

Americana Travel SCI & Walking Learning to Say 'Yes'



NEW MOBILITY

life beyond wheels

THE LATEST IN
**Medicinal
Marijuana**



(CONTRIBUTORS)



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Mark Mathew Braunstein was welcomed into the ranks of SCI by way of a diving accident in 1990. Lucky him, his injury and recovery were made into a short TV documentary (youtu.be/96EhHzN6RoI). As a T12 paraplegic, he uses cannabis medicinally for below the waist (leg spasms) and recreationally above. He is the author of three books, including *Radical Vegetarianism*, and says he considers cannabis a radical vegetable. He frequently contributes to many holistic health magazines and to *NEW MOBILITY*. You can be outraged by his counterculture writings at www.MarkBraunstein.org.

A motorcycle accident in 2003 left Matthew Castelluccio with a T6 spinal cord injury. He credits the United Spinal Association with providing the resources and mentoring to help him become comfortable as a paraplegic, and Helen Hayes Hospital with exposing him to adapted sports. Following his rehab there, he joined the hospital as its adapted sports program coordinator/patient mentor in November 2007. He has not only facilitated the hospital's membership as a Paralympic Sports Club and a Disabled Sports USA chapter, but has spearheaded the establishment of the Hudson Valley Chapter of United Spinal, of which he is president.



Embracing living with a T4 spinal cord injury in 2002 with seeming ease, Steve Dalton wondered why this usually difficult transition went so well. Years later he learned about the science of post-traumatic growth and focused his senior thesis on the intersection between PTG and the humanities in completing his bachelor of arts. Since his injury he has been able to share his growth experience and scholarly interests in peer support groups, as well as lecturing in PT, OT and humanities classes. He lives in San Pablo, California with his wife, Sydney, and their new kitten, Camhi.

Steve Wright is an award-winning travel writer who has been a mainstay freelancer for *NEW MOBILITY* for two decades. His interests include universal design as well as travel. Whether on the road solo or with his wife Heidi Johnson-Wright — an ADA expert (and also a NM freelancer) who has used a wheelchair for 40 years — he searches out the perfect blend of local culture and barrier-free access. Steve and Heidi live in Miami. Read Steve's blog at urbantravelandaccessibility.blogspot.com





Medical MARIJUANA 2.0

—Stirring the Pot

BY MARK MATHEW BRAUNSTEIN

The War on Drugs is losing, and pot is winning. And people who use medical marijuana are winning the right to choose. All of Canada, most of Western Europe, and half of the states of the United States have legalized medical marijuana. Its expanded use, growing support for legalizing its use, further innovation in its safe use, and deepening research into why to use it — all herald an upgrade to Medical Marijuana 2.0.

Trailblazers and Troublemakers

In 1996, the tide turned in the War on *some* Drugs when California voters legalized medical marijuana. Since then, citizens have joined crusades in other states by testifying about their own medicinal, though illegal, use of cannabis. Wheelchair users have often very visibly led the marijuana march. If you research the online archives of public hearings for bills legalizing medical marijuana in your own state, you are sure to find testimonies from wheelers with MS and SCI among them. Rather than simply light up and shut up, wheelers have chosen to light a fire to drug law reform.

Many unsung heroes preceded, and therefore have eluded,

the reach of the internet. Our nation's earliest documented medical marijuana users gave testimony at hearings before the U.S. Drug Enforcement Administration from 1986 to 1988. Valerie Cover of California, Martha Hirsch of Massachusetts, and Greg Paufler of New York, all living with MS, testified to their cannabis “crimes.” Two quadriplegics bravely joined that chorus. G. Fred McBee of Florida, while horseback riding, fell off his horse and then the horse fell on him. But due to his subsequent use of cannabis rather than opioid-based painkillers, McBee never fell off the wagon. David Branstetter of Missouri was arrested and threatened with incarceration unless he ceased confessing about his use of cannabis to his parole officer. Yet Branstetter traveled to Washington, D.C., to sit before the DEA to confess still more.

The 1980s and early 90s were dark times for cannabis consumers. Those who pushed the envelope did so at risk of that envelope containing warrants for their arrests. Nowadays, we easily forget the risk ever existed. Yet even where it is legal, social stigma may hang in the air. (Such stigma may explain why, despite multiple calls for submissions, so few cannabis users with SCI or MS were willing to share their stories here.)

The Grim Wheeler has led many people down wheelchair paths they would never have explored on foot. Only after their SCIs did Ethan Ruby and Dr. Gary Witman allow their lives to “go to pot.”



The Pot Doc

To some people's thinking, doctors are super-humans who never fall ill, never suffer injuries, and never die within our own lifetimes. In reality, even doctors have doctors, and doctors do become patients. Gary Witman, M.D., was head of emergency care at a Massachusetts hospital when in a cruel role reversal he was ambulated to the ER of a Rhode Island hospital. He had been enjoying a summer day wading in the ocean when a

rogue wave knocked him down and flipped him on his head. He fractured several upper vertebrae and injured his spinal cord at C3-4, leaving him paralyzed below the chest and with limited use of his hands.

Witman recounts this story from six years ago while seated in his power chair. He speaks eloquently and deliberately, as might a doctor sharing an unwelcome diagnosis with his ailing patient, except that he is the patient about whom he speaks. "At the time of my injury," he says, "I was immediately fired." So he took fate into his own hands.

For the next five years, Witman sought but was unable to obtain employment, not even with the VA. Everyone told him he was eminently qualified but too disabled. Finally, a year ago he secured a full-time position with Canna Care Docs. He treats Massachusetts and Rhode Island residents to evaluate whether their conditions might qualify them for state permits to medicate with cannabis. If so, he advises dosage and usage. He dismisses the honorific (or onerous) nickname "pot doc." Anyhow, no one has ever called him that. He counters, "It is my belief that to appropriately recommend this medicine requires a physician who specializes in either pharmacology or internal medicine, and who understands the risks as well as the benefits."

About cannabis' benefits, he says, "I have not found anything superior for the treatment of either pain or neuropathy, and it is far superior to the utilization of narcotics." While more than a thousand strains of cannabis have been cultivated, the six dispensaries in Massachusetts currently offer hardly more than 33. Among those, Witman recommends two specific strains that



Dr. Gary Witman says he has not found anything superior to marijuana for treating pain or neuropathy.

most effectively alleviate spasms, Purple Haze and Sour Diesel (more about Sour Diesel later). “Most people get the greatest benefit for spasms from CBDs.” And those two strains have the highest ratios of CBD. He adds, “My patients are not looking for THC.” (See sidebar, next page.)

Witman’s recommended modes of delivery are marijuana edibles (medibles) and vaping, but not smoking. “I do not believe that there is any indication for smoking.” He says that vaping releases all the medicinal cannabinoid compounds at below 400 degrees F (204 C), whereas smoking above that threshold produces tar and ash, both proven carcinogens.

Eight percent of the people he sees have SCI and 4 percent have MS. While everyone responds differently, Witman does outline one generalized protocol for those with MS or SCI. “I recommend they use a vaporized sativa strain, two to three puffs, to be administered every three to four hours, during the day. Nighttime, edibles are to be administered one hour prior to sleep, to take as required to get seven hours of continuous sleep.”

He voices concerns about legalizing recreational pot because that might lead to increased risk of cancer for those who smoke tobacco and to more traffic accidents by those who mix pot with alcohol. Further, the purity and potency of medical cannabis might be compromised if growers redirect their efforts to the recreational market by growing strains with higher THC. That in turn might detract from cannabis being taken seriously as a pharmaceutical agent.

Had he ever used marijuana recreationally as a youth? He answers frankly, “I certainly have.” Oddly enough, he does not presently use cannabis because he says he has none of the indications which cannabis might medicate. He leaves his spasms untreated. And with no sensation below the chest, his pains from spasms go unnoticed.

But Witman has not gone unnoticed. He is president of the



A card-carrying member of the medical marijuana community, Ethan Ruby is also CEO of Theraplant, which makes the medicine.

The CEO of CBD

Ten years ago, if you had told Ethan Ruby that he was destined to become an herb farmer, he would have wondered what herb you’d been smoking.

His circuitous route to running a huge indoor herb farm began 16 years ago when a typically aggressive Manhattan driver ran a red light, rammed a car, and that car in turn struck Ruby on a crosswalk. The last domino to fall in that effect was Ruby’s T6 vertebra. At that time in New York City, pedestrian traffic signals commanded in bold letters and in plain English either WALK or DONT WALK (no apostrophe). When he crossed that fateful street corner, Ruby’s traffic signal read WALK.

Now, rather than walk, Ruby has kept busy doing many other things. Formerly a star sports athlete and equities trader, he turned to another form of gambling post-paraplegia. Seated in his cool new wheelchair, he rolled up to the poker table and competed on a level playing field where all the other players were seated, too. He even ascended to the world series of poker tournaments. Then he founded Poker4Life, which hosts poker tournaments to fundraise for nonprofits, including for the Buoniconti Fund, a fundraising arm of the Miami Project to Cure Paralysis. He also invented and patented Wheel Comfort padded footplates for wheelchair users who like to roll barefoot.

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Rhode Island chapter of United Spinal Association, and serves on several state government agencies and committees. He awakens every morning with an urgent desire to serve and to care. “Every day is such a beautiful experience,” he says. “The ability to be alive is spectacular.”

Other business and charitable ventures preceded and followed, but now his attention centers around medical marijuana.

As an inveterate entrepreneur, Ruby foresaw cannabis as an emerging industry. When Connecticut legalized medical marijuana in 2013, he competed with 15 other applicants for the state's four costly producer permits. Applicants were rated and Ruby's company scored highest. Theraplant was born, and Ruby became its CEO.

A Plant Pharmaceutical Plant

On Google or Bing Maps, aerial views of Theraplant's pharmaceutical plant look hardly different from its neighboring industrial plants. Those include a plastics factory, a computer components maker whose computer business model is probably making plans for its move to China, an adhesive manufacturer that is still sticking around, several tool and metalwork machine shops, and FedEx and UPS competing distribution depots. But those online aerial views of the former paint factory are several years old. Today, Theraplant has transformed that 1.5 acre factory and 10 acre property into a Fort Knox. The State of Connecticut mandates that.

"Connecticut was the first state that was really treating cannabis like a pharmaceutical," explains Ruby, "so that's why I felt comfortable getting involved with the industry here."

Industry indeed. Ten years ago, people with disabilities and caregivers rhapsodized in blogs and newsletters about the med-

ical marijuana community. Now, cultivation laboratories and dispensaries tabulate in spreadsheets and annual reports about the medical marijuana industry. The sense of community may be waning, but safety, purity, and yes, even potency, are gaining. We all can legally brew beer in our garages or make wine in our cellars, but instead we pay breweries and vintners to get all messy for us. "To make medicine that passes the very strict laboratory testing here," says Ruby, "we spend millions of dollars on environmental controls."

Ruby credits demand with guiding grow lab supply. "Originally, customers were chasing THC. But as they become more educated in understanding terpene profiles and the benefits of other cannabinoids, they are starting to demand more CBD-based medications. And more people are demanding indica blends than sativa blends. When we first started it was 80 percent flower, 20 percent everything else, including edibles, capsules, waxes, vape oils, extracts. Now it's 60 percent flower. And more people are vaping oils or wax rather than flowers."

Unlike Witman, Ruby is a card-carrying member of the medical marijuana community. "Yes, I purchase my monthly supply of medicine at a dispensary just like any other patient in Connecticut. I use various forms of medical cannabis to treat different ailments. Due to SCI, I suffer from pain, PTSD, skin breakdowns, intestinal distress, to name a few. Cannabis provides a safe and natural treatment option. Typically, I use CBD-dominant strains as they provide relief without the 'high' effect associated with THC strains. I prefer indica-dominant strains at night to help relax my body and lessen the pain. This relief

The ABCs of THC and CBD

The tiresome, old question, "Does marijuana really work?" has been supplanted by "What strains work best?"

The two most widely cultivated species of cannabis are *Cannabis indica* and *Cannabis sativa*. Ethnobotanists debate the differences between the two, while cannabis consumers agree at least that each produces different effects. Sativa has traditionally been a stimulant and intoxicant, producing a head high that is uplifting and cerebral, and is best suited for day use. Indica has been more of a sedative and analgesic, producing a body buzz that is calming and sensual, and best for night use.

Cannabinoids contain the psychoactive and medicinal components of cannabis. While 80 different cannabinoids have been identified (with more on the way), the two that get the most press are THC (tetrahydrocannabinol) and CBD (cannabidiol).

Initially sativas had a richer THC content than did indicas, while indicas were higher in CBD than were sativas. Cross-breeding has since blurred those boundaries and produced a wide variety of hybrids, each strain with distinct characteristics that have been described by wildly imaginative names, for instance Purple Haze and Sour Diesel. "Strains" is a colloquial term for "cultivars," variations within a species that exhibit different appearances and properties. Thus Honey Crisp apples are cultivars good for eating raw, while Cortland apples are more suitable for baking.

During the past half century, the THC contents of both sativas and indicas have increased tenfold, thanks to intense efforts at hybridization. It's not your mother's marijuana anymore. Yet stoners do not get any higher, they just get to the same place with less huffing and puffing. When growers

hybridized strains with higher levels of THC, they unwittingly bred out the CBD. As CBD provides relief to many medical conditions such as spasms and pain, its lowered potency was a loss to medical users and accounted for mixed results in past human trials. But all was not lost because THC, too, has antispasmodic properties. Plus THC and CBD enhance each other's effects so are best consumed together.

With cannabis' medicalization, growers have cultivated higher levels of CBD back into strains that dispensaries now provide to medical marijuana card-holders. The new math of medicinal marijuana has opened new horizons. As a muscle relaxant, antispasmodic, and analgesic agent, CBD has stimulated long overdue interest from SCI, MS, and ALS medical researchers. Stay tuned as discoveries advance rapidly regarding the ABC's of THC and CBD.





Proponents say that Bud Rub, a topical salve, relieves aches and pain with no psychotropic side effects.

allows me to eat and achieve restful sleep. My preferred delivery method is vaporization.”

What Forms of Medicinal Marijuana Do People Use?

Despite Connecticut’s very rigorous criteria for qualifying a recipient of medical marijuana, enrollment in its four-year-old program has tripled in the past two years. “This speaks for the positive impact this medicine is having,” says Ruby. “More and more doctors are looking at the literature and listening to their patients.” Here are usage protocols from three of them.

Tim Fournier

Tim Fournier was a 19-year-old sailor in the Navy when a freak accident recruited him into the ranks of SCI. While C6-7 quadriplegia took the wind out of his sails, it did not sink him. He has navigated the sometimes choppy seas of quadriplegia for 30 years now. Though lacking dexterity in his fingers, he uses a manual wheelchair, only recently upgrading it with power-assist. A salesperson for an automotive company that outfits vans for the disability community, Fournier is also the VP of the Connecticut chapter of United Spinal Association.

His muscle spasms and tone are so severe that to treat them he had administered Baclofen both orally from pills and internally from a pump implant. Cannabis now enables him to eliminate his oral use of Baclofen, yet the herb has not provided a total panacea. Occasionally he still switches on the pump, though more dialed down than before. Because of cannabis, he need not resort to any pharmaceutical painkillers.

Fournier registered with Connecticut’s medical marijuana program upon its inauguration in 2012. Until the dispensaries first began dispensing two years later, he procured his cannabis clandestinely from “the street,” same as everyone else did. Now he purchases all his herbal meds from the dispensaries and is appreciative of the many strains they offer. He seeks those high in CBD, which quells spasms and tone the best. His favorite CBD strain is Sour Diesel. For day use, he prefers to partake in cannabis via oil syringes and vape pens. For night use, he consumes edibles just before going to sleep. Unbeknownst to Fournier, he follows the very regimen and prefers the same strain as recommended by Witman.

Fournier welcomes full legalization for recreational use because he happens to enjoy one of cannabis’s side effects, namely euphoria, and believes everyone else deserves the choice to be appropriately medicated, too. Did he use cannabis recreationally before using it medicinally? “Absolutely!”

Alex

Alex lives in the dim twilight between state and federal laws, so he wishes to remain anonymous. Medicinal cannabis is fully legal in his home state, but he is employed full time by a federal agency, and under federal law cannabis is still banned as a Schedule I drug. If he publically confessed his “crimes,” he could risk losing his job. Ironically, as a mental health professional, one of his duties is drug counseling.

In 2004, Alex severed his spinal cord at T5 in a motorbike crash. When he was in the rehab ward, his friends smuggled in cannabis edibles for him. From his earliest days as a paraplegic, he was aware of cannabis’ therapeutic value. He moved in 2006 to the state in which he presently resides and the next year enrolled in its cannabis program. But because of the threat posed by the feds, Alex continues to smuggle his stash into his own home.

He medicates to alleviate the extreme spasticity and stiffness (tone) in his legs and to quell the accompanying pain. Cannabis helps a lot but not enough, so during the day, for spasms



Medicinal marijuana is, well, medicine. As such, it can come in capsules to enhance time-released pain relief.

he supplements with oral Baclofen. Before his use of cannabis, his daily regimen of Baclofen was 120mg. Cannabis has enabled him to reduce that dosage to half and to eliminate usage of all other pharmaceutical drugs.

Preferring strains high in CBD, he seeks Sour Diesel (again Sour Diesel!) and ACDC, always organically grown. The owner of his dispensary personally assures Alex of its organic origin, as the USDA does not certify organic cannabis. Alex's usual methods of delivery are edibles and smoking. He smokes either pipes or joints. In light of innovations with vaporizing, smoking may be nostalgic, as he smoked pot as a teenager. Then he abstained during 12 years in the military. As though making up for lost time, he insists, "I enjoy the psychoactive properties, but not when I'm at my workplace."

Since his motorcycle accident, if his life were a book, Alex might title it, *Zen and the Art of Wheelchair Maintenance*. Above all, he values human relationships as a manifestation that we all are intimately connected. And he believes that medical marijuana is equally connected to recreational pot. "I love the fact that people have the good sense to make it legal both medically and recreationally."

Paula Ghergia

Formerly a UPI photojournalist, Paula Ghergia of Somerville, Massachusetts, juggles three new jobs. Part-time, she is employed at a café. Double-time, she serves as the primary care-

giver for her 89-year-old mother who has dementia. And full-time, she manages her MS, which was diagnosed six years ago. While she has not yet reached the stage of impaired mobility, she suffers constant fatigue and periodic spasms and pain.

When Paula tried pot as a teenager, it only made her feel silly, so she quickly lost interest in it. Now in her early 50s, she enlisted in Massachusetts' medical program nearly two years ago. She says cannabis quells the spasms, alleviates the pain, and no longer makes her feel silly. In fact, it now enables her to feel quite normal.

She prefers cannabis in its natural form as a wholesome herb, which she either vapes or smokes. In the morning, she imbibes in strains high in THC to give her a lift before going off to work, while in the evening she prefers CBD strains to relax her fatigued muscles and to impart more restful sleep.

Until a dispensary opens near to her, Paula procures her supply from a legal grower who delivers right to her home. She does not grow her own because she is too busy with her jobs. And no shady drug deals in dark alleys or parking lots. She is thankful to Massachusetts for its medical cannabis program, and supports efforts to legalize its recreational use, which she thinks will further legitimize and stabilize its medical use. Her advice to medical and recreational users alike: "Be safe and be smart."

Medical Marijuana 3.0

All drugs pose risks. Whether medicinal or recreational, herbal or pharmaceutical, legal or illicit, every drug harbors undesir-

able and potentially harmful side effects. Inhaling cannabis smoke can compromise human health. While vaping bud is widely acknowledged to be less harmful than smoking, vaping still poses some health risks that varies with the brand of vaporizer. “Vaporization technology is still growing,” says Ruby, “and is going to keep escalating.”

Due to the inherent dangers of smoking and even vaping, many alternative methods of delivering cannabinoids now are sold nationwide. These include oral sprays, alcohol tinctures, topical creams (for psoriasis), transdermal patches, sublingual strips, oil extracts, eye drops (for glaucoma), time-released capsules, waxes, salves, and a whole smorgasbord of edibles. “The future of the industry is heading toward extracts with standardization of measurement and exact dosing,” says Ruby. “And a whole new area of delivery is being affected by transdermal patches and creams.” Despite this treasure trove, most recreational users still smoke or vape the bud because they are banished from legal access to more healthful cannabis-derived alternatives. (What’s wrong with this picture?)

Some ill or injured folks who still live under state prohibition may wonder if cannabis might provide them with the relief they seek. The short answer is that not everyone benefits from any single drug, and no one drug benefits everyone. Hence the hundreds of prescription drugs and hundreds more non-prescription drugs sold just to assuage pain. Everyone can gain by broadening their choices and by weighing the risks posed by each choice. If people choose cannabis, then as expanding research weeds out all the myths, medicinal users will benefit further.

We Live in a Medicinal World

Future generations of Americans will find it incomprehensible that cannabis was briefly illegal in the United States, a blink of the eye compared to the millennia that the weed has flourished

on the planet. In 1937 when it was first banned, the AMA protested that it wanted to keep the herb in its cornucopia of drugs in order to retain doctors’ options and patients’ choices.

Freedom is synonymous with choice. Prohibitionists denounce efforts to legalize any medicinal use of cannabis as mere ploys to eventually legalize its recreational use. Guilty as charged. Drug law reformers indeed view medical marijuana as a wedge issue, as the foot in the door. Without the funding and lobbying efforts from NORML, MPP, and Drug Policy Alliance, medical marijuana’s legal status would still be stuck in the 20th century. Medicinal users who may have been their stooges nevertheless have gained from its legalization.

Even prohibitionist legislators who have voted against it stand to gain from further legalization of medical marijuana. While they will not very likely suffer SCI or contract MS, many of them indeed will be afflicted by and die from cancer. And when they undergo chemotherapy, they will be thankful when given the option of using cannabis to quell their nausea and to ease their pain.

In a sense, we are all patients. What line can be drawn between the terminally ill who will die in a month or a year and the rest of us who will die in 10 years or 50? It is a fact of life that we all get sick, and that if we grow old enough, we all will become disabled, and that young or old, we all will die. ■■

Resources

The legal status of cannabis is rapidly evolving, so it is best to consult your own state government’s medical marijuana program for policy updates. Meanwhile, two websites provide useful overviews.

- National Organization for the Reform of Marijuana Laws (NORML), norml.org/legal/medical-marijuana-2
- Marijuana Policy Project, www.mpp.org/states



Using oral tinctures or vaporizers is generally considered safer than smoking marijuana.

Photo by Monique Chevalier