on the cannabis plant and user has escalated to an essential part of “the prison industrial complex,”⁵ ultimately creating multi-billion dollar industries through law enforcement, private prisons, and drug testing facilities across the country. However while many are

² ACLU, “The War on Marijuana in Black & White,” June 2013
<<https://www.aclu.org/files/assets/aclu-thewaronmarijuana-rel2.pdf>> (Accessed June 6, 2013).

³ Ibid.

⁴ Ibid., 7.

⁵ The prison industrial complex is a term coined by Mike Davis, an American social theorist initially used to describe California prisons in the late 20th century. During this period the US Government began to sell off prisons to private companies. This meant that the companies ran the prison, for all intents and purposes.

still clinging to these antiquated and inherently racist policies, millions of people in this country and around the world are quickly coming to recognize the numerous potential medical benefits of the cannabis plant, the distinct lack of danger as compared to licit substances such as alcohol and tobacco and for the thousands of other uses that the less intoxicating varieties of cannabis, including hemp, may be used.

As noted by Professor Emeritus at Harvard, Dr. Lester Grinspoon in his seminal work *Marihuana Reconsidered* “ the single greatest risk encountered by the user of marihuana in any state in this country is that of being apprehended as a common criminal, incarcerated, and subjected to untold damage to his social life and career.”⁶ Adding insult to injury, in 1988 the Drug Enforcement Administration (DEA) judge Francis Young tasked with reviewing the evidence and testimony of the public hearing regarding the medical use of cannabis that lasted over two years, concluded that “marijuana, in its natural form, is one of the safest therapeutically active substances known to man.”⁷ Continuing, “one must reasonably conclude that there is accepted safety for use of marijuana under medical supervision. To conclude otherwise, on the record, would be unreasonable, arbitrary, and capricious.”⁸

Twenty-five years later it is virtually impossible for a reasonable person to not conclude the same for the entirety of the United States policy regarding cannabis today as well as the war on cannabis and cannabis users. Furthermore, the United States is rapidly approaching a tipping point which will ultimately result in the classification of cannabis

⁶ Lester Grinspoon, *Marihuana Reconsidered* (Cambridge: Harvard University Press, 1977), 2.

⁷ Holland, *The Pot Book*, xvi.

⁸ Ibid.

to reflect its medical benefits, to be followed by far more wide scale decriminalization and ultimately taxation and regulation. With twenty-two states and the District of Columbia already allowing their citizens access to medical cannabis, new states passing laws on an almost weekly basis, and the bold steps taken by Colorado and Washington in the 2012 election, as well as California, Massachusetts, Maine, and Nevada in 2016, it is clear that the tide of favor is turning toward less restricted access to cannabis. Money, science, and a growing understanding of the both the medicinal benefits of the plant have largely fueled these changes and the decreased risks compared to other recreational substances including tobacco and alcohol.

Chapter one of this thesis consists of a historiographical investigation of the works written about cannabis over the past forty years. Chapter two explores the role money, especially tax money, has played in helping to legitimize the medical marijuana industry in Colorado, the struggles with the depositing cannabis profits in banks, and the plethora of ancillary businesses that have grown around the cannabis industry. In chapter three, the science of cannabis is explored, with particular attention paid to cannabinoids such as cannabidiol (CBD) that have proven to be very effective in treating a variety of disorders including cancer and children's epilepsy. The proven medical benefits of cannabis have resulted in even very conservative states, including Utah, Kentucky, South Carolina, Georgia, Arkansas, Florida, Montana, South Dakota, and Texas legalizing cannabis for medical usage.

Recounting the contentious election cycle of 2012, chapter four focuses on Colorado's Amendment 64, Washington's Initiative 502, and Oregon's Measure 80, and the successes and failures of those efforts. The fifth and final chapter centers on the

examination of other countries around the world that have chosen to forgo the costly and ineffective war on drugs for more sensible solutions to their drug problem, and also looks at the effects of the 2012 election in other states across the country that wish to follow in Colorado and Washington's footsteps, such as Oregon, California, Massachusetts, Maine, and Nevada.

Marking the second historically significant election cycle in a row, and what many believe to be the beginning of the end of the senseless war on drugs, the successes of Washington and Colorado are doing much to re-instill the value of voting in much of America's youth, and emboldening other states to follow similar paths. Having sacrificed far too many lives to an un-winnable war that from its inception has been based on racism and robbing the world of the thousands of potential products that could be created from hemp, the time to end this unreasonable, arbitrary, and capricious war is at hand.

CHAPTER II

THE HISTORIGRAPHY OF CANNABIS

The undeniable desire to alter consciousness has nonetheless presented itself as such a definable characteristic of human behavior to be deemed human nature and presents a disastrous dichotomy. The simultaneous embrace of a myriad of lethal toxins that promise to do everything from cure our children's creativity to grow our eyelashes and the vilification of a sub-genre of these mind altering substances deemed "unsafe for consumption" highlights the one area in which this nation still trumps over all others - the incarceration of its own citizens.

In 2008, Adam Liptak of the *New York Times* wrote, "The United States has less than 5 percent of the world's population. But it has almost a quarter of the world's prisoners."⁹ While it would be foolish to argue against the incarceration of violent criminals, in recent decades the trends have been strongly for locking up nonviolent criminals to "save them from themselves." Creating criminals out of otherwise law-abiding citizens was addressed by President Jimmy Carter, who lamented, "Penalties against possession of a drug should not be more damaging to an individual than the use of

⁹ <<http://www.nytimes.com/2008/04/23/world/americas/23iht-23prison.12253738.html?pagewanted=all>> (Accessed March 5, 2012).

the drug itself.”¹⁰ Sadly, like much of President Carter’s advice, this extremely poignant remark has since been ignored, falling victim like the 20 million actual victims of a multi-billion dollar drug war directed by the US government against its mostly peaceful citizens.

Constituting what could easily be termed a civil war lasting several decades and resulting in over 20 million victims and costing tens of billions of dollars, neither side is showing any sign of letting up. Maintaining the untenable position that cannabis “has no currently accepted medical uses in treatment in the United States,”¹¹ while concurrently providing a select group of patients with cannabis grown at the government’s facility at the University of Mississippi, the federal government’s false façade is, for a second time, being chiseled away by daring states unsatisfied with this failed policy. Although the first attempts of the late 1970s and early 1980s were technically successful, they bore little fruitful relief from the federal government’s flourishing war on its citizens. Leading the second round of statewide refutations of drug war dogma, California’s Proposition 215 of 1996 provided the framework for numerous other states’ fights to legalize cannabis for medical use. By 2012, fifteen other states and the District of Columbia had followed in California’s footsteps, allowing patients and doctors, not law enforcement officials and bureaucrats, to decide the best possible treatment options. Each states efforts to decriminalize cannabis have proven to be critically important steps, because while locking up peaceful citizens is, at the least, disturbing, incarcerating sick people for

¹⁰ <<http://www.presidency.ucsb.edu/ws/index.php?pid=7908#axzz1PSLOq2Hj>> (Accessed March 5, 2012).

¹¹ <<http://www.deadiversion.usdoj.gov/schedules/index.html#list>> (Accessed March 5, 2012).

growing and consuming a plant to improve their quality of life should be seen as morally reprehensible. When combined with efforts to completely decriminalize cannabis for adult consumption and the efforts to legalize industrial hemp, this three-fold opposition to federal policy acts like cracks in a levee slowly widening with building public pressure, gradually exposing the futility and travesty of the war on drugs and the millions of lives it has harmed.

In 1988, after reviewing the case brought by the National Organization for the Repeal of Marijuana Laws, Judge Francis Young concluded, “marijuana, in its natural form, is one of the safest therapeutically active substances known to man,”¹² and that “in strict medical terms marijuana is far safer than many foods we commonly consume.”¹³ Unfortunately for patients, citizens, and the millions of people arrested since 1988, this advice was not followed and the civil war continues to rage today despite Judge Francis Young’s ultimate assessment that “It would be unreasonable, arbitrary and capricious for DEA to continue to stand between those sufferers and the benefits of this substance in light of the evidence in this record.”¹⁴

Publishing his first work in 1971, Harvard professor Dr. Lester Grinspoon is perhaps one of the most respected and prolific writers on the subject. Although he was not the first to publish in this area, his credentials and highly technical style of writing coupled with an inherent readability set the gold standard for other authors making the same arguments. Drawing not only from extensive experience as a psychiatrist but also

¹² <<http://www.druglibrary.org/olsen/medical/young/young4.html>> (Accessed March 5, 2012).

¹³ Ibid.

¹⁴ Ibid.

from personal experience with the utility of cannabis for medical use following his son's treatment for leukemia, Grinspoon's initial research was intended to prove that the widespread usage of cannabis by the wild youth of the 1960s was harmful. What he learned was much different and his findings became the foundation for *Marihuana Reconsidered*, published through Harvard University Press.

Written at a time when the laws pertaining to possession of cannabis in many states were incredibly draconian, the importance of Grinspoon's work can hardly be overstated. Beginning with a concise, yet informative twenty-page history of cannabis in the United States, Grinspoon's expressed intention was to "present a reasonably accurate and comprehensive account of the drug and its properties and to put into perspective its dangers and utilities."¹⁵ Covering lengthy periods of time very quickly, Grinspoon clears the Civil War before noting that, "Between 1839-1900 more than one hundred articles appeared in scientific journals describing the medicinal properties of the plant,"¹⁶ a statement that directly conflicts with the current official position that science has yet to prove the efficacy of safety of the cannabis plant.

Moving on to the twentieth-century, Grinspoon states adamantly that the 1944 LaGuardia Report, was "the only reliable American study undertaken on marihuana" and amongst other findings it indicated that "no proof existed that major crimes are associated with the practice of smoking marihuana, and that marihuana smoking does not lead to aggressive or antisocial behavior."¹⁷ The government's disregard of the La Guardia

¹⁵ Ibid., 9.

¹⁶ Ibid., 13.

¹⁷ Ibid., 26.

Report and the AMA's agreement with this position represent the emergence of a pattern of active suppression of any factual information about the effects of cannabis, that would last until the present-day. Seeking to dispel the mountains of misinformation, Dr. Grinspoon included an analysis of the chemistry and pharmacology of cannabis, the effects of acute intoxication upon its users, both from a literary and a more scientific perspective, as well as a chapter devoted to the motivation of its users. Drawing upon every available resource to produce one of the most balanced and professional works on the subject, Grinspoon is especially poignant in his treatment of the returning Vietnam veterans, many of whom would repeat the lament of one soldier, "is it any wonder people take advantage of the pot over here?"¹⁸ Grinspoon's masterpiece is a tour de force that, despite its overtly technical nature, presents non-medical professionals with a comprehensive body of knowledge. Paving the way for many doctors and authors to come, Grinspoon's work would prove a rather challenging benchmark and assure him a place of respect amongst those opposed to the government's perpetuation of yet another unwinnable war.

Additional criticism of the government's and AMA's position on cannabis was not long in coming. Dr. Tod Mikuriya, another psychiatrist, published a book in 1973, entitled *Marijuana: Medical Papers 1839-1972*. Featuring an edited collection of primary documents pertaining to cannabis that ranged over a century, Mikuriya's collection begins with the published work of an Irish doctor named William B. O'Shaughnessy, who, during his time in India, was introduced to the medicinal properties of cannabis and

¹⁸ Ibid., 268.

is widely responsible for its introduction into the Western pharmacopeia. Featuring the analysis of several cannabis-based medicines used in India, O'Shaughnessy's work, *On the preparations of Indian Hemp, or Gunjah (1839)* even features a detailed recipe for a cannabis confection called "Majoon," the effects of which are said to be "ecstatic happiness, a persuasion of high rank, a sensation of flying, voracious appetite, and intense aphrodisiac desire."¹⁹ Consulting multiple Indian, Persian, and Arabic texts on the subject, O'Shaughnessy goes even further in his analysis when he moves to experimentation, beginning first with dogs and later with "fish, cats, swine, vultures, crows, adjutants... horse, deer, monkey, goat, sheep, and cow."²⁰ Of these experiments O'Shaughnessy notes, "encouraged by these results, no hesitation could be felt as to the perfect safety of giving the resin of hemp an extensive trial in the cases in which its apparent powers promised the greatest utility."²¹ Satisfied with the level of safety exhibited in his experiments, he then turned his attention to human subjects, the first of which were two acute cases of rheumatism. Identifying a flaw that would plague experiments of this nature until modern times, one of the research subjects was later found to be "habituated to the use of the *Gunjah* in the pipe."²² While modern researchers would incorporate mandatory hospitalization before experiments to deal with this problem, these were kinks that would gradually be worked out along the way. Soon explaining the effects of cannabis on other ailments, O'Shaughnessy's experiments

¹⁹ Tod Mikuriya, *Marijuana: Medical Papers 1829-1972* (Oakland: Medi-Comp Press, 1973), 8.

²⁰ *Ibid.*, 17.

²¹ *Ibid.*

²² *Ibid.*, 19.

ranged from those who have hydrophobia (rabies), to cholera, tetanus, and infantile convulsions. Finally expressing the intent for his publishing of this document on the last page, O'Shaughnessy remarks, "that in Hemp the profession has gained an anti-convulsant remedy of the greatest value."²³ He continues, "entertaining this conviction, be it true or false, I deem it my duty to publish without any avoidable delay in order that the most extensive and the speediest trial can be given to the proposed remedy."²⁴ Seemingly defending himself against potential criticism, O'Shaughnessy notes that if he had been publishing this document with the intent of furthering his reputation, he would have waited several years and, "in publishing would enter into every kind of elaborate detail."²⁵ Rather, his intent was "to gather together a few strong facts, to ascertain the limits which cannot be passed without danger, and then pointing out these to the profession, to leave their body to prosecute and decide on the subject of discussion."²⁶ O'Shaughnessy's article is not only a historically valuable document, but also a fascinating one, providing an excellent gateway into the bulk of Mikuriya's collection of documents.

Immediately following a rather amusing account of two brothers' accidental overindulgence in a cannabis tincture titled "Two Cases of Poisoning by Cannabis Indica," Mikuriya follows up with a letter explaining the involvement of the pharmaceutical companies Parke-Davis & Company as well as Eli Lilly Company, before moving into a paper published by H.C. Hamilton titled "The Physiological effects of

²³ Ibid., 30.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

Cannabis Sativa (1913).” In this article, Hamilton, A.W. Lescohier and R.A. Perkins tackle the question of speciation in regards to the subtle differences and similarities between Cannabis Sativa and Indica. Ultimately concluding with an epiphany that many of the psychedelic age would come to in their own time, the authors note that “it may be stated with certainty that the physical and mental condition of the human subject at the time of administrating this drug influences its effects both in degree and kind.”²⁷

Including what would be groundbreaking research into the area of cannabinoids by Roger Adams and several others; Mikuriya’s work ultimately culminates with an article by Dr. David Musto, titled *The 1937 Marihuana Tax Act*.²⁸ Chronicling the passage of the law that effectively ushered in the age of cannabis prohibition that still exists today, Musto’s essay begins with The Pure Food and Drug Act of 1906, that “required that any quantity of cannabis, as well as several other dangerous substances, be clearly marked on the label of any drug or food sold to the public,”²⁹ through the passage of the Marihuana Tax Act by Congress on October 1, 1937.³⁰ With Dr. Musto’s article rounding out a very well organized collection of documents, it is easy to see why this work remains in print today.

Another important work of cannabis historiography is *G.R.A.S.S. or Great Revolutionary American Standard System: the Official Guide for Assessing the Quality of Marijuana on the 1 to 10 Scale* published by Jack Herer in 1973. Herer is perhaps best known for his timeless work, *The Emperor Wears No Clothes*, which was first published in 1985 and has since been reprinted eleven times; it is currently available in its entirety

²⁷ Ibid., 80.

²⁸ Ibid. 417.

²⁹ Ibid., 419.

³⁰ Ibid., 436.

for free on Jack Herer's website because "Jack wanted this information to be available to everyone."³¹ Featuring sixteen chapters, each interspersed with countless pictures, blurbs, and visual aids that cater to a much more general audience than the work of Mikuriya, Herer's work is designed to be highly accessible to all and to provide a body of information that has been routinely distorted or ignored by larger news sources. This cause is furthered by the appendices that are equal in length to the text itself; they feature an extensive collection of primary documents pulled from popular culture spanning a century, thus giving readers an instant sense of history in the course of just under ninety scrapbook-style pages. This work is not without its flaws, however, and in many ways it does live up to its alternate title, *The Authoritative Historical Record of the Cannabis Plant, Marijuana and Prohibition, & How Hemp Can Still Save the World*. Recent reprints have significantly benefited from the tireless efforts of Chris Conrad, who served as editor for editions later than 1990 and whose expertise in this area would ultimately culminate in several works of his own.

The first few pages of this book contain a broad overview of the history of the cannabis or hemp plant, which is quickly followed by a chapter briefly detailing the multiplicity of uses for hemp. This chapter is reinforced by the inclusion of two articles that are contemporary to the passage of the 1937 Federal Marihuana Tax Act. The first is an article from *Popular Mechanics* titled, "New Billion Dollar Crop," which listed in detail the numerous ways the cannabis/hemp plant could be utilized and featured one of

³¹ <<http://www.jackherer.com/thebook/>> (Accessed March 12, 2012).

the first printings of the oft-repeated figure; “10,000 acres devoted to hemp will produce as much paper as 40,000 acres of average pulp land.”³²

Originating from the 1916 USDA Bulletin No. 404, (the second included primary document) this calculation is based on twenty years of growth required for maturation of the average tree as compared to the annual development of the hemp plant. Posing a significant threat to the tree-based paper industry, which, in 1938, was already valued at one billion dollars annually, hemp could be seen as a menace not only to those invested in the production of paper from trees but many other areas as well.³³ The fourth chapter of Herer’s work is titled, “The Last days of legal Cannabis” and portrays William Randolph Hearst as one of the several heads of industry involved in a substantial plot to demonize the cannabis plant. The thesis of this argument is that Hearst used his newspapers and “yellow journalism” to suppress knowledge of hemp’s utility and demonize the plant entirely through an intense campaign of misinformation that featured shocking headlines such as “Marihuana makes fiends of boys in 30 days” and “Hasheesh Goads Users to Blood-Lust.”³⁴ Many of the existing laws are remnants of this highly successful campaign as is the popularized use of the word “marijuana.” In recent years many pro-hemp advocates have made a concerted effort to return to the scientific name “cannabis” as a way of distancing themselves from the negative connotations associated with the word marijuana.

³² Jack Herer, *The Emperor Wears No Clothes* (Van Nuys: HEMP Publishing, 1985), 16.

³³ Ibid., 16, 21.

³⁴ Ibid., 25.

The seventh chapter of Herer's most notable work *The Emperor Wears No Clothes* is devoted to the "therapeutic use of cannabis," and covers such ailments as "asthma, glaucoma, nausea ... AIDS, depression, and hundreds of other prime medical uses."³⁵ Although each section is brief, additional information can be found in the numerous footnotes. Whether one discusses economics, agriculture, medicinal, textiles, deforestation, poverty, and starvation, or racism, the discussion of cannabis/hemp offers something for everyone, and *The Emperor Wears no Clothes* directly epitomizes and summarizes this conversation into highly accessible format. While many other, more prestigious and academic books would follow, no work in this genre could ever attempt to reach the level of cult following or place in the hearts of activists that this work has achieved.

Abbie Hoffman established himself as a counter-culture icon in the 1960s as a result of his actions at the 1968 Chicago Democratic Convention as a member of the "Chicago Eight" and for starting the Youth International Party (Yippies). His underground survivalist work, *Steal this Book*, survives as a very intimate glimpse of the more radical perspectives exhibited in the social movements of this period. Having lived seven years on the run as "Barry Freed," Hoffman's 1987 work, *Steal this Urine Test: Fighting Drug Hysteria in America*, features a much more sagacious voice than his previous works, likely as the result of the wisdom that comes with age. Still directly challenging the government, the cover features a smiling Hoffman holding a beaker, presumably, filled with bodily fluids, proudly displaying a shirt that reads "Just Say No,"

³⁵ Ibid., 35-39.

no doubt a jab at the Reagan era dogma that dominated the conversation of the day.

Striking at the heart of the overwhelming hypocrisy of the Regan era and its revival of the war on drugs, Hoffman does not pull any punches in this in-depth examination of one of the most invasive tactics of substance use prevention ever invented. Paying particular attention to the dichotomy presented by the simultaneous illegal activities of the CIA involved in the Contra scandal and the Reagans' official position of "Just Say No," this work is nothing if not controversial.

Defining the urgency of his message from the very first page of *Steal this Urine Test*, Hoffman dedicates this book "to the workers of America who have nothing to lose but their jobs."³⁶ Separating the book into two parts, "Drugs" and "Urine Testing," Hoffman makes his intentions quite clear when he states "On the one hand, this book is meant to be philosophical about drugs. On the other, it is meant to be precise, political, and activist on urine testing."³⁷ Taking this statement a step further he continues "*This is a call to arms against a ritual that has nothing to do with drug abuse and a lot to do with controlling citizens* [emphasis mine]."³⁸ Often couching his words in Marxist terminology, at several points readers can see intentional evocation of the *Communist Manifesto*, although slightly updated for time and cause. Doing a great job of drawing these parallels, Hoffman comments not only on the multi-disciplinary approach to his work, but also on the innumerable social ramifications of the war on drugs, by remarking that "at various times you will need to be part scientist, part lawyer, part sociologist, as

³⁶ Abbie Hoffman, *Steal This Urine Test* (New York: Penguin Group, 1987).

³⁷ *Ibid.*, 3.

³⁸ *Ibid.*

well as constant philosopher” throughout the course of this work.³⁹ Only adding to a very complicated and convoluted issue, the ramifications of widespread urinalysis brought the war on drugs from the streets and television screens into the homes, workplaces, and bathrooms of a vast segment of an ostensibly free society. Existing as an affront to the privacy guaranteed in the Fourth and Fifth amendments to the Constitution, it does not take much imagination to argue that this technology is not only an “unreasonable search and seizure,” but that it also violates the Fifth Amendment guarantees against self-incrimination.⁴⁰ Presenting in great detail the most up to date information on the kinds of technology used in drug detection based urinalysis, including problems with each form of testing, substances known to cause false positives, and the levels of accuracy of each, Hoffman quotes Sun-Tzu when he quips “know your enemy.”⁴¹

Finally coming to what Hoffman refers to as “the heart of the matter,” the book then turns to its ultimate message – how to beat a urine test. First dispensing with myths on the subject, Hoffman then offers some very helpful advice on how to successfully participate in yet another manifestation of the great American tradition of civil disobedience.⁴² Once again retooling Marxist ideology, Hoffman proclaims “Urinator of the world, unite! You have *nothing* to lose.”⁴³ Telling those thinking about trying to beat the test that they should not view themselves as “misfits or criminals” but rather as “defenders of freedom,” Hoffman’s ability to turn patriotic party rhetoric around on its

³⁹ Ibid., 4.

⁴⁰ Ibid., 101.

⁴¹ Ibid., 182.

⁴² Ibid., 222.

⁴³ Ibid., 223.

creators is masterful and one cannot help but appreciate the skillful nature he uses to build his narrative. While much of the information in this book is far out of date, the message regarding the war on drugs remains quite clear and, thus, it stands as a testament to a period of immense turmoil and double-speak on the subject. While the war would survive the 1980s, Abbie Hoffman would not. Far outliving his physical being, his words transcend to a new generation that understands the hypocrisy before them and are tasked and devoted to solving some of the problems they inherited. Bringing a newfound prosperity and vastly improving forms of communications, the decade of 1990s portended an immensely different outlook, which would lead to much innovation. Growing with their society, activists fighting to reinstate cannabis into the national pharmacopeia would soon develop a multitude of different methods for waging both an offensive and defensive war.

In 1971, in the pages of his first work, *Marihuana Reconsidered*, Lester Grinspoon “confidently predicted that cannabis would be legalized for adult use within the decade.”⁴⁴ Seeing only the calculated analysis of risk to benefits of the plant itself, no doubt a side effect of being a doctor and a scholar, what Grinspoon failed to realize was the incredible political and social barricades that stood in the way of achieving this goal. In regards to the failure of his prediction to come to fruition, Grinspoon quips in his 1993 work, *Marihuana, the Forbidden Fruit*, “I had not yet learned that there is something very special about illegal drugs... they do not always make the drug users behave

⁴⁴ Lester Grinspoon, *Marihuana, the Forbidden Fruit* (New Haven and London: Yale University Press, 1993), ix.

irrationally, they certainly cause many non-users to behave that way.”⁴⁵ Although he injects humor into an often disheartening area of discussion, the work that follows is anything but comical. Featuring the often heart-wrenching accounts of but a handful of people whom cannabis has helped, this work is brimming with anecdotal evidence that flies in the face of the government’s official position that cannabis has no medicinal value. Featuring a brief history of cannabis and a chapter on cannabis as medicine, the rest of the book is divided into sections delineated by ailment, including over eleven chapters devoted to everything from glaucoma and epilepsy to cancer chemotherapy, AIDS, multiple sclerosis, and depression. Consisting of many stories interspersed with a much lighter and more approachable medical analysis from Dr. Grinspoon, this work is much shorter than his 1971 work and clocks in at a concise 175 pages, making for a much more accessible book than the highly technical *Marihuana Reconsidered*.

Among the more compelling parts of Grinspoon’s second book on cannabis are the stories of Robert Randall, Elvy Musikka, Ken and Barbara Jenks, and Irvin Rosenfeld, who were all members of the Compassionate Investigational New Drug Program. Beginning with Robert Randall who fought for and won his right to legally treat his glaucoma with cannabis in 1978, the Compassionate Investigational New Drug Program, was the organization created to deliver monthly shipments of cannabis to those deemed in need. At its height, the Compassionate Investigational New Drug Program reached sixteen individuals, while only four survive today and still receive their monthly shipments of 300 cannabis cigarettes packaged in North Carolina and grown at the

⁴⁵ Ibid.

University of Mississippi. Adding much to the immense force of this work, these surviving individuals exist as a repudiation of a policy that destroys, or at the very least disrupts, the lives of over three-quarters of a million nonviolent citizens every year. Grinspoon notes near the end of the work that “many of the millions of cannabis users in this country not only disobey the drug laws but feel a principled lack of respect for them.”⁴⁶ A very real effect of the war on drugs highlighted by Grinspoon, namely, the erosion of respect for the law, the police, and elected officials by a succession of generations, has done more damage to our country than many choose to realize. Young people often view politicians as corrupt corporate puppets and no longer believe in the American dream. Although much of this sentiment was buried in the prosperity of the 1990s, it was at this point that the cannabis movement began to gain real momentum, both in publication and on a statewide level. Having once again established himself as a highly respectable authority on the subject, *Marijuana, The Forbidden Fruit*, too, would be regularly harvested for quotes by later authors, earning Grinspoon a lasting legacy he continues to enhance as a Harvard Professor Emeritus. Dr. Grinspoon’s influence upon the movement is substantial and, his works prove invaluable to the study of the medicinal properties of cannabis and lasting repercussions of the war on drugs.

Having already established himself as a dedicated activist and an invaluable asset to the fight against cannabis/hemp prohibition with his contribution to Jack Herer’s *The Emperor Wears No Clothes*, Chris Conrad’s first solo work, published in 1993, is a heavily researched and well-cited piece of scholarship despite being published by

⁴⁶ Ibid., 166.

Creative Xpressions Publications instead of a major university press. Based on his firmly held belief that hemp could solve many of the problems visible even in the early 1990s, *Hemp: Lifeline to the Future* was presented as “The Unexpected Answer for our Environmental and Economic Recovery.”⁴⁷ Through a focus on the utility of the entire plant this work brings the myriad of uses of cannabis to life with vivid prose and a heavy reliance on facts, many of which are still not common knowledge. After passing the title page, which is printed on a 70 percent hemp blend paper, the first notable portion of this book is a chart that details the different products made from hemp and the part of the plant from which they are derived. The first chapter of this work is centered around a brief jaunt through a fantasy world in which “50,000 commercial and consumer products” are derived from hemp, and major government agencies are focused on preventing violent crime and intentional environmental degradation. Although this statement might seem like a utopian dream, the fact remains that much of the knowledge presented in this work is not new. Making this point abundantly clear in the chapters that followed, Conrad effectively argues that the important role the hemp plant has played in the history of the United States is something that simply cannot be challenged, despite how much it is ignored. From the tons of hempen rope required for ships like the U.S.S. Constitution, to the paper of the Constitution itself, to USDA produced films like *Hemp for Victory*, this plant is an undeniable part of this country’s history and deserves to reclaim its rightful place.

⁴⁷ Chris Conrad, *Hemp: Lifeline to the Future* (Los Angeles: Creative Xpressions Publications, 1993).

Only devoting one brief chapter to cannabis as medicine, the majority of this work is dedicated to the lesser known properties of the plant and how they could alter our collective path for the better. Considering the distinct reliance on plastics in our modern culture, chapter nine “from cells to plastics and beyond” is one of the most relevant,⁴⁸ and it would be remiss to not mention American legend Henry Ford and his long forgotten hemp car as but one highlight from this chapter. Surviving today as a grainy thirty second video on YouTube, the most notable portion of which features Ford pummeling the rear of the vehicle with a crowbar and leaving no visible marks because the plastic body of the car was designed to be two-thirds as heavy as a steel vehicle while withstanding “blows 10 times as great as steel without denting.”⁴⁹ Why this technology is still today unutilized is a mystery and indicative of many of the larger problems plaguing our society and threatening our future. *Hemp: Lifeline to the Future* has maintained its relevance almost twenty years after its publication. However, it is regrettable that we still have so much to learn and put into practice collectively.

Beginning what in hindsight seems to be a rather obvious trend, Ed Rosenthal built a name for himself and a career out of a few extremely informational trips to Holland and the massive scale reproduction of the knowledge there attained. Having decriminalized small-scale personal possession of cannabis in 1972, Holland and particularly Amsterdam would serve as a Mecca for devotees to the medicinal power of cannabis; and, for some such as Rosenthal, it would also serve as a de facto university

⁴⁸ Aside from discussions on deforestation for paper and hemp as a partial solution.

⁴⁹ Ibid., 99.

specializing in the cultivation of said plant. Going on to publish many works, including one that would be used as an official textbook for an actual cannabis university, *Oaksterdam*, in Oakland, California, Rosenthal's name has in many ways become synonymous with cannabis cultivation. Fully cognizant of the utility of cannabis and the distinct lack of negative repercussions associated with cannabis decriminalization as seen in Holland, it is no surprise that one of the many titles published by Rosenthal would be *Why Marijuana Should be Legal*. Juxtaposing the "effects of marijuana" with the "effects of marijuana laws," this work assumes standpoints of "logic, cost, and benefit" to arrive at the ultimate conclusion that legalizing marijuana and creating a system of civil regulation would serve the best interests of the country."⁵⁰

First published in 1996, this work is largely aimed at a wide popular audience and is co-authored by Steve Kubby, the founder of the American Medical Marijuana Association. Part of a growing effort to raise awareness, not only of the medicinal properties of cannabis but also of the unjust war being perpetrated against American citizens and around the world, this work features an eight-perspective approach, discussing the "constitutional, criminal, economic, health, industrial, medical, national security and sociological"⁵¹ ramifications of the United States' current war on non-violent citizens. Featuring chapters that are broken down accordingly, this work makes great use of its limited space and is filled with valuable and relevant information. Illustrative of the severity of the problem, the introduction indicates, "in the last thirty

⁵⁰ Ed Rosenthal et al, *Why Marijuana Should be Legal* (New York City: Thunder's Mouth Press, 1996), xii.

⁵¹ Ibid.

years, over 10 million Americans have been arrested on marijuana charges;” and, considering this number has doubled since this book’s publication, the fact that people still have to ask, “Which is more harmful to society, marijuana or the marijuana laws?” is certifiably insane.⁵²

Doing an excellent job of summarizing the combined role of the drug war and, what has been termed, the “Prison-Industrial Complex,” the book’s 3rd chapter, devoted to “Economic Costs,” features some very sobering numbers and statistics before moving into an assessment of the approximate size of the United States cannabis market. However, it is when one contemplates facts such as “the total cost to taxpayers of marijuana-related incarcerations reached more than \$1.2 billion per year,”⁵³ and that “federal taxpayers spend far more per year to house one inmate (\$23,000) than to educate one child (approximately \$8,000),” that some of the inherent problems of this country become abundantly clear. Additionally, as this work notes, the social repercussions of the current war were well documented long before the writing of this book, as evidenced by a 1982 National Academy of Sciences study which concluded that because people see “no rational basis for the legal distinction between alcohol and marijuana [they] may become cynical about America’s political institutions and democratic processes.”⁵⁴

This issue is only compounded for “young users, who are often otherwise law-abiding people, [and] are subjected to an arrest record, or even a prison term, with

⁵² Ibid., ix.

⁵³ Ibid., 31.

⁵⁴ Ibid., 72.

implications extending into many aspects of their lives.”⁵⁵ Fostering an air of mistrust for people of authority that can continue far past childhood, the true extent of the social repercussions of this law is impossible to measure. What is possible to measure is how effective this war has been. To do so, one would need to gauge how many users there were at the beginning of the war and how many there are now; and, from this data, they could derive some idea of a law’s efficacy. Fortunately for those of us with limited time and math skills, the authors of this book already did the math in the third chapter arriving at an approximate number of 27 million current cannabis users in the United States. Having begun with a number much closer to 50,000, the increase in users, and thus the failure of this war, is exponential, or, as the book states “The War against Marijuana is one of the greatest policy failures in U.S. history.”⁵⁶ Although this is probably not Rosenthal’s most functionally valuable work, the information contained therein still merits discussion because the United States has failed to address any of the issue he raises over a decade and a half later. Adding more pieces to a wall of logic that seeks to overcome a mountain of ignorance, this work represents but a small portion of the legacy of Ed Rosenthal, to whom so many have not had an opportunity to show their appreciation.

From many perspectives, cannabis is a direct threat to much of the canon of western medicine. Existing in far more complexity than the myopic pharmaceutical industry could comprehend, the attempted isolation of individual cannabinoids, although technically successful, has indeed produced much less medicinally active and much more

⁵⁵ Ibid.

⁵⁶ Ibid., 87.

expensive products than those found in the raw material of the plant itself. Illustrative of the inherent absurdity of modernity, the product produced, *Marinol* (*Dronabinol*,) is marketed as an antiemetic in pill form. Further compounding this irrationality is the fact that *Marinol*, a synthetic isolation of the most psychoactive cannabinoid THC, currently exists as a Schedule III controlled substance, which allows for accepted medical use, while the cannabis plant itself is classified as Schedule I, having no medicinal value. Having until this point attempted to define cannabis's utility within the same system that it so threatened by its existence and is wrought with anachronistic hypocrisy, Grinspoon and others have done a very admirable job.

While western medicine is quite dismissive of the medicinal properties of plants and herbs, the countless generations of wisdom contained within the body of Eastern medicine have a tendency to embrace plants such as cannabis, as previously indicated by William O'Shaughnessy's experiences in India. Thoroughly analyzing the depths of this wisdom, Joan Bello, in the course of attaining a master's degree in Eastern Studies and Psychology, amassed a personal collection of documents related to cannabis. Ultimately culminating in a work titled *The Benefits of Marijuana: Physical, Psychological, and Spiritual*, Bello's insights present an entirely new perspective to the discussion. Going further than just calling for medicinal recognition or legalization, the premise of Bello's work is that "cannabis is not only harmless and benign as a recreational euphoriant, but also a holistic medicine for deep healing of the human body, mind, and spirit- and a

specific remedy for the spiritual malaise of western civilization.”⁵⁷ Having witnessed first hand the medicinal benefits of cannabis in her son who suffered from epilepsy, this work abounds with anecdotal evidence of cannabis’s medicinal efficacy. However, what is unique about this work is Bello’s repeated discussion of the role of the autonomic nervous system and the effect of cannabis on that system.

Historically defying accurate classification, cannabis has been listed as a stimulant, a narcotic, a depressant, and a hallucinogen. Although it is now becoming more widely understood that these variations are a result of the different cannabinoid combinations contained within individual plants of the species *Cannabis Sativa* and subspecies *Cannabis Indica*, it has often been understood that in many respects cannabis “is both a sedative and a stimulant.”⁵⁸ Whereas western medicine is seen to rely on simple classifications, Bello explains, “the simultaneous opposing action of marijuana is akin to balancing our entire system.”⁵⁹ She continues, “Such a balance in the ANS can be understood as a charged equilibrium, defined as ‘well-being,’ experienced as physiological expansion and psychological contentment and responsible for health.”⁶⁰ Further supporting this position with discussion of the different kinds of brain waves, Bello explains that beta waves are associated with a more manic state of being, likely very common in our age of over stimulation; whereas theta brainwaves are associated with depression. Unlike either of these, alpha waves are most commonly associated with

⁵⁷ Joan Bello, *The Benefits of Marijuana: Physical, Psychological, and Spiritual* (Susquehanna: Life Services Press, 1996), 13.

⁵⁸ Ibid., 29.

⁵⁹ Ibid.

⁶⁰ Ibid.

meditation and it is explained that cannabis ingestion causes a notable increase in these waves that are said to be expressed as a “unification of logic and intuition.”⁶¹ Going on to make some fascinating claims that fly in the face of many of the government’s one time positions including “marijuana kills brain cells,” the response is that, in fact, studies on synthetic cannabinoids have shown to cause neurogenesis.⁶² Bello’s perspective turns the conversation from defending cannabis’s medicinal properties to redefining health altogether. One of the only books to approach the discussion from a truly holistic perspective, this work seems to be targeted towards a more general audience, providing only sparse footnotes with a sizeable bibliography. Nonetheless, this is a very engaging work overflowing with valuable information and many leads for follow up research for those so inclined. And, given its largely unexplored perspective, it is invaluable to any complete discussion of the topic.

Publishing two consecutive works in 1996 and 1997, *The Great Book of Hemp* and *The Hemp Manifesto* respectively, Rowan Robinson, although cited as a “writer, journalist, and explorer who first learned of the many uses of hemp while living in Kashmir in the 1950s,”⁶³ is also said to be the “pen name for an author who chooses to remain anonymous.”⁶⁴ Anonymity aside, these two works are notable for several reasons. The first work, *The Great Book of Hemp*, is a large textbook-style offering featuring a professionally dressed cover adorned with several historically appealing items

⁶¹ Ibid., 36.

⁶² Ibid., 39.

⁶³ Rowan Robinson, *The Hemp Manifesto* (Rochester: Park Street Press, 1997), back cover.

⁶⁴ <<http://store.innertraditions.com/Contributor.jmdx?action=displayDetail&id=541>> (Accessed March 28, 2012).

and filled with pictures, graphs, and charts to fully explain the benefits of the plant in its entirety. In many ways this work is very well put together and rather aesthetically pleasing; however, it does, at times, gloss over facts and even, in one portion, erroneously claims that glaucoma survivor Elvy Mussika was “the first American for whom cannabis was legally prescribed.”⁶⁵ While this statement would have been correct had it been phrased “the first American woman,” in reality, it was Robert Randall who was the first American to utilize the medical necessity defense successfully and to be granted a prescription for cannabis from the United States government. Although this mistake could be written off as a typo, it is a notable error considering that the adjoining pages only feature the roughest of overviews of the battle Randall and Mussika undertook to save what was left of their eyesight through the utilization of cannabis.

The second book from the mysterious Mr. Robinson entitled *The Hemp Manifesto* is a pocket-sized offering that proclaims it features “101 ways that hemp can save our future.”⁶⁶ Lacking citations of any form, the information morsels presented in this work are short and sweet and although they do not always stick to the stated goal, there are several that are worth mentioning. One of the lesser-known utilities, said to be French in origin, is the application of hemp to the building process, either using molds to pour hemp-based concrete or through the use of hemp bricks. Mentioned in this work as the fifth way that hemp can save the future, the possibilities presented by hemp for building applications are indicative of an evolving society that is looking to reclaim a bond with its environment. While the books of Rowan Robinson are not scholarly, what

⁶⁵ Rowan Robinson, *The Great Book of Hemp* (Rochester: Park Street Press, 1996), 187.

⁶⁶ Robinson, *Manifesto*.

they do offer is a body of information that needs to be spread as far and as wide as possible until it can no longer be ignored; and, being that this the inherent goal of these works, they are in and of themselves inherently valuable in that regard.

Constituting a large turning point in the fight for medicinal access to cannabis, 1996 saw the state of California once again take the lead in the battle with passage of Proposition 215. Originating in San Francisco and passing with 55.6% support of the electorate, the success of the campaign was partially attributed to monetary contributions from notable philanthropists such as George Soros; however, without the tireless effort and expertise of people such as Dennis Peron, Lynne Barnes, Valerie Corral, Dale Gieringer, and Tod Mikuriya, the proposition would not have been possible. Although federal laws would technically make California mandates obsolete, Prop. 215 was designed “to ensure that seriously ill Californians have the right to obtain and use marijuana for medical purposes where that medical use is deemed appropriate and has been recommended by a physician.”⁶⁷ The Law also states that its intent is “to encourage the federal and state governments to implement a plan for the safe and affordable distribution of marijuana to all patients in medical need of marijuana.”⁶⁸ Although this has still not happened on a federal level, many states would follow suit during subsequent decades. No doubt seeking to widen the conversation and assist those unfamiliar to cannabis with its applications, Ed Rosenthal, Dale Gieringer, and Tod Mikuriya published the *Marijuana Medical Handbook: A Guide to Therapeutic Use* in 1997. Speaking to this concept, Rosenthal states very clearly in the introduction “this book has

⁶⁷ <<http://www.hr95.org/Prop215.html#215text>> (Accessed March 28, 2012).

⁶⁸ Ibid.

been written and published to alleviate suffering.”⁶⁹ Given the implications of the effects of the AIDS virus and that cannabis has been proven effective in staving off the wasting syndrome associated with not only the virus but the medicines necessary to fight the virus, access to cannabis was, for tens of thousands of people, nothing less than the alleviation of suffering. Addressing many areas in which cannabis could prove effective, including “arthritis, insomnia, glaucoma, chemotherapy, anorexia, and chronic pain,” this work is predominately a how-to guide, first delivering a concise analysis of expected effects before moving into very functional and practical information on procuring cannabis, growing cannabis, rolling cannabis cigarettes, vaporizing, and it even features several recipes for cannabis-infused food items including everything from brownies and tinctures to chow mien and carrot cake. Purposefully marketed to a public audience, it is notable that this work, although featuring the signature cannabis leaf, is presented in a much more mature manner than many previous works. Indicative of the maturing humor and increase in age of medicinal users, each chapter begins with a Doonesbury cartoon that features an elderly woman discussing her medicinal cannabis use with her somewhat shocked but caring friend. This work could be seen as a bridge to the general public, breaching the lines between popular culture and counter-culture, much in the ways that cannabis would breach similar lines in films of this era. Although rapidly gaining momentum, the drive to reintroduce cannabis into the American pharmacopeia would not be an easy one.

⁶⁹ Ed Rosenthal et al, *Marijuana Medical Handbook: A Guide to Therapeutic Use* (Oakland: Quick American Archives, 1997), xv.

Following the extremely arduous journey towards legitimacy, and at times forming a very intimate perspective, the 1998 work *Marijuana Rx: The patient's fight for medicinal pot*, chronicles Robert Randall's fight to save his eyesight while simultaneously challenging the United States government for access to the only substance that would safely do so. Written by Robert Randall and his wife Alice M. O'Leary, this work is one of the most complete and personal accounts of the earliest battles for medical cannabis. Owning the distinction of being the first citizen of the United States to be legally prescribed cannabis for medicinal purposes in spite of that same government's continued insistence that it had no medicinal value, both Randall and O'Leary would prove to be dedicated to helping ease the suffering of as many people as humanly possible. Involving a flurry of lawyers, doctors and a large cast of patients calling for compassionate access to a substance that, for many, could save or at least prolong their lives and improve their quality of life, the law firm of Steptoe & Johnson proved to be one of the most politically powerful advocates of this work and would prove to be the most valuable of allies in both saving Robert's sight and the continued fight for medical access on a wider scale. Fully cognizant of the challenges faced by each and every patient attempting to achieve the same goal, Randall writes, "within six weeks of the decision in my case the battle lines were drawn in the war for medical marijuana. Those lines continue to this day, dug in like the weary soldiers of World War I facing an endless barrage of attacks and counterattacks. Caught in the no man's land between warring factions are the patients, still waiting for sanity to prevail."⁷⁰ Randall's eloquent words

⁷⁰ Ibid., 136.

speaking to the bellicose nature of this conflict and to those whose health is regarded as mere collateral damage. In later portions of the book, readers catch a glimpse of a young Newt Gingrich, who, for a brief moment, seemed to truly grasp the gravity of the situation before political pragmatism rendered him into the line-toeing career politician who has once again found his way back into the political discourse. Of this encounter O’Leary and Randall summarize, “Gingrich sat them on a sofa, offered them a coke, listened to their trite explanations, [and] then unloaded. The FDA had promised Georgia marijuana. If Georgia did not get marijuana, Gingrich would call for a congressional investigation. Rough, direct, demanding.”⁷¹ Unfortunately, Gingrich soon abandoned his support of the controversial program, helping to secure both his place within the Republican Party, and cannabis’s political limbo for over thirty years.

Created by the FDA to bridge the gap between illegal marijuana and medicinal cannabis, the Compassionate Investigation New Drug program (CIND) would provide sealed tins containing 300 joints each to the few patients whose personal and legal tenacity gained them entrance. Discussing this program in detail in the course of this work, Randall’s close contact with many of the first patients including Irvin Rosenfeld, Elvy Musikka, and Kenny and Barbara Jenks, brings a very personal perspective to the very human effort of these brave people to preserve their lives and the quality thereof. However, Randall’s involvement in the CIND does not end there. Beginning with the legal success of a Texas man known only as Steve L., Randall and O’Leary became very active with the push to alleviate the suffering of people with AIDS. This drive for

⁷¹ Ibid., 252.

awareness and access was seemingly multiplied when O’Leary and Randall met Kenny and Barbara Jenks. Having contracted AIDS as a result of hemophilia and infected blood transfusions and then unknowingly transmitting AIDS to his wife, Kenny Jenks first found that cannabis helped to reduce his wife’s nausea in addition to increasing her appetite at a time when his wife, Barbara, was literally wasting away.⁷² Ultimately arrested for growing cannabis plants, just as Randall and O’Leary had been, readers witness the blossoming of a very powerful friendship between the two couples that, sadly, far outlasts Kenny and Barbara. Grown out of a desire to bring the alleviating power of cannabis to as many AIDS patients as possible, together with the financial assistance of Richard J. Dennis, O’Leary and Randall began the Marijuana AIDS Research Service (MARS). Given the highly technical and often confusing nature of most government documents, the compassionate IND paperwork was notoriously difficult to fill out, which, given the exaggerated turnaround times for these applications, made the process almost pointless for a population of people many of whom were actively dying. In an attempt to remedy this problem the only way they thought possible, MARS created a template document for AIDS patients that could be filled out in a fraction of the time required for the original paperwork and distributed it to anyone who asked for it. This action resulted in a flooding of the FDA compassionate IND offices with applications. Unfortunately for countless thousands of terminally ill American citizens, this led to the government, under the direction of George Bush senior, shutting down the CIND. Since the Bush administration and the CIND turned their back on

⁷² Ibid., 326-349.

thousands upon thousands of sick people, this situation has still, to this day, not been remedied on a federal level: and, while those who had been granted the CIND were grandfathered into the program, only four were still alive as of 2018.

Breathing equal parts life and death into the reality of this war, the story presented by Robert Randall and Alice O’Leary is an incredibly powerful one and vividly illustrates the joy of victory and the sadness of too many lost friends to count. Finally ending with the passing of Robert Randall himself, this book chronicles not only the conflict-filled early history of a movement that continues to grow but also the compelling story of a couple devoted to making this world a better place. Providing the seeds of inspiration necessary to continue the fight where they could not, the immense value of this work is still being realized today.

Indicative of the collective relaxation in attitudes towards cannabis in the late 1990s, the work, *Highlights: an Illustrated History of Cannabis*, is a particularly vibrant offering packaged for a general audience of a wide age range. Featuring some nostalgic images that include Paul McCartney in handcuffs, a smoke-enveloped *Fabulous Furry Freak Brothers* and a very exotic and topless young woman next to a hashish filled hookah, the cover alone is quite evocative of the book itself which is composed of a generous blend of images from popular culture, much of which has been forgotten, and a concise synopsis of the plant’s tumultuous history. Touting the book as “the biography of the most fascinating plant in human history,” the authors also mention that this work is not a “plaintive plea for the legalization of marijuana, nor a two-thumbs-up endorsement

of current laws.”⁷³ This work attempts to clarify several bits of misinformation that have persisted throughout the pro-hemp/cannabis movement, including the long repeated legend that the first pants made by Levi Strauss & Co. were, in fact, hemp jeans. Speaking to this, *Highlights* says that, according to Levi, “Levi’s jeans were never ever made from hemp...and, it appears, they never will be.”⁷⁴ Focusing heavily on the role and presence of cannabis in popular culture, this work is a sea of colorful cannabis-related iconography, featuring everyone from a crowbar-wielding Henry Ford, through the Marx Brothers, Cheech and Chong, George Carlin, and “Murphy Brown,” to music icons such as the Beatles, The Rolling Stones, Bob Marley, and Bob Dylan. Ultimately, the resounding point frequently repeated in this work comes from a speech delivered in 1979 by Jimmy Carter to Congress which stated that the “penalties against possession of a drug should not be more damaging to an individual than the use of the drug itself.”⁷⁵

Wrought with a sense of fear, excitement, and anticipation, the millennial transition that ushered in the twenty-first century was one of great-perceived importance. What this change foretold for cannabis and those that relied on its medicinal benefits would be a dramatic mix of hope and heartbreak. Fighting a war that, like most, consists of thousands of smaller battles, it is important to note that while several states, groups and individuals were making great strides to decriminalize cannabis, the federal government was showing no sign of letting up. When viewed abstractly, the “War on Drugs,” at least on the surface, seems like a reasonable enough idea; it is hard to deny the

⁷³ Carol Sherman et al, *Highlights: an Illustrated History of Cannabis* (Berkeley: Ten Speed Press, 1999), 10.

⁷⁴ Ibid., 86.

⁷⁵ Ibid., 107.

destructive quality of some manmade substances. However, when one takes into account that it is impossible to wage anything more than a one-sided war on inanimate objects, it is not hard to conclude that this war is not on drugs themselves, but rather on the same people that the war was designed to protect.

Proving highly attentive to this need for a very specific body of information, the ever-intuitive Ed Rosenthal, together with attorney William Logan, released a work titled *Don't Get Busted*. Featuring a generous inclusion of past articles from Rosenthal's editorial column in *High Times* titled "Ask Ed," this work is centered on how to avoid police interaction and what to do in cases where that is no longer an option. Ever conscious of the bellicose nature of this conflict, Rosenthal, after listing thirty-three countries in which the U.S. was militarily engaged, notes, "But the U.S.'s longest running, most costly war is the War on Drugs. It has claimed more casualties than any other war, and is widely regarded as a failure by most analysts."⁷⁶ Featuring valuable real world information in each chapter, they are divided according to topic, with topics ranging from "What to do if the Cops come" and "Choosing a Lawyer" to "Medical Marijuana and the Law" and "Drug Testing." Although this work is far out of date, given the advancing speed of technology, much of the basic wisdom contained within it will bear value until the senseless war on our citizens is no longer. Evidence of the extent to which the millions of people touched by this war have come to resent the groups that were designed to either protect or represent them, it is very clear, after reading this work, how far the divide has become, thanks to these arbitrary and oppressive policies forced

⁷⁶ Ed Rosenthal, Logan, William, *Don't Get Busted* (Oakland: Quick American Archives, 2000), ix.

upon a group of citizens that want little more than their right to the pursuit of happiness. Prefacing this work is one final warning; Rosenthal proclaims, “Don’t get caught by the thrashing tail of the dying dinosaur, which is the “War on Drugs.” Please, for your own good, read and use this book. I wrote it for you.” Completely embodying the message and spirit of this work, that statement represents a fear that has united generations in a shared mistrust. Although this mistrust has given birth to some of the most fantastic music and art ever created, it also threatens the very fabric of our society if we do not seek a more sensible solution.

Evidence of the efforts of some to strive towards this aforementioned sensible solution, the Institute of Medicine (IOM) undertook a project that lasted eighteen months and was, in essence, a broad analysis of all available scientific studies pertaining to cannabis. What resulted from this research was the report *Marijuana and Medicine: Assessing the Science Base*, which was “first released to both the ONDCP (White House Office of National Drug Control Policy) and the public in March of 1999.”⁷⁷ Existing as a “non-governmental, apolitical, non-profit organization of scientists whose independence and objectivity lend credibility to its studies and recommendations” the IOM analysis of over 500 “selected scientific papers related to the broad scope of this study” would prove to be a well balanced and insightful analysis that, above all, sought objectivity in its findings. Later published in a more condensed form as *Marijuana as Medicine?* in 2001, the expressed conclusion was that “Medical use of potent, controlled psychoactive drugs has not led to their abuse. Rather than focusing on drug control policy, the medical

⁷⁷ Alison Mack, Joy, Janet, *Marijuana as Medicine? The Science Beyond the Controversy* (Washington, D.C.: National Academy Press, 2001), xi.

marijuana debate should really be about the promise of future drug development.”⁷⁸

Seeking to enlighten the debate in several regards, “team members compared the effectiveness of using marijuana versus approved medicines to treat numerous specific disorders.”⁷⁹ Additionally, this study “also evaluated the effects of chronic marijuana use on physical and mental health as well as its possible role as a “gateway” drug to cocaine, heroin, and other illicit drugs.”⁸⁰

Although the overall findings of this study are of great importance, by far the most interesting portion of this work is related to the discussion of cannabinoids, and specifically endogenous cannabinoids and their receptors. Discovered in 1992, anandamide, one of the most prevalent cannabinoids produced internally by the human body, is “present in high concentrations-along with abundant CB1 receptors – in areas of the brain that control learning, memory, movement, coordination, and responses to stress.”⁸¹ With evidence suggesting, “cannabinoids receptors have existed at least since vertebrates first evolved, more than 500 million years ago,” it is also worth noting “to date, scientists have identified two main types of cannabinoids receptors in the brain, known as CB1 and CB2.”⁸² Although CB2 receptors “are relatively scarce in the brain” they are said to be “plentiful in the immune system.”⁸³ Conversely, “CB1 receptors are extraordinarily abundant in the brain,” in fact there are “10 times as many cannabinoids

⁷⁸ Ibid., xii.

⁷⁹ Ibid., 5.

⁸⁰ Ibid.

⁸¹ Ibid., 29.

⁸² Ibid., 28.

⁸³ Ibid.

receptors as ‘morphine’ receptors.”⁸⁴ Providing “a wide variety of physiological functions,” the science in this area is only in its infancy and is proving to be very promising, and, at times, conflicting.⁸⁵ Illustrative of this point, “several basic studies have provided evidence that cannabinoids can suppress the immune system in a variety of ways, while others have found that cannabinoids can enhance immune responses.”⁸⁶

Striking to the heart of these conflicting studies, the authors conclude, “it is important that future studies on the health risks of medical marijuana use distinguish between the adverse effects caused by cannabinoids versus those caused by smoking or other delivery methods.”⁸⁷ Proving overall to be a very interesting study, it also makes some very fascinating recommendations, including the following: “Because different cannabinoids appear to have different effects, cannabinoids research should include, but not be restricted to THC alone; Clinical trials of cannabinoids drugs for symptom management should be conducted with the goal of developing rapid-onset, reliable, and safe delivery systems.”⁸⁸ Making strong suggestions for an inhaler-like delivery system, the IOM proclaimed, “if there is any future for marijuana as a medicine, it lies in its isolated components, the cannabinoids, and their synthetic derivatives.”⁸⁹

Presenting a very different perspective on the cannabis plant, Jason King’s work *The Cannabible*, focused on illuminating the beauty of over 250 different traceable strains of cannabis, and is a photographic odyssey that follows his own life journey and

⁸⁴ Ibid.

⁸⁵ Ibid., 31.

⁸⁶ Ibid., 35.

⁸⁷ Ibid.

⁸⁸ Ibid., 174.

⁸⁹ Ibid., 175.

mission, “to travel the globe, hunting down every type of marijuana to be found.”⁹⁰

Wanting to best document this journey, King taught himself the art of photomicrography (microscope photography) in order to capture the delicate intricacies of the barely visible surface of the different strains. Existing as an ever-evolving combination of science and underground art form, the cultivation of cannabis, in particular the role of cannabis genetics, is even today a topic of immense mystery. Not having to adhere to the rules and traditions of pharmaceutical companies, the terminology that resulted was far different. Each strain containing a distinct blend of cannabinoids, terpenoids, and visual properties, identifying the subtleties in any single variety is something of an art form unto itself. Although the science today has evolved to the point in which several different companies across the country can actually analyze cannabis samples for cannabinoids and contaminant content for a nominal fee, in the years of research that led up to the publishing of *The Cannabible* this technology was not nearly as widespread. King’s research largely relied upon an immense amount of footwork to trace the lineage of the 250 strains that could be reliably identified out of the over one thousand that are available around the globe. Tracing this path from the popularization of *Sinsemilla* or seedless growing techniques, as defined by the 1976 work *Sinsemilla Marijuana Flowers*, through the exodus of California cannabis cultivators to Holland in the 1980s, to the proliferation of genetics throughout Holland, and thus the rest of the world, it is estimated that “of the nearly 150 varieties offered for sale by Dutch seed companies in 2000, 80 percent of

⁹⁰ Jason King, *The Cannabible* (Berkeley: Ten Speed Press, 2001), xi.

them contain germ plasm that first came to the Netherlands prior to 1985.”⁹¹ In addition to providing a very informative base of knowledge pertaining to the genetic building blocks of many of today’s most common strains, this work also makes an admirable effort to try and dispense with much of the mystery when it comes to differentiation between Cannabis Sativa and Indica and identifying the role Indica has played in the evolution of cannabis genetics over the past few decades. Going on to publish two sequels to *The Cannabible*, each as aesthetically appealing and engaging as the next, what started as a personal mission for Jason King grew into not only a career, but a photomicrography epic that sought to illuminate the beauty within what so many believe simply to be illegal “crude plant matter.” Searching for a better understanding of an evolutionary process that has been developing with invertebrates for millions of years, a good starting point would be a healthy appreciation for that which we will likely never truly understand. Barely scratching the surface of cannabinoid research, what is growing abundantly clear is that despite the wishes of countless alcohol, tobacco, and pharmaceutical companies, the discussion of cannabis is growing into an ever more present issue and becoming more scientifically based.

Beginning his research career focused on the dangers of alcohol, Mitch Earleywine was well aware of the hazards of drug abuse. Bringing this wealth of knowledge to the State University of New York at Albany, it was his students in an undergraduate course on drugs and human behavior, which persuaded Earleywine to broaden his area of research to include cannabis. Ultimately culminating in a 2002 work

⁹¹ Ibid., 12.

titled *Understanding Marijuana: A New Look at the Scientific Evidence*, this work would bring the perspective of a psychologist to the conversation that was, in many respects, bordering the insane. The work covered the gamut of topics contained within the cannabis conflict, from the utility of hemp and the absurdity of current laws, to the current rates of recreational use amongst people of the world, through the various myths associated with its use, to a very detailed analysis of the “latest research findings about marijuana’s effects on thought and memory and on its subjective effects such as emotional mood state.”⁹² Although some of the findings of this work arrive at conclusions that seem too obvious to be anything but common sense, such as “that marijuana is neither completely harmless nor tragically toxic,” others are, for some, far less apparent.⁹³ Prefacing these results with the disclaimer that “a selective reading of this research can buttress nearly any argument for or against the drug,” Earleywine then notes, “Intoxicated people do not learn new material well. They cannot solve complex problems quickly, and their brain waves change. They can drive a car as well as the unintoxicated, but these consistent results are so counterintuitive that most people find them unbelievable.”⁹⁴ Eventually returning to a brief comparison between society’s acceptance of alcohol and the government’s continued war on cannabis, Earleywine’s penultimate paragraph asks a very simple yet extremely poignant question, “citizens seem to trust adults enough to let them attempt to use this drug (alcohol) in a way that will not

⁹² Mitch Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence* (Oxford: Oxford University Press, 2002), vii.

⁹³ Ibid.

⁹⁴ Ibid., 271, 272.

cause problems. Can we extend this trust to people who use marijuana?”⁹⁵ As time would show, this answer would become self-evident.

Helping to cultivate a very robust and well-funded underground society, the prohibition of drugs in the United States has led to very similar circumstances as those seen during alcohol prohibition. In essence creating illegal corporations devoted to filling the needs of a supply and demand market, where these laws have failed at eradicating the substances they sought to control, they have succeeded in creating an immense amount of crime, often violent. Attempting to compensate for this presence of violence with harsh punishments that create criminals out even the most casual drug user, this, in turn, has led to an inequity in sentencing of those arrested for possession of drugs compared to violent criminals, in addition to discrepancies in social programs following arrest. Chronicling the presence and role of several aspects of underground society, author and journalist Eric Schlosser’s work, *Reefer Madness*, first focuses on the cultivation of cannabis in the United States before turning his attention to immigration and then pornography. Initially giving a brief history of cannabis in the United States, Schlosser then brings the conversation into the 21st century with the disturbing reality that “about 724,000 were arrested in the United States for violating marijuana laws during 2001.”⁹⁶ Acknowledging the variation in sentencing in various locations, ranging from a slap on the wrist in some states to the possibility of life in prison in others, he then begins to personalize these abstracts into a gripping story involving a few domestic cannabis farmers, the government and one very unlucky individual caught in the middle. He tells a

⁹⁵ Ibid., 274.

⁹⁶ Eric Schlosser, *Reefer Madness* (Boston: Houghton Mifflin Company, 2003), 27.

dramatic tale that features the growth of 900 pounds of cannabis, its facilitated sale, the drunken arrest of one of the involved parties, and the consequential avalanche of backstabbing and confessions that followed Schlosser's most tragic figure, Mark Young. Young, who had merely assisted the growers in finding a buyer, was the only one who refused to "cooperate" and hence was the only one subject to the possibility of life in prison. Beautifully juxtaposing the case of Mark Young with similar cases from around the country and an immense amount of information, this brief offering has a lot to say about the disproportion of our current system of law enforcement, and just how radically it can affect the lives of those involved. Perhaps the most profound point made in the course of the book would simply be that "a society that can punish a marijuana offender more severely than a murderer is caught in the grips of a deep psychosis."⁹⁷ Left wondering how do we collectively emerge from this psychosis, this work offers the following suggestions: "the decriminalization of marijuana should be the first step towards rational drug policy...mandatory minimum sentences for drug offenders should be repealed...[and] the asset forfeiture laws should be amended so that criminal investigations are never motivated by greed."⁹⁸ Although for some these suggestions might seem like common sense solutions to rampant issues plaguing this country and the world, there still exists adamant opposition to this position; however, what is certain is that something must be done.

One does not have to look much further than the recent war in Iraq and the rise of government funding for private organizations such as Halliburton and Blackwater

⁹⁷ Ibid., 74.

⁹⁸ Ibid., 73.

security to realize that there is a lot of money to be made in warfare. Arguably driving much of the continuation of the war on drugs, such policies such as asset seizure, mandatory minimums, and the privatization of prisons have created a proverbial minefield for all users of cannabis that could prove to be even more potentially fatal for those already lacking good health. Seeking to help people navigate this potentially hazardous mine field, Richard Glen Boire and Kevin Feeney published *Medical Marijuana Laws* in 2006. The authors, attorneys from California and Oregon respectively, filled this work with explanations of pertinent cases, a detailed explanation of “medical necessity,” the legal defense first successfully used by Robert Randall, as well an immense amount of very relevant and current information such as “qualify conditions, how to become a caretaker, how to find a doctor...and patients rights and restrictions, and physicians rights and responsibilities”⁹⁹ When this work was written, eleven states including Alaska, California, Colorado, Hawaii, Maine, Montana, Nevada, Oregon, Rhode Island, Vermont, and Washington had passed laws of varying degree to grant people access to medical cannabis. Spanning the width of the country, the challenges to this country’s aversion to medical cannabis were becoming far too numerous not to be noticed and were notably corresponding with an increased presence in popular culture and literature, both popular and formal. Like it or not, cannabis was gradually becoming an embedded mainstay of popular culture while many courageous individuals, countless groups and a select group of politicians fought tirelessly to secure the rights of patients and doctors to best choose their treatment options.

⁹⁹ Richard Glen Boire and Kevin Feeney, *Medical Marijuana Law* (Oakland: Ronin Publishing, 2006).

Indicative of this rise in popular works infused with cannabis culture, the 2000s featured a variety of entire cookbooks devoted to cannabis. Featuring titles like *The Marijuana Food Handbook*, *Baked*, *The Cannabis Cook Book*, and *Aunt Sandy's Medical Marijuana Cookbook*, this rising trend was proving that cannabis culture had evolved far past simply smoking or magic brownies. One of these works, published under what could only be a pen name, S.T. Oner, featured a brief analysis of cannabis history, usage, and law before jumping into cooking basics, followed by a mélange of recipes ranging from “gone bananas bread” to “off your noodle soup.”¹⁰⁰ Not only including some interesting recipes for meals and desserts, *The Marijuana Chef Cookbook* also features some very creative drink ideas and a chapter on detoxification. Representative of many books of this nature, truthfully the most functional information contained in this work and in works of this nature are the detailed instructions of how to properly infuse butter, oil, alcohol, or milk with cannabis, from which almost any conceivable recipe could be altered to include a medicated version. Exponentially widening the avenues of cannabis consumption and removing all of the health concerns associated with inhalation of smoke, the expansion of a market for edible forms of cannabis is becoming one face of a rapidly changing world.

As each state would learn in its own time, passing legislation permitting cannabis was one thing; building infrastructure while at constant odds with federal laws was an entirely different task. With California producing the longest functioning examples of this intense battle, many tactics have been tried and tested within that state alone. Forming a multitude of different organizations, each subject to different local laws, one of the most

¹⁰⁰ S. T. Oner, *The Marijuana Chef Cookbook* (San Francisco: Green Candy, 2008), 46, 66.

admirable of these would have to be the Wo/man's Alliance for Medical Marijuana or WAMM. Formed as a non-profit co-operative organization dedicated to providing medical marijuana to a population that desperately needed it, a group that largely consisted of terminal AIDS patients, the heart-wrenching tale of this organization is eloquently told in a 2008 work aptly titled *Dying to Get High*. This tremendously powerful work highlights the underlying mortality of many of those who have fought for their right to choose their medication and how this has affected their tenacity and the true meaning of this battle. Easily dismissed by some as a proverbial trojan horse for legalization, for those who are actively wasting away on a daily basis, the battle for access to cannabis is a matter of life and death. This work also frames its argument in terms that reflect the great and deeply conflicted history of this country including discussions of the pursuit of happiness, patients' rights, states' rights, and the commerce clause of the U.S. Constitution. However what makes this work truly compelling is the humanizing effect that the telling of this story brings to the discussion. Chronicling the heroic acts of Valerie Corral and many others inside of WAMM, authors Wendy Chapkis and Richard J. Webb brought the immense tension of moments such as the raid by the DEA to light in riveting detail. This work is not only an example of human compassion and ingenuity but also a beautiful example of individual people working together in the face of substantial governmental opposition.

Seeking to alter the context of the conversation about cannabis, one Colorado-based movement known as SAFER tried a reality-based juxtaposition of alcohol and cannabis. An acronym for "safer alternatives for enjoyable recreation," SAFER and its executive director Mason Tvert are primarily responsible for several political campaigns,

including the 2005 ballot initiative I-100 that essentially decriminalized small scale possession of cannabis in Denver, or at least made it a low priority for law enforcement and 2006 amendment 44 that, although not successful, did garner 41% of the popular vote. Only building upon the lessons from both the success and failure, in 2009 Mason Tvert of SAFER along with Steve Fox of the Marijuana Policy Project and Paul Armentano of NORML together published a work titled *Marijuana is Safer: So Why Are We Driving People to Drink?*

Part manifesto, part activist manual, part plea for sanity, this work is the synthesis of a multitude of perspectives into one coherent logic-based assessment that asserts truth above all in its call for sensible policy. Filled with facts such as the findings of one domestic violence study that concluded that “men were eight times more likely to be abusive on days they consumed alcohol as compared to days when they did not,” and a “U.S. government estimate that alcohol contributes to 25 to 30 percent of all violent crime in America,” this work is very clear in its intention to promote discussion and action.¹⁰¹ Overall this work can be seen as an effort to “demonstrate...that marijuana is not only less harmful than alcohol, but that the difference is really quite significant.”¹⁰² Coming across in a very clear, organized and straight forward manner, the larger movement behind this work was showing no signs of letting up and, as of 2012, had found overwhelming support for their Amendment 64, also known as “the campaign to regulate marijuana like alcohol,” even from some unlikely sources including televangelist

¹⁰¹ Steve Fox et al, *Marijuana is Safer: So Why Are We Driving People to Drink?* (White River Junction: Chelsea Green, 2009), xix.

¹⁰² Ibid., xvi.

Pat Robertson.¹⁰³ Highlighting the numerous different paths that have been utilized to achieve an overarching goal, this work does an excellent job of introducing logic into this discussion, exemplifying one of the more successful paths taken by those fighting for access to cannabis.

Witnessing an explosion in cannabis-centered literature; the year 2010 seems to mark a watershed in the presence of cannabis in popular culture. With a multitude of books emerging in this year, the diversity of voices is also something worth noting. Featuring offerings from several doctors, a journalist, a federal patient who has been receiving cannabis from the government for almost thirty years, and an authoritative grower's handbook from the prolific Ed Rosenthal, 2010 would prove to be a tremendous year for cannabis literature. One of these many offerings, *The Pot Book: A Complete Guide to Cannabis*, is a compilation of a variety of smaller works edited by psychiatrist Julie Holland. Featuring offerings from Dr. Andrew Weil, Lester Grinspoon, Tommy Chong, and many others, this work truly excels in providing a multitude of perspectives, in presenting the most current findings regarding cannabis, and in its attempts to finally put many of the cannabis myths to rest.

Although every chapter of this collection is of immense value, one of the most interesting is Dr. Holland's interview with Mahmoud ElSohly, head of the University of Mississippi's cannabis cultivation program through the Investigational New Drug program. Discussing the different cannabinoids and what he referred to as a "cannabis fingerprint," it is clear that Dr. ElSohly occupies a very conflicted existence, which

¹⁰³ <<http://www.nytimes.com/2012/03/08/us/pat-robertson-backs-legalizing-marijuana.html>> (Accessed April 17, 2012).

defiantly comes through during the interview.¹⁰⁴ Clearly an intelligent chemist, it would appear that his career is at least partially contingent on maintaining the government's current policies, which keeps him in the spot of the only federally sanctioned cannabis cultivator in the United States. Leading to the production of cannabis of inferior quality compared to that grown by experts such as Rosenthal, it has been argued that this is done purposefully to maintain the government's position that cannabis lacks medical utility. Additionally, the cannabis sent to federal patients is often old and has been frozen and is said to be often very harsh, hardly what some would refer to as medicinal quality. Overall proving to be incredibly informative, Holland also chose to donate a portion of the proceeds from her work to "help fund therapeutic cannabis research."¹⁰⁵

A 2010 study from Harvard economist Jeffrey Miron concluded, "state and federal governments would save \$13.7 billion in law enforcement costs" were cannabis to be legalized throughout the United States.¹⁰⁶ Only adding to the possibility of profitability, "Miron estimated [that] federal and state revenues, including various excise and sin taxes, would be \$6.7 billion"¹⁰⁷ Although the actual value of the domestic cannabis market is next to impossible to estimate, given that it is a largely illicit market not subject to much of the regulations and record keeping of other markets, the numbers indicated by Miron and supported by many well-known economists including Milton Friedman, speak to the enormous presence that cannabis has in the United States and the

¹⁰⁴ Holland, *The Pot Book*, 269.

¹⁰⁵ Ibid., back cover.

¹⁰⁶ John Geluardi, *Cannabiz: The Explosive rise of the Medical Marijuana Industry* (Sausalito, CA: PoliPointPress, 2010), 4.

¹⁰⁷ Ibid.

enormity of the failure of the war on drugs. Highlighting the economic boon that cannabis legalization could have on the United States through an examination of the innovation of the medical cannabis industry, particularly in California, author, and journalist John Geluardi's 2010 work *Cannabiz* is full of analogies that portray California as a vibrant cross between the days of prohibition and the gold rush. Discussing many important themes throughout the course of his work, one of which is the "marijuana movements relation to other social movements," he notes "the marijuana movement is unique insofar as it is morphing into a full-fledged industry that will market a product, create jobs, and generate taxes."¹⁰⁸ Remarking that, "marijuana will not only be subject to the laws of man, but also to the laws of supply and demand," Geluardi draws an effective comparison when he notes that the repeal of prohibition in 1933 "was not the result of a successful movement, but rather the failure of one."¹⁰⁹ Arguing that young people are a major driving force behind cannabis reform, Geluardi notes that "The industry has begun to attract college graduates who are not only eager to be a part of what they regard as an exciting enterprise, but also view full legalization as comparable to the civil rights movement of the 1950s and 1960s."¹¹⁰ Summarizing the importance of his work in one sentence, Geluardi explains, "the marijuana movement is quickly turning into the cannabis industry- and one of the biggest political and business stories of our

¹⁰⁸Ibid., 7.

¹⁰⁹Ibid.

¹¹⁰Ibid., 5.

generation.”¹¹¹ Adding a very vibrant and insightful voice to an ever-evolving discussion, *Cannabiz* is a welcomed addition to the pantheon of cannabis works.

In another 2010 work, no doubt partially fueled by Jeffrey Miron’s study, psychiatrist Christopher Glenn Fichtner attempts to once again redefine the terms of the cannabis discussion through the introduction of terms like *Cannabinomics*. Functioning as the title of his work and framing the discussion that Dr. Fichtner presents, this term is an endeavor to eloquently represent the monetary implications that cannabis legalization would have on the United States. Seeking to outline the utility of the word, Fichtner included the following definitions for this word *Cannabinomics*,

“(1) Management of cannabis; (2) Rules, customs, or laws governing cannabis management; cannabis policy; (3) Natural laws pertaining to cannabis; cannabis science; (4) Implied: treatment of cannabis as a commodity or resource; (5) Connotatively and implicitly, the economics of cannabis; (6) More broadly, the language or vocabulary through which public conversation regarding rational and responsible management of cannabis becomes possible.”¹¹²

Framing the conversation in both economic terms as well as those of psychiatry, Fichtner also carefully outlines what his work is intended to convey and what it is not. *Cannabinomics* is “an effort to prompt a more open discussion of drug policy and, in particular marijuana policy,”¹¹³ it is not “a systematic presentation of the medicinal uses of cannabis [or] an in depth discussion of the medicinal values of cannabis for any

¹¹¹Ibid., 8.

¹¹²Christopher Glenn Fichtner, *Cannabinomics: The Marijuana Policy Tipping Point* (Northbrook, IL: Well Mind Books, 2010), 26.

¹¹³Ibid., 27.

specific medical condition, or medical advice regarding the use of cannabis.”¹¹⁴

Additionally Fichtner’s work is a “frank rejection of the term marijuana itself as too contaminated by its history of racism and government propaganda to be useful in an attempt to see the issues clearly” and “an interpretative exercise, involving redescription of historical, medical, public policy, and human interest data available to all interested observers, that finds Americans by and large ready for marijuana policy change *now* but lacking the vocabulary to articulate it.”¹¹⁵ Having listed but a few of the intended goals of this work, the bold intentions are not only abundant but also very well argued. Stated perhaps more succinctly, Fichtner’s work “seeks to replace policy predicated on fear, superstition, and prejudice with ideas based on science, practicality, and respect in a democratic society.”¹¹⁶ Dividing his work into three parts, “cannabis and medicine,” “cannabis and the drug war,” and “cannabis and the economy,” Fichtner does an impressive job of interweaving a brief history with personal experiences from his practice as a psychiatrist, imperative discussions of “consumer driven healthcare,” and some brief analysis of the most current findings regarding cannabinoids such as CBD. One of the most well presented and valuable works to come out in 2010, *Cannabinomics*, is a brilliant example of an ever widening cannabis conversation that will, no doubt, help to create policy and a brighter future similar to that mentioned in Fichtner’s introduction.

Ed Rosenthal’s most recent offering has grown into a 500 page color step by step manual that also doubles as an “official course book “for Oaksterdam University.

¹¹⁴Ibid., 26.

¹¹⁵Ibid., 28.

¹¹⁶Ibid., 29.

Founded in 2007 by Richard Lee, who also owned several cannabis distribution facilities known colloquially as dispensaries, Oaksterdam was designed to train those interested in pursuing a career in the up-and-coming cannabis industry. Offering classes in everything from cultivation, vaporizing, and extractions to “politics and history,” “federal vs. state law,” and “legal rights,” Oaksterdam offered not only weekend seminars, but also semester-length programs; however, it was never accredited as an educational institution. Although this work is far from the only cultivation guide on the market, the Oaksterdam edition of Rosenthal’s widely used handbook transformed one of the few works that actively set industry standards into a full-fledged textbook, complete with beautiful photography and the most current technical information available. Covering the cycle of growth from seed or clone through harvest, curing and consumption, this collaboration between the prolific Ed Rosenthal and Oaksterdam created one of the most complete guides to cannabis cultivation on the market, once again placing Rosenthal at the forefront of an ever-evolving industry. This work and the existence of Oaksterdam are a testament to changing tides both in this country and all over the world.

Losing not only the person who has been called the “father of the medical marijuana movement,”¹¹⁷ but also one of the few surviving members of the compassionate IND, the loss of Robert Randall was a notably tragic event for those left still fighting for access to cannabis and for the numerous people who he helped throughout his life. Belonging to both of those groups and now the longest surviving member of the IND, Irvin Rosenfeld would not be alone in the continued fight for

¹¹⁷ <http://www.drugsense.org/dpfwi/bob_randall.htm> (Accessed April 26, 2012).

medical access to cannabis and a more logical based legal system. In 2010, Rosenfeld published an autobiographical work titled *My Medicine: How I Convinced the U.S. Government to Provide my Marijuana and Helped Launch a National Movement*, which added yet another vibrant voice to the growing consensus that cannabis does indeed have medical value. Telling the story of much of his life, Rosenfeld recalls the early stages of diagnosis with pseudo-pseudohypoparathyroidism, a very painful disorder that causes tumors to grow internally within the bones themselves, causing innumerable bone spurs and other internal growths that threaten the inner portion with the very likely possibility of tearing, which could cause hemorrhaging and many other serious issues. He then discusses his intense legal battle to attain access, the smaller battles to maintain that access, and his struggle to maintain basic rights, such as the ability to travel. A deeply personal tale that is both extremely informative and intensely engaging, putting this work down was the hardest thing about reading it. Written for a wide population, this work, while sparse with citation, is very well written and adds another valuable perspective to the conversation. Still functioning as an activist today, Rosenfeld is a full-time stock broker in Florida and often travels throughout the year, both for movement-related events such as Patient Out of Time (POT) as well as for the Shake-a-leg program, a sailing program for people with disabilities. In October of 2012, it will be thirty years since the United States federal government first started providing Irvin Rosenfeld with his medicine. While that medicine still remains illegal, the tides of change seem to be increasing with time.

Continuing the trend beginning in 2010, 2011 witnessed a steady stream of cannabis literature in a variety of forms ranging from a much-matured beginners

handbook titled *Medical Marijuana 101*, to a very well done piece of investigative journalism, to a graphic novel from one of the children of the venerable Robert Nesta Marley. Featuring a young female healthcare professional on the cover and no sign of the once ever-present cannabis leaf, *Medical Marijuana 101* is indicative of a crossing of boundaries into age and social groups that once seemed to hold the plant as taboo. Marketed towards an emerging market that spanned at least 16 states and the District of Columbia by 2011, this work is filled with a combination of informative and valuable basic information about cannabis and cannabinoids, the variety of conditions for which cannabis has been found useful, and more functional information such as brief sections on cannabis consumption and cultivation. Well packaged and perfect for those who have never been exposed to cannabis culture, the pertinent information contained within this work is highlighted by occasional anecdotes, which give the work a more human feel and could, no doubt, prove reassuring to a person considering using cannabis to alleviate a similar ailment. Alluding to another growing conflict within the battle for access to cannabis, the first appendix of this work cites an increasing divide between pharmaceutical corporations and “the small organic Grower.”¹¹⁸ Often a point of division, proponents of cannabis as medicine have not frequently looked upon the introduction of synthetic THC as a good thing.

Although many justifications have been given for this, many see this as a monumental struggle between western patent-based medicine that seeks to reduce any and every organism into something from which proceeds can be generated and a more

¹¹⁸ Mickey Martin et al, *Medical Marijuana 101* (Oakland: Quick American Publishing, 2011), 109.

holistic approach whose proponents feel that the pharmaceutical companies are masquerading as benevolent entities while playing god for profits. Ziggy Marley, son of Reggae legend Bob Marley, published one very intriguing expression of this perspective in 2011. In his graphic novel, Ziggy Marley presents *MARIJUANAMAN*, a non-earthly being whose genetic structure is not comprised of DNA, but rather THC. Cast as the villain in the story is “pharma-con,” an evil organization that sells a synthetic cannabis product called “ganjarex” and is so determined to “maintain their monopoly over the pharmaceutical industry” that they have “engineered...[a] techno-biker mercenary” named “cash money” to decimate their enemies.¹¹⁹ Existing as an archetypal mild-mannered character named Sedona, it is only when his body comes into contact with “herbal inspiration” that he transforms into *MARIJUANAMAN*. Blending a typical comic book storyline with tons of imagery and iconography that is tied to the music of Bob Marley, reggae, and Rastafarianism, a Jamaican religion that holds cannabis as a holy sacrament, this work also incorporates a greater theme that runs throughout, namely “that our world cannot flourish while caught in the iron grip of corporate greed.”¹²⁰ Indicative of the numerous ways in which people have tried to express their strong relationship with cannabis and convey its importance to modern society, this work is definitely one of the more creative and, given that it was written by Ziggy Marley, himself an acclaimed Reggae Musician, its release garnered tremendous media attention, which in turn promoted discussion of the real issue - cannabis prohibition. Proving very efficient at promoting discussion, *MARIJUANAMAN* was yet another sign of things to come.

¹¹⁹ Ziggy Marley et al., *MARIJUANAMAN* (Berkeley: Image Comics, 2011).

¹²⁰ Ibid., 3.

Another medium that has proven very effective at altering people's world concepts and introducing new ideas is video. Having proven its efficacy in the 1960s with the civil rights movement, modern day activists have taken to video as an effective means of communicating a variety of messages in an engaging manner. With the price of available technology dropping on a continual basis, this trend is not showing any signs of decreasing anytime soon and in fact, the prevalence of this technology has, in essence, turned entire generations of people into photographers, videographers, and photojournalists, each contributing their perspective in a much more visible way than ever before possible. One significant part of this evolving trend is the role of the documentary. Able to convey volumes of information and sincerity in a very short amount of time, documentaries have proven to be a very powerful tool for spreading ideas. Showing their tenacity and resourcefulness, the growing number of people fighting for access to cannabis has proven to be very adept at the art of the documentary, collectively producing around a dozen in a period of a decade.

Capturing the evolving nature of the battle in raw detail, the co-existence of medical cannabis within a country that is waging war against its own people and telling them it's for their own good, has created such media frenzy that even CNBC could not resist and released two documentaries, the first in 2008 and the second in 2010, respectively titled *Marijuana, Inc.*, and *Marijuana USA*. Both documentaries were anchored by CNBC journalist Trish Regan; in 2011 Regan utilized what she had learned within filming the documentaries and published a book titled *Joint Ventures: Inside America's Almost Legal Marijuana Industry*. Focusing predominantly on Colorado and California in the documentaries, Regan's book is predominantly focused on Colorado,

and more specifically Denver, where, as of 2011, it is said that cannabis dispensaries outnumbered both Starbucks and liquor stores combined.¹²¹ Although having never actually smoked marijuana, Regan approached the issue from a perspective gleaned early on, the medical benefits of cannabis. Having seen firsthand the ravaging effects of cancer and its treatments on the body in the case of her mother's friend, Regan also learned that cannabis, an illegal substance, was instrumental in providing relief for the suffering that was an inherent part of cancer. Continuing in the footsteps of her mother, who as a journalist wrote an article for the *Boston Globe* about New Hampshire's efforts to legalize cannabis, Regan's work centers around several very poignant questions: "Has the federal government overstepped its bounds? Are the feds contributing to a culture of violence? [And] Might the government do the right thing by decriminalizing, or even legalizing marijuana outright?"¹²² Tackling these and numerous other questions head on, this work is a carefully crafted and balanced piece of journalism at its finest. Citing the Miron study, a plethora of relevant court cases, the commerce clause, and a 2009 memo from President Obama's deputy Attorney General David Ogden, Regan places the extremely conflicted recent history of cannabis in its proper context, and provides a very relevant work that is a stark reminder of the fact that currently "there is no greater conflict between federal and state law than as they relate to medical marijuana-fifteen states currently have laws providing for some use...meanwhile, marijuana is completely illegal under federal law, and the federal government still regards marijuana as a

¹²¹ Trish Regan, *Joint Ventures: Inside America's Almost Legal Marijuana Industry* (Hoboken: John Wiley & Sons, Inc., 2011), 4.

¹²² Ibid.

Schedule I drug with no accepted medical purpose.”¹²³ Proving an excellent addition to her documentaries, *Joint Ventures* is quite successful at tying the importance of what is happening in California and Colorado to states such as her home state of New Hampshire, which are still fighting to convince state legislatures of what fifteen others already know, that cannabis has medicinal value.

The deluge of cannabis literature continued through 2012. No stranger to conflict, author and journalist Greg Campbell’s work *Pot Inc: Inside Medical Marijuana, America’s Most Outlaw Industry* is shaping up to be one of the most valuable works of 2012. Once again placing the author of *Blood Diamonds* at the forefront of a remarkably profitable gray area within the global economy, *Pot Inc:* tells the parallel stories of Colorado’s “green rush” and Campbell’s own foray into the world of cannabis cultivation. Admittedly a very hands on journalist, Campbell’s efforts to better capture the perspective of those immersed in the cultivation of cannabis do not pan out as he had hoped, but do make for a very engaging, insightful, and enjoyable read. Focusing heavily on what has been termed the “Ogden Memo,” which many in Colorado misinterpreted and took as a *de facto* sanction of the growth of a federally illegal industry that in many ways precipitated the virtual explosions of facilities known as cannabis dispensaries, Campbell does an excellent job of dissecting many of the underlying issues that plague the ambiguity of the conflicting laws of the Colorado and the United States. Adding a personal side to this story, Campbell, as many Coloradoans have attempted to do, turns a small portion of his basement into a grow room, and tries his hand at growing cannabis.

¹²³ Ibid., 197.

Although certainly not a manual on how to grow cannabis, this work does offer at least one helpful tip to domestic cultivators in the form of his constant reminders of his failure to properly account for the smell of growing cannabis in the picturesque suburban environment of Ft. Collins, Colorado. Not producing near what he had hoped for, his initial \$800 investment, only netted him a profit of \$500 leaving him \$300 in the red. Although this is a very well written and amusing tale, it also speaks to the inflated dollar amounts frequently repeated by police and media about the purported value of cannabis growing operations. Campbell's insider perspective removes much of the foggy uncertainty that envelopes medical marijuana and wraps it in a charming tale of personal growth, so to speak. Ending the book with a glimpse of the several measures taken by local governments and activist groups within Colorado including initiatives that would make driving with a very minimal level of THC in one's blood regardless of level of actual intoxication a crime equivalent of DUI and SAFER's campaign to regulate marijuana like alcohol, Campbell finishes with a quote from WAMM co-owner Michael Corral from 2002 that states, "there is no turning back for us... We know we are right. We know the federal government is wrong."¹²⁴ Remarking, "This sentiment is as true as ever," Campbell is, no doubt, cognizant of the rapidly turning tide in this country. With more and more states joining Alaska, Arizona, California, Colorado, Delaware, Hawaii, Maine, Michigan, Montana, Nevada, New Jersey, New Mexico, Oregon, Rhode Island, Vermont, Washington, and Washington D.C., it is becoming more and more apparent that the federal government's position that cannabis has no medical value must be reevaluated

¹²⁴ Greg Campbell, *Pot Inc: Inside Medical Marijuana, America's Most Outlaw Industry* (New York: Sterling, 2012), 251.

and with three-quarters of a million people still being arrested every year for cannabis-related crimes, the sooner, the better.

Each of these works has provided a significant perspective, and together they come close to telling the complete story of cannabis and the struggle for a logical and compassionate cannabis policy in the United States. Individuals that have fought for cannabis legalization for decades, such as Ed Rosenthal, Lester Grinspoon, Chris Conrad, and Irvin Rosenfeld, join with contemporary authors such as Julie Holland, Greg Campbell, and Christopher Glenn Fichtner to provide us with a varied and comprehensive view of the cannabis crusade. They share via intensely personal stories of struggle and loss of life and liberty to logic-based economic pleas to comparative studies of cannabis and alcohol to works that chronicle the convoluted history of cannabis prohibition. The authors have attempted to use every means at their disposal to clear the haze of misinformation that has surrounded this subject for decades. Picking up where these formidable authors left off, the work that follows continues the story of the fight for cannabis legalization, with a direct focus on the 2012 election in Oregon, Washington, and Colorado. Additionally focusing on the potential profitability of the cannabis market, the role of science in deconstructing the myths surrounding the cannabis plant, and an examination of global cannabis policy, this work intends to help elucidate a path towards a more logical and compassionate cannabis policy in the United States and around the globe.

CHAPTER III

THE POTENTIAL PROFITABILITY OF THE CANNABIS MARKET

Sharing many similarities with that of alcohol prohibition, perhaps the most notable would be marijuana prohibition's contribution to organized crime, violence, and its capacity to create immense revenue streams for those willing to risk prosecution. With actions that would have most certainly made even the most brutal 1920s era Chicago gangster nauseous, the efforts of Mexican cartels to maintain control of what has been estimated to be a "\$6 billion a year" business market have been anything but understated.¹²⁵ With Mexico regularly making headlines with news of recent decapitations and bloody massacres, it is quite clear that the effects of the United States war on drugs extend far beyond its borders with often deadly repercussions. Just before the 2012 elections, the Mexican Institute for Competitiveness issued a report, which stated that if Washington, Colorado, or Oregon were to pass legalization measures, it could put a substantial dent in the profits of Mexican cartels.¹²⁶ According to this group's finding, Mexican cartels stand to lose, "\$1.4 billion if Colorado passes its marijuana bill, \$1.4 billion if Washington legalizes cannabis and \$1.8 billion if Oregon approves its

¹²⁵ <<http://seattletimes.com/text/2019573257.html>> (Accessed November 20, 2012).

¹²⁶ <<http://mmjbusinessdaily.com/2012/11/01/mexican-groups-study-a-mixed-bag-for-marijuana-legalization-efforts-in-3-us-states/>> (Accessed November 20, 2012).

measure.”¹²⁷ Although this “study assumes states that legalize cannabis would become major marijuana producers for the rest of the US and that a hefty amount of diversion will take place,” as the advocacy director of Amendment 64 Betty Aldworth notes, “Coloradans are deeply concerned about the impacts of the war on marijuana in Mexico and appreciate that moving marijuana sales off the streets and behind a counter will chip away at the cartels’ power both here in Colorado and abroad.”¹²⁸ Although it is not clear how close these numbers come to reality, they are further indicative of the perspective that ending marijuana prohibition in the United States could be an economically beneficial policy.

Colorado

Earlier in 2012, the National Cannabis Industry Association published a document titled “The Colorado Cannabis Industry: A Tale of Ten Cities” in which it profiled ten of the more than “60 cities in the state of Colorado” in which the cannabis industry is flourishing. Colorado, which is “home to nearly 100,00 registered medical marijuana patients”¹²⁹ in many ways serves as an excellent case study for the for-profit medical marijuana industry, which has created and maintained strong rules and regulations regarding the growth, sales, and transportation of medical marijuana. According to the findings of these studies, Colorado’s medical marijuana industry has proven to be quite economically beneficial for both state and local governments. For the year of 2011, “medical cannabis sales in the ten cities tracked for this report produced \$5,185,368 in

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ National Cannabis Industry Association, *The Colorado Cannabis Industry: A Tale of Ten Cities* (Washington, D.C. National Cannabis Industry Association, 2012), 1.

local sales tax revenue and \$4,496,771 in state sales tax revenue.¹³⁰ If this was not enough, the NCIA study found that “city taxes collected from medical marijuana businesses in the city of Denver were enough to fund 98% of the city’s Parks and Recreation Administration- the largest municipal park system in the nation.”¹³¹ Additionally, they also found that “there are more than 4200 state licensed employees working in Colorado’s medical marijuana industry,” which in light of what has been termed by the media as “the great recession,” is of great benefit for the state of Colorado. Simply put, the creation of over 4200 jobs in Colorado, and almost \$10 million in tax revenue, in times of great need of both, the economic benefit of medical marijuana is very hard to ignore.

Regulated by the Medical Marijuana Enforcement Division or MMED, each “support” level employee must go through a fairly extensive paperwork process, be clear of any outstanding legal issues, including parking tickets, pay \$75, and then be fingerprinted before receiving their badge that allows them to legally work in the medical marijuana industry. According to the MMED, a support employee is defined as an “employee [who] works within restricted areas of the Medical Marijuana facility, but does not make operational decisions for the business.”¹³² For those within the industry whose position requires more responsibility, the MMED defines the key employee as an “employee [who] makes operational or management decisions that affect the businesses... [such as] master growers that determine what crops to produce and how

¹³⁰ Ibid.

¹³¹ Ibid.

¹³² <<http://www.colorado.gov/cs/Satellite/Rev-MMJ/CBON/1251592985101>> (Accessed January 14, 2013).

much to produce ... but does not have an ownership interest in the business.”¹³³

Delineating several different types of medical marijuana businesses, the MMED defines Medical Marijuana Center as a “Retail operation from which Medical Marijuana Registry patients purchase Medical Marijuana and Medical Marijuana infused products,” whereas a Medical Marijuana Optional Premises Cultivation (OPC) is defined as a “facility which grows, harvests and processes raw Medical Marijuana product to sell in retail centers or for use in infused products,” as differentiated from a Medical Marijuana Infused Product Manufacturer (MMIP), which is a “facility which produces Medical Marijuana infused products such as edibles, tinctures and beverages...[and] are only able to sell their products to Licensed Medical Marijuana Centers wholesale.”¹³⁴

For the purpose of their study, the NCIA chose the cities of Denver, Colorado Springs, Boulder, Fort Collins, Carbondale, Lakewood, Aspen, Nederland, Grand Junction, and Glenwood Springs as representative of the over sixty cities in the state of Colorado that have benefited, at least economically from medical marijuana. Of these, Denver was the largest market with sales revenues totaling \$82,164,558 in 2011 alone, with Colorado Springs bringing in a somewhat distant second with \$30,839,160. In a very clear example of the good that is being done with the money from medical marijuana tax revenue, the city of Boulder, Colorado which had recently been struggling to fund its many literacy programs managed through the public library turned to this

¹³³ Ibid.

¹³⁴ Ibid.

industry, and “in 2011 the cannabis industry produced enough sales tax revenue to fund 100% of the community learning and literacy programs.”¹³⁵

In addition to the taxes collected, there are also a considerable amount of fees that are collected by the cities from those desiring to open a medical marijuana business, such as an MMC or an MMIP. According to the NCIA, “the revenue generated from license fees alone, which must be renewed every two years, has totaled more than \$6 million for Denver.”¹³⁶ In Colorado Springs, the MMED reported “more than 400 applicants...[that accounted] for more than \$1,210,000 collected in application and license fees.”¹³⁷

Differing slightly from Denver, Colorado Springs businesses must reregister annually, “Making the renewable revenue for the city approximately \$720,000.”¹³⁸ However, while the states and MMED may not have issues depositing the millions of dollars that they are making from the medical marijuana industry, many within the industry itself do, due to federal banking restrictions.

Michigan

Another clear indication of just how economically beneficial movement away from the failed policy of marijuana prohibition can be, the state of Michigan, which passed the Michigan Medical Marihuana Act, also known as Initiated Law 1 in 2008, released information in February of 2013 indicating that the stated had collected upwards

¹³⁵ NCIA, 5.

¹³⁶ Ibid., 2.

¹³⁷ Ibid., 4.

¹³⁸ Ibid.

of \$10 million dollars in tax revenue.¹³⁹ With the costs of overseeing the state's medical marijuana program adding up to less than half that amount, this means that Michigan received a tax windfall of roughly \$5 million dollars. Most of the money was collected from the \$100 fee paid by all medical marijuana applicants in Michigan plus the fees associated with becoming a private grower for others, also known as a caregiver.¹⁴⁰ In total, according to the report released, Michigan received 122,463 applications for medical marijuana, as well as 50,188 applications to become a caregiver.¹⁴¹ Even more interesting is that according to the report, "1,928 physicians" issued certificates indicating their patients' need for medical marijuana. Only adding to the mountain of evidence against the longstanding contradictions of the classification of marijuana as a Schedule I drug, with "no currently accepted medical use in the United States," these 1,928 doctors are a testament to growing sentiment against the draconian marijuana laws of this country and abroad.¹⁴²

While these \$10 million dollars were no doubt very helpful to Michigan's economy, judging by a decision handed down by the Michigan Supreme Court in February of 2013, it is going to take more than money to change the minds of many in that state and across the country. Decided by a "4-1 ruling by the state Supreme Court,"

¹³⁹ <<http://www.detroitnews.com/article/20130206/POLITICS02/302060383/1361/Marijuana-program-a-windfall-for-Michigan-government>> (Accessed February 6, 2013).

¹⁴⁰ Ibid.

¹⁴¹ <http://www.michigan.gov/documents/lara/FY_2012_Medical_Marihuana_Annual_Report_Statistics_409663_7.pdf> (Accessed February 6th, 2013).

¹⁴² <<http://www.deadiversion.usdoj.gov/schedules/index.html>> (Accessed February 6, 2013).

Michigan will be barred from having medical marijuana dispensaries.¹⁴³ Leaving over 120,000 patients to either grow their own or procure it from one of the “26,000 caregivers licensed by the state,” this decision will likely leave many people without the medication they need. Considering the difficulty that states like Colorado and California have been experiencing with the banking industry, perhaps they are wise to not bother with the hassle of dispensaries.

Banking

Second only to the possibility of federal prosecution due to the conflict between state and federal laws regarding marijuana, the largest problem faced by the majority of medical marijuana businesses is where to deposit all of the money they are accumulating. The logical answer to this question would, of course, be in a bank. However, the FDIC federally insures the majority of the banks in this country. Conversely, all marijuana use, except for the four surviving members of the Compassionate IND, is federally illegal. Thus, this has created an inevitable conflict that has forced many businesses to switch banks several times; countless others have switched to cash only and found alternative means of paying their employees and the various of other third party distributors that help to maintain the medical marijuana industry.

For those attempting to abide by state laws and provide for access to medical marijuana in states such as California and Colorado, how to handle the money after the fact is a very frustrating issue that is rather unique to this industry. According to a 2012 article in the *Huffington Post*, “In September of 2011, the last bank in Colorado to openly

¹⁴³ <http://www.huffingtonpost.com/2013/02/08/michigan-medical-marijuana-dispensaries-supreme-court_n_2646213.html> (Accessed February 8, 2013).

work with medical marijuana businesses closed those accounts and shut its doors to working with dispensaries due to increased federal pressure.”¹⁴⁴ Indicating just how disruptive this is to the medical marijuana industry, “Robert Friehtel, director of the Medical Marijuana Business exchange...estimates nearly half of Colorado’s 700 dispensaries lost their bank accounts in September of 2011.”¹⁴⁵ A 2012 article in a San Francisco newspaper reported, “Bank of America, Citibank, and JP Morgan Chase are reported to have closed off their teller windows to the businesses, as has San Francisco's Wells Fargo, which up until last year was offering accounts to local dispensaries.”¹⁴⁶ Illustrating the very inconvenient position that the banks have been placed in due to the discrepancies between state and federal laws and why they chose to discontinue service to medical marijuana dispensaries, Wells Fargo told CNBC that "In view of the complex, inconsistent legal environment relating to medical marijuana dispensaries, Wells Fargo has opted not to bank these businesses. While medical marijuana dispensaries are legal in some states, they are still illegal under federal law.”¹⁴⁷

Two important measures have been tried to at least partially alleviate the conflict caused by the incongruity of state and federal laws regarding medical marijuana. The first of which was made by “15 members of Congress, including Reps. Zoe Lofgren, D-San

¹⁴⁴ <http://www.huffingtonpost.com/2012/01/27/medical-marijuana-banks-colo_n_1236408.html> (Accessed January 16, 2013).

¹⁴⁵ Ibid.

¹⁴⁶ <<http://www.sfgate.com/business/bottomline/article/Medical-marijuana-sales-becoming-cash-only-3700575.php#ixzz2JI3X7a1n>> (Access January 16, 2013).

¹⁴⁷ <http://www.cnbc.com/id/48764312/Selling_Pot_Legally_Good_Luck_Opening_a_Bank_Account> (Accessed January 16, 2013).

Jose, Pete Stark, D-Fremont, Sam Farr, D-Monterey, and Ron Paul, R-Texas”¹⁴⁸

implored “U.S. Treasury Secretary Timothy Geithner in May 2010 to assure financial institutions ‘whose account holders are involved in a business ostensibly operating in compliance with a state medical marijuana law,’ that they would not be targeted by the department;” more than two years later “Geithner has [still] yet to respond.”¹⁴⁹ The second notable effort to attempt to deal with the issue of medical marijuana banking was Colorado’s Senate Bill 75, which was sponsored by Sen. Pat Steadman, D-Denver and would have allowed for the extension of “bank like services to the medical-marijuana industry, which has largely been blocked by federal regulations from using traditional banks or credit unions.”¹⁵⁰ Plagued by critics and many who questioned whether this bill would actually accomplish anything positive in light of federal regulations, those who had hoped to allow for a regulated medical marijuana banking system in Colorado saw their changes crushed as “The Senate Finance Committee killed Senate Bill 75 by a 5-2 vote.”¹⁵¹ After debating the issue for over three hours, opponents of Bill 75 were successful in conveying that “the [banking] cooperatives would be targets for federal seizure and would involve the state in a business that is illegal federally.”¹⁵² Leaving an industry that produces millions in tax revenue every year with little option but to continue business dealing with cash only, or to lie to banks, any attempt to discuss banking with

¹⁴⁸ <<http://www.sfgate.com/business/bottomline/article/Medical-marijuana-sales-becoming-cash-only-3700575.php#ixzz2JIAb0ksy>> (Accessed January 16, 2013).

¹⁴⁹ Ibid.

¹⁵⁰ <http://www.denverpost.com/breakingnews/ci_19966807> (Accessed January 16, 2013).

¹⁵¹ Ibid.

¹⁵² Ibid.

most dispensary owners is usually met with distinct efforts to change the subject quickly and a notable air of discontent. In addition the uniquely uncomfortable position that this lack of legitimacy presents, results in an overwhelming presence of cash that makes these businesses an easy target for crime. Failing to deal with the issue is creating countless opportunities for criminal activity, precisely the kinds of things that Bill 75 was intended to prevent. Indicating that whatever will be done should come from the federal level, this is not much comfort for the roughly 700 Colorado businesses and countless others throughout the country that are left with little choice when it comes to banking and are often forced to, once again, skirt legality in order to run their state sanctioned and taxed businesses.

Credit Cards

Only adding to the difficulties faced by those in the medical marijuana industry, in June of 2012, Electronic Merchant Systems, one of the largest processors of credit card payments, announced plans via email to “stop handling Visa and MasterCard transactions made at cannabis centers as of July 1.”¹⁵³ According to *Medical Marijuana Business Daily*, “Visa and MasterCard were behind the decision to sever ties with the MMJ industry, in large part because of the federal crackdown on medical cannabis in states such as California.”¹⁵⁴ With broad implications for several thousand small businesses throughout the country, this move is indicative of the immense amount of conflict surrounding this burgeoning industry that is primarily devoted to helping people. Also, in

¹⁵³ <<http://mmjbusinessdaily.com/2012/06/25/weekly-wrapup-visa-mastercard-shut-out-marijuana-dispensaries-san-diego-mmj-drive-fails/>> (Accessed January 20, 2013).

¹⁵⁴ Ibid.

June of 2012, Discover card joined Visa, MasterCard, and American Express announcing “they follow federal law on the matter,” and thus refrain from medical marijuana based transactions.¹⁵⁵ As these large companies have, for the most part, not issued public statements, it is extremely likely that these decisions were in fact motivated by fear of federal repercussions and/or deeper political motives; however, this is largely conjecture. With little traditional options available, many have been seeking and creating new innovative means of processing the millions of dollars that are annually being generated by this quasi-legal market.

While many dispensaries have resorted to accepting cash only or placing ATM machines in their lobbies and thus subjecting patients to additional fees, several businesses have moved in to fill the gaps left by these credit giants. Among the businesses working to fill the gap for the medical marijuana and other “high risk” credit industries, are companies such as California's eMerchant Broker and Atlas Payment Processing, and Maxx Payment Processing of Colorado. To this end, Maxx Payment Processing has introduced what they call the Green ATM, which is “a countertop ‘cashless ATM’ device that supports debit card withdrawals or credit card cash advances to enable patients to pay electronically for medical marijuana within dispensaries.”¹⁵⁶ Having been forced to find creative solutions to existing problems, “Maxx Payment Processing assesses a \$2 fee when consumers use the company's Green ATM, which requires a debit or credit card PIN to complete the transaction...[and according to vice

¹⁵⁵ <<http://www.forbes.com/sites/jonmatonis/2012/09/29/credit-card-processors-discriminate-against-medical-marijuana/>> (Accessed January 20, 2013).

¹⁵⁶ <<http://www.paymentsource.com/news/in-medical-marijuana-sales-alternative-payment-methods-sprout-3011867-1.html>> (Accessed January 20, 2013).

president of business development Alex Neri] ‘Because the merchant is charging a convenience fee for the cash advance, the credit card is not being used to buy medical marijuana’ directly.”¹⁵⁷ Handling a combined “5,000 to 10,000 transactions per month through the devices,” this low-cost solution only runs dispensaries around “\$200 per month for the terminal ...[with the benefit of] no processing fees.”¹⁵⁸

Similarly, Atlas payment processing “charges no merchant-processing fees, [while] dispensaries pay \$12 per month for the countertop terminal, which covers the statement fee, the cost of 12 rolls of receipt paper and insurance for the equipment.”¹⁵⁹ In addition to the cost of the wired terminal, which amounts to “\$365, plus an additional \$40 for an IP terminal” dispensaries also “pay \$8 monthly for the wireless device plus \$34.95 per month in wireless carrier fees.”¹⁶⁰ Amounting to costs similar to those of doing business with a credit card company, finding solutions that allow dispensaries to operate in the increasingly cashless society in which we currently live is perhaps a far less daunting issue than being completely barred from banks. Although many have found the thrill of possibilities associated with this industry too plentiful to ignore, there are many signs that the industry within Colorado is reaching its peak expansion potential with some pointing out that it has recently contracted by as much as 40%.¹⁶¹ While much of this is the market leveling out, many are realizing just how much time, money, and effort must be expended to be successful in this industry and are thus looking for other means to

¹⁵⁷ Ibid.

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

¹⁶¹ <http://www.denverpost.com/news/marijuana/ci_22706453/colorado-medical-marijuana-businesses-have-declined> (Accessed March 3, 2013).

contribute towards the success of medical marijuana both domestically and internationally.

Ancillary Businesses

Because the production of cannabis is so dissimilar to the production of just about every other pharmaceutical on the market today, the creation of the necessary infrastructure will no doubt be a very profitable endeavor. From the construction and retrofitting of grow facilities and dispensaries, to the production of nutrients, lights, and ballasts, to the employ of electricians, HVAC specialists, and consultants, as well as the new and innovative means of tracking and distributing medicinal cannabis through its growth cycle until it is sold to a patients the opportunities abound for those creative enough to stay one step ahead of a steadily evolving and slightly dangerous industry.

One of the most thought-provoking companies to emerge from this group that some have termed *Ganjapreneurs* is the company Med Box. Producing a Medical Marijuana vending machine, with a wide variety of applications that could be repurposed for just about any pharmaceutical product that needed to be safely stored, Med Box has recently been featured on a number of media outlets marketing their “medicine dispensing systems.” Not your traditional vending machine, the Med Boxes are not accessible to the patients themselves nor are they in public areas; instead, they are operated by the employees of dispensaries or bud tenders and utilize biometric identification to “help manage employee possession of sensitive drugs.”¹⁶² Embodying many of the qualities that are valuable to such businesses as medical marijuana

¹⁶² <<http://www.thedispensingsolution.com>> (Accessed March 9, 2013).

dispensaries, the Med Box system is capable of “inventory control and lower overhead for operators, safe and convenient access for patrons, fraud prevention as every transaction is documented, guaranteed compliance to state and local laws, and unparalleled accounting and tracking” making it a very valuable addition to a growing market.¹⁶³ What’s more, these machines can also be utilized “in assisted living facilities, prisons, and urgent care centers directly by nurses and authorized staff,” allowing for much more accessibility, better use of space, and a clearly structured and monitored system of distribution.¹⁶⁴ Clearly one of the rising stars in this industry, this California-based company already has offices in New York, Connecticut, and Arizona, as well as London, Toronto, and Tokyo; additionally, it owns Prescription Vending Machines, Inc.

One of the defining characteristics of Colorado’s medical marijuana industry is its notable degree of regulation. Requiring all employees to be finger-printed and issued badges that run from \$75 to \$250 depending upon the level of responsibility, the Medical Marijuana Enforcement Division or MMED also requires the tracking of all medical cannabis throughout the entire growth cycle through its sale to patients. In order to fulfill the regulatory needs of dispensaries, several companies have developed software that enables businesses and entities such as the MMED to track the entire process. These include such companies such as MMJMenu, LLC, Shade of Green Solutions, 420soft, and Bio Track THC. The plethora of software solutions is making the significant growth of many dispensaries possible while, at the same time, allowing regulatory institutions to maintain control of this growth. While all dispensaries are different, the most common

¹⁶³ Ibid.

¹⁶⁴ Ibid.

software found in Colorado is Bio Track THC. Developed by Bio-Tech Medical Software, Inc. in affiliation with University of Central Florida Business Incubation Program, Bio Track THC utilizes a barcode system to organize all plant material “from seed-to-sale.”¹⁶⁵ Modeling parts of their system after the actual environment of a grow facility, each stage of the process is compartmentalized in a different “digital room” that mimics that real world rooms in which the plants will spend the various stages of their lives. Additionally, Bio Track also utilizes a “complete biometric employee chain of custody tracking for your inventory,” as well as keeping track of everything from patient records in a HIPPA compliant and protected manner and employee time clocks, to helping businesses identify strains that produce better than others and countless other variables that contribute to running a successful grow operation.¹⁶⁶ Another company that offers a similar list of products, MMJMenu, also caters to businesses that create medical marijuana infusion products or edibles allowing medical kitchens to keep track of recipes for specific products as well as nutrient recipes for the plants themselves.¹⁶⁷ Perhaps even more importantly for many medical marijuana businesses, the company, Shade of Green Solutions, also provides “integrated credit card payment processing,” in addition to some very similar offerings as Bio Track and MMJMenu. Effective software solutions can be very helpful in building robust and productive businesses as it assists medical marijuana businesses to maintain compliance with the often rigid and ever-changing state laws and

¹⁶⁵ <<http://www.biotrackthc.com/how-it-works.asp>> (Accessed March 9, 2013).

¹⁶⁶ Ibid.

¹⁶⁷ <<http://mmjvenu.com/yes>> (Accessed March 9, 2013).

statues. The companies developing them can also become quite profitable without the risks associated with owning an actual dispensary, kitchen, or grow operation.

Another ancillary business that is flourishing in states such as Colorado and California thus creating jobs and tax revenue and without which most of the dispensaries would not be able to function are the indoor gardening supply stores. In recent years numerous businesses have been created to help provide a plethora of individuals and commercial growers requiring more specialized items than the average gardening store. Supplying everything from grow lights and ballasts, to growing mediums ranging from traditional soil based products to soil-less mixtures mostly based around use of coconut husk, to an endless array of specialty nutrients, organic pest control solutions, as well as a wide variety of climate control and air filtration options, many of the indoor gardening supply stores in Colorado have become one-stop shops for the hundreds of dispensaries, many of which spend thousands of dollars on growing supplies alone every month. While there are many small businesses, such as Boulder's One Love Gardening Supply, all over the state, and no doubt country, two of the most well-known indoor garden suppliers in Colorado are Cultivate Colorado, which has three locations in Colorado, and Way to Grow, which has five; together they supply a substantial cross section of the dispensaries in the state. Although most of these businesses still operate under the auspices of more garden variety agrarian supply stores, one does not need to look much farther than the colorful labels of the endless rows of nutrients to realize that these products were not developed for tomatoes. While they could indeed be used for any consumable foodstuffs, with names like Canna Boost, Sensi PH Perfect, Bud Candy, and Bud Boost, it is fairly obvious to whom these companies are catering, and given the

growing national consensus regarding medical marijuana and the decriminalization of recreational adult use, perhaps rightly so.¹⁶⁸

Testing

Whereas companies like Advanced Nutrients, American Hydroponic, Botanicare, Hydrofarm, and countless others have been created to fulfill the need for quality organic indoor gardening nutrients, thereby helping to cultivate higher yielding and more potent strains of medicinal cannabis, another burgeoning industry has been developing the analysis of the unique cannabinoid profile of each plant as well as other cannabis concentrates and edibles products. Playing a significant role in the actual evolution of medical cannabis cultivation from underground and closet grow operations to a legitimate medical product, complete with accurate assessment of active properties, suggested dosage and third party testing, facilities such as Colorado's CannLabs, California's Steep Hill Cannabis Analysis Laboratory and BudGenius Laboratory, Seattle's Analytic 360, and Arizona's Az Med Testing are pioneering a new industry while setting the standard for cannabinoid analysis all over the country.¹⁶⁹ Although each lab will vary depending upon size and budget, to date the most efficient method for analyzing cannabinoid profile is High Pressure Liquid Chromatography, which is utilized in most of the aforementioned laboratories. In addition to analyzing cannabinoid profile, testing is also necessary to protect medical patients against microbiological contaminants, pesticide residue, and mold and fungus. While the cannabinoid most people are familiar with is

¹⁶⁸ <<http://waytogrow.net>> <<http://www.cultivatecolorado.com>> (Accessed March 25, 2013).

¹⁶⁹ <<http://www.cannlabs.com/index.html>> <<http://steephilllab.com>> <<http://azmedtest.com>> <<http://analytical360.com>> (Accessed March 26, 2013).

Tetrahydrocannabinol (THC), largely thanks to its medicinal and psychoactive properties, the cannabis plant actually contains over four hundred chemical compounds, several of which have shown some very promising medical properties as well.

Although places such as Steep Hill laboratory only report to test for THC, Cannabidiol (CBD), and Cannabinol (CBN), Colorado's CannLabs also tests for Tetrahydro-cannabinolic acid (THCA), and Cannabidiolic Acid (CBDA), and will reportedly be testing for Tetrahydrocannabivarin (THCV), Cannabigerol (CBG), and Cannabichromene (CBC), soon.¹⁷⁰ Additionally, CannLabs also indicates that it will also be adding E. Coli and Salmonella to its testing list helping to further protect patients from any unnecessary dangers that could result from careless producers or negligence. With sample submission rules varying slightly in all locations, one of the most innovative methods for shipping samples to a laboratory and to dispensaries comes out of California's Steep Hill which has introduced a nitrogen packaging service that "Substantially reduces mold and bacterial growth, maintains quality of medicine throughout the year, [and] reduces degradation and discoloring."¹⁷¹ Testing costs range from \$50-150 depending on the number of samples and bulk discounts. Sample submission is usually set at half a gram samples of smokable flower material, hash, hash oils, waxes, etcetera, that has been cured properly and clearly labeled in easily accessed containers, while edibles are to be submitted in whole. Although these tests remain optional in most states, it is suggested that as the industry gains in legitimacy, testing

¹⁷⁰ <<http://www.cannlabs.com/services.html>> (Accessed March 26, 2013).

¹⁷¹ <<http://steephilllab.com/services/standardized-packaging/>> (Accessed March 26, 2013).

facilities such as those mentioned will be in much higher demand. Additionally, as the suppression of studies on the medicinal benefits of cannabinoids is gradually lifted, more and more testing facilities and specialists will be required to help determine the efficacy of various therapeutic plant-based compounds, which as of late have been showing some very significant promise.

Going Global

Placing themselves at the forefront of a multi-billion dollar industry, companies like Medical Marijuana Inc. (OTC: MJNA) have proven very determined to help legitimize an industry that is cautiously emerging from the underground but to also make a profit in the process. Establishing themselves as one of the first publicly traded medical marijuana companies in the United States, MJNA is definitely not stopping there.

Comprised of five smaller companies, Medical Marijuana Inc. is positioning itself for a market that covers all 50 states in addition to European and other international markets.

Doing a brilliant job of vertically integrating along a broad spectrum of areas within the medical marijuana industry, the companies included in the ranks of MJNA are PhytoSPHERE, Hemp Meds RX, Wellness Managed Services, CanChew Bio Technologies, and Dixie Elixirs and Edibles.

PhytoSPHERE is self-described as “the world’s leading cannabinoid-based biotechnology company,” and is reportedly “developing pharmaceutical grade medicinal hemp production facilities that produce high grade oil, [and] is harvesting 1,000 acres of hemp from its microclimate fields throughout Europe.”¹⁷² Focusing heavily on

¹⁷² <<http://www.medicalmarijuanainc.com/phytosphere>> (Accessed September 13, 2012).

cannabidiol, (CBD) one of the cannabinoids that is proving to be very promising, both in terms of medical value and distinct lack of the strict regulation that THC receives, PhytoSPHERE announced in early September of 2012 that they will be processing a substantial amount of CBD oil in anticipation of the release of the Dixie X product line from MJNA's Dixie company. Taking every conceivable measure to adhere to medical grade standards, PhytoSPHERE's website indicates that they are committed to the following objectives: "greatly increasing plant production through yields that significantly exceed traditional methods, completely controlling the cultivation environment resulting in superior plant growth, uniform strain purity, quality crop production, and year-round production potential; reduce per-unit costs compared to traditional methods by eliminating the use of pesticides, fungicides and herbicides; produce pharmaceutical grade extracts; establish antibacterial environments and packaging systems; control post production processing with proprietary standardization methods."¹⁷³

Currently processing CBD from "1,000 acres of hemp from its microclimate fields throughout Europe," in the United States, PhytoSPHERE also announced in July of 2012 that it would be opening a production facility in Europe through Canipa Holdings, which is the newest member of MJNA's portfolio. Based in Bucharest, Romania, Canipa Holdings is designed "to handle its European product launch and distribution...[and to] focus its efforts on obtaining European product and marketing approvals for the entire line of Medical Marijuana Inc.'s portfolio of products as well as obtaining various

¹⁷³ Ibid.

licenses for the production of industrialized varieties of hemp.”¹⁷⁴ Shaping up to be one of the most ground breaking organizations in the medical marijuana field, the members of the portfolio of MJNA are in the process of creating entire new markets while doing everything in their power to bring pharmaceutical grade precision and respectability to the industry.

One of the most promising facets of the MJNA portfolio would have to be Dixie Elixirs and Edibles. Based out of Colorado, Dixie products are already sold in hundreds of dispensaries throughout Colorado. Recently, however, they have partnered with MJNA and have been developing a number of products that are already on sale online to an audience across the country. Although the majority of Dixie’s products in Colorado do contain THC, which is still a schedule I drug, their newest product line, Dixie X, is a CBD based product line and, according to the company, it is legal to ship this product to all 50 states and internationally.¹⁷⁵ Coming in a variety of forms ranging from pills, drops, and a salve and being directed at people with chronic pain, anxiety, arthritis, and a number of other debilitating disorders, the potential for this market to increase is very promising. Aside from all of the possible disorders and symptoms that could potentially be relieved by Dixie X, one of the most notable features is that since this medicinal product lacks THC, it is not a mind altering substance, which will likely be beneficial for

¹⁷⁴<<http://www.medicalmarijuanainc.com/index.php/phytosphere/30-press-releases/2012-phytosphere-press-releases/147-phytosphere-systems-a-medical-marijuana-inc-portfolio-company-to-bring-production-facilities-to-europe-through-canipa-holdings>> (Accessed September 13, 2012).

¹⁷⁵<<http://www.dixiex.com/index.php/2012-all-press-and-news/12-news-and-press/2012-news-and-press/23-medical-marijuana-inc-s-portfolio-company-red-dice-holdings-announces-the-official-nationwide-on-line-sales-launch-of-dixie-x>> (Accessed September 13, 2012).

those weary of the mind altering effects of THC and has also made its nationwide sales a reality. Indicating that they are definitely a company worth watching in the coming months, the prospects of their expansion seems almost unlimited and are a part of a rapidly expanding conglomerate that is proving to be impressively innovative.

Another member of the MJNA portfolio is Wellness Managed Services, a business based in San Diego that “engages in the management, capitalization, and development of health and wellness facilities, medical clinics and cooperatives throughout North America.”¹⁷⁶ In addition to its operations in California, Wellness Managed Systems is also “in negotiations for several additional facilities in Canada, California, Colorado, and Arizona at present and is looking to further expand throughout the U.S. as well as develop an International Division.”¹⁷⁷ In their shareholder update that was issued in July of 2012, Wellness Managed Services also indicated that they had begun “negotiations for the management of a chain of Canadian Health and Wellness facilities that are covered by Health Canada and the Canadian Health Care System.”¹⁷⁸ Speaking optimistically about the opportunity presented by this deal, WMS said, “It is anticipated that all of the facilities will carry the full line of MJNA portfolio company products and that some of the specific HempMeds Rx products may be covered under Canadian medical insurance.”¹⁷⁹ Although their portion of the website is not quite as

¹⁷⁶ <<http://www.medicalmarijuanainc.com/index.php/wellness-managed-services>> (Accessed September 13, 2012).

¹⁷⁷ Ibid.

¹⁷⁸ <<http://www.medicalmarijuanainc.com/index.php/wellness-managed-services/35-press-releases/2012-wellness-managed-services-press-releases/144-medical-marijuana-inc-shareholder-update-wellness-managed-services>> (Accessed September 13, 2012).

¹⁷⁹ Ibid.

detailed as the other, HempMeds Rx describes their company as the “world’s premier developer of specialty health and wellness products derived from hemp extracts and compounds.”¹⁸⁰ Additionally their website indicates that it is closely affiliated with PhytoSPHERE and that their “unique and patented and proprietary extraction process allows [them] a significant advantage in bringing forth these products to consumers around the world.”¹⁸¹

The last member of the MJNA portfolio is CanChew Bio-Technologies, whose described mission is the “treatment of pain and other medical disorders with the application of chewing gum based cannabis/cannabinoids medical products.”¹⁸² Focusing intensively on research and development of their patented medicine, CanChew gum, this product is marketed as offering “a unique, socially acceptable, patient friendly, taste masked and convenient delivery format for delivery of the cannabis/cannabinoid(s) based medicine via the oral mucosal membranes.”¹⁸³ Judging by visual images on their website, this product is geared towards adults experiencing “pain, nausea and vomiting, anorexia, spasticity and various other symptoms.”¹⁸⁴ Roughly along the lines of the method proposed by the I.O.M., although not an inhaler, the advantages to CanChew’s method of delivery is that it “bypasses of the gastrointestinal tract and hepatic portal system, increasing the bioavailability of orally administered drugs that otherwise undergo

¹⁸⁰ <<http://www.medicalmarijuanainc.com/index.php/hempmeds-rx>> (Accessed September 13, 2012).

¹⁸¹ Ibid.

¹⁸² <<http://www.medicalmarijuanainc.com/index.php/canchew-biotechnologies>> (Accessed September 13, 2012).

¹⁸³ Ibid.

¹⁸⁴ Ibid.

hepatic first-pass metabolism.”¹⁸⁵ Indicative of a much larger trend that is moving towards a plethora of food based cannabinoid delivery methods, the speed with which MJNA is acquiring new companies is astounding, and for those that suffer from ailments that could be alleviated by their products, this is great news. Although MJNA is positioning themselves to be one of the biggest forces in the world of cannabis-based medicines, they are certainly not alone.

Cannabis Universities

Since its first appearance in the Chinese pharmacopeia in 2727 B.C., cannabis and knowledge of how to grow, process, and ingest cannabis followed similar paths as the dissemination of all other information with the exception of the last century when so much of it was driven underground as a result of prohibition that has spread to just about every corner of the world. With the Netherlands becoming one of the first countries to relax laws against cannabis consumption in the 1970s, Amsterdam has become home to around 200 “coffee shops,” which are legally allowed to sell up to five grams a person to those eighteen years of age or older, two small museums, one devoted to hash and the other devoted to marijuana and hemp, as well as the world’s first cannabis college. Founded in 1985 by Henk Poncin and a group known as the “green prisoners release,” with help of renowned seed producer Eddie, Cannabis College Amsterdam was created as a “Cannabis info centre and flowering organic garden” with the intent to provide people “with correct, objective information about the Cannabis Sativa L. Plant.”¹⁸⁶ While Cannabis College Amsterdam is not an actual college, this idea has gone on to inspire

¹⁸⁵ Ibid.

¹⁸⁶ <<http://www.cannabiscollge.com>> (Accessed July 10, 2013).

others to create institutions of various sizes, some of which have even gained academic accreditation.

One of the people that Cannabis College Amsterdam inspired was Richard Lee, activist and the owner of Coffeeshop Blue Sky, a medical marijuana dispensary in Oakland, California. Proving a long history of wanting to work within the confines of the system in place, “Lee obtained one of the initial four dispensary permits for Coffeeshop Blue Sky” and went on to create Oaksterdam University in 2007 after running an advertisement in the “East Bay Express proclaiming ‘Cannabis Industry Now Hiring’ and receiving “over 200 phone calls in the first week.”¹⁸⁷ Growing from packed weekend seminars with long waiting lists to semester length weekday night classes, to two additional locations in California as well as some regular seminars in Michigan, Oaksterdam has even published a growing guide in conjunction with Ed Rosenthal that functions as one of the university’s required textbooks. Offering semester length classes in subjects such as federal versus state law, extraction, cooking, vaporizing, patient relations, advocacy and politics, horticulture, as well as dispensary operations, Oaksterdam is playing a very influential role in legitimizing and standardizing the medical marijuana industry. Existing in an overlapping cacophony of gray areas and legal snares and loopholes, those who desire to work in the medical marijuana field will soon learn of the vast sea of intricacies that envelops the industry in just about every state, making educational programs such as the ones offered by Oaksterdam highly necessary.

¹⁸⁷ <<http://www.oaksterdamuniversity.com/history.html>> (Accessed July 10, 2013).

Another school to follow in the footsteps of Cannabis College Amsterdam and Richard Lee, Greenway University made history by becoming “the nation's first state-certified medical marijuana occupational training school.”¹⁸⁸ Run by California native, Gus Escamilla, who had come to Colorado to capitalize on the growing medical marijuana industry, Greenway University also began by offering affordable weekend seminars, before making a move towards a structure loosely based upon that of the college semester with a much less affordable pricing structure. Initially offering such helpful courses as understanding the laws, opening an MMJ Business, and Medical Marijuana Business 101, these classes came with their own textbook, and those who were in need of seeing a doctor for their own personal medical marijuana approval were given the opportunity to do so making for a clever cross-promotional activity.¹⁸⁹ Unfortunately greed soon set in, and a program that was designed to extract as much money from the eager individuals wanting to find jobs in the industry replaced affordable and informative classes. In July of 2011, as Greenway University was forced to close its doors, the explanation of this shift finally made sense. In signing the application for Greenway University, owner Gus Escamilla indicated that he had never been convicted of a felony when in fact he had been indicted and convicted of felony embezzlement in California, thus falsely representing his company and his criminal history. In doing so, he blemished an industry that so many are fighting to legitimize. Further indicating the extent of Escamilla’s dishonesty, according to several statements, “Escamilla said the school had

¹⁸⁸ <http://www.huffingtonpost.com/2011/07/27/greenway-university-natio_n_911413.html> (Accessed July 20, 2013).

¹⁸⁹ Greenway University, *State of Colorado Textbook & Reference Guide* (Denver, Greenway University, 2010).

seen 3,000 students since it opened, but a Department of Higher Education spokesman revealed that only 112 people paid a required state fee.”¹⁹⁰ Upon further investigation into the legal history of Mr. Escamilla, reporters for the Westword, an arts and entertainment newspaper from Denver, also found that he also had bench warrants for charges including “Corporal Injury on a Spouse, Cohabitant or Fellow Parent and Intimidation of a Victim or Witnesses.”¹⁹¹ While his side business, Greenway Nutrients, is still existent, Greenway University has become almost a distant memory, and Gus Escamilla has all but vanished from the Colorado Medical Marijuana Industry.

More recently, several other cannabis education programs have been created. While many smaller dispensaries also offer monthly classes to their patients on how to grow their own plants, process concentrates, make edibles, and a variety of other topics, others have gone in the direction of Oaksterdam and Greenway University and have sought to build institutions that educate individuals about the medical marijuana industry as well as the burgeoning legal recreational cannabis industry. One of the organizations working towards properly educating cannabis industry professionals is Clover Leaf University. Sharing a name with Clover Leaf Consulting, both companies were founded by Chloe Villano who has “20 years experience as an expert cultivator and years of paralegal and MMJ Law training” and also bears the distinction of being the “first

¹⁹⁰ <http://blogs.westword.com/latestword/2011/08/marijuana_greenway_university_gus_escamilla_domestic_violence_warrant.php> (Accessed July 25, 2013).

¹⁹¹ Ibid.

Certified Marijuana Professor accredited through Colorado's Department of Higher Education.”¹⁹²

With specializations in areas such as “Consulting, Education, and Mergers and Acquisitions,” it seems that Clover Leaf University was a natural progression for Ms. Villano, who sought out some very recognizable and influential figures to help establish the project including Colorado Attorneys Robert Corry and Warren Edson, Esq., and the legendary Ed Rosenthal.¹⁹³ An activist for over forty years and the author of the textbook for Oaksterdam University, Mr. Rosenthal is both on the board of directors and one of the professors. Along with Ms. Villano, Scott Reach (CEO of Rare Dankness Seeds), and Adam Dunn of T.H.Seeds have worked to create a Colorado-specific textbook titled *2013 Colorado Cannabis Text Book & Reference Guide*.¹⁹⁴ Featuring over 360 pages of information and resources on subjects ranging from Cannabis Business 101 and Basic Cannabis Growing Resources to Colorado Cannabis Laws & Information and Colorado Cannabis Registration Forms, compared to the price of the average college textbook the *2013 Colorado Cannabis Text Book & Reference Guide* is priced at a very affordable \$39.99.¹⁹⁵ Additionally, this textbook also features a section devoted to Cannabis Career Resources and even includes “sample resumes and executive summaries” for consumer use.¹⁹⁶ These are the people who work tirelessly to build the legitimacy of the medicinal

¹⁹² <<http://yourmmjinfo.com/about-us/about-the-ceo/#.UjMljhbXF94>> (Accessed August 5, 2013).

¹⁹³ <<http://www.cloverleafuniversity.com/personnel>> (Accessed August 5, 2013).

¹⁹⁴ <<https://www.formstack.com/forms/CloverleafconsultingCo-buycocannabistextbook>> (Accessed August 5, 2013).

¹⁹⁵ Ibid.

¹⁹⁶ Ibid.

cannabis industry in Colorado. Without people such as Chloe Villano and Robert Corry, many Colorado citizens would most certainly be less prepared to face the numerous challenges of the massive gray areas within the conflicting federal and state cannabis laws in the United States.

Magazines

Following in the illustrious footsteps of the infamous *High Times* that has survived since its creation in New York City in 1974, countless smaller and more localized publications have been created, in California and Colorado particularly, in an effort to help educate people about cannabis and all of its numerous forms. Featuring dozens of articles, recipes, and tips, as well as vast advertising space for the hundreds of medical cannabis dispensaries, magazines such as *Kush*, *Cannabis Voice*, *Nuggetry*, *Culture*, *Cronic*, and *The Daily Doobie*, have each provided a different cross-section of the world of cannabis culture. With content creators attempting to make money in the industry in any way possible, offerings range from *Kush* magazines glossy, ad-based pages filled with high definition close up photos of cannabis at various stages in the growth process to the more traditional newspaper style offerings of *The Daily Doobie*, to the divisive pages of *Cronic*, which has dedicated its magazine to showcasing its own blend of cannabis culture. *Cronic's* stated goal was “Synergizing the two most beautiful things in the world... Weed and Women,”¹⁹⁷ and featured a moderate amount of information alongside a mélange of pictures of cannabis and scantily clad women. Although not the best example of how hard some of these magazines are working to

¹⁹⁷ <<http://issuu.com/cronic/docs/cronicmag420>> (Accessed August 20, 2013).

legitimize the medicinal cannabis industry and bring quality information to a populace that has been continually lied to for decades, *Cronic* does illustrate the diversity of approaches utilized by these numerous magazine publishers and advertisers to gain market share in a highly volatile and, for some, lucrative industry.

Standing out amongst some fairly impressive competitors, *Culture* magazine has put together a very informative magazine that focuses on a blend of cannabis, arts, and entertainment similar to *High Times* and has managed to feature some bigger names including Bill Maher, comedians Tommy Chong, Mike Epps, and Paul Rodriguez, and a variety of musicians including Willie Nelson, Mac Miller, and Wiz Khalifa. Not to be confused with the Canadian magazine *Cannabis Culture*, *Culture* publishes localized issues that share a similar shell but feature area- specific advertisements in Colorado, Washington, Michigan, Northern California, Southern California, and San Diego. Predominately available in specialty stores, smoke shops, gas stations and medicinal cannabis dispensaries, the primary use of these publications is for their advertisements and coupons and secondarily as reading material.

High Times & The Cannabis Cup

Publishing its first issue only four years after passage of the Comprehensive Drug Abuse Prevention and Control Act of 1970 and two years after President Nixon blatantly ignored the recommendations of the Shafer Commission, *High Times* magazine was originally intended to be a “trade magazine for paraphernalia.”¹⁹⁸ Founded by Tom Forçade, former “director of the Underground Press Syndicate,” member of the Yippies,

¹⁹⁸ George Petros, *A Brief History of High Times Magazine* (New York: Seconds Magazine, 1998), 249.

the White Panther Party, and reported member of the Weatherman, as well as a documented smuggler, *High Times* grew quickly in popularity and before being on any actual newsstands was selling “close to a million copies per issue.”¹⁹⁹ Forçade built the magazine into a multi-million dollar enterprise within only a few years. However, following the death of his friend, Jack Coombs, in a plane accident over the Florida everglades, Forçade took his own life in 1978, leaving behind a legacy and *High Times* trust-controlled.²⁰⁰

Gradually declining following the death of Forçade, the *High Times* of the early 1980s soon found itself fractionalized, featuring cocaine centerfolds, “stories about freebasing and crack” use and coming extremely close to going under in 1985.²⁰¹ Finally “kicking cocaine out forever” in 1986 under the direction of John Holmstrom, John Howell, and Steve Hager, *High Times* would make a notable resurgence to being a successful and marginally respectable magazine, brand, and voice of the cannabis counter-culture.²⁰² Of his entrance into the company, Hager remarks that there was “no staff; it’s like an empty shell,” and soon began making his way through the horribly mismanaged files and surveying the distinct lack of resources that should have been present after a decade of publishing.²⁰³ Upon acquisition of the plethora of information about the many medical uses for cannabis, “Hemp and environmental issues,” Hager

¹⁹⁹ Ibid.

²⁰⁰ <<http://www.hightimes.com/microsites/handbook/chap1p4.inc.php>> (Accessed September 1, 2013).

²⁰¹ Petros, 1998, 251.

²⁰² Ibid.

²⁰³ Ibid., 258.

began to focus *High Times* on turning cannabis legalization “into a national issue.”²⁰⁴

Moreover, *High Times* also began forming international relationships that would continue to this day with the creation of the Cannabis Cup in 1988, that according to Hager “put Holland on the marijuana map...[eventually becoming known as] the place where they could breed seeds.”²⁰⁵

Originating as a 1987 *High Times* piece on Nevil, the founder of the first seed company in Holland, *The Super Sativa Seed Club*, Hager’s first trip to Amsterdam hit a turning point with his meeting with representatives from an American based company, Cultivators Choice, who regaled him with tales of California harvest festivals, which in turn gave Hager the idea to hold a similar but more elaborate gathering in Amsterdam.²⁰⁶

Hager returned in 1988 with an unnamed photographer and fellow *High Times* contributor and expert horticulturist, Dr. Indoors, to serve as the first panel of judges for the first Cannabis Cup, which featured entries from “Super Sativa Seed Club, Sensi Seed Club, the Seed Bank, and Cultivators Choice.”²⁰⁷ Winning the first ever Cannabis Cup with their Skunk #1 strain, this victory could not save Cultivators Choice, which, by this time, was teetering on the brink of insolvency. Once Nevil Seed Bank acquired most of their best strains, Cultivators Choice dissolved after the second Cannabis Cup; although, many of their strains still survive today.

²⁰⁴ Ibid.

²⁰⁵ Ibid.

²⁰⁶ <<http://www.hightimes.com/read/history-cannabis-cup>> (Accessed September 1, 2013).

²⁰⁷ Ibid.

The first few years were not large events and were slow to catch on due to a "[DEA] operation designed to shut down the Seed Bank and High Times," the format was forced to change slightly as the majority of the seed companies went underground.²⁰⁸ Returning for a fourth year as a "Coffeeshop Crawl" due to lack of official entries, the original format soon returned with the fifth year, which featured Elvy Musikka, the first woman to receive medical marijuana from the United States Federal Government through the Compassionate Investigational New Drug Program, as a judge. Becoming a much larger event by the eighth year, the 1995 Cannabis Cup featured "1,500 judges, 21 coffee shops, two entries from US growers, one entry from Canada, one entry from Switzerland, and five seed companies," as well as the attendance of dozens of members of the international media, including "Morley Shafer from 60 minutes."²⁰⁹

Allowed to exist because of the laxity of Amsterdam's laws concerning cannabis, after the events of September 11, 2001, Amsterdam experienced a shift in its political climate and with a much higher degree of security in every single airport around the world, much of the extra-legal activity that was required for competitors from different countries to compete became much more challenging and dangerous. By 2011, the distinct political shift was becoming very apparent with Dutch authorities cracking down on cannabis tourism. With many coffee shops being forced to close their doors to travelers from around the world, the new system has attempted to turn the coffee shops into private clubs for Dutch citizens only with the number of members being limited by

²⁰⁸ Ibid.

²⁰⁹ Ibid.

authorities and monitored through the use of a “club card.”²¹⁰ Further illustrating the dissatisfaction of some members of the Dutch government with their country’s status as a marijuana mecca, 2011 was also the first year in the history of the Cannabis Cup to be interrupted by a police presence. Dutch police raided the 24th Cannabis Cup for the first time in the history of the event, searching for anyone violating Amsterdam’s limits on personal or vendor possession, and making a public show of force. Finding little evidence that anyone was in violation of these statutes, the police ushered everyone to the exits and were said to be searching all in attendance and confiscating any cannabis that they had on their person.²¹¹ According to a widely reprinted Twitter post, “Everyone [at the cannabis cup] will have their buds confiscated, but no-one will be charged or fined.”²¹²

With some estimates attributing upwards of “90% of their income ...from foreign tourists,” coffee shop owners were far from pleased with the proposed incursion on a long-standing and largely successful program of decriminalization, and by 2012, the mayor of Amsterdam had announced that “he will not ban foreign tourists from using the city’s famous cannabis cafes.”²¹³ Home to approximately 700 cannabis coffee shops, Amsterdam’s supremacy as a destination for cannabis enthusiasts and activists has been long-standing, but with the relaxation of laws concerning cannabis for medicinal use in states such as California, Colorado, and Washington, the Cannabis Cup began to expand

²¹⁰ <<http://www.ibtimes.com/amsterdam-deny-tourists-access-marijuana-dispensing-coffee-shops-287177>> (Accessed October 1, 2013).

²¹¹ <<http://blog.norml.org/2011/11/23/high-times-cannabis-cup-raided-in-amsterdam/>> (Accessed October 1, 2013).

²¹² <<http://www.cannabisculture.com/content/2011/11/23/High-Times-Cannabis-Cup-Raided-Amsterdam>> (Accessed October 1, 2013).

²¹³ <<http://www.bbc.co.uk/news/world-europe-20165371>> (Accessed October 1, 2013).

and evolve, adding medicinal events based on a similar format in cities such as San Francisco, Seattle, and Denver.

With many regarding the Haight/Ashbury district as the epicenter of hippie/cannabis culture in the United States, the city of San Francisco, California would prove a very fitting first home for the First Medical Cannabis Cup held June 19–20, 2010. Similar to the Cannabis Cup held in Amsterdam for over twenty-five years, the Medical Cannabis Cup was also sponsored by *High Times* and featured a variety of local competitors battling to see whose cannabis, hashish, and edibles were the most potent, visually appealing, and tasted and smelled the best. Offering prizes for best Sativa, Indica, concentrates (hashish), edibles, booth, glass, and best product, the first Medicinal Cannabis Cup was also significant because *High Times* is based in New York, a state without access to medical marijuana, and although California had passed Proposition 215 in 1996, it took almost fifteen years for those geographic and cultural gaps to be bridged with an event such as this. Assuredly no stranger to harvest festivals, as previously mentioned, it was the harvest festivals of California that influenced Steve Hager to create the Cannabis Cup in Amsterdam, and as such, this event also symbolized the Cannabis Cup having traveled full circle in some respects. What was perhaps even more significant is that this event was symbolic of a nation that was becoming “increasingly [more] divided... as the U.S.A. became two nations: a nation with medical marijuana and a nation without medical marijuana.”²¹⁴

²¹⁴ <<http://www.hightimes.com/read/high-times-medical-cannabis-cup-blasts-san-francisco>> (Accessed October 15, 2013).

The following year, 2011, the medical Cannabis Cup expanded into Colorado and Michigan as well, with *High Times* hosting events in Denver and Detroit with a slightly expanded number of awards, this time with the addition of “Best Hybrid,” a combination of Sativa and Indica genetics. Additionally, it added the CBD award, which is, in many respects, a notable departure for this long-running event that has predominately focused on THC content as a deciding factor for medicinal properties. This shift is illustrative of the evolution of knowledge of the medicinal properties of different cannabinoids, specifically CBD, or Cannabidiol, largely because “CBD is not psychoactive and has several pharmacological properties, among others it acts as a powerful anti-inflammatory and antioxidant compound.”²¹⁵ While cannabis breeders and geneticists had for many years focused on THC, recent studies have shown that CBD is proving useful in combatting cancer, as well as several other ailments, and as such, the prevalence of strains containing higher percentages of CBD is on the rise. Although the results for the levels of CBD for the Detroit competition were not listed for C.L.C.C.C., LLC.’s CBD award winning strain “Cannatonic X,” the winners of San Francisco’s CBD award was the Master Control Unit Collective with their strain “ATF,” which clocked in at 9.23% CBD; whereas, the winner of the Denver CBD award was The Clinic on Holly with their “Pre '98 Bubba Kush” strain, which featured 12.7% CBD.²¹⁶ Having survived for over twenty-five years, the Cannabis Cup’s evolution has seemed to pick up a lot of speed

²¹⁵ <<http://cbdcrow.org>> (Accessed October 15, 2013).

²¹⁶ <<http://www.hightimes.com/read/official-results-high-times-medical-cannabis-cup-detroit>> <<http://www.cannabiscupwinners.com/cups-and-awards/more-high-times-cups/51-high-times-medical-cannabis-cup/213-2011-high-times-medical-cannabis-cup.html>> <<http://www.hightimes.com/read/high-times-denver-medical-cannabis-cup-results>> (Accessed October 15, 2013).

with the progression of medical marijuana laws within the United States, and with the help of people like Steve Hager, *High Times* has done an excellent job of maintaining their relevancy for over a quarter of century while evolving with and helping to shape cannabis policy both domestically and internationally.

Concentrates

While most historians and the written record generally confirm that the first recorded medicinal use of cannabis is attributed to Chinese emperor Shen Nung, who, around 2700 B.C., was said to have “discovered marijuana’s healing properties as well as two other mainstays of Chinese herbal medicine, ginseng and ephedra,” the actual historical record on hashish is far less sure.²¹⁷ Rather than agreeing on one site of origination, hashish historians are instead divided amongst three possible locations including “China, along the Yangtze and Yellow Rivers, Central Asia, from the Caucasus to the Altai Mountains, [or] South Asia, throughout the foothills of the Himalayas and the Hindu Kush Mountains.”²¹⁸ According to one theory, “Moslem traders most likely carried *Cannabis* west through the Elburz Mountains of Persia to the Middle East, [while] sea traders voyaging to the east coast of Africa spread drug types of *Cannabis Sativa* to the west and to the east, and south of Burma, and on into Southeast Asia.”²¹⁹ While all three theories do hold some relevance, as Hashish Historian Robert Connell Clark notes, “Prehistoric dispersal has obscured the geographical origins of *Cannabis*, and the exact

²¹⁷ Alison Mack, Janet Joy, *Marijuana as Medicine? The Science Beyond the Controversy* (D.C.: National Academy Press, 2001), 14.

²¹⁸ Robert Connell Clark, *Hashish!* (Los Angeles: Red Eye Press, 2010), 8.

²¹⁹ *Ibid.*, 11.

geographical origin may never be determined.”²²⁰ However, Clark does concede “It is certain that Cannabis originated either in Central Asia or in India along the foothills of the Himalayas and that it was first cultivated in China,” with “India and China [serving as the] sites of primary domestication.”²²¹

Originally made by “hand rubbing living [cannabis] plants,” Hashish “is a psychoactive drug prepared from the resin or the resin glands of the female (pistillate) Cannabis plant.”²²² Although the “first evidence of Hashish use appears...in the Arabian historical record,” until the “introduction of tobacco smoking into Europe and Asia during the early sixteenth century ... all marijuana and Hashish were consumed by being mixed with food and drink.”²²³ Hand rubbing of live plants is mainly suited for more humid climates and is far more labor-intensive than methods that would follow, the first of which would be *sieving*. Yet another area that bears little agreement, “Modern-day Lebanese hashish-makers assume that sieved hashish is a native technique, but Afghan hashish-makers also believe the sieving technique was discovered by their ancestors.”²²⁴ The transference of technology used for “sizing cereal grains” to the production of hashish seems to be a natural progression as more knowledge was gained about the medicinal and euphoric properties of the cannabis plant.²²⁵ Methods for collection improved greatly from early “carpet collection,” which involved collecting the resin glands on carpets. Thanks to the introduction of high-quality silk from China, Hashish

²²⁰ Ibid., 15.

²²¹ Ibid.

²²² Ibid., 60-61.

²²³ Ibid., 60.

²²⁴ Ibid., 72.

²²⁵ Ibid., 74.

eventually spread widely after the introduction of smoking tobacco and a newfound method of ingestion.

Although these two methods of cannabinoid extraction have dominated almost the entirety of hash history, scientists and hash-makers of the twentieth and twenty-first centuries have developed several new and often controversial methods for concentrating the psychoactive and medicinal properties and compounds of the cannabis plant. Now that new cities, states, and countries have legalized and decriminalized cannabis, concentrates have become very popular and a growing market segment, and for some, this has become an area of concern. Given only a paragraph in Robert Connell Clark's tome, *Hashish!*, purists, who regard the introduction of organic solvents as potentially harmful and unnecessary, look upon Hashish oil scornfully. Additionally, as many of the solvents used are also combustible gases, these hash-making techniques also bring with them the chances for explosions, bodily harm, and property damage if not done with the utmost amount of safety and skill. While some locations have chosen to view and punish the use of hashish oil as a harder drug than cannabis, Colorado has chosen not to do so and in the past few years has been working on developing a system to regulate the burgeoning cannabis concentrate industry.

With names like “bubble, wax, butter, flake, moon rock, shatter,” and many others, hashish in Colorado is big business and only growing larger. Often referring to the consistency or method in which the hashish was extracted, hash labeled as butter, will ideally have a butter-like consistency, whereas “shatter” looks more like a clear hard candy that has a brittle consistency that shatters when pressure is applied. A far cry from the Moroccan and Lebanese hand pressed and sieved hash of the late 1960s, as a recent

NPR article points out “ Marijuana 'Hash Oil' Explodes In Popularity, And Kitchens.”²²⁶

Capable of producing much more potent extracts than simply rubbing live plants or sieving dead ones, butane hash oil, or BHO as it is commonly referred to, is a blanket term for a variety of different solvent-based processes designed to extract as much THC, CBD, and other cannabinoids from the cannabis plant matter as possible. Colloquially referred to as “dabs...[because] a little dab will do you,” this term is indicative of the small amount it takes to reach desired effects and has spawned a separate but often intersecting subculture within cannabis culture devoted to the “dabbing.”²²⁷

Armed with blowtorches, expensive and elaborate hash water pipes, and strange assortments of glass and metal tools designed to pick up the perfect “dab,” the modern day hash smoker has a seemingly endless buffet of new ways to consume their desired texture of cannabis concentrate. Subsequently, the large events have followed. Having gravitated to the number 710 in a similar fashion as proponents of smoking cannabis rally around the number, date, and time 4/20, July in Denver of 2013 saw a variety of festivals and events marketed specifically towards hash connoisseurs, including “Dabs of Denver,” “The 710 Cup,” and “The Secret Cup.” Quickly becoming big events, “The Secret Cup” went on to host at least two other events before the year ended. All three featured retail sales of clothing, hash accessories, and food, as well a variety of musical acts and free hash for those of age who didn't bring their own and decided to brave the endless lines that wrapped the main walls of the smoking areas.

²²⁶ <<http://www.npr.org/2014/01/10/261390781/marijuana-hash-oil-explodes-in-popularity-and-kitchens>> (Accessed January 18, 2014).

²²⁷ Ibid.

However, while these events have been big money making events for those involved, and in many ways promote tourism to Colorado (at least to some), when it comes to hash, what is making headlines is inexperienced individuals attempting to make their own hash oil and causing explosions around the country. Thanks partially to the Do-it-Yourself, or DIY, initiative of this generation and sources such as YouTube that houses dozens of videos showing how easily butane hash can be made, there are now an almost equal amount of videos showing what can go wrong in those situations. Among the disturbing trends that have emerged because of this is a rising number of severe burn victims, damage to houses, apartments, and hotels, and even “exploding refrigerators,”²²⁸ which is apparently the result of hash makers trying to dehydrate the newly extracted hash in a freezer, which then recycles the excess butane to the compressor, which can be set off with a single spark causing sizable explosions and property damage. Showing the capability to do a decent amount of damage, extracts such as these are also proving to be very beneficial to those that require large amounts of cannabinoids; therefore, as such, much effort should be afforded to making these processes as safe and effective as possible as they are showing no signs of going away anytime soon.

Vaporizers and Pens

According to the *Handbook of Drug Control in the United States*, a book by James A. Inciardi published in 1990, “The drug paraphernalia industry is thought to have reached its height during the late 1970s.”²²⁹ While the industry’s own estimates put their

²²⁸ Ibid.

²²⁹ James A. Inciardi, *Handbook of Drug Control in the United States* (New York: Greenwood Press, 1990), 318.

annual gross sales at between “\$350 and \$1 billion,” “in 1979, the government estimated that drug paraphernalia sales in the United States may have topped \$3 billion in 1990.”²³⁰ Although many states had passed anti-paraphernalia laws by 1987, as the Internet became more and more popular and stores that sold drug paraphernalia or “headshops” began to market their smoking devices as “for tobacco use only,” many of the businesses were once again flourishing by the early 2000s.

Perhaps politically motivated and perhaps alarmed at how pervasive online retailing of drug paraphernalia had become, in 2003, Attorney General John Ashcroft launched “Operation Pipe Dreams” stating, “This illegal billion-dollar industry will no longer be ignored by law enforcement.”²³¹ Although some of the businesses targeted were larger wholesalers who offered a wide variety of products, the majority of the people indicted were companies that specialized in glass pipes most commonly used in smoking cannabis, including some very well known industry names including 101 North Glass, Jerome Baker Designs, and even Tommy Chong for his affiliation with Chong Glass Works, a company run by his son.²³² Reportedly putting “55 illegal drug sellers out of business,” the justification for these actions was that “the illegal drug paraphernalia industry has invaded the homes of families across the country without their knowledge.”²³³ Taken a step further by John Brown, the Acting Administrator of the

²³⁰ Ibid.

²³¹ Department of Justice, *OPERATION PIPE DREAMS PUTS 55 ILLEGAL DRUG PARAPHERNALIA SELLERS OUT OF BUSINESS*, <www.usdof.gov> (Accessed January 25, 2013).

²³² <http://www.huffingtonpost.com/the-/operation-pipe-dream-10-y_b_2745740.html> (Accessed January 25, 2014).

²³³ Ibid.

Drug Enforcement Administration, “People selling drug paraphernalia are in essence no different than drug dealers.”²³⁴

Carrying only a “maximum total sentence of three years in prison, a fine of \$250,000 or both,” within a few years the paraphernalia industry was back running at full steam, minus a few scrapes and bruises along the way, now validated by increased support for medical marijuana and efforts to decriminalize cannabis all over the country.²³⁵ While the paraphernalia industry was no stranger to innovation, with their constantly evolving system for concealing, masking, and consuming a variety of illicit and semi-licit substances, one of the most innovative products to take the paraphernalia market by storm is the vaporizer pen.

Trading in the more traditional water pipes and cannabis cigarettes or joints for much more modern and concealable smoking devices, the popularity of the vaporizer pen has been growing since 2011. With every passing year, these devices seem to dominate ever-larger segments of the paraphernalia market and have even been bridging the gap for some non-smokers, as it appears to be a healthier option than actual combustion. Relying on either “convection or conduction” for the vaporization process, the ever widening variety of vaporizer pens come in several different, yet often rather similar, designs.²³⁶ Most vaporizer pens come from the same manufacturer, usually in China; however, some companies have developed unique designs while others have simply relied on exclusive branding of an identical product and celebrity endorsement.

²³⁴Ibid.

²³⁵Ibid.

²³⁶ <<http://www.hightimes.com/read/high-times-vaporizer-pen-buyers-guide>> (Accessed February 2, 2014).

The majority of the convection vaporizers require users to buy pre-filled cartridges or fill their own, as “in convection heating, the substance never touches the heating element; instead, it’s added to a “polyfill” medium²³⁷ and then air heated by the element, releases the active ingredients.”²³⁸ The conduction models offer many more options while also being slightly to overwhelmingly more labor intensive and messy; the process is described thusly: “the substance to be vaporized is placed on a metal element that is then heated to release the active ingredients.”²³⁹ Capable of vaporizing both raw cannabis and cannabis concentrates such as BHO and other oil-based hashish, units such as the *Atmos Raw*, *The ThermoVape*, *G Pen*, *Cloud Pen*, *Trippy Stix*, *CANNAcig Vapor Inhaler*, *Fusion Osmosis*, *Pax*, and countless others have been actively reshaping the stereotypes of “lazy stoners sitting around all day stinking up their apartment complexes,”²⁴⁰ to industrious young entrepreneurs on the go utilizing the latest technology to help protect their bodies and minds from the stresses and stressors of modern society.

Playing an active role in the legitimization of the cannabis user and the evolution of people’s perceptions of those who consume cannabis, devices that provide healthier alternatives to smoking and places such as California and Colorado, both of which have a very active and healthy average populace, have been instrumental in the process as well. However, this process is still far from over and is far from perfect. Still in its stages of

²³⁷ Usually propylene glycol or vegetable glycerin.

²³⁸ <<http://www.hightimes.com/read/high-times-vaporizer-pen-buyers-guide>> (Accessed February 2, 2014).

²³⁹ Ibid.

²⁴⁰ Ibid.

infancy as a legitimate industry, the problems of astronomical energy expenditures, less than ethical business owners, and run-off from fertilizers and pesticides used by the more commercial operations are still yet to be addressed and present substantial challenges given the already extremely fragile and abused ecosystems of many areas across the country that could otherwise support the cultivation of cannabis.

Environmental Considerations

Considered by a great majority of users to be a much more natural and earth-friendly activity than consuming any of the pharmaceutical companies' chemical-based medicines, the realities of large scale cannabis production are far more detrimental to the health of the environment and energy consumption than many would suspect. As a 2011 study (updated in 2012) found, "indoor Cannabis production results in energy expenditures of \$6 billion each year--6-times that of the entire U.S. pharmaceutical industry--with electricity use equivalent to that of 2 million average U.S. homes."²⁴¹ With indoor cannabis production presenting such a huge energy burden, many are quick to suggest that growers simply remain outside, although this solution comes with its own set of problems.

California's experience with large-scale cannabis cultivation, offers much in the way of insight into the very real dangers of irresponsible and commercial-style grow operations. Polluting and destroying watersheds, clear cutting in areas prone to landslides, and even going as far as leveling mountaintops to make room for their cash crop, so much of Northern California's "emerald Triangle" has fallen victim to those far

²⁴¹ <<http://evan-mills.com/energy-associates/Indoor.html>> (Accessed February 9, 2013).

more concerned with profits rather than helping people. Although the issue on private land is concerning, the explosion of unregulated growing operations in the national forests of the United States has become an unavoidable reality over the last five-ten years.

Valued because "the lands are remote with few people, the forest vegetation is dense, there is an extensive system of roads and trails (both open and closed), soils are fertile, and water for irrigation is available for the diverting," some have argued that legalization of cannabis will decrease the need for illicit utilization of public lands, while others are not as convinced. Great swaths of the public lands are virtually unpatrolled, "in some areas there is [only] one park ranger for every 100,000 acres."²⁴² This enforcement vacuum and the amount of money that can be made in a relatively short period of time has led to an influx of illegal grow operations on public lands, including a notable percentage run by Mexican drug cartels. The cartels have found it easier and more profitable to grow in the United States rather than to attempt to import inferior quality cannabis across international borders.

Likely beginning in the 1960s, it was not until 1995 when large plots were discovered on federal lands, but since then "the forestry service has seen serious pot-growing operations sprout in sixty-seven national forests in twenty states."²⁴³ Indicative of the kind of damage these sites are doing, "In 2010, the cleanup of 335 California national forest sites removed more than 130 tons of trash, 300 pounds of pesticides, five

²⁴² <<http://www.livescience.com/17417-marijuana-growers-national-forests.html>> (Accessed February 9, 2014).

²⁴³ Ibid.

tons of fertilizer and nearly 260 miles of irrigation piping from marijuana growing operation sites discovered on national lands.”²⁴⁴ Some large-scale operations are even posing a threat to hikers and visitors to the national parks, through the presence of “armed guards, counter-surveillance methods, logistics support...[and even] improvised antipersonnel devices.”²⁴⁵

Another problem with large-scale cannabis production is the astronomical electricity usage of the legal indoor grow operations in places such as California and Colorado. While legal grow operations are all too familiar with energy bills that run tens of thousands dollars a month, the average medical marijuana consumer has little inclination that “a single Cannabis cigarette represents 2 pounds of CO emissions, an amount equal to running a 100-watt light bulb for 25 hours with average US electricity.”²⁴⁶ Some locations are recognizing the necessity of solving this problem before it gets any more substantial.

Home of the University of Colorado and a very athletic and forward thinking populace, Boulder, Colorado is one location that is confronting the issue of energy consumption by cannabis growing operations head on. In a move that many found to be highly controversial, Boulder officials announced in May of 2010, that they would “require growing operations to offset 100 percent of their electricity use with wind or solar power.”²⁴⁷ While many may see this as a simple and effective solution that will

²⁴⁴ Ibid.

²⁴⁵ Ibid.

²⁴⁶ <<http://evan-mills.com/energy-associates/Indoor.html>> (Accessed February 15, 2014).

²⁴⁷ <http://www.huffingtonpost.com/2010/05/19/boulder-medical-marijuana_n_581499.html> (Accessed February 15, 2014).

bypass the need for more government intervention, some see this as yet another instance on a long list of governments overstepping their bounds at the expense of civil liberties and personal freedoms. Arguing that it is discriminatory to single out just medical marijuana dispensaries and grow operations for their energy consumption, opponents of Boulder's push for alternative energy in cannabis production maintain that letting other businesses such as breweries, car dealerships, and even the university continue to utilize non-renewable forms of energy is a double standard.

Representing one of the biggest issues jeopardizing the potential successes of the legal cannabis industry, the question of electrical usage tends to overshadow a great portion of other concerns, and given that “the energy used to produce one ‘joint’ would also produce 18 pints of beer,” these questions need to be answered with creative and innovative solutions. With the potential to prevent and treat some of the world's most deadly and life-altering diseases and ailments, creating a space for cannabis to exist that will not also create more harm than good will be essential to its success. Having spent several decades fighting to emerge from the shadows, cannabis advocates must still work tirelessly to get their message heard and to counteract the irresponsible nature of others. Presenting countless opportunities to gain wealth for those brave enough, the burgeoning cannabis industry, more than almost any other, bears an immense responsibility in the cannabis legitimization process. Challenging the countless lies and half-truths that have led to the destruction of millions of lives of nonviolent citizens and the enrichment of dozens of illegal drug cartels, the bold efforts of several states in moving past failed prohibition policies have produced some of the most newsworthy and significant legislature in recent history.

CHAPTER IV

CANNABIS, SCIENCE, AND MEDICINE

Utilized as a medicine around the world “since at least 2800 BCE,” cannabis “is one of humankind’s oldest cultivated crops.”²⁴⁸ Marketed as a key ingredient in numerous patent medicines for over a hundred years in the United States during the nineteenth and early twentieth centuries, cannabis as medicine is not a new idea, by any stretch of the imagination. However, for the last century, cannabis has been sullied with the derogatory moniker “*Marijuana*,” distancing the plant-based medicines of our great-grandparents from the racially based fear mongering that accompanied its new name. However during the 1970s the resurgence of medical cannabis knowledge took hold, and for a short while it even looked like the United States would see legalization within the decade, however that turned out to be a pipe dream, and the war on drugs picked up more steam than ever before, transforming the “land of the free” into the biggest jailer nation in the world.

No longer reliant on books that were often out of date, sharply biased, or unavailable, or news media for basic information, with the advent of the internet the ability to contain information, has in many ways disappeared, and as a result the majority of the populace is much more informed on issues, global and local, than ever before.

²⁴⁸ Julie Holland, *The Pot Book* (Rochester: Park Street Press, 2010), 6.

Helping to erode the walls that have separated people from useful information, the myth that cannabis has no medical value is one that is crumbling in front of our eyes.

Exploring how scientific breakthroughs have helped to turn the tide of public perception in favor of the cannabis plant, the following chapter examines the evolution of cannabinoids and cannabis genetics, the role of Cannabidiol or CBD-rich strains of cannabis have altered public opinion, as well as a few of the numerous ways in which cannabis has shown to be medicinally beneficial for millions of people with a wide variety of ailments. Having illustrated the failing of the war on drugs to curb availability, and the potential for profitability of a legal market, this chapter focuses on many of the potential medical benefits of cannabis, and how these benefits are helping to change people's lives for the better.

Genetics

Containing over four hundred different cannabinoids, the medical benefits of the cannabis plant, although utilized for several millennia, have only begun to be understood in the past few decades. Having been suppressed and forced into the shadows under the weight of prohibition for so long, instead of extremely complex scientific names for the countless varieties of the cannabis Indica, Sativa, and hybridized plants, they have been endowed with much more memorable and counter-culture based names such as White Widow, Ak-47, and Sour Diesel. With some strains such as Durban Poison, the Kush varieties taking their name from their country of origin or "landrace," have largely come about because of human creativity.

Lacking in the sophisticated laboratory equipment that pharmaceutical companies have, much of the research and development of new strains has taken place on a very

small individual scale, many of which had a tendency to breed varieties that were rich in the more notable or psychoactive cannabinoids such as THC, leaving the CBD-rich genetics to be all but forgotten. With the rise of testing laboratories helping to fuel interest in all of the different cannabinoids and their potential benefits, one of the newest trends in cannabis genetics is identifying, breeding, and cross breeding CBD rich strains for their expressed medical benefit. With numerous small scale CBD based projects unfolding around the globe, one of the larger forces for connecting all of these individuals and collectives is Project CBD, an educational website that offers information on CBD, including benefits, existing genetics, history of genetic lines, as well as where to find these particular strains. Although the site could use a bit of updating, it does contain much useful information and links to companies that specialize in these very rare phytochemicals.

Beginning to take shape in 2008 with the collaboration of Oakland, California's Harborside Health Center, and Steep Hill analytic lab, the identification of the first CBD strains, including "Harlequin, Jamaican Lion, Omrita Rx, Cotton Candy Diesel, Soma A-Plus and Cannatonic," would within a few years be followed by a number of additional hybridizations and genetic isolations from all over the globe. While companies such as Dixie (MJNA) are working to extract CBD from hemp, one of the most notable strains to emerge from Colorado is referred to as "R4" and was developed by Greenwerkz of Denver. According to Greenwerkz, R4 has tested at "20% assayable CBD and less than 1% THC content by weight," and they have reportedly "made concentrated forms testing

over 79% CBD.”²⁴⁹ Equally as exciting as this extremely high ratio of CBD to THC is the announcement by Greenwerkz that they would be giving away the genetics of R4 for free to Colorado patients and dispensaries in order to help disseminate these higher CBD strains across the state. Conditional to this “open source” breeding program, Greenwerkz asks that “the strain, in its natural form, is not resold as seed or clone form but may be freely given away to others; The end product, in bud form, is not sold for more than \$15 per eighth [and] any strains created by hybridizing the R4 would be available to Greenwerkz in clone form free of charge”²⁵⁰

Another group that is focusing on the development of these historically significant cannabis strains with strong CBD cannabinoid profiles is the “CBD Crew,” which is a collaboration of two well-known seed companies, Mr. Nice Seed Bank and Research based in Switzerland and developer of the cannatonic strain Resin Seeds based in Spain. So far their efforts have yielded mixed results, as is evidenced by a recent hybridization that resulted in only “50% of the plants grown ...[testing as] CBD rich.”²⁵¹ These two companies have joined forces to help combat the industry’s trend of fierce competition among many other issues to help make CBD genetics more available to people around the globe, while bolstered by the CBD Crew’s mission to “produce 100% CBD-rich seeds for medical marijuana patients.”²⁵² Working closely with growers and different labs across the globe to help dial in the unique genetics, to date the CBD Crew has developed seven

²⁴⁹ <<http://www.greenwerkz.com/index.php/r4-ultra-high-cbd-non-psychoactive-strain-to-become-open-source/>> (Accessed June 25, 2013).

²⁵⁰ Ibid.

²⁵¹ <<http://cbdcrew.org/about-us/>> (Accessed July 1, 2013).

²⁵² Ibid.

unique strains including “CBD Shark, Critical Mass, CBD Noodle, CBD outdoor mix, CBD Skunk Haze, CBD Yummy, & CBD Sweet & Sour Widow,” all of which feature a 1:1 ratio of THC to CBD.²⁵³ With still so much to learn about the health benefits of CBD and the very complex relationship between the hundreds of different cannabinoids as well as cannabinoid synergy, it is clear that it is time for governments around the world to finally allow doctors and scientists to do the necessary research to learn all they can about these very beneficial phytocannabinoids.

Cannabidiol (CBD)

While cannabis has been used for medicinal purposes for thousands of years, it is only in that past several decades that scientists have begun to understand how the hundreds of cannabinoids actually interact with our bodies. With the discovery of the endocannabinoid system in early 1990s and the corresponding discovery of the endocannabinoid anandamide, scientists and researchers soon began to better understand the role played by phytocannabinoids such as THC, CBD, and several others. A crucial part of that system is the cannabinoid receptors that are spread throughout the human body. Known as CB1 and CB2 receptors, the “CB2 receptors are mainly expressed in immune cells, whereas CB1 receptors are the most abundant G protein-coupled receptors expressed in the brain.”²⁵⁴ While THC has for quite some time received the most attention due to its psychoactive properties, which also translates well to pain management, depression, and countless other ailments of modernity, cannabidiol has recently been gaining much attention for its own medicinal properties.

²⁵³ <<http://cbdcrew.org/varieties/>> (Accessed July 1, 2013).

²⁵⁴ <<http://edrv.endojournals.org/content/27/1/73.full>> (Accessed March 28, 2013).

According to the National Cancer Institute, “An in-vitro study of the effect of CBD on programmed cell death in breast cancer cell lines found that CBD induced programmed cell death, independent of the CB1, CB2, or cannabinoid receptors.”²⁵⁵ Additionally, “CBD inhibited the survival of both estrogen receptor–positive and estrogen receptor–negative breast cancer cell lines, inducing apoptosis in a concentration-dependent manner while having little effect on nontumorigenic, mammary cells”²⁵⁶ Were this not amazing and potentially beneficial enough, “CBD has also been demonstrated to exert a chemopreventive effect in a mouse model of colon cancer,” not to mention that “in lung cancer cell lines, CBD upregulated ICAM-1, leading to decreased cancer cell invasiveness.”²⁵⁷ With researchers adding to this body of knowledge on a regular basis, the amount of evidence for the medical values of cannabis is becoming overwhelming. Having finally surpassed the bounds of the select group of doctors, specialists, and publishers that have been discussing similar benefits for decades, this body of evidence produced by the National Institutes of Health (NIH) largely contradicts the classification of cannabis as a schedule one drug with “no currently accepted medical use in the United States.”²⁵⁸

According to the American Cancer Society, “Cancer remains the second most common cause of death in the US, accounting for nearly 1 of every 4 deaths,” and as such is something that has touched the lives of almost everyone in this country and around the

²⁵⁵ <http://www.cancer.gov/cancertopics/pdq/cam/cannabis/healthprofessional/page4#Section_34> (Accessed March 28, 2013).

²⁵⁶ Ibid.

²⁵⁷ Ibid.

²⁵⁸ <<http://www.deadiversion.usdoj.gov/schedules/>> (Accessed June 20, 2013).

world.²⁵⁹ Although it has been widely known for several decades that cannabis is very effective in helping alleviate much of the pain and discomfort that comes with treating cancer, news that it could actually “turn off” the cancer gene involved in metastasis” in some of the most aggressive forms of cancer is likely groundbreaking for most people. One of the few not surprised by this is Hemp activist Rick Simpson, who has been saying this for years, and has even developed a method for a medical grade cannabinoid extraction, that is commonly referred to as either Rick Simpson Oil or RSO or Phoenix Tears, which can be either orally ingested or topically applied to treat skin cancer.²⁶⁰ Requiring “about 90 days to ingest the full 60-gram treatment,” Simpson suggests starting off slowly and doubling the dosage size every four days until it reaches about a gram of RSO a day”²⁶¹ Bolstering Simpson’s argument for Cannabis oil in the treatment of skin cancer, “Cannabis Science has already seen success with 4 self-medicated skin cancer patients. These patients have been self-administering using cannabis-based extracts applied topically to their carcinomas and tumors. These patients have experienced shrinking and apparent eradication of their skin cancer, backed by positive reports from their doctors.”²⁶²

Charlotte’s Web

Showing great medical potential for several debilitating ailments and diseases, recent research with CBD has recently been making cannabis advocates out of some of

²⁵⁹ <<http://www.cancer.org/research/cancerfactsstatistics/cancerfactsfigures2013/>> (Accessed September 26, 2014).

²⁶⁰ <<http://phoenixtears.ca/dosage-information/>> (Accessed September 26, 2014).

²⁶¹ Ibid.

²⁶² <<http://www.dailyfinance.com/2012/09/20/nbc-news-reports-that-cannabidiol-cbd-turns-off-th/>> (Accessed September 26, 2014).

the plants formerly harshest critics. Among the recent converts, Dr. Sanjay Gupta, CNN's chief medical correspondent, produced one of the most emotionally compelling documentaries on the subject simply titled "Weed."²⁶³ Although far from the first cannabis documentary produced by a major news network in recent years, what made Gupta's different was his personal reversal on the subject of medicinal cannabis since his 2009 article "Why I Would Vote No On Pot," for which he genuinely apologized. However, the undeniable star of the documentary was the smiling, bubbly, ball of energy, Charlotte Figi, who had been diagnosed with Dravet Syndrome "a rare, severe form of intractable epilepsy," which produced upwards of "300 grand mal seizures a week" in the small child.²⁶⁴

After doing countless hours of online research, the Figis finally found a glimmer of hope for Charlotte in "a video online of a California boy whose Dravet was being successfully treated with cannabis."²⁶⁵ Upon further research they learned it was a strain of cannabis that was low in THC and high in CBD, which scientists have postulated relieves "the excessive electrical and chemical activity in the brain that causes seizures."²⁶⁶ Luckily for the Figis they already lived in Colorado which had passed Amendment 20 in 2000, which amended Colorado's constitution to include a right to Medical Marijuana, and after finding two doctors to sign off on her Medical Marijuana Registry card or "Red Card," Charlotte became one of only thirty-nine Medical

²⁶³ <<http://www.cnn.com/2013/08/08/health/gupta-changed-mind-marijuana/>> (Accessed August 15, 2014).

²⁶⁴ <<http://www.cnn.com/2013/08/07/health/charlotte-child-medical-marijuana/index.html>> (Accessed August 15, 2014).

²⁶⁵ Ibid.

²⁶⁶ Ibid.

Marijuana Patients registered in Colorado.²⁶⁷ First finding the previously mentioned R4 strain, Paige Figi purchased her allotted two ounces and had them processed into oil, which she then had tested and soon administered to her daughter Charlotte with astounding results.

Charlotte went from having hundreds of seizures a week to three or less a month, and soon the Figis found the Stanley brothers, a group of five brothers who grow medical cannabis in Colorado Springs with an almost evangelical zeal. After learning of the Figis need of a strain with low THC and high CBD the Stanley brothers soon revamped their low THC strain “Hippie’s Disappointment” into a new specially named strain “Charlotte’s Web” and started a charity called Realm of Caring, which has helped reduce the seizures of hundreds of children like Charlotte.²⁶⁸ The effects of CNN and Dr. Gupta popularizing this heart-wrenching tale of a child helped by this so-often-demonized plant would soon have wide-reaching political and social repercussions as parents of suffering children learned of something that could help ease their misery. Giving rise to several laws even bearing her namesake, and the mobilization of the immensely powerful political force that is often referred to as the “Mommy Lobby” in favor of medical marijuana laws, Charlotte’s glowing smile would serve as proof for countless people around the country of this medicine’s efficaciousness and safety. Although Charlotte’s story is one of the most emotionally engaging pieces of journalism ever done about

²⁶⁷ Ibid.

²⁶⁸ <http://www.slate.com/articles/news_and_politics/jurisprudence/2014/04/colorado_s_s_tanley_brothers_and_their_pot_farm_leading_evangelicals_to_embrace.html> (Accessed August 15, 2014).

cannabis, her story is really only one of millions of lives positively affected by the medical value of this so-called weed.

Cannabinoid Research

Responding to an elevated demand for cannabis samples with higher levels of Cannabidiol or CBD, “The National Institute on Drug Abuse, which ‘oversees the cultivation, production, and distribution of research-grade marijuana on behalf of the United States government,’” requested an increase in their cannabis production.²⁶⁹

Boosting the United States Government’s “production quota for medical marijuana from an annual 21 kg to 650 kg,” many are taking this increase in production as a substantial shift in policy from an entity that has solely focused on the negative side effects of cannabis since the closing of the Compassionate Investigation New Drug program after it was discovered how effective cannabis was in helping AIDS patients.²⁷⁰ In explanation of the increase, NIDA stated that they “are targeting concentrations that are low in CBD, equal concentrations 50/50 CBD/THC, and high CBD...[so they can] know the final THC/CBD concentrations once the marijuana is harvested this fall and analyzed.”²⁷¹ Although many cannot help but view these increases with great optimism, the reality remains, that the NIDA facility at the University of Mississippi is still the only one in this country that is allowed by federal law to grow cannabis due to its Schedule I status,

²⁶⁹ <http://www.huffingtonpost.com/2014/08/29/nida-marijuana-research_n_5737592.html> (Accessed September 26, 2014).

²⁷⁰ <http://www.huffingtonpost.com/2014/05/05/obama-just-ordered-a-thou_n_5268647.html> (Accessed September 26, 2014).

²⁷¹ <http://www.huffingtonpost.com/2014/08/29/nida-marijuana-research_n_5737592.html> (Accessed September 26, 2014).

despite the ever-expanding mountain of evidence that that cannabis does indeed have medicinal value.

Multiple Sclerosis

Affecting more than 2.3 million people and their families around the world, Multiple Sclerosis is a “Chronic, unpredictable disease of the central nervous system (CNS).”²⁷² According to the National Multiple Sclerosis Society, it “is thought to be an immune-mediated disorder, in which the immune system incorrectly attacks healthy tissue in the CNS, [and whose symptoms include, but are not limited to] including blurred vision, loss of balance, poor coordination, slurred speech, tremors, numbness, extreme fatigue, problems with memory and concentration, paralysis, and blindness and more.”²⁷³ Predominantly affecting women between the ages of twenty and forty, there is no cure for MS and currently treatment is focused on slowing down the progression of the disease, controlling symptoms, and the discomfort and decrease in quality of life that accompanies them.²⁷⁴ According to a recent report titled *Efficacy and Safety of Medical Marijuana in Selected Neurologic Disorders* from the American Academy of Neurology, “Medical marijuana can be considered to relieve particular symptoms of MS, including spasticity, pain related to spasms, or central pain from MS lesions.”²⁷⁵ However,

²⁷² <<http://www.nationalmssociety.org/What-is-MS/MS-FAQ-s#question-How-many-people-have-MS>> (Accessed November 4, 2014).

²⁷³ Ibid.

²⁷⁴ <<http://thechart.blogs.cnn.com/2014/04/29/treating-brain-diseases-with-marijuana/>> (Accessed November 4, 2014).

²⁷⁵ Ibid.

“medical marijuana did not help MS patients who had tremors, nor did it relieve [similar] abnormal involuntary movements in [patients with] late-stage Parkinson's disease.”²⁷⁶

Another study published in the *Journal of Neuroimmune Pharmacology* found that “chemical compounds found in marijuana can help treat multiple sclerosis-like diseases in mice by preventing inflammation in the brain and spinal cord.”²⁷⁷ Through studies conducted at the University of Tel Aviv in Israel, the team of Dr. Ewa Kozela determined that “the presence of CBD or THC restrains the immune cells from triggering the production of inflammatory molecules, and limits the molecules' ability to reach and damage the brain and spinal cord.”²⁷⁸ Thanks largely to the global prohibition of cannabis that has persisted for decades, and the relatively recent discovery of the endocannabinoid system, Dr. Kozela notes, “we're just beginning to understand how it works,” [however] “when used wisely, cannabis has huge potential.”²⁷⁹

Crohn's Disease

First described in 1932 by Dr. Burrill B. Crohn, Crohn's Disease “belongs to a group of conditions known as Inflammatory Bowel Diseases (IBD), and is symptomized by “Persistent Diarrhea, Rectal bleeding, Urgent need to move bowels, Abdominal cramps and pain, Sensation of incomplete evacuation, [and] Constipation (can lead to bowel obstruction),[as well as] Fever, Loss of appetite, Weight Loss, Fatigue, Night

²⁷⁶ Ibid.

²⁷⁷ <<http://www.medicalnewstoday.com/articles/267161.php>> (Accessed November 4, 2014).

²⁷⁸ Ibid.

²⁷⁹ Ibid.

sweats, [and] Loss of normal menstrual cycle.”²⁸⁰ According to the Crohn’s and Colitis Foundation of America, “Crohn’s disease may affect as many as 700,000 Americans...is more prevalent among adolescents and young adults between the ages of 15 and 35” and affects men and women equally.²⁸¹ Wreaking havoc on the lives and digestive tracts of those it effects, the diagnosis process of Crohn’s Disease is often arduous, with little relief found, leading some sufferers to look for less traditional remedies. Having proven successful at treating nausea with cancer and AIDS patients, the idea that cannabis could be beneficial for people with Crohn’s Disease is not very farfetched.

Published in the journal for *Clinical Gastroenterology and Hepatology*, a limited study has shown that cannabis is indeed medicinally beneficial for those suffering from Crohn’s. The study was comprised of twenty-one people, the study gave ten a placebo, and eleven people two cannabis cigarettes a day for eight weeks, and studied their responses. Of the eleven given the actual active medicine, “Complete remission was achieved by 5 of 11 subjects.”²⁸² Based on these findings, the main conclusion was that “a short course (eight weeks) of THC-rich cannabis produced significant clinical, steroid-free benefits to 10 of 11 patients with active Crohn’s disease, compared with placebo, without side effects,” and that “further studies, with larger patient groups and a nonsmoking mode of intake, are warranted.”²⁸³ With the difficult nature of cannabis research in this country due to its classification as a Schedule I drug, further studies will

²⁸⁰ <<http://www.ccf.org/what-are-crohns-and-colitis/what-is-crohns-disease/>> (Accessed November 4, 2014).

²⁸¹ Ibid.

²⁸² <<http://www.ncbi.nlm.nih.gov/pubmed/23648372>> (Accessed November 4, 2014).

²⁸³ Ibid.

be subject to much more scrutiny than other medical compounds, however as more and more states seek to provide access to medical cannabis, this tide shows significant signs of turning.

PTSD

In 2012, “suicides among active-duty military personnel averaged one per day.”²⁸⁴ If that were not troubling enough, “every day, 22 veterans take their own lives”²⁸⁵ by far the worst symptom of a problem that affects “one in five veterans of the Iraq and Afghanistan wars” and the countless millions that came before them.²⁸⁶ Post-Traumatic Stress Disorder or PTSD is the byproduct of decades of militarization and wars fought for industry, with little to no ethical impetus, and decades of neglecting of veterans.

Although veterans are one of the most prevalent groups of people with PTSD, there are countless other survivors, and witnesses to violence and tragedy, that continued to be affected by the events even years and decades later. According to the National Institute of Health, “PTSD affects about 7.7 million American adults [and is] often accompanied by depression, substance abuse, or other anxiety disorders.”²⁸⁷ Although there exist many helpful treatments for people with PTSD, including “Cognitive Processing Therapy (CPT), Prolonged Exposure, Eye Movement Desensitization and Reprocessing (EMDR),” as well as medications including “selective serotonin reuptake inhibitor

²⁸⁴ <<http://www.facethefactsusa.org/facts/the-true-price-of-war-in-human-terms>> (Accessed November 5, 2014).

²⁸⁵ <<http://www.cnn.com/2013/09/21/us/22-veteran-suicides-a-day/>> (Accessed November 5, 2014).

²⁸⁶ <<http://www.facethefactsusa.org/facts/the-true-price-of-war-in-human-terms>> (Accessed November 5, 2014).

²⁸⁷ <<http://www.nlm.nih.gov/medlineplus/magazine/issues/winter09/articles/winter09pg10-14.html>> (Accessed November 5, 2014).

(SSRI),”²⁸⁸ veterans and soldiers during wartime have been utilizing cannabis for its medicinal properties for decades, if not centuries.

In spite of the “mountain of anecdotal evidence that marijuana helps with PTSD, there has been no controlled trial to test how marijuana suppresses the symptoms, including flashbacks, insomnia, and anxiety,”²⁸⁹ due to the countless restraints involved in studying cannabis and veterans in the United States. One researcher hoping to put some of the anecdotes to the test is Suzanne Sisley of the University of Arizona. However, the process of getting permission to do such a study has literally taken years. After clearing permission from the FDA in 2011, Sisley again made it past another hurdle when the “Public Health Service, part of the U.S. Department of Health & Human Services, gave its approval” in March of 2014.²⁹⁰ Unfortunately for Sisley and the thousands of veterans that stood to benefit from her study, the University of Arizona terminated her in June of 2014.

With the university failing to cite any direct reason for her termination, “Dr. Sue Sisley contends her dismissal was spurred by her cannabis research, and by Arizona lawmakers who don’t support her work.”²⁹¹ Refusing to take the decision lying down, Ricardo Pereyda, “an Arizona alumnus diagnosed with Post-Traumatic Stress Disorder” created an online petition through change.org that has garnered over 109,000

²⁸⁸ <<http://www.ptsd.va.gov/public/treatment/therapy-med/treatment-ptsd.asp>> (Accessed November 5, 2014).

²⁸⁹ <<http://www.usatoday.com/story/news/nation-now/2014/03/18/medical-marijuana-ptsd-veteran-study/6532021/>> (Accessed November 5, 2014).

²⁹⁰ <<http://www.usatoday.com/story/news/nation-now/2014/03/18/medical-marijuana-ptsd-veteran-study/6532021/>> (Accessed November 5, 2014).

²⁹¹ <<http://www.nbcnews.com/health/health-news/pot-ptsd-arizona-boots-researcher-seeking-cure-vets-n152881>> (Accessed November 5, 2014).

signatures.²⁹² Additionally, Rick Dobin of the Multidisciplinary Association for Psychedelic Studies (MAPS), one of the studies' private investors, has stated that the study will be looking for a new home, and that they have no intention of abandoning Dr. Sisley as the University of Arizona has done.²⁹³ On her termination, Dr. Sisley remarked, "it's so sad that it requires political courage to do an FDA randomized control trial... This involves blinded, independent investigators, just trying to collect objective data."²⁹⁴

Despite this setback in Arizona, the proliferation of cannabis decriminalization laws are making medical marijuana much more accessible for veterans and the millions of others living with PTSD, even in Arizona, where less than two weeks after the termination of Sisley, the state's Department of Health Services Director Will Humble [stated that he] "will allow PTSD sufferers, beginning Jan. 1, [2015] to use cannabis for palliative care."²⁹⁵ This added Arizona to the short list of states that allow people with PTSD access to medical marijuana, including "Oregon, California, Connecticut, Delaware, Massachusetts, and New Mexico."²⁹⁶ With groups such as Veterans for Medical Cannabis Access, and MAPS, and researchers such as Dr. Sisley working tirelessly to help bring veterans some relief from their agony, and more and more states

²⁹² <<http://www.nbcnews.com/health/health-news/pot-researcher-firing-unleashes-rising-veteran-backlash-n167691>> (Accessed November 5, 2014).

²⁹³ Ibid.

²⁹⁴ Ibid.

²⁹⁵ <<http://www.azcentral.com/story/news/arizona/politics/2014/07/09/medical-marijuana-can-treat-ptsd-arizona-official-decides/12418673/>> (Accessed November 5, 2014).

²⁹⁶ <<http://www.mpp.org/media/press-releases/maine-adopts-law-allowing.html>> (Accessed November 5, 2014).

pushing for either medical cannabis, localized decriminalization, or statewide legalization, it is clear that while the war is not over, several key battles have been won.

Incapable of ignoring the ever-rising mountain of evidence forever, the point at which the federal government of the United States, yet again admits they were mistaken and repeals cannabis prohibition once and for all seems closer than ever. While so many thought they would never see it within their lifetime, with every passing election we take another step closer to closing one of the saddest chapters in United States history.

CHAPTER V

CHIPPING AWAY AT PROHIBITION

With over a decade of successful campaigns in over a dozen states proving that medical marijuana will not disappear or be ignored, many activists saw the election year of 2012 as a perfect opportunity to continue their efforts to chisel away at the foundational support for the one of the most controversial aspects of the war on drugs, marijuana prohibition. In addition to Montana's struggle to maintain their access, residents of Massachusetts and Arkansas would be allowed to vote to allow their residents access to medical marijuana. While the all of these struggles were notable, especially that of Arkansas, which stood a chance at being the first southern state with compassionate access, even more groundbreaking were the efforts of three states' efforts to decriminalize marijuana for adult recreational use. Each proposing slightly different plans, the Colorado, Washington, and Oregon elections not only featured the highly contentious race between Barack Obama and Mitt Romney, but the chance to make history by being one of the first states to push back against the failed policy of prohibition in a manner reminiscent of the way in which alcohol prohibition eventually met its demise.

Washington Initiative 502

Headed by a group by the name of New Approach Washington, Initiative 502 was designed to tackle several objectives; foremost among these would be the legalization of “the possession of marijuana for adults age 21 and older.”²⁹⁷ Cognizant of the new levels of control necessary to undertake such a venture, this initiative stated that “the only marijuana that would be legal to sell in this state would be grown by specially-licensed Washington farmers and sold in standalone, marijuana-only stores operated by private Washington businesses licensed and regulated by the state.”²⁹⁸ Functioning in the same way as excise taxes on cigarettes and alcohol, the passage of initiative 502 would also bring with it a “25% sales tax [on the sale of marijuana], with 40% of the new revenues going to the state general fund and local budgets, and the remainder dedicated to substance-abuse prevention, research, education, and health care.”²⁹⁹ Adding to the similarities between the intent of this initiative and the manner in which alcohol is treated in this country, initiative 502 also stated that, “advertising would be restricted, [and] a new marijuana DUI standard that operates like the alcohol DUI standard would be established.”³⁰⁰ In addition, initiative 502 also “modifies the definition of ‘marijuana’ under Washington state law to include only cannabis with greater than 0.3% THC concentration.”³⁰¹ Under this new classification, cannabis under this limit [would be

²⁹⁷ <<http://www.newapproachwa.org/about>> (Accessed November 9, 2012).

²⁹⁸ Ibid.

²⁹⁹ Ibid.

³⁰⁰ Ibid.

³⁰¹ <<http://www.newapproachwa.org/sites/newapproachwa.org/files/I-502%20Backgrounder%20-%20Industrial%20Hemp%20-%20092812%20-%20PDF%20for%20Website.pdf>> (Accessed November 9, 2012).

considered] industrial hemp ... [and] will no longer be subject to the penalties described in Washington's Uniform Controlled Substances Act."³⁰² Providing many points that are nothing short of groundbreaking, the historic nature of this initiative and the 2012 election year is beyond dispute.

A group calling themselves, No On I-502, took issue with "a provision that makes it illegal to drive with 5 ng/ml of active THC in your bloodstream, regardless of impairment."³⁰³ Although this level is arguably low, the law also made driving with any concentration above 0.00 for drivers under 21 an automatic DUI, another area of the law that the opponents of initiative 502 found to be disagreeable. Referencing a document produced in 1993 by the Department of Transportation titled *Marijuana and Actual Driving Performance: Effects of THC On Driving Performance*, No On I-502 cites several observed facts that contradict the need for such stringent policies including "A low THC dose (100 ug/kg) does not impair driving ability in urban traffic to the same extent as a blood alcohol concentration (BAC) of 0.04g%, [and that] it is not possible to conclude anything about a driver's impairment on the basis of his/her plasma concentrations of THC and THC-COOH determined in a single sample."³⁰⁴ Proving to be a contentious issue in several areas, the concern over driving under the influence of marijuana is one area that could benefit from open and honest research. While legitimate research in this regard has been largely hindered by the federal governments unwavering

³⁰² Ibid.

³⁰³ <<http://www.nooni502.com/wordpress/about-no-on-i-502>> (Accessed November 9, 2012).

³⁰⁴ <http://www.druglibrary.org/schaffer/misc/driving/dot78_1e.htm> (Accessed November 9, 2012).

stance on the subject, each new medical marijuana state brings new opportunities to expand the body of knowledge on the subject, only adding to our understanding of the benefits and dangers of marijuana.

Oregon Measure 80

Crafted by the Campaign for Restoration and Regulation of Hemp, it is then not that surprising that the majority of Oregon's Measure 80 focused predominantly on the issue of hemp as well as the legalization of marijuana for adults. Featuring a great deal of explanation and several historical and biblical references ranging from Genesis and the 10th amendment to Thomas Jefferson, George Washington, and Governor Morris of Pennsylvania, Measure 80's main difference from that of Washington's Initiative 502 is that it while Measure 80 allowed for the personal cultivation of marijuana, Initiative 502 did not.³⁰⁵ While Washington planned to place the regulation of marijuana under the control of the state liquor board, Oregon went a different route, and proposed the creation of a "commission to license marijuana cultivation by qualified persons and to purchase the entire crop."³⁰⁶ At which point, the "commission sells marijuana at cost to pharmacies, medical research facilities, and to qualified adults for profit through state-licensed stores."³⁰⁷ Additionally, Measure 80 also provided for the creation of two new state commissions "Oregon Hemp Fiber and Food Committee" and the "Oregon Hemp Biodiesel Committee," which would each receive one percent of the incoming tax revenue. The remaining ninety-seven percent was to be allocated as follows: "90%

³⁰⁵ <<http://octa2012.org/oregon-cannabis-tax-act-legislation/>> (Accessed November 9, 2012).

³⁰⁶ <<http://www.crrh.org/>> (Accessed November 9, 2012).

³⁰⁷ Ibid.

credited to the state's general fund to finance state programs; seven percent shall be credited to the Department of Human Resources and shall be continually appropriated to fund various drug abuse treatment programs on demand; [and the last] one percent ...[would be] distributed to the state's school districts...to fund a drug education program.”³⁰⁸

Although there is much that is notable about this particular measure, even when compared to Washington and Colorado, one of the more interesting aspects of Oregon's measure 80 that perhaps should have been employed in Washington, is the creation of a “commission to study methods of use, potential for abuse, [and] establish cannabis levels for presumption of impairment.”³⁰⁹ Also worth noting is section 474.315 labeled attorney general's duties, which states that “the Attorney General shall vigorously defend this Act and any person prosecuted for acts licensed under this chapter, propose a federal and/or international act to remove impediments to this chapter.”³¹⁰ Additionally, the attorney general is also compelled to “deliver the proposed federal and/or international act to each member of Congress and/or international organization, and urge adoption of the proposed federal and/or international act through all legal and appropriate means.”³¹¹ Presenting one of the most unique and strongly worded bills of the three, Oregon's Measure 80 is highly reflective of the distinctive character of Oregon and its people and in many ways indicative of the ways in which states such as Oregon, Washington, and Colorado still

³⁰⁸ <<http://octa2012.org/oregon-cannabis-tax-act-legislation/>> (Accessed November 9, 2012).

³⁰⁹ Ibid.

³¹⁰ Ibid.

³¹¹ Ibid.

harbor what some could term a “pioneer spirit.” While there are many others factors that come into play, it is perhaps no accident that it is the most western states that have continued the legacy of a people who refused to take no for an answer and have continually shown their affinity for an ever expanding and evolving understanding of what an ideal society should look like.

Colorado Amendment 64

Building on the success of several successful initiatives and amendments over the past decade, including Initiative 100 and Amendment 20, the organization Safer Alternatives For Enjoyable Recreation or SAFER, and several other groups spent over a year working towards another round of election-year plans for further progress away from marijuana prohibition. Having succeeded in reducing the penalties for simple marijuana possession in Denver with Initiative 100, and helping make Colorado one of the model states for a regulated Medical Marijuana industry with Amendment 20, SAFER in conjunction with and opposed by several other groups have made for an even more contentious election year. Alongside Washington State’s initiative 502 and Oregon’s measure 80, Colorado’s amendment 64 proposed that all adults over twenty-one years of age be allowed to use, possess and purchase marijuana, much in the same way adults are allowed to purchase alcohol. Although there were no less than three different amendments seeking a place on Colorado’s 2012 ballot, Amendment 64 was the only one to attain enough support to make it.

Among the less successful campaigns was initiative 70, that sought to regulate marijuana like tobacco and also made provisions for the legalization of hemp farming in

the state of Colorado, and an initiative by the group Legalize 2012, which sought a more outright legalization based upon the commonly acknowledged fact that “cannabis is one of the safest substances known to man.”³¹² While all of these groups shared a very similar goal, they were all quick to develop areas of contention over details that will be discussed in a later section.

With a substantial amount of support from groups including SAFER, Drug Policy Alliance, Marijuana Policy Project, Sensible Colorado, Students for Sensible Drug Policy, and NORML, Amendment 64 was able to acquire almost twice the number of signatures needed to secure a spot on the ballot in 2012. Completing their signature drive with almost 160,000 signatures in late January of 2012, Supporters spent the remaining months building a substantial support base for what was a wildly controversial and historical piece of state legislation.

While there is much more in the extended language of the actual bill, the main purpose of Amendment 64 would be to “makes the personal use, possession, and limited home-growing of marijuana legal for adults 21 years of age and older; [establish] a system in which marijuana is regulated and taxed similarly to alcohol; and [allow] for the cultivation, processing, and sale of industrial hemp.”³¹³ In more specific terms, Amendment 64 would allow all adults over twenty-one years of age to possess up to one ounce of marijuana and to grow no more than six plants for personal use, with no more

³¹²<<http://www.legalize2012.com/models.legalization.html>>(Accessed October 12, 2012).

³¹³<<http://www.regulatemarijuana.org/about>> (Accessed October 12, 2012).

than three plants maturing at one time.³¹⁴ In addition to creating the necessary infrastructure for local entrepreneurs to build their own marijuana-based businesses, this amendment also compels the general assembly to “enact an excise tax to be levied upon marijuana sold or otherwise transferred by a marijuana cultivation facility to a marijuana product manufacturing facility...at a rate not to exceed fifteen percent.”³¹⁵ Careful not to interfere with the previously established rights and processes of the Colorado medical marijuana law, Amendment 64 states, “No such excise tax shall be levied upon marijuana intended for sale at medical marijuana centers.”³¹⁶ Although much of this amendment does focus on decriminalizing adult use and possession of marijuana, which considering the amount of people in this country who have had their lives affected by these draconian laws, is rather significant; equally as important is what this amendment proposes for hemp. Making their intentions very clear, the authors of subsection C of section 16 of Amendment 64 states that, “in the interest of enacting rational policies for the treatment of all variations of the cannabis plant, the people of Colorado further find and declare that industrial hemp should be regulated separately from strains of cannabis with higher delta 9 Tetrahydrocannabinol (THC) concentration.”³¹⁷ While there still would be much work left to do in the implementation and further clarification of the language of this amendment, what it portended for the personal freedom of adults and for the

³¹⁴ <<http://www.regulatemarijuana.org/s/regulate-marijuana-alcohol-act-2012>> (Accessed December 3, 2012).

³¹⁵ Ibid.

³¹⁶ Ibid.

³¹⁷ Ibid.

advancement of logical policies regarding hemp in the United States was rather promising.

Endorsements

While marijuana remains a largely contentious issue in much of the United States and in Colorado, for many people, the social implications of continuing a failed experiment are far too high to support any longer. Voicing their acknowledgment of this position with their support of Amendment 64, many organizations, individuals, and media sources made their endorsement public in an effort to help promote what they viewed as the proper next steps away from marijuana prohibition. Included in this group would be several newspapers such as the *Aurora Sentinel*, *Boulder Weekly*, *The Aspen Times*, *Pagosa Springs Sun*, and *OutFront Colorado*, as well as “more than 300 Colorado physicians from more than 65 cities and towns, [and] more than 130 college professors from across Colorado and around the nation” comprise a large group of supporters.³¹⁸ Additionally, “A diverse group of more than two dozen clergy and faith leaders from across Colorado also endorsed Amendment 64” voicing similar opinions to that of Reverend Bill Kirton of the United Methodist Rocky Mountain Conference who stated “if a punishment policy fails to meet its objectives and causes harms to humans, I believe we have a moral obligation to support change. Our laws punishing marijuana use have caused more harm than good to our society.”³¹⁹

³¹⁸ <<http://www.regulatemarijuana.org/endorsements>> (Accessed November 12, 2012).

³¹⁹ <<http://www.regulatemarijuana.org/clergy>> (Accessed November 12, 2012).

Similarly many political organizations publicly supported of Amendment 64 public including the “Colorado Democratic Party, Republican Liberty Caucus, Libertarian Party of Colorado, Green Party of Denver, Colorado Latino Forum, United Food and Commercial Workers Union (UFCW) Local 7, and the Operative Plasterers' and Cement Masons' International Association (OPCMIA) Local 577.”³²⁰ In addition the “National Association for the Advancement of Colored People (NAACP) Colorado Montana Wyoming State Conference, the American Civil Liberties Union (ACLU) of Colorado, the Colorado Criminal Defense Bar, the National Lawyers Guild, Colorado Chapter, and the Colorado Criminal Justice Reform Coalition” all also endorsed Amendment 64 illustrating the very prevalent perspective that marijuana prohibition has failed in this country, and has only created far more problems than it has solved.

Showing a notable ability to bridge party lines, Amendment 64 has also garnered the support of Republicans such as former U.S. Congressman Tom Tancredo, as well as State Senator Shawn Mitchell. However what is even more notable was news of support from a somewhat unlikely source, conservative evangelist Pat Robertson, who announced in March of 2012 to the *New York Times* that he “absolutely’ supported the ballot measures.”³²¹ Robertson stated, “it’s completely out of control...Prisons are being overcrowded with juvenile offenders having to do with drugs. And the penalties, the maximums, some of them could get 10 years for possession of a joint of marijuana. It

³²⁰ <<http://www.regulatemarijuana.org/endorsements>> (Accessed November 12, 2012).

³²¹ <<http://www.nytimes.com/2012/03/08/us/pat-robertson-backs-legalizing-marijuana.html>> (Accessed November 12, 2012).

makes no sense at all.”³²² Although perhaps not known for his pragmatic decision-making, this is one issue where Pat Robertson appears to have done his homework, and as he notes, it is hard not to understand. Robertson argued, “if people can go into a liquor store and buy a bottle of alcohol and drink it at home legally, then why do we say that the use of this other substance is somehow criminal?”³²³ Recognizing the enormous societal effects that the perpetual failure of the United States war on drugs has caused, Robertson stated, “he was not worried about criticism this time around... [And I] just want to be on the right side,” adding “and I think on this one, I’m on the right side.”³²⁴

The Opposition

Not fully convinced that decriminalization and efforts to better regulate marijuana would create the kind of change that they view as appropriate or necessary, and perhaps concerned that it will send the wrong message to young people and about the states attempting to change their laws, groups such as Vote No on 64 have made their opposition to these measures quite clear. In addition to oft-repeated arguments that the reduction of marijuana laws sends the wrong message to young people, one of the larger issues taken with amendment 64 was vocalized by Kelly Brough, the CEO and President of the Denver Metro Chamber of Commerce, who remarked that “when we’re convincing companies to come here, we’re selling them on our workforce— a very well educated hard working productive workforce, [and according to Ms. Brough], “this doesn’t

³²² Ibid.

³²³ Ibid.

³²⁴ Ibid.

reinforce that brand.”³²⁵ Among the other vocal opponents of Amendment 64 include “Gov. John Hickenlooper, the Colorado Education Association, the Colorado chapter of the American Academy of Pediatrics, several law-enforcement organizations...[as well as] Denver Mayor Michael Hancock.”³²⁶ On this subject, Colorado governor John Hickenlooper is quoted as stating, “Colorado is known for many great things – marijuana should not be one of them. Amendment 64 has the potential to increase the number of children using drugs and would detract from efforts to make Colorado the healthiest state in the nation.”³²⁷ Echoing a frequently repeated talking point, Hickenlooper also noted that “it sends the wrong message to kids that drugs are OK.”³²⁸ Indicating both a certain level of understanding when it comes to this issue, and the same kind of idealistic ignorance that has allowed marijuana prohibition to continue for this long, Hickenlooper also noted that “while we are sympathetic to the unfairness of burdening young people with felony records for often minor marijuana transgressions, we trust that state lawmakers and district attorneys will work to mitigate such inequities.”³²⁹

Illustrating the various elements of contention that were faced by Amendment 64 in the month leading up to the 2012 election, polls showed amendment 64 ahead by a small margin, leaving many in a state of anxious anticipation. Although the polling was

³²⁵ <<http://denver.cbslocal.com/2012/10/15/hancock-to-encourage-voters-to-reject-marijuana-ballot-initiative/#.UHwijX7s4i8.twitter>> (Accessed November 14, 2012).

³²⁶ <http://www.denverpost.com/news/marijuana/ci_21773748/colorado-marijuana-legalization-amendments-lead-shrinks> (Accessed November 14, 2012).

³²⁷ <<http://www.colorado.gov/cs/Satellite?c=Page&childpagename=GovHickenlooper%2FCBONLayout&cid=1251630730489&pagename=CBONWrapper>> (Accessed November 14, 2012).

³²⁸ Ibid.

³²⁹ Ibid.

somewhat limited, a Denver Post poll found that “of 614 likely voters found that 48 percent of respondents support the measure, while 43 percent oppose it.”³³⁰ Only adding to the momentous buildup to the 2012 election, the immense amount of support and effort put into the campaigns for Initiative 502, Measure 80, and Colorado’s Amendments 64, are indicative that society was largely moving away from the antiquated drug war policies and mindset, and is ready for a more rational policy when it comes to personal use of marijuana. While there are still many that are not ready for this amount of change, in Colorado, Washington, and Oregon, it would up to the voters to take the lead in the new direction for this country and the world.

Election Day 2012

Arguably one of the most historically important elections in recent United States history, Barack Obama’s presidential victory in 2008 was soon overshadowed by a looming economic crisis that would soon come to characterize much of his first term in office. Coming into office on a wave of idealistic youth voters, and being the United States first African-American President, Barack Obama was viewed by many as a polarizing figure. Inspiring higher than average voter turnout, Barack Obama's message of hope was, at times blunted by the harsh reality of a substantial opposition and an unfavorable economy. Assisting in the passage of a fairly comprehensive overhaul of the medical system sarcastically dubbed “Obama-care,” that worked towards closing the gap between people with health insurance and those without it, Obama had a tough fight on

³³⁰ <http://www.denverpost.com/news/marijuana/ci_21773748/colorado-marijuana-legalization-amendments-lead-shrinks> (Accessed November 14, 2012).

his hands in his bid for re-election in 2012, as the number one issue on people's minds was the economy.

As election results and projections began to pour into media outlets, the weeks and months of preparation all condensing into a flurry of red states and blue states, the will of the people came to be expressed quite clearly, with Obama taking the lead over Romney in Electoral College votes due to his winning several key swing states. Eventually, the totals returned with Barack Obama earning 332 Electoral College votes to Romney's 206; news of Barack Obama's re-election was soon followed by results from states such as Massachusetts, Colorado, and Washington projecting victories of an equally historic nature.³³¹

In Massachusetts, the success of Question 3 was determined by 63% of voters voting in favor³³² of allowing those “diagnosed with a debilitating medical condition, such as cancer, glaucoma, HIV-positive status or AIDS, hepatitis C, Crohn’s disease, Parkinson’s disease, ALS, or multiple sclerosis”³³³ access to medical marijuana, making it the 18th state in the United States to do so. Marking a substantial victory for those affected by these ailments, this addition only adds to the case made by a growing number of people and states, that marijuana does indeed have medicinal value, and thus should not be a Schedule I drug under the controlled substances act.

³³¹ <<http://www.politico.com/2012-election/>> (Accessed November 20, 2012).

³³² <<http://www.cnn.com/election/2012/results/state/MA/ballot/01>> (Accessed November 20, 2012).

³³³ <http://www.sec.state.ma.us/ele/ele12/ballot_questions_12/quest_3.htm> (Accessed November 20, 2012).

Further indicative of this rapidly expanding position, a majority of voters in both Colorado and Washington decided to go one step farther than allowing access to medical marijuana, and on November 6, 2012 voted in their respective states to decriminalize personal possession for adults over the age of 21. Creating a historic night, Washington state, voters not only decided to decriminalize adult marijuana consumption with a majority of 55% of the vote, but they also passed referendum 74 which allowed for same-sex marriage with 53% of the votes.³³⁴ Illustrating the much more open and accepting perspective that is beginning to characterize much of this country, success in Washington was bolstered by the passing of Amendment 64 in Colorado, which also allows adults over twenty-one to possess and consume marijuana in a manner that does not harm others. Passing with the support of 55% of Colorado voters, although not a landslide by any means, the fact that 1,291,771 Colorado citizen's alone stood up for a rationalization of marijuana laws in this country is a significant step forward.

Proving that there was still much ground to be gained, Oregon's Measure 80 was defeated, with 54% of Oregon voters voting against it.³³⁵ In a much closer race, 49% or 505,613 people in Arkansas voted to allow Medical Marijuana, while 51% or 535,755 voters opposed.³³⁶ While the political victories in Washington and Colorado are indeed noteworthy, a myriad of challenges remains. Foremost amongst these challenges would be the federal law classifying cannabis as a Schedule I drug. Nonetheless, the reaction of

³³⁴ <<http://www.cnn.com/election/2012/results/state/WA/ballot>> (Accessed November 20, 2012).

³³⁵ <<http://www.cnn.com/election/2012/results/state/OR>> (Accessed November 21, 2012).

³³⁶ <<http://www.cnn.com/election/2012/results/state/AR>> (Accessed November 21, 2012).

state and federal officials was something that many would anxiously await, cautious not to celebrate too much, as the wake of the 2012 election would leave much to be sorted out.

Reaction

Following the success of Washington's Initiative 502 and Colorado's Amendment 64, one of the first steps taken to protect these historic pieces of legislation was introduced by Democratic U.S. Rep. Diana DeGette under a bipartisan effort that has been termed the "Respect States' and Citizens' Rights Act."³³⁷ According to the *Denver Post*, "The bill seeks to exempt states where voters have legalized pot from the federal Controlled Substances Act provision on marijuana."³³⁸ Garnering a wide range of supporters from some unlikely sources Republican U.S. Rep. Mike Coffman explained, "I strongly oppose the legalization of marijuana, but I also have an obligation to respect the will of the voters given the passage of this initiative, and so I feel obligated to support this legislation."³³⁹ Even Colorado Governor John Hickenlooper has stated, "voters were loud and clear on Election Day... [And] we will begin working immediately with the General Assembly and state agencies to implement Amendment 64."³⁴⁰ On December 10, 2012, just over a month after the 2012 election, governor Hickenlooper signed the executive order that "formalizes the amendment as part of the state Constitution and makes legal the personal use, possession and limited home-growing of marijuana under

³³⁷ <http://www.denverpost.com/breakingnews/ci_22011789/colorado-democrats-urge-u-s-attorney-general-marijuana> (Accessed November 22, 2012).

³³⁸ Ibid.

³³⁹ Ibid.

³⁴⁰ <<http://kdvr.com/2012/12/10/governor-signs-amendment-64-marijuana-officially-legal-in-colorado/>> (Accessed December 10, 2012).

Colorado law for adults 21 years of age and older,” making Colorado the second state in the country to do so.³⁴¹ Only adding to the layers of uncertainty, until the infrastructure is in place to accommodate the new law, “it is still illegal to buy or sell marijuana or to consume marijuana in public.”³⁴²

In Washington, Initiative 502 and Referendum 74 both took effect as of midnight on December 6, 2012, making Washington the first state to legalize adult use of marijuana, and the ninth state to allow for same-sex unions of some kind.³⁴³ With celebratory crowds forming at courthouses across Washington which had opened early to accommodate the jubilant swarms of couples and their loved ones attaining marriage certificates,³⁴⁴ and ecstatic smoky masses that gathered under the Space Needle, the visible effects of these measures speak directly to the both the very real change that can be created through established means such as voting and the increasing pace of progress in the areas of personal freedom.

While many found this occasion to be a cause for celebration, Jonah Spangenthal-Lee, the Seattle police spokesman took the time to post the following response on his department’s official blog, "The police department believes that, under state law, you may responsibly get baked, order some pizzas and enjoy a Lord of the Rings marathon in

³⁴¹ Ibid.

³⁴² Ibid.

³⁴³ <http://www.huffingtonpost.com/2012/12/06/legalizing-marijuana-washington-state_n_2249238.html> (Accessed December 10, 2012).

³⁴⁴ <http://seattletimes.com/html/localnews/2019841023_samesex06m.html> (Accessed December 10, 2012).

the privacy of your own home, if you want to.”³⁴⁵ Despite its reliance on the stereotypical lazy stoner archetype, this somewhat humorous reaction on the part of the Seattle police department is indicative of the evolving perspective of much of this country and planet, when it comes to this particular plant.

Still leaving much work to be done, Initiative 502, much like Colorado’s Amendment 64 leaves any distribution of marijuana in a legal gray area until the infrastructure is created. According to a statement released by the Washington State Liquor Control Board, the entity that has been tasked with creating the infrastructure for the legal growth, sales, and distribution of legal marijuana, “essentially, a system will be built from the ground up. The initiative provides the WSLCB until December 1, 2013, to craft rules for implementation. We expect that it will take the full year to craft the necessary rules which will provide the framework for the new system.”³⁴⁶ Already creating new jobs, the Washington State Liquor Control Board quickly indicated a need to “hire 40 additional staff and bring an outside expert in marijuana to implement the voter-approved marijuana legalization measure.”³⁴⁷ With countless more jobs being created by the need for infrastructure, the pressure is very high for both Colorado and Washington, which, if successful, will serve as templates for numerous other states to follow. Although these two states stood-alone against federal law, within a few weeks of their successful efforts, many other states began openly contemplating similar legislation,

³⁴⁵ <<http://abcnews.go.com/US/washington-pot-smokers-celebrate-legal-status-fed-agents/story?id=17893882#.UNyCVqxn-dk>> (Accessed December 12, 2012).

³⁴⁶ <<http://www.liq.wa.gov/pressreleases/statement-following-i502>> (Accessed December 12, 2012).

³⁴⁷ <<http://blogs.seattletimes.com/politicsnorthwest/2012/11/30/marijuana-legalization-measure-requires-40-staffers-and-a-pot-expert/>> (Accessed December 12, 2012).

while several thousand others took to the petition forum on Whitehouse.gov to show their support and to influence the president to respect the laws passed by these states.

Somewhat hesitant to release an official response, the reactions of Washington D.C. and of the President were anxiously awaited by citizens all across the country, and perhaps most in Colorado and Washington.

After over a month of waiting for some sort of response, at last newly reelected President Barack Obama did an interview with Barbara Walters on December 11th, in which he briefly discussed the recently created policies of Washington and Colorado. Quoted as saying “we’ve got bigger fish to fry,” President Obama also said, “it would not make sense for us to see a top priority as going after recreational users in states that have determined that it's legal.”³⁴⁸ While this statement seems promising for many, it also leaves much unsaid in regards to businesses that will cater to these recreational users. Although President Obama told Walters “he does not—at this point—support widespread legalization of marijuana,” he indicated, “we're going to need to have a conversation about, how do you reconcile a federal law that still says marijuana is a federal offense and state laws that say that it's legal?”³⁴⁹ While many could view this as a step in the right direction, many are quick to point out that “the Justice Department has continued raids on pot providers—including in states where they are legal—in an approach that experts say is more aggressive than that of Obama's predecessor, George W. Bush.”³⁵⁰ This statement

³⁴⁸ <<http://abcnews.go.com/Politics/OTUS/president-obama-marijuana-users-high-priority-drug-war/story?id=17946783#.UNyWWaxn-dk>> (Accessed December 14, 2012).

³⁴⁹ Ibid.

³⁵⁰ Ibid.

did little to ease the anxiety of entrepreneurs in these forming markets; it is clear that there is still much work to be done in order to resolve these conflicts on a level that will work for all involved parties. Although working at the state level has proven to be an effective interim solution that has begun to illustrate the will of the people, the real work must be done on a congressional and federal level in order to bring about real change on a national scale.

Viewed as a whole, the historical importance of the 2012 election is unavoidable. Whether one speaks of the re-election of this country's first African-American president, Massachusetts becoming the eighteenth state to legalize medical marijuana, Washington becoming the ninth state to legalize same-sex marriage, or Washington and Colorado's groundbreaking effort to reduce restrictions on personal freedoms in the form of decriminalizing adult marijuana consumption, the effects of this election cycle clearly indicate that individual voters can make a difference and that young voters are finally realizing their part and power in the election process. A further indication of an evolution of thought in regards to personal freedom, prohibition, and drastically dated laws, the efforts of the countless volunteers that made initiative 502 and Amendment 64 successful were clearly not wasted, and further contribute to a widening of a long overdue conversation. Having sacrificed the lives and futures of too many people of all ages to laws that only serve to overpopulate our prisons, waste billions of dollars every year, and prevent this country from collecting much needed tax revenue, it will be up to Colorado and Washington to prove that decriminalization can be accomplished in an organized and controlled manner that will prove beneficial to both these states and the rest of the country. Leaving many miles yet to be covered, what is certain is that drive towards a

more logical marijuana policy has indeed begun. While many have set timetables only to see them fade into memories, the promise held in these two western strongholds will help to give other the courage and strength to continue to fight for what they believe in.³⁵¹

Legislative Responses

Building on the momentum created in the 2012 elections, February of 2013 brought with it the beginning of a major push towards a more logical policy concerning marijuana in this country headed by Colorado representative Jared Polis and Earl Blumenauer of Oregon. Introducing two pieces of legislature with a promise of several more to follow, Polis's bill, H.R. 499, or the Ending Federal Marijuana Prohibition Act of 2013, that in many ways resembled H.R. 2306: Ending Federal Marijuana Prohibition Act of 2011, that was introduced by Massachusetts representative Barney Frank and supported by several other representatives including Polis and Ron Paul. While the clearly stated goal of both bills was to end federal marijuana prohibition, both were also designed to "amend the Controlled Substances Act so that marijuana would no longer be considered a scheduled drug, allowing states to establish their own laws and regulations."³⁵² One of the new additions to the 2013 version of this act was the "transfer of Jurisdiction From Drug Enforcement Administration to Bureau of Alcohol, Tobacco, Firearms and Explosives...[and the redesignation of] the Bureau of Alcohol, Tobacco, Firearms, and Explosives...[to] the Bureau of Alcohol, Tobacco, Marijuana, Firearms and

³⁵¹ Continuing the trends set in the elections of 2012, and 2014, the 2016 election brought with it the passage of medical cannabis initiatives in Arkansas, Florida, Montana, and South Dakota. More notably, California, Massachusetts, Maine, and Nevada passed laws that allowed for adult recreational consumption of cannabis very similar to those of Colorado and Washington.

³⁵² <<http://www.opencongress.org/bill/112-h2306/text>> (Accessed February 20,2013).

Explosives.”³⁵³ As well as the “redesignation of Alcohol and Tobacco Tax and Trade Bureau as Alcohol, Tobacco, and Marijuana Tax and Trade Bureau.”³⁵⁴ Interestingly enough, both acts conclude with similar statements regarding drug testing, stating “neither this Act nor any amendment made by this Act shall be construed to affect Federal drug testing policies.”³⁵⁵ Although this is no doubt a small concession in an attempt to garner as much support as possible, considering that marijuana has the most long lasting presence in drug screens, this also represents an issue that must be dealt with down the road.

The second component of Polis and Blumenauer’s two-pronged approach is the Marijuana Tax Equity Act. Designed to work with the Ending Federal Marijuana Prohibition Act of 2013, the Marijuana Tax Equity Act calls for the imposition of “a 50 percent excise tax on the first sale of marijuana, from the producer to the next stage of production, usually the processor.”³⁵⁶ In addition it also calls for an approach “similar to the rules within the alcohol and tobacco tax provisions, an occupational tax will be imposed on those operating in marijuana, with producers, importers, and manufacturers facing an occupation tax of \$1,000/a year and any other person engaged in the business facing an annual tax of \$500/a year.”³⁵⁷ While some may find the 50 percent excise tax a bit extreme, this bill also called for “the IRS to produce a study of the industry after two

³⁵³ H.R. 499 <<http://thomas.loc.gov/cgi-bin/query/F?c113:1:/temp/~c113l8P9bp:e1462:>> (Accessed February 20, 2013).

³⁵⁴ Ibid.

³⁵⁵ Ibid.

³⁵⁶ <<http://polis.house.gov/news/documentsingle.aspx?DocumentID=318723>> (Accessed February 20, 2013).

³⁵⁷ Ibid.

years, and every five years after that, and to issue recommendations to Congress to continue improving the administration of the tax,” which presents the possibility of some reduction in this percentage.³⁵⁸

Indicative of these two representatives’ very clear understanding of the massive issue that they were attempting to tackle, they also released a document in conjunction with the two pieces of legislation to better explain their position and the inherent problems titled *The Path Forward: Rethinking Federal Marijuana Policy*. In this document, Blumenauer and Polis gave an overview of cannabis, including a brief history of the plant in the United States, and a list of facts and comparisons of marijuana compared to alcohol and tobacco, before closing that section with the statement “the facts suggest that U.S. policies on marijuana are of questionable value as we seek to protect the health and safety of Americans.”³⁵⁹ The next section “The Cost of the War on Marijuana” highlights some of the quantifiable statistics of war on the citizens of the United States, proclaiming, “the war on marijuana is waged at a tremendous cost of money and impact on human lives.” Going on to include facts such as “over 660,000 people in 2011 were arrested for marijuana possession” and that “enforcement of federal marijuana laws (including incarceration) costs a minimum of \$5.5 billion dollars each year,” perhaps the most disturbing fact cited by this document has to do with the inherently racist aspect of

³⁵⁸ Ibid.

³⁵⁹ Jared Polis and Earl Blumenauer, *The Path Forward: Rethinking Federal Marijuana Policy*, 2013, <http://blumenauer.house.gov/images/stories/2013/The_Path_Forward_Rethinking_Federal_Marijuana_Policy.pdf> (Accessed February 20, 2013).

the execution of this failed policy, namely that “African Americans are 13 times more likely to go to jail for the same drug-related offense than their white counterparts.”³⁶⁰

In addition to these appalling statistics, this document also has a section devoted to the evolution of public opinion concerning marijuana, which has been increasingly turning in favor of allowing adults the freedom to choose. Closing with the realization that “the American public is far ahead of the federal government on marijuana regulations and policy,” Polis and Blumenauer were very clear in their in their position that “it is time for the federal law to reflect this reality.”³⁶¹

After brief summaries of both medical marijuana, and the federal policy on medical marijuana, and the success of recent efforts in Colorado and Washington to legalize adult marijuana consumption, “The Path Forward” then outlines the numerous challenges and conflicts that exist because of the contrast between federal law and a growing number of states. Included in this list are challenges in enforcement, federal tax code, banking, and business, as well as the barriers to medical marijuana research, that have been present for far too long despite the fact that the United States government has supplied a very select group of people with medical marijuana for over thirty years. The final section of Polis and Blumenauer’s very informative document, labeled “Opportunities” illustrates with its title the sanguine perspective that a growing number of people in this country are beginning to have regarding the potential of marijuana. Considering this document accompanied the legislation that it did, it is perhaps not surprising that Polis and Blumenauer’s first suggestion to congress was the taxation and

³⁶⁰ Ibid., 6.

³⁶¹ Ibid.

regulation of marijuana, which according to some estimates could generate tax revenue upwards of “\$20 billion annually.”³⁶²

Striking at the heart of the many of the issues affecting the United States and so many other countries around the world, Polis and Blumenauer proclaimed that “this represents a unique opportunity to save ruined lives, wasted enforcement, and prison costs, while simultaneously creating a new industry, with new jobs and revenue that will improve the federal budget outlook.”³⁶³ With economic downturn in much of the global economy, the third suggestion made by these two representatives seems to be an issue that any intelligent person would support. Following the lead of states like Colorado and Washington and “removing industrial hemp from the definition of marijuana,” this recommendation represents a substantial move forward that has already been embraced by many countries in Europe, and more directly would provide farmers in this country with a “new agricultural industry,” which could help save countless trees, forests and ecosystems that would no longer be needed to be ravaged for the production of paper.³⁶⁴ American society would also benefit from the hundreds of other products that could be made from hemp and hemp byproducts, from clothes and cars to fuel and housing materials. Additionally, Polis and Blumenauer also sided with allowing “states to enact existing medical marijuana laws without federal interference,” as well as allowing “the marijuana industry to operate in a normal business environment.”³⁶⁵ As this report mentions, a growing number of people around the country, and indeed around the world,

³⁶² Ibid., 14.

³⁶³ Ibid.

³⁶⁴ Ibid., 15.

³⁶⁵ Ibid.

are beginning to recognize that to deny people a medicine that could improve their quality of life, and in many cases even save it, is absurd, and this policy needs to be changed.

In addition to respecting the existing laws that have been passed, Polis and Blumenauer also suggest, “Congress should immediately remove tax and banking barriers to allow legitimate business to operate in states that have legalized marijuana for medical or recreational use.”³⁶⁶ Even more importantly, at least from a banking perspective, Polis and Blumenauer argue that “congress should also protect banks from federal fines or seizures simply because they accept deposits from medical marijuana businesses.”³⁶⁷ As mentioned in previous chapters, this is one of the biggest problems faced by all of those who have attempted to abide by state laws and fulfill the needs of medical marijuana patients; correcting these conflicts will be an essential part of allowing these businesses to function properly. The final suggestion made by the two representatives is that “members of congress working on these issues should formalize their working relationship, [in order to create] a Sensible Drug Policy Working Group [that] would educate members of congress and their staff on the facts of marijuana use and national drug policy.”³⁶⁸ Cognizant of the fact that cultivating the amount of change in perspective necessary to reach all of these goals will take a lot of collaborative work, these efforts do in many ways provide a sense of optimism, as well as a clearly stated and cohesive argument that will be easily followed. Having set the stage for some very

³⁶⁶ Ibid.

³⁶⁷ Ibid.

³⁶⁸ Ibid., 16.

necessary national growth, the efforts of countless professionals and volunteers in Colorado, Washington, Oregon, and around the country have led to a considerable amount of public discourse, which as time progresses will only turn in favor of more logical policies that will not only prove more economically beneficial, but will also seek to restore some of the long-lost respect that many desire to have for their country. Too many millions of lives have been sacrificed in attempts at criminalizing antiquated concepts of morality, and as these states and a handful of representatives have shown it is time for significant changes on a much larger scale.

Task Force Recommendations

Although Colorado's Amendment 64 was quite clear on many issues, given the immensity and historic nature of the task it undertook, it left many details on the implementation to be determined at a later date. Assigned by Colorado's Governor John Hickenlooper to research, discuss, and make recommendations on this subject, the Amendment 64 Task Force was co-chaired by Barbara Broil the executive director of the Colorado Department of Revenue, and Jack Finlaw, the Chief Legal Counsel to the office of the Governor.³⁶⁹ The Task Force itself consisted of five working groups³⁷⁰ that were then comprised of "members of the Colorado General Assembly and representatives of the Attorney General's office, state agencies, law enforcement, the defense bar, district attorneys, the medical profession, the marijuana industry, the Amendment 64 campaign, marijuana consumers, academia, local governments and Colorado's employers and

³⁶⁹ <<http://www.scribd.com/doc/130341775/Task-Force-Report-on-the-Implementation-of-Amendment-64>> (Accessed March 20, 2013).

³⁷⁰ 1. Regulatory Framework 2. Local Authority and Control 3. Tax, Funding, and Civil Law 4. Consumer Safety and Social Issues 5. Criminal Law.

employees.”³⁷¹ Having spent the months of January and February tangling with the multiplicity of issues buried within this important amendment, on March 13, 2013, the Task Force released the *Task Force Report on the Implementation of Amendment 64*. Featuring numerous recommendations, the beginning of the report lists the following as its guiding principles,

Promote the health, safety, and well-being of Colorado’s youth; be responsive to consumer needs and issues; propose efficient and effective regulation that is clear and reasonable and not unduly burdensome; create sufficient and predictable funding mechanisms to support the regulatory and enforcement scheme; create a balanced regulatory scheme that is complementary, not duplicative, and clearly defined between state and local licensing authorities; establish tools that are clear and practical, so that interactions between law enforcement, consumers, and licensees are predictable and understandable ; ensure that our streets, schools, and communities remain safe ; develop clear and transparent rules and guidance for certain relationships, such as between employers and employees, landlords and tenants, and students and educational institutions ; take action that is faithful to the text of Amendment 64.³⁷²

Going on to touch upon everything from banking, transportation, business mechanics, adulterants, and juvenile possession, this rather extensive documents begins with endorsement for two bills in the executive summary, namely the “Driving Under the Influence (DUID) bill and a bill to authorize the cultivation of industrial hemp,” the latter being a tremendous move forward for a country that has denied both the immensely positive role that hemp could play in our economy and any knowledge thereof for over half a century while sitting idle as ecosystems are destroyed around the world for paper production. Highlighting the multifaceted importance of this amendment, the role of hemp in revitalizing our economy and our environment, assuredly cannot be ignored much longer.

³⁷¹ Ibid., 5.

³⁷² Ibid., 7.

Making a total of fifty-eight recommendations which it then arranged into seventeen categories, the Task Force's reports begins with regulatory structure and a proposal for a vertical integration model similar to that of the existing medical marijuana industry. Advocating the 70/30 model in which every dispensary is required to grow at least 70% of the inventory they sell, "under this model, cultivation, processing and manufacturing, and retail sales must be a common enterprise under common ownership."³⁷³ Making several other points on this subject the most interesting and for some controversial would be the suggestion that the state of Colorado "provide for a grace period of one (1) year that would limit new applications for adult-use marijuana licenses to medical marijuana license holders in good standing, or applicants that had an application pending with the Medical Marijuana Enforcement Division prior to December 10, 2012."³⁷⁴ While this is intended to ease the transition from a strictly medical distribution model to a recreational structure, this suggestion will also limit the fundraising capacity of the department of revenue for this same period, as is discussed in later sections of the report. Additionally the Task force recommends against a state-run dispensary model, in favor of the state assuming a regulatory role only, which is much more in line with the stated purpose of Amendment 64, as well as allowing for local governments to enact further regulations in their own communities, asserting "local counties and municipalities should neither be required to adopt, nor be prohibited from adopting, additional local standards."³⁷⁵ The next recommendation would be to further

³⁷³ Ibid., 16.

³⁷⁴ Ibid.

³⁷⁵ Ibid., 19-20.

ease the implementation of Amendment 64 by converting the Medical Marijuana Enforcement Division into the Marijuana Enforcement Division (MED), then allowing this new entity to “take advantage of the existing infrastructure, resources, and staff expertise developed over the past few years in regulating medical marijuana.”³⁷⁶ Drawing upon the experiences of those already involved in the medical marijuana industry, according to the Task Force “will facilitate a quicker and smoother transition to adult-use marijuana than if a new division were created.”³⁷⁷

The second and third sections of the Task Force report are devoted to Regulatory Financing, and Taxation, respectively. Among the recommendations made on these issues the Task Force suggest using “the fund balance from the Medical Marijuana Licensing Cash Fund ... as a funding source for the Marijuana Enforcement Division in FY 2013-14,” after which point “revenue from all sales taxes, application and license fees, and other fees generated from adult-use marijuana and medical marijuana should be deposited in the General Fund,” which will be used “to support the spending authority for a new Marijuana Enforcement Division for five years, through FY 2017-18, after which this arrangement should be reviewed by the General Assembly.”³⁷⁸

After carefully reviewing Amendment 64 and the existing taxation standards and Colorado laws, the Task Force found that although the amendment itself was “facially constitutional,” the taxation aspect did not, however, comply with Colorado’s Tax Payer

³⁷⁶ Ibid., 22.

³⁷⁷ Ibid.

³⁷⁸ Ibid., 23.

Bill of Rights (TABOR).³⁷⁹ Because of this, “Another vote of the majority of the people of the State of Colorado is required, through a TABOR-compliant referendum or citizen initiative, to impose specific taxes on adult-use marijuana.”³⁸⁰ After suggesting that the General Assembly work towards passing a “Marijuana Products Sales Tax,” the Task Force report then stated that based on their suggestions for a vertically integrated model that favors existing medical marijuana facilities for the first year, and caps their applications at \$500 as opposed to \$5000 for new facilities, the “limitations on potential revenue could leave the new Marijuana Enforcement Division under-funded to handle its formidable new responsibilities.”³⁸¹ However, some have argued that this problem could simply be remedied by allowing new businesses to apply for licenses at the cost of \$5000 each. As for the level of taxation, the Task Force declined to give specific recommendations, as they could not come to a consensus, stating only that it had been vocalized by individual members that the rate should go no higher than 25%, while many others “believed that a 25% sales tax would be too high, [thus] encouraging the survival of the illegal market and increasing the incidence of home cultivation among private citizens.”³⁸² Illustrating the complexity of the issues dealt with by the Task Force, the real test will be in striking an appropriate balance that will provoke validity and sustainability, and will allow Colorado to continue to lead the way in creating a functional model in legal marijuana regulation.

³⁷⁹ Ibid., 28.

³⁸⁰ Ibid.

³⁸¹ Ibid.

³⁸² Ibid., 30.

Among the numerous suggestions made by the Task Force there are several others of significant importance including the “separation of inventories in dual-use cultivation and manufacturing, a residency requirement of two years for those desiring to own a licensed marijuana establishment, the creation of a responsible marijuana retailer program,” as well as recommending that the “General Assembly clarify that all persons aged twenty-one years or older—resident or a visitor—shall be permitted to purchase marijuana for personal use.”³⁸³ However, to the last recommendation, “the Task Force further recommends that the General Assembly consider setting per-transaction purchase limits that are more restrictive for non- residents than for residents,” no doubt to prevent large scale diversion out of state. Additionally, the Task Force also advocates very clear labeling and packaging standards for potency, as well as warning labels, and potency limits for infused products, and a uniform serving size, all in an effort to “prevent accidental ingestion of marijuana products by children.”³⁸⁴ It is worth noting that an essential aspect of creating a safe product will also play a role in building a legitimate, functional and regulated market.

Speaking to one of the largest issues that has been plaguing existing medical marijuana businesses around the country for quite some time, “the Task Force recommends that the General Assembly consider all lawful alternatives to assist marijuana businesses to access the banking system, which includes banks, credit unions, and other financial institutions.”³⁸⁵ Moreover, the Task Force also recommends that “The

³⁸³ Ibid., sections 5.4, 4.1, 7.1, 4.3.

³⁸⁴ Ibid., 55.

³⁸⁵ Ibid., 98.

General Assembly should allow legal marijuana businesses to claim state income tax deductions for expenditures that would be eligible to be claimed as federal income tax deductions, but are disallowed by the federal Internal Revenue Code (IRC), Section 280E,” as well as advocating passage of a resolution requesting that the federal government reform IRC, Section 280E, not to be applicable to legal marijuana businesses in Colorado.”³⁸⁶ Cognizant of the much larger issues still at hand, the task force also advises the Governor to “contact and attempt to create a bi-partisan coalition of the Colorado congressional delegation [and state governors] to advocate for reform of IRC, Section 280E.”³⁸⁷ Although it is by no means perfect, from an overall perspective the Task Force report is a very well-thought-out list of recommendations. While the next steps will be in the hands of the legislature and ultimately the federal government and Department of Justice, if and when they ever decide to issue their official response to the will of the voters of Colorado and Washington and the growing plurality of states allowing medical marijuana, a very clear plan of action has been established in Colorado to help bridge this gap towards a much more logical future.

³⁸⁶ Ibid., 100.

³⁸⁷ Ibid.

CHAPTER VI

AFTERMATH: THE 2012 ELECTION

After waiting the better part of a year since the groundbreaking 2012 election cycle for a response from the federal government regarding the actions of the voters of Washington State and Colorado, Attorney General Eric Holder and Deputy Attorney General James Cole finally made an announcement on August 29, 2013. Issuing a *Memorandum for All United States Attorneys*, Deputy Attorney General James Cole stated that “congress has determined that marijuana is a dangerous drug and that illegal distribution and sale of marijuana is a serious crime ... [and that] the department of justice is committed to enforcement of the CSA consistent with those determinations”³⁸⁸ To this end Cole cited several of the goals of the Department of Justice regarding enforcement of marijuana and the Controlled Substances Act (CSA), including protecting against “ the distribution of marijuana to minors; revenue from the sale of marijuana from going to criminal enterprises, gangs and cartels;[and] the diversion of marijuana from states where it is legal under state law in some form to other states.”³⁸⁹ Cole went on to include in the goal of the DOJ to guard against “state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal

³⁸⁸James Cole, *Guidance Regarding Marijuana Enforcement* (Washington D.C., August 29, 2013).

³⁸⁹ Ibid.

activity; violence and the use of firearms in the cultivation and distribution of marijuana; drugged driving; growing of marijuana on public lands; [and] preventing marijuana possession or use on federal property.”³⁹⁰

With that out of the way, Cole then stated that “the guidance of the memorandum rests on its expectation that states and local governments that have enacted laws authorizing marijuana-related conduct will implement strong and effective regulatory and enforcement systems that will address the threat those state laws could pose to public safety, public health and other law enforcement interests, ” and that “in jurisdictions that have enacted laws enacting legalizing marijuana in some form and that have also implemented strong and effective regulatory and enforcement systems to control the cultivation, distribution, sale, and possession of marijuana, conduct in compliance with those laws and regulations is less likely to threaten the federal priorities set forth.”³⁹¹ While this could be interpreted as an evolution of the federal government’s position on the subject, Cole also warns that “if state enforcement efforts are not sufficiently robust to protect against the harms set forth above, the federal government may seek to challenge the regulatory structure itself in addition to continuing to bring the individual enforcement actions, including criminal prosecutions, focused on those harms.”³⁹²

Cole also gives some advice to prosecutors regarding “exercising prosecutorial discretion” in which he stated that “prosecutors should not consider the size or commercial nature of a marijuana operation alone as a proxy for assessing whether

³⁹⁰ Ibid.

³⁹¹ Ibid.

³⁹² Ibid., 3.

marijuana trafficking implicates the Department's enforcement priorities listed above...[Instead] the primary question in all cases- and in all jurisdictions-should be whether the conduct at issue implicates one or more of the enforcement priorities listed above."³⁹³ Having waited for nine months for some response, the subtle vagaries of this memo are for many reassuring that the tide is changing in regards to marijuana policy, however, as indicated, change will only really be possible when Congress comes to the same conclusion that millions of voters across the country have come to, and they decide to stop allowing marijuana prohibition to divert billions of dollars or revenue to "large scale criminal enterprises, gangs, and cartels," and start taxing, regulating, and profiting from a business that a growing majority of voters support. Illustrative of the conflicted position of the government at this point, the closing line of the memo reads, "Finally, nothing herein precludes investigation or prosecution, even in the absence of any one of the factors listed above, in particular circumstances where investigation and prosecution otherwise serves important federal interest."³⁹⁴

While this is definitely not the response advocated by eight former heads of the DEA and an agent of the United Nations that called for President Obama to "nullify Colorado and Washington's new laws legalizing recreational marijuana use," it is only further indication of the amount of uncertainty that still exists for those involved in cultivating, distributing, and procuring cannabis, medical or otherwise.³⁹⁵ With each different municipality attempting to navigate a proverbial minefield, Colorado and

³⁹³ Ibid.

³⁹⁴ Ibid., 4.

³⁹⁵ <http://www.huffingtonpost.com/2013/03/05/dea-marijuana_n_2810347.html> (Accessed November 8, 2013).

Washington State have been making a lot of progress in creating new laws that will provide a foundation for each new state going forward. Additionally serving as an arena for those who opposed the passage of Amendment 64 and Initiative 502 to attempt to push back against laws that they oppose, one of the most widely contested proposed laws in Denver tried to “prohibit smoking on private property if it is visible to the public, such as on a front porch or in a car, or if the odor of pot could be detected from a neighboring property.”³⁹⁶ After much public outcry and at least one widely circulated petition, saner minds prevailed, and that portion of the city ordinance was amended, although perhaps not enough for some, as another petition surfaced almost immediately after the announcement of the changes to the proposed laws.³⁹⁷

Another area that is causing conflict is the issue of taxation, more precisely how high to set the rate. After much debating and political positioning, a compromise was eventually reached with Proposition AA: Retail Marijuana Taxes. Required by Colorado's constitution to submit any tax increases to the voters of Colorado for approval, the proposal would, in turn, require a vote, which would take place on November 5, 2013. Proposing the imposition of a “15 percent state excise tax on the average wholesale price of retail marijuana when the product is first sold or transferred by a retail marijuana cultivation facility, with public school construction receiving the first \$40 million of any annual taxes collected,” Proposition AA also calls for a “10 percent sales tax on retail

³⁹⁶ <http://www.denverpost.com/marijuana/ci_24284316/denver-floats-new-rules-that-could-make-even> (Accessed November 8, 2013).

³⁹⁷ <<https://www.change.org/petitions/denver-city-council-the-new-version-of-the-marijuana-ordinance-is-still-unacceptable-do-not-criminalize-adults-for-using-marijuana-on-private-property>> (Accessed November 8, 2013).

marijuana and retail marijuana products in addition to the 2.9 percent state sales tax, to increase the funding for regulation and enforcement of the retail marijuana industry.”³⁹⁸ Additionally, Proposition AA also “direct[s] 15 percent of the revenue collected from the 10 percent state sales tax to cities and counties where retail marijuana sales occur; and allow[s] the state legislature to increase or decrease the excise and sales tax on retail marijuana as long as the rate of either does not exceed 15 percent.”³⁹⁹

As is the nature of compromises, many were displeased with much of Proposition AA. Among the strongest arguments against would be that “the new state taxes created by the measure may be so high that they undercut one of the intended purposes of Amendment 64, which is to encourage consumers to purchase marijuana from a licensed store rather than from the underground market.”⁴⁰⁰ Also taking issue with the addition of the state sales tax, those against Proposition AA argue that “Amendment 64 requires the establishment of an excise tax, but does not require the sales tax created by this measure...[and that] revenue from application and licensing fees, as well as the existing 2.9 percent state sales tax on marijuana, can adequately satisfy the regulatory requirements of Amendment 64.”⁴⁰¹

The most compelling argument of those in favor of Proposition AA is that “the passage of this measure is expected to generate the revenue necessary to support the

³⁹⁸ Research Publication No. 626-1, *2013 State Ballot Information Booklet*, State of Colorado Legislative Council, (Denver: 2013), 19.

³⁹⁹ Ibid.

⁴⁰⁰ Ibid., 23.

⁴⁰¹ Ibid.

robust regulation of this market.”⁴⁰² Utilizing the same language that was used in the Cole Memo, it is clear that the primary intent of those in favor of Proposition AA is to avoid federal conflict on the issue, noting that “an effective regulatory system may discourage federal interference with the industry, as the sale of marijuana remains illegal under federal law.”⁴⁰³ Additionally, supporters argue that “Colorado schools have a projected \$17.9 billion in school construction needs through 2018, and that proposed state excise tax will make more funding available for these needs, as intended by Amendment 64.”⁴⁰⁴

With both sides making several valid arguments voters were left with an important decision to make. While the need to maintain a “robust regulation” of the recreational cannabis industry is indeed crucial as noted by the memo from Deputy Attorney General James Cole, the opposition makes a very valid point that a twenty-five percent tax on recreational cannabis will keep an unknown percentage of sales underground to avoid taxation, thus negating much of the intent of Amendment 64.⁴⁰⁵ Though some may have been conflicted, according to a survey from “Public Policy Polling about the tax measures ... 77 percent of Colorado voters supported both the excise and sales tax proposals. [While] only 18 percent of those surveyed were opposed to increased taxes on legal pot sales.”⁴⁰⁶ Ultimately proving successful, on November 5, 2013, Colorado voters passed Proposition AA, which is projected to “generate roughly

⁴⁰² Ibid., 22.

⁴⁰³ Ibid.

⁴⁰⁴ Ibid.

⁴⁰⁵ Ibid.

⁴⁰⁶ <http://www.huffingtonpost.com/2013/11/05/marijuana-taxes_n_4219133.html> (Accessed November 9, 2013).

\$70 million in additional revenue for the state in 2014.”⁴⁰⁷ As these numbers are still only projections, some “researchers believe the state could see as much as \$130 million in tax revenues annually from retail sales,” however these kinds of number could take a few years to become a reality.⁴⁰⁸

Following the success of Proposition AA, Governor John Hickenlooper took to Twitter with this message “Marijuana, Cheetos & Goldfish all legal in CO. Now we’ll have the \$\$ to regulate, enforce & educate,” indicating with a joke and a nod to earlier comments that he was pleased with the way the voters had responded.⁴⁰⁹ While not everyone was as excited as Governor Hickenlooper after hitting the cannabis tax lottery, the general feeling among citizens was that Colorado is on the right track, and that they were looking forward to “the first recreational marijuana shops in Colorado [opening] their doors for the first time in United States history on Jan. 1, 2014.”⁴¹⁰ Although there are still several kinks waiting to be worked out of the system, Colorado’s role in leading away from the draconian drug laws of the past is being expanded on almost a monthly basis. Having first developed one of the most successful systems of control, enforcement, and regulation in the country for medical marijuana, they are now, along with Washington State, leading the way in providing adults safe access to cannabis for recreational purposes, and creating a tax structure to enhance state revenue generated by cannabis sales.

⁴⁰⁷ Ibid.

⁴⁰⁸ <http://www.dailycamera.com/ci_24301166> (Accessed November 8, 2013).

⁴⁰⁹ <http://www.huffingtonpost.com/2013/11/05/marijuana-taxes_n_4219133.html> (Accessed November 8, 2013).

⁴¹⁰ Ibid.

Taking cues from the success of voters in Colorado and Washington, the elections on November 5, 2013, also proved to be groundbreaking for some smaller localities. In Michigan, a state that passed a medical marijuana law in 2008, the 2013 elections were a chance to extend these policies further in a direction indicated by the success of Amendment 64 and Initiative 502. With the towns of Lansing, Ferndale, and Jackson all including measures that would decriminalize possession of small amounts (less than an ounce) of marijuana on their midterm election ballots, the historical significance of this election is definitely worth noting. By the end of the night of November 5, 2013, it was becoming evident that these three towns in Michigan had indeed made history, joining “Detroit, Grand Rapids, Flint, and Ypsilanti [who had] all passed measures that [reformed] marijuana regulations last year,” alongside Colorado and Washington’s statewide measures.⁴¹¹ With each measure garnering over 60% of the vote, it is becoming increasingly clear that “the public is far ahead of most politicians on this issue.”⁴¹²

However, two months before the election Republican state Representative Mike Callton suggested a plan that indicates that a growing percentage of politicians are beginning to catch on. With a plan that has been affectionately dubbed “pot for potholes,” Callton was attempting to address two problems facing Michigan with one measure, namely, overcrowded prisons, and the state’s “crumbling infrastructure.”⁴¹³ Perhaps turning a little green with envy at the prospect of all the tax revenue that

⁴¹¹ <http://www.huffingtonpost.com/2013/11/05/michigan-marijuana-law-legalization_n_4221350.html> (Accessed November 9, 2013).

⁴¹² Ibid.

⁴¹³ <<http://michiganradio.org/post/pot-potholes-gop-state-lawmaker-wants-legal-marijuana-pay-roads>> (Accessed November 9, 2013).

Colorado and Washington will generate, Callton notes that he has heard “some of the most conservative people say let’s legalize marijuana and tax the heck out of it.”⁴¹⁴

Further illustrating how states other than Colorado and Washington are attempting to deal with the issue of cannabis consumption, medical and otherwise, ten days after the Michigan election, “a bill that would allow pharmacies in Michigan to stock “pharmaceutical grade” medical marijuana passed the Senate Wednesday by a 22-16 vote.”⁴¹⁵ Essentially a very bold piece of legislation, “Senate Bill 660 would, if passed, reclassify medical marijuana to a Schedule II drug in the state, [to be] controlled in a manner similar to drugs such as OxyContin or Percocet.”⁴¹⁶ However, the actual outcome of this effort remains dependent upon the “federal government reclassify[ing] marijuana as a Schedule 2 drug,” something that still seems an unlikely possibility for the near future.⁴¹⁷ While that aspect of the bill would still take a while to implement, the intention was to “establish a second medical marijuana system in Michigan, one that proponents say wouldn’t interfere with a 2008 voter-approved law where patients can grow their own or obtain it from caregivers.”⁴¹⁸ What this legislation would do is “allow doctors to recommend that patients be issued “enhanced” cannabis cards differing from those now carried by 129,000 residents.”⁴¹⁹ Additionally, according to Michigan State Senator Roger Kahn “this bill will give them a pure and pharmaceutical-grade alternative to

⁴¹⁴ Ibid.

⁴¹⁵ <<http://www.thedailychronic.net/2013/26343/michigan-pharmaceutical-grade-medical-marijuana-bill-passes-senate/>> (Accessed November 15, 2013).

⁴¹⁶ Ibid.

⁴¹⁷ <<http://detroit.cbslocal.com/2013/11/13/mich-senate-oks-sale-of-marijuana-at-pharmacies/>> (Accessed November 15, 2013).

⁴¹⁸ Ibid.

⁴¹⁹ Ibid.

homegrown marijuana, so that they'll have the ability to make a choice, and in making that choice, they will have a product that accurately fits the name medical.”⁴²⁰

Although the Midwestern states dominated much of the news cycle of the 2013 elections, Portland, Maine made sure that the Northeast would not be forgotten. Passing Question 1, with roughly “70 percent of the vote,” a majority of Portland’s voters have shown that they are very much in support of decreasing penalties and enforcement of current federal marijuana laws.⁴²¹ Although, like Michigan’s Senate Bill 660, Question 1 is something of a symbolic victory, when communities refuse to support the failed war on drugs, and particularly cannabis prohibition, the legitimacy of such programs becomes increasingly questionable. Having already passed medical marijuana legislation in 1999 with 61 percent of the vote, Portland voters took another important step with Question 1 by decriminalizing “possession of 2.5 ounces of marijuana legal for adults 21 years of age and older.”⁴²² Additionally, it should be noted “in 2009, the Maine Legislature passed a measure... making possession of up to 2.5 ounces of marijuana a civil penalty, punishable by only a civil fine.”⁴²³ Indicating that Maine could be one of the next states to go the way of Colorado and Washington, it is becoming very apparent that the foundation of this unreasonable, arbitrary, and capricious war against cannabis consumers is crumbling with every passing day.

⁴²⁰ <http://www.mlive.com/politics/index.ssf/2013/11/medical_marijuana_could_be_sol.html> (Accessed November 15, 2013).

⁴²¹ <http://www.huffingtonpost.com/2013/11/05/portland-maine-marijuana_n_4221919.html> (Accessed November 16, 2013).

⁴²² <<http://www.mpp.org/states/maine/>> (Accessed November 16, 2013).

⁴²³ Ibid.

Leading the rest of the world in the incarceration of its own citizens, a great many of which are nonviolent offenders, and proving exceedingly influential in dictating the drug policy of countries around the world, the United States also holds the distinction of leading the world in illegal drug use.⁴²⁴ Although states such as Washington, Colorado, California, Maine, and many others have been working tirelessly to reduce the inherent hypocrisy of these policies, several countries around the world have taken even larger steps away from this actively failing policy of criminalizing what is fundamentally a health issue. As mentioned before, the policies of Holland regarding “soft drugs” such as cannabis, have fostered what could be termed “drug tourism,” including such events as the *High Times* Cannabis Cup, however, according to several studies “71.5 percent of US teenagers said it's very easy to get pot, while in the Netherlands, where pot is legal, it's 41.5 percent.”⁴²⁵ In addition to the coffee shop system that has been previously discussed, some of the most significant aspects of the Netherlands’ harm reduction policy are programs such as “needle exchange[s] and safer consumption rooms, decriminalized possession of small quantities of drugs, and the introduction [of] easy-to-access treatment services.”⁴²⁶ Despite decades of failed attempts by countries around the world, the problems associated with drug use, abuse, and addiction have yet to be addressed adequately through punitive measures. Requiring daring solutions to these far-reaching

⁴²⁴ <<http://www.prb.org/Publications/Articles/2012/us-incarceration.aspx>>
<<http://www.cbsnews.com/news/us-leads-the-world-in-illegal-drug-use/>> (Accessed November 22, 2013).

⁴²⁵ <<http://www.eastbayexpress.com/LegalizationNation/archives/2011/09/22/going-dutch-teen-marijuana-use-in-the-us-vs-netherlands-the-full-interview-with-cal-professor-robert-maccoun>> (Accessed November 22, 2013).

⁴²⁶ <<http://www.opensocietyfoundations.org/reports/coffee-shops-and-compromise-separated-illicit-drug-markets-netherlands>> (Accessed November 22, 2013).

problems, it will no longer suffice to simply fill prisons with nonviolent citizens who need help. This is simply unethical and unsustainable.

Portugal is another excellent example of a country taking courageous steps to more effectively deal with the problems associated with drug addiction, “on July 1, 2001, Portugal decriminalized every imaginable drug, from marijuana, to cocaine, to heroin.”⁴²⁷

While many critics have railed against this policy, predicting, “Lisbon would become a drug tourist haven...[and that] usage rates among youths [would] surge,” after being in place for over a decade, it seems as though these critics were far off the mark.⁴²⁸

Beginning their policy experiment with roughly 100,000 addicts, within a decade this number was cut in half, and now “Portugal's drug usage rates are now among the lowest of EU member states.”⁴²⁹ Although this is a bold step, decriminalization is certainly not full-blown legalization, rather “distribution and trafficking [are] still a criminal offense, [however] possession and use is moved out of criminal courts and into a special court where each offender's unique situation is judged by legal experts, psychologists, and social workers.”⁴³⁰ Perhaps even more significant from a harm reduction perspective, “drug related diseases including STDs and overdoses have been reduced even more than usage rates, which experts believe is the result of the government offering treatment with no threat of legal ramifications to addicts.”⁴³¹ Proving its effectiveness within a short period of time, “the number of new HIV cases caused by using dirty needles to inject

⁴²⁷ <<http://www.businessinsider.com/portugal-drug-policy-decriminalization-works-2012-7#ixzz2lTOqgXje>> (Accessed November 22, 2013).

⁴²⁸ Ibid.

⁴²⁹ Ibid.

⁴³⁰ Ibid.

⁴³¹ Ibid.

heroin, cocaine and other illegal substances plummeted from nearly 1,400 in 2000 to about 400 in 2006.”⁴³² Providing a very powerful counterpoint to the policies of much of the United States, the Portuguese experiment has proven to be a much more successful way of dealing with the very real problems of addiction and drug abuse.

In a document titled, *Drug Decriminalization in Portugal: Lessons for Creating Fair and Successful Drug Policy* in 2009, the Cato Institute, a Libertarian think tank has detailed the successes of the Portuguese experiment from a perspective based upon “individual liberty, limited government, free markets and peace.”⁴³³ Created in 1977 by Ed Crane with the funding and assistance of Charles G. Koch, the Cato institute has since supported many controversial causes including “drastically lower personal and corporate taxes, minimal social services for the needy, and much less oversight of industry—especially environmental regulation.”⁴³⁴ Because of the Libertarian views regarding personal freedom, and limited government, the war on drugs is one of the many issues that they oppose. As such, their support for the change in laws in Portugal is not surprising. Within the document, the Cato Institute compares the statistics of Portugal to the rest of the European Union, finding “for the period 2001–2005, Portugal—for the 15–64 age group—has the absolute lowest lifetime prevalence rate for cannabis, the most used drug in the EU.”⁴³⁵ Additionally, in regards to cocaine use, this study found that

⁴³² <<http://www.scientificamerican.com/article.cfm?id=portugal-drug-decriminalization>> (Accessed November 22, 2013).

⁴³³ <<http://www.cato.org/about>> (Accessed November 30, 2013).

⁴³⁴ <http://www.newyorker.com/reporting/2010/08/30/100830fa_fact_mayer> (Accessed November 30, 2013).

⁴³⁵ Glen Greenwald, *Drug Decriminalization In Portugal: Lessons for Creating Fair and Successful Drug Policies*, (Washington D.C., Cato Institute, 2009), 22.

“Most EU states have double, triple, quadruple, or even higher rates than Portugal’s, including some with the harshest criminalization schemes in the EU.”⁴³⁶

Ultimately the Cato Institute study of Decriminalization in Portugal found that “while drug addiction, usage, and associated pathologies continue to skyrocket in many EU states, those problems—in virtually every relevant category—have been either contained or measurably improved within Portugal since 2001.”⁴³⁷ One of the most crucial aspects of this program and its success would be that “Portugal has dramatically improved its ability to encourage drug addicts to avail themselves of treatment.”⁴³⁸ Allowing the sick to get the care they need, and citizens more individual freedom, the success of decriminalization in Portugal is in many ways encouraging for those who see the inherent flaws of much of the global—and United States—drug policy. Illustrating how widespread and diverse the issue of decreased support of the war on drugs has become, the findings of the Cato Institute are indicative both of their political ideology and a growing trend among many different groups across the globe.

Another country that has been working tirelessly to develop alternative solutions to the failed war on drugs is Uruguay. Taking cues from countries such as the Netherlands and Portugal, in August of 2013 Uruguay announced that their lower house had passed a bill that “legalizes marijuana and regulates the production, distribution, and sale of weed for adult consumers.”⁴³⁹ Although any movement away from the current

⁴³⁶ Ibid.

⁴³⁷ Ibid., 28.

⁴³⁸ Ibid.

⁴³⁹ <http://www.huffingtonpost.com/2013/08/06/uruguay-legal-marijuana-price_n_3713826.html> (Accessed December 1, 2013).

policies regarding cannabis is notable, what is unique about the Uruguayan program is that it “provides for government control over the entire marijuana industry, from cultivation to consumption,” and that the “bill fixes the price of marijuana around \$2.50 per gram.”⁴⁴⁰ Priced in order to compete with the well-entrenched illegal cannabis market, the new government regulation system will consist of “individual citizens, cooperatives, and private companies [that] can grow a specified amount of [cannabis] each month, though it may only be sold to consumers by state-run pharmacies.”⁴⁴¹

After months of debate, on December 10, 2013, Uruguay’s cannabis legalization bill passed the Chamber of Senators, and as such Uruguay became the first nation in the world to legalize cannabis. Allowing “registered Uruguayans over 18 to buy up to 40g (1.4oz) of the drug a month,” President José Alberto Mujica has warned that the state-run system in “Uruguay will not be open to tourists, and that he [personally] opposes drug consumption but wants to take the multi-million-dollar cannabis business away from the drug cartels.”⁴⁴² Championed as a “visionary” by Guatemalan President Otto Perez Molina, former guerrilla President Mujica has a long history of fighting against injustice, and leading by example. Additionally supporting policies such as “same-sex marriage [and] abortion,” Mujica is also making headlines for choosing to forgo “a state palace in favor of a farmhouse, donat[ing] the vast bulk of his salary to social projects, fl[ying]

⁴⁴⁰ Ibid.

⁴⁴¹ Ibid.

⁴⁴² <<http://www.bbc.co.uk/news/world-latin-america-25328656>>
<<http://www.bbc.co.uk/news/world-latin-america-25315215>> (Accessed December 13, 2013).

economy class and driv[ing] an old Volkswagen Beetle.”⁴⁴³ Providing a compelling counterexample to the multi-millionaires who run so much of the rest of the world, President Mujica and his policies are also helping to illuminate an alternative path to maintaining the failing status quo.

Delivering an early Christmas present to the people of Uruguay, on December 24th President Mujica signed the cannabis legalization bill into law, making it the first country in the world to “legalize, regulate and tax” cannabis.⁴⁴⁴ While their retail sales, which will be run by the government, did not open until April 2014, as of Christmas day it was legal for adult residents of Uruguay “to grow up to six marijuana plants at home.”⁴⁴⁵ Although reactions have been somewhat varied, among many in South America the response has been very positive, including “Guatemala's president, Otto Perez Molina, [who] hailed it as ‘an important step.’”⁴⁴⁶ Additionally, “The *Wall Street Journal* reports marijuana legalization bills are being drafted by legislators in Barbados, Belize, Chile, Mexico City and Trinidad and Tobago.”⁴⁴⁷

However, not everyone is pleased with this historic step, including many of Uruguay’s citizens, and the International Narcotics Control Board, which stated that “Uruguay lawmakers ‘knowingly decided to break the universally agreed and internationally endorsed legal provisions’ contained in the 1961 Single Convention on

⁴⁴³ <<http://www.theguardian.com/world/2013/dec/13/uruguay-president-jose-mujica>> (Accessed December 13, 2013).

⁴⁴⁴ <<http://www.usnews.com/news/articles/2013/12/26/uruguays-president-quietly-signs-marijuana-legalization-bill>> (Accessed December 28, 2013).

⁴⁴⁵ Ibid.

⁴⁴⁶ Ibid.

⁴⁴⁷ Ibid.

Narcotic Drugs,” although according to some experts, on this issue the UN has little in the way of enforcement power. Leaving much to be worked out over the next few months, the timing and historic nature of the signing of this bill was also worth noting, as it fell just days before select stores in Colorado opened their doors to anyone twenty-one years of age to purchase the legal cannabis for recreational purposes. With the foundation of the war on cannabis crumbling on a daily basis, it is anybody's guess as to where the next advances will take place.

Czech Republic

Several other countries have also recently made strides towards providing their citizens with regulated access to medical marijuana. Among the notable additions to this list would be the Czech Republic. In February of 2013, “President Vaclav Klaus ... signed into law legislation that makes it legal in the Czech Republic to use marijuana for medical treatment.”⁴⁴⁸ With the medical cannabis system in the Czech Republic still requiring much in the way of experimentation and implementation, their government has decided to bar patients from growing their own medicine, instead opting for a system of importation from countries such as the Netherlands and Israel.⁴⁴⁹ Requiring a digital prescription, dispensed from traditional pharmacies, [and will] “not be covered by health

⁴⁴⁸ <http://www.huffingtonpost.com/2013/02/15/czech-republic-medical-marijuana_n_2693657.html> (Accessed December 14, 2013).

⁴⁴⁹ <<http://blogs.wsj.com/emergingeuropa/2013/11/20/czech-medical-cannabis-unavailable-despite-import-license-award/>> (Accessed December 14, 2013).

insurance,” this Czech system shows both differences and similarities with the medical marijuana states in the United States.⁴⁵⁰

One of the main factors distinguishing the Czech Republic from the rest of the states and nations that have medical marijuana is their choice to import from other countries.⁴⁵¹ In order to facilitate the importation of cannabis from other countries, the Czech government has begun creating a licensing program. In November of 2013 the first Czech cannabis importation company, Elkoplast Slusovice was awarded their license. Receiving “a license from the health department to buy seven pounds of marijuana from the Netherlands,” Elkoplast Slusovice’s monopoly is not expected to last long, with the Czech government planning on “issuing up to 10 cultivation licenses next year.”⁴⁵² Proceeding cautiously, while also trying to provide access for the sick people that need cannabis, the progress in the Czech Republic provides yet another example of the ways in which the attitudes and perceptions about cannabis are changing around the world, albeit slowly.

Israel

Home to Dr. Raphael Mechoulam, widely considered the “father of research on cannabinoids,” and the first person to “synthesize THC, Tetrahydrocannabinol, the principal active ingredient [in cannabis],” Israel’s role in understanding the medical value

⁴⁵⁰ <http://www.huffingtonpost.com/2013/02/15/czech-republic-medical-marijuana_n_2693657.html> (Accessed December 14, 2013).

⁴⁵¹ <<http://mmjbusinessdaily.com/czech-republic-awards-1st-marijuana-import-license/>> (Accessed December 1, 2013).

⁴⁵² Ibid.

of cannabis cannot be overstated.⁴⁵³ Although the first synthesis of THC in 1964 is a crucial event for the expanded understanding of the health benefits of cannabis, the 1992 discovery by Dr. Mechoulam of Anandamide, “a naturally occurring human cannabinoid neurotransmitter, ” was in many the key necessary for unlocking the mysteries of the endogenous cannabinoid system of the human body.⁴⁵⁴ A professor of medicinal chemistry and natural products at the Hebrew University of Jerusalem, Dr. Mechoulam has spent the last five decades fighting for his research and contributing more to the study of cannabinoids than just about any other individual alive today.

Cannabis has become an integral part of the Israeli medical system, thanks in large part to the tireless efforts of Dr. Mechoulam, and, as a result, Israel is now considered by many to be the “world leader in medical cannabis research.”⁴⁵⁵ Unlike much of the United States, Israel has supported cannabis research through efforts such “as premiere research facilities and leniency toward scientists,” that have allowed people such as Dr. Mechoulam and facilities like Tikun Olam to thrive while so many others across the globe have had to conduct their research clandestinely.⁴⁵⁶ While cannabis for recreational use is still illegal in Israel, as is the case in most of the rest of the world, in 1995 the Israeli Parliament Drug Committee formed a subcommittee to examine the legal

⁴⁵³ <<http://www.globalpost.com/dispatch/news/regions/middle-east/israel-and-palestine/130820/israel-cannabis-scientist-Raphael-Mechoulam-medical-marijuana>> (Accessed December 20, 2013).

⁴⁵⁴ Ibid.

⁴⁵⁵ <<http://www.sciencedaily.com/releases/2013/01/130124123453.htm>> (Accessed December 27, 2013).

⁴⁵⁶ <<http://www.globalpost.com/dispatch/news/regions/middle-east/israel-and-palestine/130822/israel-embraces-the-miracle-marijuana>> (Accessed December 27, 2013).

status of cannabis that recommended that Israel “allow and regulate access to medicinal cannabis for severely sick patients.”⁴⁵⁷

One of the facilities leading the way in Israel is Tikun Olam, self-described as “the first and foremost supplier of medical Cannabis in Israel and the flag bearer for the medical use of Cannabis in Israel.”⁴⁵⁸ Taking its name from a concept in Jewish mysticism that means to “heal the world,” the goal of the company Tikun Olam is to heal through providing access to cannabis and developing new products and strains of cannabis that increase the medicinal qualities of the plant. Having created a well-thought-out line of cannabis-infused products including “Chocolate praline, Pastries, and Tahini cookies, Toffees, Gum, Honey, Sugar, and Ointments,” as well as “Cannabis Oil Drops, Cannabis Powder, Capsules, and Powder Oil,” two of the most important products designed by Tikun Olam are their genetic strains, Avidkel, and Rafael, both containing very high levels of CBD and negligible levels of the psychoactive cannabinoid, THC.⁴⁵⁹

By far one of the most promising areas of cannabis research, as mentioned before, the cannabinoid Cannabidiol or CBD has shown much potential in treating or relieving “chronic pain, diabetes, cancer, cardiovascular disease, alcoholism, PTSD, schizophrenia, antibiotic-resistant infections, rheumatoid arthritis, MS, epilepsy, and other neurological disorders.”⁴⁶⁰ Largely due to the illegal status of the plant and traditional chemical prevalence, so much of cannabis culture and research has been largely dominated by the

⁴⁵⁷ <<http://cms.herbalgram.org/herbalgram/issue97/hg97-featcannabis.html?ts=1388139783&signature=5c8a566a5fdecc2c813f1683f9c43940>> (Accessed December 27, 2013).

⁴⁵⁸ <<http://www.tikun-olam.info/#!/about-us/csxb>> (Accessed December 27, 2013).

⁴⁵⁹ <<http://www.tikun-olam.info/#!/Species/c15c1>> (Accessed December 27, 2013).

⁴⁶⁰ <<http://projectcbd.org>> (Accessed December 27, 2013).

more psychoactive component THC, while it has only been in recent years that CBD-rich strains have come to be recognized as important for medicinal purposes. Having researched CBD-rich strains and genetics since 2009, Tikun Olam's strain Avidkel made national news when it debuted in 2012, proclaimed as "marijuana that doesn't get you stoned."⁴⁶¹ The introduction of the world to cannabis that lacks in the trademark alteration in consciousness is helping to legitimize cannabis as a medicine in the minds of the public and allowing for an element of the taboo to fall away. Additionally, the success of the Israeli medicinal cannabis program stands as proof that a system of regulation of medicinal cannabis can thrive in a country if given the proper support.

⁴⁶¹ <<http://news.discovery.com/tech/biotechnology/medical-marijuana-thc-120706.htm>> (Accessed December 27, 2013).

CHAPTER VII

A NEW ERA

After months of waiting for responses from the federal government and countless hours of negotiations, planning, and fine tuning, on January 1, 2014, Colorado was finally set to make history as the first state in the US to allow adults to purchase cannabis from retail vendors in an entirely legal environment. With just over a dozen stores having transitioned from medical dispensaries to recreational cannabis shops in the Denver area, the hundreds and hundreds of eager shoppers ready to be part of history led to long lines, and wait times of more than two hours were common. However, considering just about everybody in line had been waiting for the better part of their lives for a day such as this, another two hours seemed comparatively short. Overflowing with a jovial spirit, the people of the seemingly endless lines that often stretched the length of several Denver blocks, joked, took dozens of pictures, and soaked up the momentous occasion that had brought them all together.

Among the eager masses were several people, upon whom media focused, including the very first customer, Iraq war veteran Sean Azzariti, who though he suffers from PTSD, was not covered by Colorado's lenient medical marijuana law. Azzariti was all smiles as he purchased the first legal eighth (of an ounce) of cannabis, surrounded by

news cameras, before exclaiming “we did it!”⁴⁶² With some people camping out almost all night to be part of the day’s events, Sean Azzariti being the first customer was part of the “ceremonial “first purchase” at the Denver store 3D Cannabis Center” organized by the many supporters of Amendment 64.”⁴⁶³ In addition to the multitudes of those eager to make legal purchases, were those who just came to witness history being made, including an “83-year-old grandma from Chicago, who wishes only to be identified as ‘Nana Perry.’”⁴⁶⁴ Cognizant of the historic nature of the occasion, “Nana Perry” stated that she “had been through the depression, and I don’t know how many wars, but I count this as one of my more important days.”⁴⁶⁵ With antiquated laws having made criminals of peaceful citizens for far too long, this crucial first step has been taken by Colorado and Washington, as well as by countries such as Portugal, the Netherlands, and Uruguay, and every day new locations follow suit. Having allowed drug cartels and private prison industries to flourish at the expense of our young people and the sick and dying, the unreasonable, arbitrary and capricious war on the cannabis user is showing many signs of ending.

Thanks to Colorado’s highly regulated system of medical cannabis; the transition to recreational use was, from many perspectives, at least in the first few days, seamless. Although many could have done without the long lines, the residents of Denver had also recently lined the streets for the well-timed debuts of two new Donut chains, New

⁴⁶² <http://www.denverpost.com/news/ci_24828236/worlds-first-legal-recreational-marijuana-sales-begin-colorado> (Accessed January 4, 2013).

⁴⁶³ Ibid.

⁴⁶⁴ <http://www.huffingtonpost.com/2014/01/02/grandmother-colorado-marijuana-video_n_4533190.html?ncid=edlinkusaolp00000009> (Accessed January 4, 2013).

⁴⁶⁵ Ibid.

England Favorites Dunkin Donuts, and Portland's Voodoo Donuts, so they were well prepared to brave the cold for a much more pivotal moment. With Colorado collectively making upwards of \$1 million in revenue in the first day of business, it became quickly evident that legalization of cannabis for recreational use was a wise economic move.⁴⁶⁶ Although this is great news for many small business owners in Colorado, this is equally as exciting for the state government which will pull in over 25% of cannabis revenue in taxes, legalized cannabis is no doubt an enticing prospect for many states around the country that have been struggling to fund their law enforcement, keep nonviolent citizens perpetually incarcerated, and maintain many of the functions of government.

According to some estimates, "Nationwide, the legalized pot industry is expected to bring in a reported \$2.34 billion in 2014, including both medical and recreational sales."⁴⁶⁷ With that amount or more going untaxed this year and every year until it is legal, taxed, and regulated, in addition to the wasted billions on enforcing arbitrary laws, many are expecting the legal cannabis market to become a " \$10 billion a year industry by 2018."⁴⁶⁸ Bolstered by the first day sales, and all that they portend, many of the cannabis stocks also showed many signs of increasing in value; although many of these companies are still small and "trade on over-the-counter markets," the spikes in activity

⁴⁶⁶ <<http://www.9news.com/news/article/371498/339/Pot-sales-exceed-1-million-on-first-day>> (Accessed on January 5, 2013).

⁴⁶⁷ <http://www.huffingtonpost.com/2014/01/03/pot-sales_n_4536780.html> (Accessed January 5, 2014).

⁴⁶⁸ Ibid.

are another signal of cannabis coming out of the shadows, and becoming a legitimate aspect of the global economy, medicine, and culture.⁴⁶⁹

While many were elated with the success and implementation of the new law, many others still do not support decriminalization, let alone legalization of cannabis, and remain very outspoken on the subject. Typical of these opponents is of some of the most vapid cable news personalities, Nancy Grace who stated, on national television, that she believed that legalization was a “horrible idea,” and that anyone who disagreed with her was “lethargic, sitting on the sofa, eating chips ... fat and lazy.”⁴⁷⁰ Indicative of the level to which media discourse has recently elevated, comments such as these do more to promote further ignorance and divisiveness, and lack anything more substantive than a personal opinion. While Ms. Grace’s comments did cause quite an Internet backlash, perhaps the public response was any greater than that inspired by the vaguely contradictory piece by *New York Times* columnist David Brooks entitled “Weed: Been There. Done That.”⁴⁷¹

Essentially telling the story of Brooks’ own experience smoking marijuana as a teenager, and then somehow miraculously managing to become a well-rounded and productive member of society, the end of the first paragraph reads: “I think those moments of uninhibited frolic deepened our friendships.”⁴⁷² After regaling readers with speculation as to why his group of friends stopped using marijuana recreationally, Brooks

⁴⁶⁹ Ibid.

⁴⁷⁰ <<http://news.yahoo.com/nancy-grace-doesn-t-like-pot-heads--pot-heads-say-feeling-is-mutual-215746455.html>> (Accessed January 10, 2014).

⁴⁷¹ <http://www.nytimes.com/2014/01/03/opinion/brooks-weed-been-there-done-that.html?_r=0> (Accessed January 10, 2014).

⁴⁷² Ibid.

then acknowledges that “laws profoundly mold culture,” before moving on to questions such as “what sort of community do we want our laws to nurture? What sort of individuals and behaviors do our governments want to encourage?”⁴⁷³ Arguing that the recent laws of Colorado and Washington are “nurturing a moral ecology in which it is a bit harder to be the sort of person most of us want to be,” Brooks’ detractors quickly pointed out that given the long-standing embrace of alcohol and far more dangerous pharmaceuticals by the government and countless other institutions, including media outlets and universities, that this is already the case.⁴⁷⁴ Using this logic, the communities that we currently want our laws to nurture must then be, drunk, violent, and incarcerated.

Although much of Brooks’ argument is understandable, namely that it is often in a society’s best interest to discourage certain behaviors, what he fails to grasp is that the time has come to find new methods of discouragement that are not as life-wrecking as incarceration amongst violent offenders and barring young people from advancing their education due to one mistake. According to a recent study by the ACLU, “between 2001 and 2010, there were 8,244,943 marijuana arrests, of which 7, 295,880, or 88%, were for marijuana possession.”⁴⁷⁵ Although the amount of wasted potential, police energy, and budgets that these failed policies have resulted in is astounding, even more horrifying is the inherent racism involved in the enforcement of the standing drug laws in this country.

According to the same ACLU study titled *The War on Marijuana in Black and White*, “a Black person was 3.73 times more likely to be arrested for marijuana

⁴⁷³ Ibid.

⁴⁷⁴ Ibid.

⁴⁷⁵ ACLU, *The War on Marijuana in Black and White* (New York: ACLU Foundation, 2013), 8.

possession than a white person,” despite almost identical levels of use.⁴⁷⁶ Although the averages are still appalling, “in the states with the worst disparities, Blacks were on average over six times more likely to be arrested for marijuana possession than whites.”⁴⁷⁷ Whereas, “in the worst offending counties across the country, Blacks were over 10, 15, even 30 times more likely to be arrested than white residents in the same county.”⁴⁷⁸ Illustrative of the immense racial disparity that is nothing short of “ubiquitous, [as the ACLU notes] the differences can be found only in their degrees of severity.”⁴⁷⁹

Perpetuating systems of racism that have existed since, and that in many respects strongly resemble slavery, once looked upon from this perspective it is hard not to see support for the current war on drugs as an implicit endorsement and continuation of policies that are equally as morally reprehensible. Subjecting nonviolent citizens and the youth of this country to a penal system that is notoriously violent, and stripping them of countless opportunities and social capital in the process, it is points such as these that are ignored by people such as Nancy Grace and David Brooks. In theory, it could be nice if human beings were not so inclined to dulling, or amplify their senses, or to try and expand their consciousness, but alas, historically speaking this has really never been the case. As a society, we should be able to recognize and come to terms that people, especially young people, are going to experiment with drugs. It is, perhaps, a noble objective to dissuade people from using drugs, however, it is hard to find anything that

⁴⁷⁶ Ibid., 9.

⁴⁷⁷ Ibid.

⁴⁷⁸ Ibid.

⁴⁷⁹ Ibid.

has actually improved because of the war on drugs, other than the quality and availability of drugs themselves.

Other States

As of the beginning of 2014, twenty states and the District of Columbia had passed some sort of law allowing for the production, dispensing, and usage of medical cannabis. Although many of these statutes vary to some degree, the overarching intention is to provide sick people with the medical care that they require, regardless of archaic federal laws. Cognizant of how successful many of the other states have been in their efforts to provide sick people access to medicines that they require, another fifteen states have introduced some sort of legislation that would provide citizens of their states access to medicinal cannabis. Included in this list are states such as Florida, New York, Georgia, Ohio, Kansas, Pennsylvania, Kentucky, Tennessee, Maryland, Utah, Minnesota, West Virginia, Mississippi, Wisconsin, and Missouri.⁴⁸⁰ Although many of these bills are the standard medical marijuana legislation that allows for a variety of uses for the plant, a select few are much more selective in their intention and have even garnered the support of some unlikely proponents.

Long an influential political force, the collection of passionate parents often referred to as “The Mommy Lobby,” have for many years been at odds with those who have fought for access to cannabis, medical or otherwise. However, in recent years, as numerous first-hand accounts of the successes of certain cannabis strains in treating

⁴⁸⁰ <<http://medicalmarijuana.procon.org/view.resource.php?resourceID=002481>> (Accessed March 4, 2014).

epilepsy and other ailments in children have disseminated through social media and the Internet, the Mommy Lobby has become “a powerful advocate for medical marijuana for children.”⁴⁸¹ One of the more unlikely states where the Mommy Lobby has proven very successful is Utah, where House Bill 105 passed the House on March 3, 2014, with a vote of 62 to 11.⁴⁸² Allowing for cannabis oil high in CBD to be imported to Utah from states like Colorado or California, and to be possessed by parents with a doctor’s note, many have argued that House Bill 105 is a step in the right direction towards improving the quality of life of some very ill children in this very conservative state.

Not without its detractors, opponents of the proposed bill argue that this is just a step towards widespread access to medical marijuana, with some still asking questions like “how do we know this is safe for children?”⁴⁸³ However, while lawmakers are still bickering over possibilities, the numbers of concerned parents educating themselves and others is growing rapidly and is coalescing into a very powerful political entity.

Undoubtedly bolstered by the proliferation of information on the beneficial nature of cannabis, even some of the more staunchly conservative southern states are making inroads towards providing their citizens the help they need. Among these would be Georgia, where House Bill 885, passed by 171-4 on March 3, 2014, and Kentucky, which passed Senate Bill 124 on March 12, 2014, unanimously. As noted in the bill, the intention of Georgia’s House Bill 885 is the “compassionate potentially life-saving use of

⁴⁸¹ <http://www.washingtonpost.com/national/health-science/mommy-lobby-emerges-as-a-powerful-advocate-for-medical-marijuana-for-children/2014/03/02/296ad1e2-9a38-11e3-b88d-f36c07223d88_story.html> (Accessed March 3, 2014).

⁴⁸² <<http://fox13now.com/2014/03/03/bill-to-bring-cannabis-oil-to-utah-moves-closer-to-becoming-law/>> (Accessed March 10, 2014).

⁴⁸³ Ibid.

medical cannabis and is not intended to sanction, encourage, or otherwise be construed as a movement toward the legalization of recreational cannabis.”⁴⁸⁴ Although similar in intent Kentucky’s bill “would [instead] allow the University of Kentucky and University of Louisville medical schools to conduct research and allow anyone enrolled in a U.S. Food and Drug Administration trial to be treated with marijuana oil.”⁴⁸⁵

Forced to find creative solutions to the issue of federal illegality, and the negative connotation of the word marijuana, Kentucky’s answer is to remove from the definition of marijuana “Industrial hemp as defined in KRS 260.850; The substance cannabidiol, when transferred, dispensed, or administered pursuant to the written recommendation of a physician practicing at a hospital or associated clinic affiliated with a public university having a college or school of medicine; or for persons participating in a clinical trial or in an expanded access program, a drug or substance approved for the use of those participants by the United States Food and Drug Administration.”⁴⁸⁶ Illustrating the power word choice can have, Georgia’s answer to the question of problematic terminology was to strike the word marijuana from previous versions of the bill and to replace it with the word cannabis, while also renaming the bill itself from the “controlled Substances Therapeutic Research” to the Haleigh’s Hope Act.⁴⁸⁷

No longer an issue that is divided along party lines, more and more people of all political backgrounds are beginning to recognize some amount of value in cannabis,

⁴⁸⁴ Georgia House of Representatives, House Bill 885 Line 34-36.

⁴⁸⁵ <<http://www.courier-journal.com/article/20140312/NEWS0101/303120080/Marijuana-oil-bill-unanimously-passes-Kentucky-Senate>> (Accessed March 14, 2014).

⁴⁸⁶ Kentucky State Senate, Senate Bill 124.

⁴⁸⁷ Georgia House of Representatives, House Bill 885.

whether it is medical, recreational, or strictly monetary. Whether we talk of the success in cases such as Charlotte's, the multimillion dollar influx in tax revenue that Colorado is experiencing, the successes in places such as Portugal, or the bold steps taken in Uruguay, and even in Washington D.C. where the city council passed a bill on March 3, 2014 making possession of up to an ounce a civil violation carrying only a "\$25 fine, lower than most city parking tickets," it is clear that the war on cannabis and more accurately the cannabis user, is in its final stages.⁴⁸⁸ Although this same reality has been hypothesized for several decades now, it seems as though the populace of this country and indeed the world are gradually waking up to the reality that our solutions are creating more problems than they are solving, we are denying our nation millions, if not billions in tax revenue, while destroying countless ecosystems around the world because we have been kept blind to the numerous benefits of hemp, not to mention the denial of the proper care to sick people all over the world.

While the war on drugs has been marketed to the people quite effectively as a way to protect others from the dangers of addiction, it has done little if anything to combat addiction, and rather has made millions of people criminals, and thereby a source of income for private prisons, police forces, and drug testing facilities. We have allowed our youth to be literally flushed down a toilet, and our jails to be filled far past capacity; how many lives will have to be wasted before enough is enough? The war on drugs, and particularly the war on cannabis and the cannabis user are unreasonable, arbitrary, and capricious, and are rapidly coming to a close. Having sacrificed millions of lives to a

⁴⁸⁸ <<http://news.yahoo.com/washington-d-c-city-council-passes-pot-decriminalization-204446367--finance.html>> (Accessed March 13, 2014).

failed experiment, it is time that we actively started healing old wounds, and began searching for better, more sustainable solutions.

CHAPTER VIII

CONCLUSION

On November 4, 2014, the voting populace of the United States once again took to their respective polling places and played their part in representative democracy and while there were many winners and losers that night, what was abundantly clear was that the successes in Colorado and Washington State had not gone unnoticed, as similar legislature passed in Oregon, Alaska, and the District of Columbia, essentially legalizing cannabis for adults over 21 years of age. With the legal cannabis market flourishing in Colorado, “January through May brought the state about \$23.6 million in revenue from taxes, licenses, and fees,” creating rather enticing possibilities for numerous other states that could desperately use more tax revenue.⁴⁸⁹ Adding to the unavoidable mountains of tax revenue, “during the first six months of 2014, violent crime in the city and county of Denver was down 3 percent from the same period in 2013, according to the most recent available data,”⁴⁹⁰ while “The Colorado State Patrol reported in April that fatal crashes in

⁴⁸⁹ <<http://www.nytimes.com/2014/08/03/opinion/sunday/high-time-the-great-colorado-weed-experiment.html>> (Accessed November 5, 2014).

⁴⁹⁰ <http://www.huffingtonpost.com/2014/07/17/marijuana-crime-denver_n_5595742.html> (Accessed November 6, 2014).

the first quarter of 2014 were down 25.5 percent from the year before.”⁴⁹¹ Although neither of these can be directly attributed to cannabis legalization and would take years of longer term studying to prove causation, as Colorado and Washington continue to move forward on their path, and other states continue to join in as Oregon, Alaska, and Washington D.C., while dozens of others begin to offer medical cannabis, whether whole plant or CBD only, the illusion that cannabis has no medical value has clearly lost credibility and with it the federal government until the latter finally evolves to serve the will of the people it was created to serve.

Through medical cannabis, people have once again been reintroduced to a medicine that is thousands of years old, and is in many ways far safer than the chemical compounds that generate so many billions of dollars a year for American pharmaceutical companies. Whether saving a small child from hundreds of seizures a day, to allowing a person on chemotherapy to be able to eat, sleep, and live just a little more comfortably, to actually stopping the growth of many kinds of cancers, to offering an alternative to alcohol and alcoholism that is responsible for the “death of 2.5 million people annual[ly],”⁴⁹² to the innumerable products that could be produced from the hemp plant,⁴⁹³ the benefits of regulating, taxing, and legalizing cannabis far outweigh the potential harm.⁴⁹⁴ Compared to the damage done by cannabis prohibition to the lives of

⁴⁹¹ <<http://www.nytimes.com/2014/08/03/opinion/sunday/high-time-the-great-colorado-weed-experiment.html>> (Accessed November 5, 2014).

⁴⁹² <<https://ncadd.org/in-the-news/155-25-million-alcohol-related-deaths-worldwide-annually>> (Accessed November 6, 2014).

⁴⁹³ Which has been so illogically held hostage by prohibition for far too long.

⁴⁹⁴ That only rigorous testing could prove or disprove, which is at this point impossible thanks to the illogical classification of cannabis as a Schedule I narcotic.

the over forty million people, potential harm from smoking, eating, or otherwise ingesting cannabis pales in comparison. The war on cannabis has been a massive failure, a complete and utter waste of time, money, and police power; and is one that a growing majority of people in the United States as well as globally no longer support. With the disassembly of the myth of cannabis having no medical value, came the legends of its immense danger, and while no mind-altering substance is harmless, compared to the millions of lives lost to alcohol every year, the risks are negligible. With the lives and families that medical cannabis has helped, the lie that cannabis had no medical value has been eroded and with it the barriers that kept so many people from seeing just how unreasonable, arbitrary, and capricious the war on cannabis had become. Through medical evidence and anecdote, the process of digging ourselves out of decades of lies, racial profiling, and mass imprisonment is now a possibility, but only when every person whose life has been ruined by this disgraceful war has been set free, will the healing process truly begin. Although Colorado and Washington have shown the way towards statewide legalization, only when cannabis is reclassified, legalized, regulated, and taxed on a national level, and the problems of banking resolved will any large-scale change be possible.

The trends set in 2012 and 2014 elections continued through 2016, with California, Nevada, Maine, and Massachusetts all passing laws legalizing the consumption of cannabis by adults over the age of 21. However, with the 2016 election the political climate has shifted towards a more conservative perspective on the federal level despite these positive developments in state law in 2016. Although a detailed analysis of the 2016 election is outside of the purview of this thesis, the general outlook

remains difficult to forecast in the current political climate. Until that point, those who have seen how beneficial cannabis can be will continue to fight, tell everyone they can, and pass along the message of hemp and cannabis, because as Victor Hugo noted: “one cannot stop the invasion of ideas.”⁴⁹⁵ The invasion has not only begun, it is on the verge of carrying the field.

⁴⁹⁵ Victor Hugo, *Histoire D'un Crime* (Paris: J. Hetzel, 1877).

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