SPECIAL FEATURE: AMERICA PLAYS GLOBAL CATCH-UP

June | 2018

www.mgretailer.com

PEOPLE + PLANTS + PRODUCTS

For The Cannabis PROFESSIONAL

DR. REGGIE GAUDINO DECONSTRUCTS PLANT GENETICS





OPTIMIZING RETAIL LOYALTY PROGRAMS

ILLINOIS'S Seven point IP LICENSING AND INTERNATIONAL BRANDING

THE ORIGINAL WHITE LABEL VAPE PEN MANUFACTURER





Pictured above is the A3-C cartridge, consisting of a fully ceramic heating element. It is paired up with the L0 Battery, which provides 3 separate heating temperatures and 5 separate safety features to ensure your customers are taken care of. Ask us how we can put your brand to the forefront of our product with different customization options. For over 6 years Transpring has been focusing on creating the highest quality cannabis vaporization technology.

Let's work together to showcase your brand



THE FOUNDATION OF GREAT VAPES





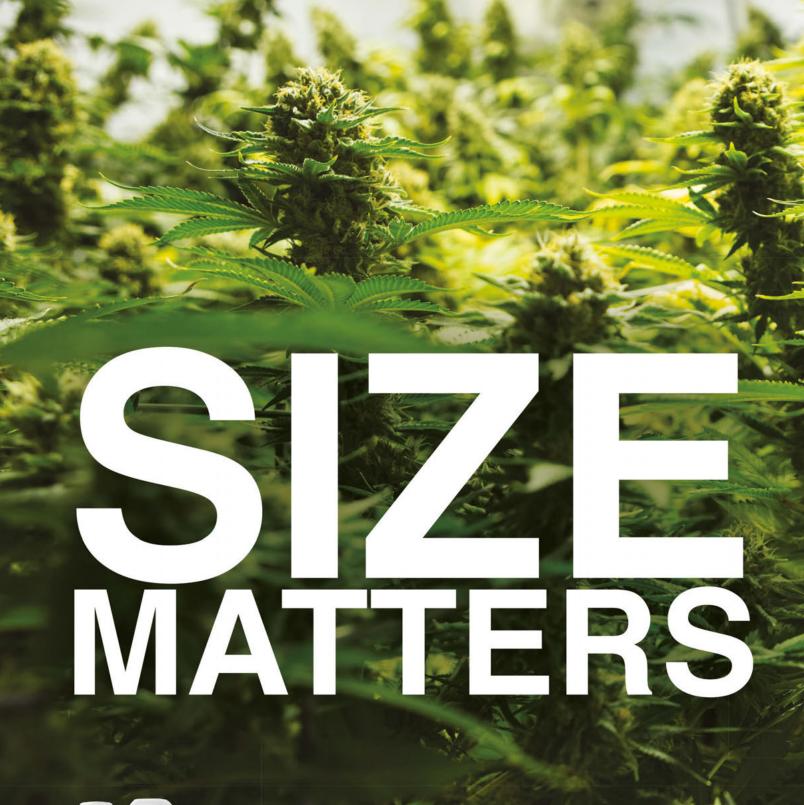
CUSTOM VAPE PEN MANUFACTURER ODM/OEM SERVICES BRANDED PACKAGING OPTIONS







Transpring HQ market@transpring.com Shenzhen, China Transpring Technology(USA) (626)581-4433 City of Industry, CA Transpring USA (925)405-5582 Concord, CA **Transpring Canada** (647)550-1699 Mississauga, ON, Canada





Measurable, significant increases in overall harvest weight, taste, and market value.

AdvancedNutrients.com





Raising the Bud Weights... and Reputations... of Top Growers

Delivering PROFITABILITY to THC and CBD oil producers worldwide!

iKrusher Cartridge Manufacturer

OEM & ODM Projects Accepted, Private Labeling



IKRUSHER IS THE LARGEST CARTRIDGE & DISPOSABLE WHOLESALER IN THE USA

1,500 Employee Production Line I 200,000 Units Manufactured Daily



Latest Technologies & First Class Materials



Order Direct!

LOS ANGELES 626-656-6169 SAN FRANCISCO 510-778-1855 **DENVER** 720-519-1348

www.ikrusher.com | hello@ikrusher.com | 0 iKrusherUSA

| CONTENTS | VOLUME 4, NO 5 • JUNE 2018

Dr. Reggie Gaudino



38

COVER STORY Steep Hill Labs' Dr. Reggie Gaudino works the front lines of cannabis, genetics, and intellectual property.



12 | HARVEST

News and information from around the nation.

26 | TOP SHELF

Oak Park, Illinois's Seven Point raises awareness with a welcoming, modern boutique vibe.

30 | TIP JAR

Jeff Harris, founder of springbig, on optimizing retailer loyalty programs.

34 | SPOTLIGHT: MANUFACTURING

Patient safety and innovation form the core of CannaCraft's mission.

36 | SPOTLIGHT: ACCESSORIES

Maïtri's elegant, handmade accessories appeal to modern cannabis consumers.

48 | COLUMN

Veteran journalist Ricardo Baca begins his new monthly column with a question for readers.

50 | CORNER OFFICE

Greenlane CEO Aaron LoCascio on the acquisition of VaporNation and the launch of his long-range development plans.

54 | FEATURE

Despite growing state legalization, the U.S. has fallen behind in the global cannabis race—and we're all suffering because of it.

68 | LEGAL

IP licensing presents a pathway to consider for international cannabis branding.

72 | PRODUCTS

Things that cut, grind, chop, vape, smoke, grow, and taste really, really good.

78 | HASHTAG

80 | OPINION

Jessica Cole, high hostess and founder of White Rabbit High Tea, recommends...





KUSHYPUNCH.COM | IG @getkushypunch





GLOBAL ASPIRATIONS

THE GLOBE IS WARMING LITERALLY, but it's also warming up to cannabis. Hopefully, the latter can help reverse the former. For that and many other reasons, what may now look like a legalization trend in a few countries soon will become a movement among nations embracing cannabis and hemp. It's only a matter of time before a fullfledged industry exists worldwide, creating exchanges, markets, and cross-border trading. The evolution of cannabis and hemp has the potential to rival or even surpass that of legal alcohol, wine, and spirits.

The revolution is happening now, in fact—a new industry is growing like a weed. Well, not exactly new; more like "borrowed" from the black market. But the creation of a legal infrastructure is new, as is the reclassification of cannabis from blanket contraband into an unknown number of legal commodities. There are few, if any, parallels in history to provide guidance. As this month's feature (p. 54) reveals, there are many roads to cannabis legalization, and countries seem to be experimenting with all of them, a patchwork of progress spreading around the world.

Challenges remain. Beyond its notoriety as a recreational drug, many of the products made from the cannabis plant are hugely disruptive to established industries with significant resources. Despite the potential headwinds, the trend is decidedly toward legalization, and much of the world looks to be breathing a heavy sigh of something far more sativa-dominant than relief.

00

Tom Hymes Tom@cannmg.com

OUR DO NO HARM MANTRA IS THE CORE OF OUR BUSINESS VALUES.

WE ALL SHARE THE COMMON GOAL OF WORKING SMARTER TO REDUCE OUR CARBON FOOTPRINT WITH SUPPLIERS, CUSTOMERS AND EMPLOYEES DRAMATICALLY REDUCING WASTE TO LANDFILL, SIGNIFICANTLY CUTTING PAPER AND MATERIAL USAGE COMPLYING WITH ENVIRONMENTAL STANDARDS AND PROGRAMS THAT HELPS US ACHIEVE THIS MISSION. WE ONLY USE RECYCLED PAPERS AND SOY BASED INKS ON OUR PRINTED PRODUCTS WHENEVER POSSIBLE.



CORRECTIONS: KIVA Head of Sales Charlie Cangialosi's name was misspelled in the spotlight "Sweet Delivery" in the February 2018 issue. We apologize for the error.

mg is printed in the USA and all rights are reserved. ©2018 by CANN Media Group, LLC. mg considers its sources reliable and verifies as much data as possible, although reporting inaccuracies can occur; consequently, readers using this information do so at their own risk. Each business opportunity and/ or investment inherently contains criteria understanding that the publisher is not rendering legal or financial advise. Neither CANN Media Group, LLC. nor their employees accept any responsibility whatsoever for their activities. All letters sent to mg magazine will be treated as unconditionally assigned for publication, copyright purposes and use in any publication or brochure and are subject to mg unrestricted right to edit and comment.



EDITOR IN CHIEF: Tom Hymes EXECUTIVE EDITOR: Rob Hill CREATIVE DIRECTOR: Angela Derasmo CONTACT: editorial@cannmg.com

CONTRIBUTING EDITORS

Adrian Sedlin, Alec Rochford, Dr. Allen S. Miller, Ammon Ford , Anastasia Ashley Picillo, Kaufman, Benjamin Hoopes, Cameron Martel, Christopher Machnich, Danny Davis, Danny Reed, David Hodes, Dawn Stancarone, Dr. Donald Land, Graham D. Gibson , Jefferson Reid, John Rozelle, Kate Cook, Kenneth J. Berke, Kymron Decesare, Leah Maurer, Leslie Bocskor, Lukian Kobzeff, Luke K. Stanton, Mary Shapiro, Joanne Cachapero, Matthew Rosen, Matthew Youngblood, Megan Stone, Michael Chernis Esq., Nancy Gudekunst , Nancy A. Shenker, Neil Juneja, Nigel Williams, Paul Kiernan, Richard D. Pio Roda, Ricardo Baca, Robert T. Hoban Esq., Sahar Ayinehsazian, Sam Fensterstock

ADVERTISING & MARKETING

CLIENT MAGAGEMENT Brie Ann Gould: Brie@cannmg.com Joe Sebergandio: Joe@cannmg.com Meghan Cashel: Meghan@cannmg.com General Inquiries: Sales@cannmg.com

PHOTOGRAPHY

COVER PHOTO: James Banasiak COVER COMPOSITE: Jorge Fuentes CONTRIBUTING PHOTOGRAPHERS: Erik Hecht, Mike Rosati, Kristen Angelo, Simeon Schatz, Thomas O'Brien, Jamie Soja, Michael Snyder, Lukas Zanoli

CONTRIBUTING ARTISTS Christine Pervarnik, Gavin Antil, Mario Maric, Zack Korn, Jorge Fuentes

> DATA MANAGEMENT DATA MANAGER: Kevin Guardado

ONLINE DEPARTMENT BRAND MANAGER: Linda Friedman

WEB DEVELOPMENT: Chris Fulton VIDEO PRODUCTION: Jorge Fuentes

BUSINESS OFFICES

CHIEF EXECUTIVE OFFICER: Darren B. Roberts DIRECTOR OF CONTENT : Kathee Brewer DIRECTOR OF OPERATIONS: Erin Zavala CREATIVE STRATEGIST: Gavin Antill GENERAL INFORMATION: Hello@cannmg.com

MAILING ADDRESS CANN Media Group, LLC

21333 Oxnard Street, Second Floor Woodland Hills. CA 91367



•••••••

www.mgretailer.com A CANN Media Group Publicatio

mg: For The Cannabis Professional Vol. 4, No. 5, (ISSN 2379-1659) is published monthly and is available to qualified industry professionals by readership request or is also available for purchase online [subscribe.mgretailer.com] Application to mail at Periodicals Pending postage rate is pending at Canoga Park, CA. and at additional mailing offices. POSTMASTER: Send all UAA to CFS. NON-POSTAL AND MILITARY FACILITIES: send address corrections to: mg: For The Cannabis Professional, 21333 Oxnard Street, Woodland Hills, CA 91367.



the smart choice

CHILLED ALCOHOL EXTRACTION

Colorado Extraction Systems makes industry leading alcohol extraction and separation systems that are easy to use and maintain. All of our systems are designed with one-button technology and backed by expert training. Smart design and superior customer relationships result in unparalleled satisfaction every time.

THE BEST EXTRACTION EQUIPMENT IN THE INDUSTRY

Operating together, our SprayVap™ and Triple X-Tract™ systems provide a seamless closed loop system that allows you to extract all the essentials and create the purest oils possible.



00 0 00



SCHEDULE A DEMO

ColoradoExtraction.com | 1.800.513.5560 | sales@coloradoextraction.com

| HARVEST |

ALL THE NEWS THAT'S FIT TO SMOKE

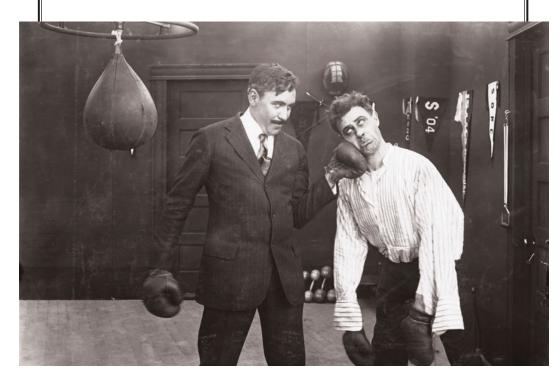
CANNABIS OUT, THEN BACK IN, AT CANNABIS CUP SOCAL

SAN BERNARDINO, Calif. — In a sterling example of the unintended consequences that can erupt in newly regulated markets, an eleventh-hour permit denial by the San Bernardino City Council seemed certain to remove the cannabis from Cannabis Cup SoCal's 4/20 event until an enterprising attorney stepped in.

The city council voted to deny the permit two days before the annual event's kickoff, forcing Cannabis Cup parent company High Times into a scramble to advise vendors and the public to leave their weed at home. Although the event could proceed without cannabis, the city threatened to shut things down entirely if even one attendee lit up.

On the morning of 4/20, attorney Chris Hickok of Shevin Law Group met with city and law enforcement officials to untangle confusion precipitated by California's constantly shifting regulations for the adult-use marketplace. Much of the medical sector of the industry may continue to operate in a sort of "gray area" created by Proposition 215 until January 2019, and according to Hickok, that's where the hiccup developed. Because Cannabis Cup SoCal allows vendors to provide medicine only to qualified patients, the event operates as a Prop. 215 entity, but like many other local jurisdictions, San Bernardino had difficulty parsing the intricacies in the regulations. Rather than risk "doing something wrong," city officials erred on the side of caution.

Once the confusion was dispersed, the need for a permit became moot. The event opened only slightly the worse for wear and with its namesake substance ensconced in the usual place of honor.





U.S. wholesale revenue from cannabis flower in 2017. (Source: New Leaf Data Services)

CANNABIS Banking Bill Gets committee Approval

SACRAMENTO, Calif. — The California Assembly's Banking and Financial Institutions Committee in mid-April approved a bill that would allow limited merchant banking for cannabis businesses. Senate Bill 930, if

eventually passed by the state senate, would allow the creation of limited charter banks and credit unions with the specific functions of holding cash assets for cannabis merchants and issuing special-purpose checks for account holders.

10%

Portion of Colorado cannabis users who think consuming cannabis makes them a better driver. (Source: Colorado Department of Transportation "Cannabis Conversation" report)



BOEHNER, SCHUMER REVERSE STANDS ON CANNABIS

WASHINGTON, D.C. — In mid-April, two prominent voices in Washington made an abrupt about-face on their long-standing cannabis stances. Former Speaker of the House John Boehner (R-Ohio) and current Senate Minority Leader Chuck Schumer (D-NY) declared open support for legalization after years of calling marijuana a scourge.

Boehner, a vocal arch-conservative during his fourteen years in the U.S. House of Representatives, accepted a position on the board of advisors for Acreage Holdings, a four-year-old, multi-vertical holding company. He also will become a member of the company's board of directors once the body is formed, but he has not invested in the company.

One of the most outspoken opponents of cannabis while in Congress, Boehner once famously wrote to a constituent that he was "unalterably opposed to the legalization of marijuana" because "legalization will result in increased abuse of all varieties of drugs, including alcohol."

Now, he is claiming a genuine change of heart. "I'm convinced de-scheduling the drug is needed so we can do research, help our veterans, and reverse the opioid epidemic ravaging our communities," he wrote on Twitter after joining Acreage's board.

Schumer, too, has been outspoken in his opposition to cannabis reform. On 4/20, however, he introduced legislation to decriminalize cannabis at the federal level. The bill would maintain penalties for trafficking across state lines between legal and non-legal states and would fund research into health benefits of and medical uses for the plant.

"The time has come to decriminalize marijuana," Schumer said in a statement. "My thinking, as well as the general population's views on the issue, has evolved, and so I believe there's no better time than the present to get this done. It's simply the right thing to do."

Both men deny having used pot in any form in the past, but after watching people close to them benefit, neither would rule out partaking in the future.



TRUMP CALLS OFF Doj cannabis Crackdown

WASHINGTON, D.C. — President Donald Trump's action to remove a roadblock from between him and vacancies in the Department of Justice could signal impending freedom from the threat of federal raids and prosecution in adult-use states.

Colorado Senator Cory Gardner, a Republican, successfully froze nominations to fill DOJ vacancies when Attorney **General Jeff Sessions** rescinded the Cole Memo in January. After negotiating with the senator, Trump in April directed the DOJ to cease any potential cannabis enforcement action in Gardner's state. According to Gardner, the president also said he would support other states' rights to set their own policies.

Colorado became the first state to legalize adult use over Gardner's objections shortly after the Cole Memo instituted a federal "handsoff" policy in legal states in 2013. Gardner since has said he'll defend the will of his constituents.



pounds of wholesale flower sold in the U.S. during 2017, up 22% over 2016 (Source: New Leaf Data Services)

| HARVEST: News |

STATISTICS CANADA TO GATHER DATA About cannabis use from poop

OTTAWA, Ontario — Canadian government agency Statistics Canada has begun large-scale testing of sewage to gather annual data on, among other things, cannabis use. Statistics Canada Assistant Director Anthony Peluso said as many as twenty-five cities eventually may be included in the survey.

Peluso also said that in addition to estimating overall cannabis consumption for test populations, the data may be used to determine the ratio of legal to illegal cannabis being consumed. Some critics cast doubt on the ability of wastewater analysis to accurately deduce levels of drug use in large populations or by region.

Canada joins several other countries that annually test wastewater for various drugs including cannabis. China, New Zealand, Australia, Italy, England, and multiple European cities test wastewater for



data including drug use. Researchers in American cities rarely have conducted wastewater research, though testing could become more commonplace. Some opponents cite privacy issues as an argument against large-scale testing for drugs.

FinancialPost.com likened Canada's sewage survey to "a drug test on eight million people."

FIRST FDA-APPROVED CANNABIS MEDICATION MAY NOT BE AVAILABLE IN COLORADO

DENVER — In an upside-down case of regulatory disconnect, Colorado patients may be unable to obtain the first FDA-approved drug derived from cannabis.

The medication, Epidiolex, is expected to receive FDA approval June 27 for treating Lennox Gastaut and Dravet syndromes. Lennox Gastault is a severe form of epilepsy; Dravet is a severe form of epileptic encephalopathy. Both conditions typically are diagnosed prior to age four.

The problem with distribution in Colorado arises from the state's drug dispensing laws: Pharmacies cannot sell cannabis medications, and cannabis dispensaries cannot sell FDAapproved drugs because they are not licensed pharmacies.

Epidiolex, developed by Greenwich Bioscience (a subsidiary of GW Pharmaceuticals), is a non-psychotropic CBD oil formulation to be used as an alternative treatment. FDA approval means Epidiolex could be prescribed through a conventional pharmacy in cases where healthcare providers are reluctant or unable to refer young patients to a dispensary—if Colorado lawmakers change current laws.

Currently, patients in Colorado, including children (through certified caretakers), access CBD oil and other medicinal products at cannabis dispensaries and patient facilities.



U.S. wholesale revenue from cannabis flower in 2017. (Source: New Leaf Data Services)



Growth in cannabis jobs during 2017. (Source: ZipRecruiter)



Projected size of global vaporizer market by 2023. (Source: Research and Markets)

SOCIALLY ENGAGED



@trippy.treez 110k



@lonely.stoney.420



@this.is.krishna **30**K

GO GREEN TO SAVE GREEN





Cannabis cultivation and alternative energy compliment each other perfectly. They both ultimately emphasize restoration, preservation and health. These energy systems are the more intelligent approach to supporting the uninterrupted production of plant based medicinals to the market – without damaging the place we all call home."

> —Viyda Schatz ,Founder OG Spaces Foundation

OG SPACES FOUNDATION ogspaces.com • 503-967-3772 • viyda@ogspaces.com *Powered by MBS Engineering*



| HARVEST: Business |



ISRAELI RESEARCH FIRM PARTNERS WITH PENNSYLVANIA CULTIVATOR

WATERFALL, Pa. — Pennsylvania cannabis cultivator Ilera Healthcare has an international partner in Israel after joining forces with clinical research firm Tikun Olam, which is based in Tel Aviv. The venture allows Ilera to produce and distribute Tikun Olam

strains specifically developed to combat anxiety, pain caused by cancer, nausea, depression, and other ailments.

Tikun Olam—which means "repair the world" in Hebrew—has amassed data from approximately 20,000 cannabis patients who agreed to take part in large-scale clinical research studies at Israeli medical centers, universities, and retirement homes. The Israeli company and its American partner hope to gather similar data about American cannabis patients, though when the U.S. government may approve clinical research is unknown.

Two of Tikun's recent Israeli studies showed promise, according to Chief Marketing Officer Stephen Gardner: an examination of the effect of substituting cannabis for opioid medications and an examination of cannabis's effect on Crohn's disease.

"By using specific strains, we were able to eliminate opioids in 36 percent of a test group," Gardner said. "They were able to move off opioids and use cannabis as a pain-relief management tool." **TIKUNOLAMUSA.COM, ILERAHEALTHCARE.COM**



HENRY'S ORIGINAL: Saving the earth one tree at a time

MENDOCINO COUNTY, Calif. — Grower Henry's Original donated all profits from April sales of its Manzanita strain to nonprofit organization One Tree Planted. The funds will be used to reforest the wilderness around Lake Tahoe with sugar pines, which are essential to the ecosystem's biodiversity but have been ravaged by fire and disease. Each \$1 donated will plant one tree.

"Henry's Original is more than a cannabis company; it's a community of cultivators, growers and environmental advocates who are always looking to give back," said co-owner Jenna Meister.

HENRYSORIGINAL.COM

ULTRA HEALTH PLANS 8.7-MILLION-SQUARE-FOOT CULTIVATION FACILITY

ALBUQUERQUE, N.M. — Ultra Health has announced plans to build an 8.7-millionsquare-foot cultivation facility on 200 acres of farmland in Otero County, New Mexico. The company believes the facility will be the largest of its kind in North America.

The new campus will be called Ultra Health Tularosa and will include twenty acres of cannabis greenhouses, eighty acres of outdoor cannabis cultivation, and an additional 100 acres of hemp crops. To support the project, the company secured water rights for the equivalent of nearly 326 million gallons.

A spokesperson said Tularosa will employ 100 local residents in a facility that "blends modern agribusiness and green technologies including solar, wind, and rainwater harvesting."

Medical cannabis has been legal in New Mexico since 2007 but has seen substantive growth in only the past two years. In early 2018, there were 50,000 registered patients in the state. In 2017, the program reported sales of \$86 million. **ULTRAHEALTH.COM**



SCOTTS MIRACLE-GRO Acquires sunlight Supply Co.

MARYSVILLE, Ohio — Scotts Miracle-Gro, the venerable lawn and garden company established in 1868, has acquired Sunlight Supply Company, the largest distributor of hydroponics in the United States, for \$425 million in cash and \$25 million in stock.

Sunlight will be incorporated into Scotts' cannabis-focused subsidiary The Hawthorne Gardening Company, which is based in New York, though some operations will be relocated to Sunlight's headquarters in Vancouver, Canada.

SCOTTSMIRACLEGRO.COM, SUNLIGHTSUPPLY.COM

TRUFFLY MADE UNIVERSAL DEPOSITOR

EDIBLES DEPOSITOR THE EASIEST WAY TO MAKE EDIBLES

Iruffly Made





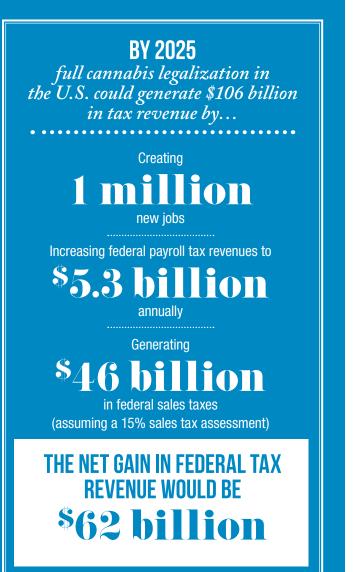
Universal Depositor "Made in Germany" Efficient - 800 to 1000 candies per hour Reliability - Affordable - Patented Model Chocolate - Truffles - Caramels Gummies - Hard Candy - Edibles THE ONLY ONE OF ITS KIND



Visit trufflymade.com to see our full collection of Depositors and Molds

email: info@trufflymade.com call: (+01) 619 500 3102

| HARVEST: Business |



(Source: New Frontier Data)



MAINSTREAM VEGGIE PRODUCER PARTNERS WITH CANNABINOID RESEARCH TEAM

DENVER — Ornamental plant and vegetable producer Hardy Boy Farms has partnered with cannabinoid research company ebbu to create a state-of-the-art indoor hemp cultivation and research facility.

Hardy Boy, which traditionally has focused on providing garden centers and landscapers with bedding plants, has set aside 150,000 square feet of greenhouse space for growing hemp under the state license it recently received. The farm also will provide ebbu's botanists with 1,500 square feet of lab space for strain performance testing and genetic manipulation.

With a million square feet of greenhouse space across three locations in the Denver metro area, Hardy Boy Farms employs horticulturists trained in genetics and keeps a soil scientist on-site. The segue to hempbased cannabinoid research and development was an easy one to make, according to owner Marty Gerace.

Colorado-based ebbu will use the space to expand its efforts to generate clinically-proven cannabinoid formulations for medicine. HARDYBOYPLANT.COM, EBBU.COM



Portion of Colorado cannabis users who admit to having driven under the influence at least once during the past 30 days.

(Source: Colorado Department of Transportation "Cannabis Conversation" report)



Total U.S. medical cannabis sales in 2017. (Source: New Frontier Data)





A COMBO FOR ANY OCCASION.



| HARVEST: Business |

NUGGETS



420TV premiered a new docuseries, "Cannabiz," on 4/20, introducing established and emerging companies that are elevating the business of weed. **420TV.COM**



MEDMEN opened a 10,000-square-foot dispensary on 5th Avenue April 20, bringing the California company's total New York locations to four. MEDMEN.COM



STEEP HILL and EYBNA TECHNOLOGIES LTD. launched the joint venture Delta, which produces custom terpene formulations. STEEPHILL.COM; EYBNA.COM



FLRISH INC., corporate parent of Harborside, closed a \$5 million qualified equity round, part of a larger \$6.5 million series A financing. **FLRISH.COM**

\$3,24,5,682,724 Total U.S. adult-use sales in 2017. (Source: New Frontier Data)

NATIONWIDE SURVEY TO GAUGE RECREATIONAL, MEDICAL CONSUMPTION

NEW YORK — As part of its Survey of the American Consumer, GfK MRI is collecting data about Americans' recreational cannabis use within the past six months and medical use in the past year. Data, including contextual information about product ownership, leisure activities, attitudes and beliefs, media usage, and socioeconomic status, is scheduled to be available in March 2019.

The addition of cannabis questions to the survey is part of a larger GfK North America initiative to explore marijuana usage in the context of lifestyle choices. "With marijuana moving beyond stereotypical 'stoners' into mainstream medical and recreational use, MRI believes it is time to understand the implications of these changes," said Karen Ramspacher, senior vice president for innovation and insights. "We look forward to trending the data nationwide and revealing the associated purchases that are impacted by new usage trends." **GFK.COM**







Portion of Colorado cannabis users who admit to driving high almost daily. (Source: Colorado Department of Transportation "Cannabis Conversation" report)



MILLS PAYS THE BILLS



562-343-5412 | #millspaysthebills | info@millsnutrients.com

MAKE BRANDING EMOTIONAL AGAIN



GRAHAM GIBSON is the founder and CEO of KandyPens, one of the largest vaporizer lifestyle brands in the world.



HAT IS BRANDING? We take so much pride in the products we create for consumers. We want to show off the cool features, colors, etc., but none of that matters to customers. The customer, honestly, couldn't care less. What they do care about is how the product will make them feel-not from a physiological standpoint, but from an emotional perspective.

All of us are connected emotionally to our phones, our cars, our clothes. Why do we know them all by brand names? Brands that connect emotionally, resonate with your core, are brands that will survive through market shifts and changes and will position a company for longevity.

Don't make products for you; make them for your customers. The most important branding component is not what you can touch, and it's not a feature. It's what your customers feel-an emotional connection to every single thing in their lives.

When a customer falls in love with your brand, they become an evangelical supporter of everything you do now and in the future-and that kind of strong relationship should evoke an emotional response in you.

KANDYPENS.COM



HOW DO YOU HANDLE ODOR CONTROL?

Odor Control Engineered Plans | Odor Control Neutralizers Vapor and Water-based Odor Control Dispersion Systems Odor Impact Air Model Studies | Nationwide Service Team



NCMenvironmentalsolutions.com

WEEDY CANNABIS COLLECTIVE WASHINGTON, DC EDUCATION COMMUNITY PRIVATE EVENTS CORPORATE FUNCTIONS

N (🕆

SOUVENIR T-SHIRTS AVAILABLE ONLINE

CANNABIS COLLECTIVE

www.kingweedy.cor

VISIT US WHEN YOU ARE IN DC OPEN DAILY (202) 394-4493 www.kingweedy.com

EVENTS CALENDAR



The House & Garden Team at Indo Expo, CA. Photo by Mike Rosati

JULY 2018 EVENTS SCHEDULE

The following is a list of select industry events taking place during July 2018.

CULTIVATE '18 JULY 14-17 GREATER COLUMBUS CONVENTION CENTER,

COLUMBUS, OHIO "An event for the entire green industry," Cultivate '18 is expected to attract 10,000 attendees from 30 countries to eight acres of trade show floor containing 700 exhibitors. Hosted by trade association AmericanHort, the event offers professionals from all segments of the horticulture industry seminars, keynotes, and networking.

CHAMPS LAS VEGAS SUMMER JULY 18-20

LAS VEGAS CONVENTION CENTER

CULTIVATE18.0RG

Founded in 1999 and now one of the largest counterculture trade shows in the world, CHAMPS hosts premier exhibitors and draws buyers in the thousands from all over the world. Vendors offer glass pipes, vaporizers, cleaners, and extraction machines, among other stock. CHAMPSTRADESHOWS.COM

CANNABIS BUSINESS SUMMIT & EXPO JULY 25-27

SAN JOSE, CALIFORNIA

Hosted by the National Cannabis Industry Association, Cannabis Business Summit & Expo is celebrating five years of bringing together the industry's best and brightest minds. Myriad networking and marketing opportunities combine with five educational tracks: money and law, policy and reform, cultivation and processing, business management, and emerging issues.

THECANNABISINDUSTRY.ORG

CANNACON 2018 JULY 27-28

HYNES CONVENTION CENTER, BOSTON

Rapid change in all areas of the cannabis industry is creating new possibilities for entrepreneurs and companies that can recognize opportunities, innovate, and evolve strategies quickly. CannaCon's seminar series endeavors to help by providing insights about and actionable ideas for dealing with the industry's issues. **CANNACON.ORG**

STAY CURRENT ON ALL OF THE INDUSTRY RELATED EVENTS: MGRETAILER.COM



AUGUST 4-5, 2018 PORTLAND EXPO CENTER • PORTLAND, OR

BUYERS PRE-REGISTER NOW FOR COMP ADMISSIONS

EXHIBITS • SEMINARS • DEMOS INDUSTRIAL HEMP PAVILION INDOOR • OUTDOOR • GREENHOUSE



COLORADO • CALIFORNIA • OREGON INDOEXPO.COM

TOP SHELF



ON POINT

A swanky, modern design and a large menu make Seven Point a standout Illinois dispensary.

HE MOMENT that I learned I had won the District 36 license in 2015, I began exploring potential dispensary locations," said Brad Zerman, founder and chief executive officer of Chicago-area dispensary Seven Point. From the start, he envisioned a crisp, clean retail space with a welcoming, modern boutique vibe.

He promptly hired local design firm Curioso to translate the raw space—"a rubble pit," he called it—into a sleek, highly detailed environment. Curioso chose partially see-through polycarbonate walls to reinforce the feeling of openness, a humidor-style display case with natural wooden boxes to contain products, a handpainted mural of the cannabis plant and its components, a large community table to facilitate interaction, a non-patient waiting area and restroom, and a community room separate from the dispensary where Seven Point hosts events.

But with more than fifty shops scheduled to open at about the same time, Zerman knew he would need more than just an elegant design to capture a share of the market. So, he set about finding a team of employees who would would set an equally high bar. "What makes us unique is our steadfast dedication to raising awareness about the medical cannabis pilot program and increasing the number of patients that have access, as well



Front Row Left to right: Yajaira Santiago, Zoe Francowicz, Terri Jovacevic, Lisa Tipton; Back Row left to right: Kim Shaw-Booker, Paul Doyle, Amy Lee, Marc Nino, Brad Zerman

SOME REVOLUTIONS ARE BORN, OURS WAS ENGINEERED.



215 - ALCHEMIST

U.S. made. Precision-tooled. This is the machine that lets you get the most out of your harvest — with no solvents. Food-grade stainless steel, a whisper-quiet motor and easy cleanup make it clear: this is the dry-sift solution growers can depend on.

888-379-8746 Greenbroz.com



TRUE TO THE CROP

| TOP SHELF |



WHAT MAKES US UNIQUE IS OUR STEADFAST DEDICATION TO RAISING AWARENESS ABOUT THE MEDICAL CANNABIS PILOT PROGRAM AND INCREASING THE NUMBER OF PATIENTS THAT HAVE ACCESS, AS WELL AS OUR UNWAVERING DEVOTION TO EXCEPTIONAL CLIENT EXPERIENCE"

-Brad Zerman, founder and CEO



PAUL DOYLE, INVENTORY DIRECTOR. Before joining Seven Point, Doyle worked in security management, information technology, and pharmaceutical clinical trials. "The State of Illinois has one of the strictest medical cannabis programs and some of the toughest regulations in the nation," he said. "One requirement is a daily inventory of all cannabis items, and all discrepancies must be accounted for.

"Seven Point utilizes a three-person team to count anywhere from 5,000 to 10,000 items every day," he added.

"Inventory staff are trained and reinforced daily on all inventory requirements, including labeling, recordkeeping, and storage. All inventory is tracked from delivery to sale through our inventory [point-of-sale] system."

LISA TIPTON, EDUCATIONAL WORKSHOP DIRECTOR. Tipton holds certificates of training as a holistic health practitioner, holistic nutrition consultant, and anti-aging regulation specialist. "The intention of the patient workshops is to teach about cannabis as medicine," she said. "We provide an in-depth presentation about medical cannabis, including the endocannabinoid system, intake methods, cannabis formulations, research, and educational resources. Another component that makes us unique is our strong emphasis on adding a caregiver."

TERRI JOVICEVIC, APPLICATION DIRECTOR. Prior to working at Seven Point, Jovicevic spent twenty years in caretaking. "I love partnering with patients and making them feel extremely comfortable, knowing someone is by their side until they have a [medical] card in hand," she said. "During the waiting time, we help them to hang in there and support them until they receive their card."

AMY LEE, PHYSICIAN EDUCATION DIRECTOR. Before joining Seven Point, Lee worked as a regional coordinator with a statewide network, providing training and technical assistance to school district leaders, coaches, and school-based teams in northern Illinois. "From the way we organize our menu to the specific recommendation we make, we are rooted in education and research," she said. "At the center of our community table is a leading medical cannabis physician's protocol for documenting the essential information regarding formulations, intake, delivery methods, and research-based recommendations for specific conditions and symptoms." as our unwavering devotion to exceptional client experience," Zerman said.

In fact, within thirty days of winning the license, he began developing a framework for a medical cannabis education and registration workshop. Within sixty days, he presented "The Benefits of Medical Cannabis" at the Oak Park Health and Wellness Fair and began providing local physicians with the information necessary to certify their patients. Seven Point hosts eight to ten medical cannabis education and registration workshops each month.

"These workshops are singular in that we provide fingerprinting, passport photos, and application completion assistance," Zerman said.

He also said Seven Point offers the largest and most varied menu in Illinois. Consequently, the dispensary's team must be on top of a massive selection of products, strains, and devices. At first, Zerman worried the menu was too expensive for the average customer, so he implemented a two-tiered discount program with flexible loyalty points that may be exchanged for free products. "We also provide specials and sale items every day," he said.

The customer mix has remained the same since day one: patients over the age of 21 suffering pain, anxiety, and insomnia. The three most common ailments are fibromyalgia, cancer, and PTSD, Zerman said. Flower is still king, accounting for 71 percent of all transactions and 50 percent of all sales. Edibles are second with 17.5 percent of sales, followed by concentrates at 11.5 percent, vape cartridges at 11 percent, disposable vape pens at 7 percent, and transdermal products at 2.5 percent.

"Flower sales remain strong, with our single most popular product being indica," Zerman said. "We believe there will always be a place for flower, as the effects of inhaled cannabis have a uniquely deep and powerful mechanism of symptom control. Even with the impressively high percentages of THC and CBD in other inhalable concentrate formulations, it appears our clients continue to benefit from cannabis in its most organic and unprocessed form."

Business has been brisk. From March to November 2017, sales volume doubled. Seven Point was the forty-ninth of fifty-four dispensaries to open in the state, but by June 2017 the shop was ranked eighteenth for number of patients registered.

Zerman said business has grown since then. "As of mid-January 2018, we have over 640 patients [registered] and see around sixty a day," he said. @—*Rob Hill*



THE WORLD'S ONLY PROVIDER OF TURN-KEY EXTRACTION LABS PROFESSIONAL SITE PLANNING LAB DESIGN ENGINEERING COMPLIANCE FIELD VERIFICATION LICENSING INSTALLATION TRAINING WORKFLOW



R

855-420-0020

Extraction solutions

PRECISIONEXTRACTION.COM

EQUIPMENT | TRAINING | COMPLIANCE | SUPPORT

© 2018 PX2 Holdings, LLC. All rights reserved.



OPTIMIZING RETAILER LOYALTY Programs

ITH COMPETITION heating up in many states, retail storefronts must find new ways to attract and keep customers. Points-per-spend and points-per-visit loyalty programs represent two ways to encourage return visits and foster consumer loyalty.

Jeff Harris, founder of customer loyalty platform springbig (springbig.com), believes points-per-spend systems are superior. Here's why.

COSTS VS. BENEFITS

Points-per-spend programs give customers incentive to spend more than they normally might. Big spenders and frugal customers alike often will work to attain cash back, coupons, or a freebie. Customers who need only a few more points in order to receive a reward are likely to buy extras instead of purchasing only the item they came in to get.

"If you have the ability to set up a points-per-spend rewards program, do," Harris advised. "A points-per-visit program doesn't increase the average spend."

Points-per-visit programs also are more difficult to reconcile cost-wise: A customer who spends \$5 and another who spends \$500 will receive the same number of points for their visit. Pointsper-spend programs, however, base both costs and rewards on a percentage of sales. "The accepted percentage of sales that a program should cost is in the 1- to 2.5-percent range," said Harris. "On a net basis, if you are spending more than 2.5 percent you are probably spending too much." He also pointed out that a cost of less than 1 percent probably means the program is underfunded and therefore may underperform.

NET COST, BREAKAGE, AND SLIPPAGE

According to Harris, a net cost of 2 percent is considered ideal for one of the most common points-per-spend structures: a 10-percent value proposition, meaning customers who spend \$100 earn a \$10 reward. Net cost is determined by subtracting "breakage" and "slippage" from the base cost of the reward. "Breakage is defined as the percentage of rewards that are issued but do not get redeemed," Harris said. "This percentage is normally about 50 percent of rewards issued. Slippage is the percentage of points that fall in between reward levels that never get spent on rewards."

A REAL-WORLD EXAMPLE

One of the most well-known brands in the United States also operates one of the most popular loyalty programs: Starbucks. Fans of the company's iconic coffee who take advantage of the Starbucks Rewards program earn two "stars" for every dollar they spend on food and beverages. Members can redeem their stars for a variety of rewards including free or reduced-price food and drinks.

According to Harris, Starbucks's loyalty program wasn't always per-spend based. Initially launched in per-visit mode, Starbucks Rewards failed because not enough customers spent the baseline amount the company projected. The program quickly proved too costly to continue, yet Starbucks execs continued to believe rewarding consumers for their patronage would pay off in the long run.

"The company's solution was to switch to a points-per-dollarspent system," said Harris. "Now, stars are earned in proportion to the customer's spending."

Retail cannabis should follow Starbucks's lead, he added. *—Rob Hill*

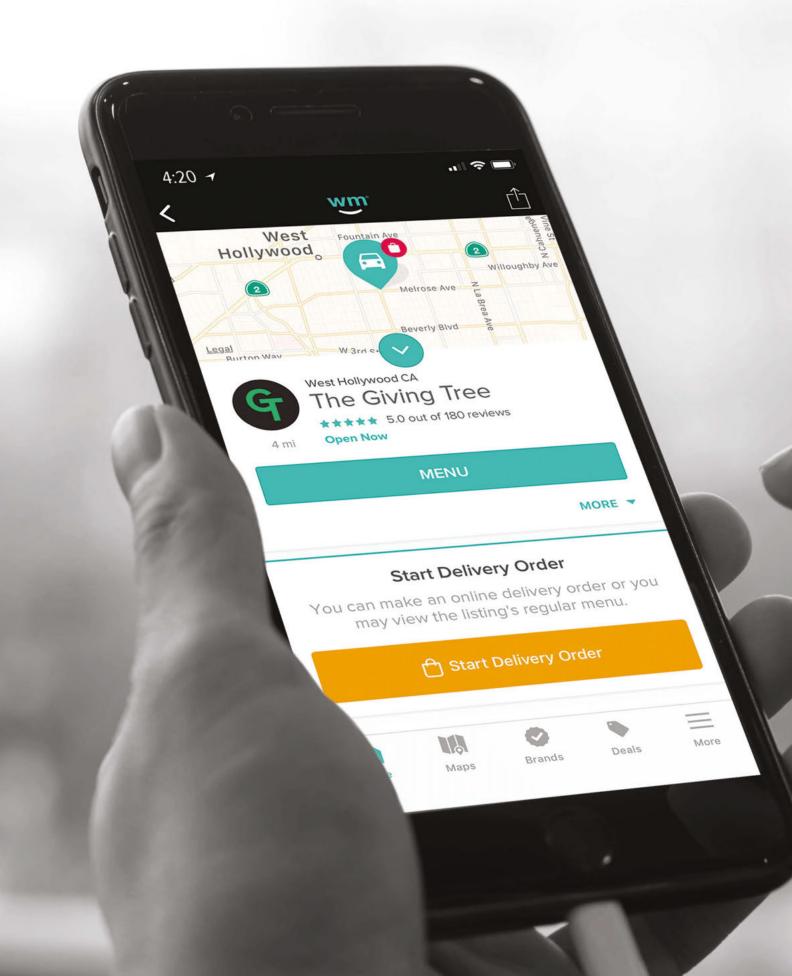


a better experience^{**} iloveincredibles.com









weedmaps

SKIP THE LINE ORDER NOW

Now order everything you love without the wait and hassle. Get delivery and in-store pickup from the largest selection of retailers and cannabis products anywhere. It's simple, just add items right to your bag and tap to order.



www.weedmaps.com

| SPOTLIGHT: Manufacturing |



HELPING PEOPLE HEAL

Patient safety and innovation form the core of CannaCraft's mission.

ENNIS HUNTER always wanted to start a legal cannabis business. Hunter, 46, grew up in the enchanting weed forests of Humboldt County, California, and learned early on about the health benefits ascribed to the plant and how to grow it. When he discovered he couldn't leap into cannabis as quickly as he might have liked, he started a gardening and nutrients company instead. "I knew how to grow and what techniques to use, so I used that knowledge to make products that improved the cultivation process for others," he said.

In 2014, the time was right to launch CannaCraft. The vision was simple and to the point: create a cannabis company that made safe, sophisticated products to help people heal. "Our focus has predominantly been on cannabis extract, which we then turn into vape cartridges, softgels, sublingual sprays, and edibles," Hunter said. What makes CannaCraft's products rare in the ever-expanding market?



WE'RE FORMULATING TERPENES TO TARGET SPECIFIC CONDITIONS. THIS NEW WAVE OF CANNABIS PRODUCTS IS SOPHISTICATED AND BENEFITS PEOPLE THROUGH PRECISION AND CUSTOMIZATION.

> — Dennis Hunter, co-founder, CannaCraft

They are designed to be medically appropriate and customized to the dose of THC or CBD that fits each individual's needs.

Beyond creating singular products, Hunter wanted to give back to the community. At the time, he said, many cannabis companies were operating in the shadows. Hunter wanted to set CannaCraft apart as a legitimate business that was shaping the social shift to destigmatize cannabis.

From there, CannaCraft grew quickly. The company now employs more than 150 people in its Santa Rosa, California, headquarters. The 36,000-square-foot facility allows almost all aspects of the business to operate in one location, making communication and collaboration between departments easy. Prior to CannaCraft, the building was used to manufacture pharmaceutical equipment. So, the space already contained equipment hookups and lots of clean-room area for formulation and production. With everything under one roof, Hunter and his team are able to ensure quality throughout every step of the process, which is important for a company that places patient safety and product quality at the center of its mission. According to Hunter, CannaCraft was making safe, lab-tested, clearly dosed products long before those things were required or expected.

The company also invests heavily in research and development, including that undertaken by Project CBD, in order to continue evolving products for maximum efficacy and medicinal benefit. "We triple-test our products throughout the production process to ensure they are free of contaminants and doses are consistent," said Hunter.

The company's umbrella covers myriad brands, all with different focuses and purposes. For instance, Care By Design is a CBD-rich line available in five CBDto-THC ratios. "We originally launched the line with sublingual sprays but, as the product's popularity grew, we added more applications because people wanted to use CBD in different ways and for different reasons," Hunter said. The line now features vape cartridges, softgels, droppers, concentrate oil, dissolvable strips, topical cream, infused chocolates, and honey. In 2017, Care By Design was the best-selling CBD brand in California, according to Hunter. In a HelloMD and Brightfield survey, California patients voted Care By Design their favorite CBD brand.

Hunter's role has changed since launching CannaCraft. He recently hired a chief executive officer to take over day-to-day management. Hunter's main focus now is

To Extract and Serve *CannaCraft by the numbers:*

VERSATILITY. On the product development side, CannaCraft always is looking for what's next and what else can be done with existing products. "That takes us into a lot of new territories and meeting with people from different industries or with different areas of expertise," said Hunter.

ESTABLISHED. Well established after four years in the industry, CannaCraft is able to scale to meet market demands. "This makes us a reliable partner and product maker," Hunter said.

BELIEF. "We believe in what we do, and we built our company with patients in mind," said Hunter. "We built this company from the ground up, and we are invested in our products, our patients, our communities, and our employees that make it all possible."

CANNACRAFT.COM

Care Care Care Care



innovation and product creation. He spends the majority of his time exploring new ideas and technologies that can be adapted or retrofitted to make current products and processes better. "I spend a lot of time with the extraction, formulation, and processing teams," he said.

The focus of the moment is terpene science. Hunter is obsessively exploring how different terpenes may affect sleep, anxiety, nausea, and pain relief. "We're formulating those terpenes to target specific conditions," he said. "This new wave of cannabis products is sophisticated and benefits people through precision and customization."

He's happy with the change in roles, and he's over the moon with the company's bottom line. CannaCraft's business has grown steadily; sales have roughly doubled every year, especially in the CBD realm. When California approved adult use, Hunter felt certain CannaCraft would experience growth in high-THC product sales, but CBD products still lead the pack. He developed a theory: The legalization of recreational use on January 1 introduced an older demographic to CBD-rich products. "CBD is now being used for common ailments to replace over-the-counter and prescription medications," Hunter said.

CannaCraft is big on education. Since day one, the company has been involved with community and local non-profits including Ceres Community Project, Daily Acts, Go Local, and Becoming Independent. Hunter believes once people see how cannabis benefits health, the science behind the plant becomes less daunting and the various ways of medicating are demystified. "In addition to having easy-to-use products like softgel caps, we wanted to let people know why they might use a certain product, how it works in the body, what the effects could be," Hunter noted. Lawmakers are a particular target of educations efforts, he said. CannaCraft works closely with California legislators to draft sensible and comprehensive manufacturing guidelines. "Until recently, a lot of regulators were unfamiliar with cannabis manufacturing, so we opened up our facility and hosted dozens of tours for state and local officials," he said.

—Rob Hill

| SPOTLIGHT: Accessories |



ELEVATING THE CANNABIS RITUAL

Maïtri's elegant, handmade accessories appeal to modern cannabis consumers.

ORMER PROFESSIONAL MOUNTAIN BIKER Philippe Depault had no interest in using cannabis until he developed fibromyalgia as a side effect of a virus he caught in New Zealand. Depault, 26, quickly became a believer in the healing properties of the plant when he discovered medical use eased his symptoms and got him back on his feet.

"I now use cannabis daily in different forms, but mainly edibles and concentrates," the young Canadian said. "My disdain for the plant turned into a passion for agriculture, cannabis, and entrepreneurship, which led me to found Maïtri in 2017. I also possess a chemical analysis certificate and received a degree in engineering while starting the business."

While medicating early on, Depault needed accessories to help him consume but did not feel comfortable going to classic head shops, where cleanliness could be sub-optimal and the offerings often seemed bland. His dilemma sparked an idea: develop a line of welldesigned, discreet accessories and manufacture them in his hometown, Quebec. "Most of the accessories available in smoke shops are made in Asia," Depault said. "Local economy is something that drives my decisions on a daily basis."

Also driving his decisions was a belief the cannabis industry will mimic the beer and coffee industries, becoming all about the brands. From the beginning, he intended Maïtri to be the meaningful cannabis accessories brand addressing the needs of the modern consumer. The company's mission: to help destroy the stoner image with elegant, savvy, craftsman-made products. "Our core demo[graphic] is the design-centric consumer who looks for a piece of art to complete the cannabis ritual," said Depault.

To start, he located local artisans and told them to let their creativity flow, with one caveat: Everything must be handmade. One of the first participating artists, a talented ceramist, now leads a team of multiple ceramists who mold and finish products by hand.

Maïtri's wooden pieces are machined by a computer-assisted, automated tool and finished by hand. All products are assembled in-house prior to shipping. Depault is adamant about sourcing Canadian wood and using the highest quality clay available. "Our ceramic lasts a lifetime, as you would expect from a high-quality porcelain dish set," he said.

Maïtri's popular Prana one-hitter and Karuna Jar are primary sales drivers. For Prana, Depault wanted a one-hitter that would replicate a cigar's aesthetic. Adding a wooden tip to the ceramic core gave the device a sophisticated, personal touch.

Depault decided to go the organic route with distribution, relying on social media and word of mouth. Instagram and Facebook, in particular, were instrumental in Maïtri's early success, he said. "We did not approach the market as an accessory company," Depault noted. "We positioned ourselves as a lifestyle brand really quickly with our Instagram feed and our content. Our social media [presence] is our client services. We believe it's incredibly important in the world we live in to build a meaningful relationship with your consumers."

Evidently, Depault's dedication to creating quality products crafted by hand paid off. Two months after the company debuted, Maïtri was nominated for the Canadian Cannabis Awards' Brand of the Year. Six months later, in February 2018, publicly traded cannabis holding company Hiku Brands Company Ltd. made an offer to buy Maïtri. After a few sleepless nights, Depault agreed to sell—on the condition he'd remain deeply involved in day-to-day operations.

If the sale was unexpected, it came at a good time for Depault. Now, he said, he can concentrate on what he's most passionate about: product development, production, administration, and businessto-business sales.

He's positively giddy about Canada's impending federal legalization of recreational use. "It is historic," he said. "I can't wait to develop new cannabis products as legislation unfolds." TAYMAITRI.COM





BA

RRU

B

E

40RLD'S

C PC CHAMBER NARO

IRST



NHOLESA

GREENLANE

"+CLUSINE

WHOLESALE ORDERS CALL 877.292.7660 | GNLN.COM

NOT FOR SALE TO MINORS

Dr. Reggie Gaudino

100	Lot No. aaa#6a
GenKit User Guide	Lot No. addinos
Y1150 F M E Notes	
R11s1 F M E Notes	
G11s2 F M E Notes	
B11s3 F M E Notes	
K1154 F M E Notes	
M11s5	
011s6 F M E Noter	
V11s7	*
	State State

Photo: James Banasiak

| COVER STORY |

THE PATENT WHISPERER COULD DR. REGGIE GAUDING HOLD THE KEY TO AVOIDING

A LOOMING CANNABIS IP APOCALYPSE?

BY TOM HYMES

eggie Gaudino, PhD, is a fascinating combination of pure intellect and passionate impulse, a scientist of rigorous discipline happy to chill with a fatty, a man of the mind perfectly at home within the complicated topography and sociology of the cannabis industry. It's been four years since he arrived at Steep Hill Labs, a published genetics researcher with eighteen years of intellectual property experience "writing, prosecuting, and managing patents and patent portfolios in fields as diverse as software and telecom to biotechnology and molecular genetics," per his bio. He took on two heady job titles—Vice President for Scientific Operations and Director of Intellectual Property—and in the intervening years, in addition to his official duties, Gaudino sounded a constant refrain reminding the industry to guard intellectual property or risk losing it. The warnings, which I first heard a few years ago during one of Green Flower Media's first series of streamed industry talks, remain dishearteningly germane today as the number of cannabis patent filings increases monthly.

| COVER STORY |



Testing equipment packs Steep Hill Labs' Oakland, California facility. Photo: Tom Hymes

"Nothing's happened, not a damn thing, and the patents keep coming," a frustrated Gaudino said in April. "The patent I was talking about [during the Green Flower Media presentation] that would be so detrimental to the industry was issued. It was a utility patent on a strain of cannabis, couched in a breeding-process patent, but that's the thing—you can't just look at a patent title and get anything from it. Unless you look at the claims, which people never do, you don't understand what the patent is for."

Gaudino knows whereof he speaks. He likes to read patents, a "hobby" that has given him rare insight into how they work.

"A plant patent gives you control of the plant itself and only the plant itself," he said. "Typically, a plant patent is for something that is clonally propagated, which fits very well into how we do things in the cannabis industry. You go to a dispensary and see the clones there; that's clonal propagation. Plant patents are good for that.

"Utility patents provide much broader protections than plant patents," he continued. "If you get a utility patent on a plant, not only are you protecting the plant itself, but also the seeds and any products made from them. You're taking your claim a step farther by saying the plant has unique properties—chemical output or unique genetics—and these properties are good for something else. That's where you get the utility part."

But this also is where the breakdown in cannabis patents occurs. "The entire plant patent foundation is built on a paradigm where everything is well-characterized and/or proprietary," explained Gaudino. "Because of that, when you do a cross between a mother and a father, you end up with a new product that has bound parameters. A stabilized or true-breeding male has a repertoire, so when you put them together you're going to get an F1 hybrid, which is the first generation from two well-characterized plants. The problem in cannabis is that nothing is well-characterized, and everything is a mishmash."

While strains have traditionally been bred mostly to produce high THC, the industry does have some genetic lineage history to lean on. "Cherry AK was bred with this and it gave us this," said Gaudino. "Great, but Cherry AK was an F1, and it wasn't even a stabilized F1, but a mishmash, a hybrid. Someone had a bunch of seeds and found the one they liked and clonally propagated it, so it's got no stabilization and is truly like something found in the wild.

"When you try to patent something like that you have a problem, because a patent is predicated on knowing the genetics or the combined chemical output," he added. "Well, if you don't really know and you haven't had it characterized, how do you then offer a utility patent that protects the seeds?"

All of which raises a question: Why are these cannabis patents issued at all?

Doug's Varens

Amanda Chicago Lewis made the problematic patent in question infamous in her taut August 2017 article for GQ magazine, "The

Light + Fan control

New



Gavita Master controller ELF

Get enhanced control of your grow room with the second generation Gavita Master controllers. The Gavita Master ELF is the latest addition to our controller line-up. You get everything the upgraded second generation Master controllers offer, plus fan control. With the integrated fan controller, it can directly control your lights and fans for a stable temperature in your grow room.

- Switch, dim, and boost your fixtures from a central unit
- Independent cycle programming (EL2 only)
- Separate sunrise and sunset settings
- Direct control of EC fans (AC fan control with optional EFM1 module)
- Fan control based on intelligent, self-learning PID algorithm



For more information about the Gavita Master controllers visit www.gavita.com

| COVER STORY |

Great Pot Monopoly Mystery." She raised the specter of Monsanto-like patent arrogations underway even before the industry was federally legal. Lewis asked of the secretive patent applicants in her subhead, "Who are they? Can they be stopped?"

Gaudino, who is mentioned briefly in the article, said the issuance of a patent is an end in and of itself. "The presumption is that if it comes out of the patent office with a number on it, it's a valid patent," he said. "What has to happen is that someone has to have the time and the money to challenge that patent. Do I think it's challengeable? Yes."

That said, he acknowledged that the "mystery" patent was well-written. "It's a damn good patent, but it's a patent that cannot stand because patents for plants are built on a number of assumptions, including that their true breeding is from stabilized strains and that they represent a well-categorized and well-defined genome. That does not exist in cannabis," he stated. "The problem becomes that it may be a great



In cannabis, we take a female and four or five males, throw them in a room, and see what we get.

> — Dr. Reggie Gaudino on genetic breeding practices



patent, but the underpinning foundation of the patent is complete dogshit because we don't have stabilized variety. Everything is an F1, and we even use the term F1 incorrectly.

"In true agricultural genetics," he continued, "an F1 is the first filial seedling population of two well-defined parents. Strain A and strain B give you F1 A + B. You can then follow the genetics in that offspring, because you know the definition of the parents. We don't do that in cannabis. Instead, we take a female and four or five different males, throw them in a room, and see what we get."

The first of the patents in question, of which there are now five, was issued in 2014 to a company called BioTech Institute LLC. According to Gaudino, BioTech consciously focused on cannabis strains that have both THC and CBD, which were not grown in abundance at the time the patent was filed.

"In cannabis culture, people generally want to get high, so THC-dominant strains were the ones important to people," said Gaudino. "[BioTech] has no patents targeting THC-dominant strains, because









STORZ & BICKEL AMERICA INC. Oakland • CA 94608 • USA www.storz-bickel.com

| COVER STORY |



Loading the Micro Reader / PathogenDX DNA testing of cannabis. Photo: Christian Cizek

they knew the industry would turn on them. But there were not a lot of people making THC-CBD plants back in 2012 and 2013. [BioTech] saw that arena and filed specifically on those things. They also took a strain that someone else gave them—Doug's Varen, which Steep Hill had developed—incorporated it into their breeding program, and tried to file a patent on it, too."

The United States Patent and Trademark Office (USPTO) rejected Doug's Varen but issued the other utility patents despite their deficiencies, Gaudino said. "They looked like good patents in the agricultural industry," said Gaudino. "They were written in a way that they had the structure and feel of a proper patent."

Gaudino shook his head at the thought. "Here's the reality," he said finally. "There is a claim out there for a hybrid cannabis plant making at least 3 percent THC and at least 3 percent CBD, and there is another version that says there is a BT/BD phenotype, which just means that it has an active THC synthase and an active CBD synthase, so it just has to make both. There are no lower limits or upper limits. The additional part of the claim that made it sound good to the examiner was that the patent included a terpene profile that was myrcene-dominant and had at least 1 percent terpenes. But if you are growing cannabis and you cannot make 1 percent terpenes, you shouldn't be growing cannabis because cannabis plants make at least 1 percent terpenes. To the examiner it looked like a limitation on paper, however, and claim structure is all about limitations."

Still, Gaudino is not surprised the patents were issued. "The problem is that the cannabis industry is new in terms of patents, and there probably is not a single person working for the patent office who has grown cannabis in their life," he said. "They have no clue that any cannabis plant makes 1 percent terpenes. They have no clue that if you are growing a THC or CBD plant, that if you cannot make 3 percent THC or CBD, you should not be a cannabis farmer. They simply don't know that."

A similar phenomenon happens in every new industry, he added, and often it takes years for the situation to play out, with bad patents issued and enforced in the meantime. Enforcement currently is not possible in cannabis because weed remains federally illegal. That will not be the case forever, though, and Gaudino fully expects there to be interest in the BioTech patents.

"Things could move very quickly," he said, referring to the end of federal prohibition. "Once that happens, these patents could be phenomenally valuable. Who has the most to gain? Someone with deep pockets who will be able to keep anyone from challenging them. What will happen is that someone like Dow or Monsanto will try to snap up this company to get these patents. I fully expect the company that owns these patents will be looking for a buyer, but maybe they will turn around and donate them to humanity and put them in the public domain.

"But the fact they have not done it after this many years means it

is unlikely to happen," he added.

What sorts of cannabis plants will be covered by the infamous patents? "All the plants that make both THC and CBD, all the hybrids," said Gaudino. "Anything that might be 'medicinally useful." Go figure."

DEEPER DIVE

Gaudino, who checks for new cannabis patent applications every six months, said there are many new ones every time he looks. "The number goes up by about 200 applications every six months, a very steady increase," he said. "When you look at the demographics of where these patents are coming from, a lot are from outside the United States. There are a growing number coming from within the U.S., but now there is a trend with non-traditional companies patenting into the cannabis space. We're starting to see ozone treatments and other technologies that were applied elsewhere and are now improvement patents for use in cannabis."

A world of pain still awaits the cannabis industry if overbroad patents are permitted to proliferate, but as fate would have it, Gaudino himself may influence how this story plays out. The scene is right out of a movie. Earlier this year, at the mid-winter session of the American Intellectual Property Lawyers Association (AIPLA), Gaudino presented a talk called "Accidental Infringement." The presentation claimed the immediate attention of the USPTO after one of the lawyers posted about it on his blog. "When they saw the title for my talk, they flipped out, because you can't have a patent that by definition is accidentally infringed," said Gaudino, who has a solution to the cannabis patent conundrum if only the USPTO is open to revising the way it assesses cannabis patents.

"What we see all day at Steep Hill are products that are called the same name, that presumably have identical genetics, but which come out with completely different chemical profiles," said Gaudino. "The different growing conditions affect different systems in the plant. Genetics plus environment equals phenotype. That's why, if you specify the genetics and you specify a set of growing conditions which is not what is required in the patent record normally—now you've locked in one phenotype, one chemical output. That's how you could have many people going after similar genetics and coexisting peacefully. You can require that they do a deeper dive into the information—tell us how your genetics are unique from someone else's genetics. You need to show it and define the conditions that gave you the output you are claiming.

"The first step has happened," added Gaudino. "[The USPTO] heard there is a problem and latched onto it immediately after hearing about my talk at the AIPLA meeting. I got a call a week after I gave the talk, so they are definitely aware of it."

Despite the interest by the USPTO, Gaudino is not holding his breath that change will result. "There are very few companies in the world that do both chemistry and genetics on cannabis, and Steep



| COVER STORY |

Hill is one of them. In fact, we may be one of the only companies that does both," he said. "The fact that there is a decent amount of data that we can associate with these properties is going to be very important to the industry and to the patent office, and I would hope they understand the message and adopt it.

"I understand from my data that the only way for the equation to be zero sum is if you define all of the pieces," he continued. "You can't just say, T'm claiming a chemical profile,' because you could have different genetics that get you to the same spot. And you can't just claim genetics, because what if someone finds a unique nutrient formulation and applies it to those genetics and it produces a unique chemical profile? Do you automatically get his thing? So, these things cannot peacefully coexist, and there has to be a way to define it better. That way is using genetics and the environment, which locks in a phenotype.

"However, having been a patent practitioner for the past twenty years, I think something like that happening is

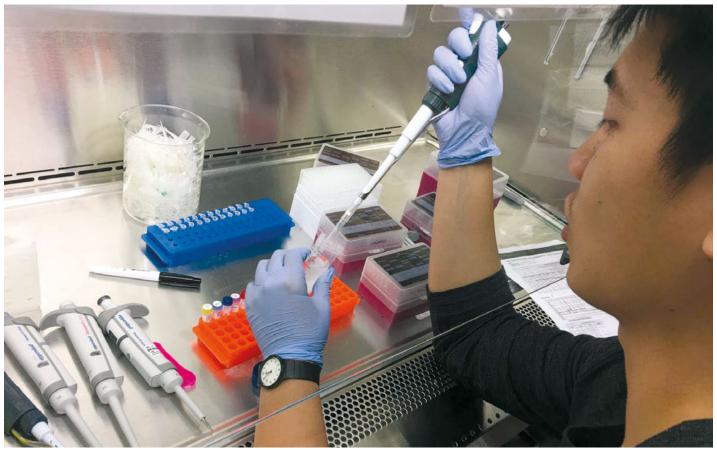
6

The scary part about the cannabis industry is that any clone you can buy from a dispensary shelf right now is already Open-source. -Dr. Reggie Gaudino unlikely, and if it does happen it will not be anytime soon. The muck in the mire keeps getting deeper."

In the meantime, he said, the industry needs to get wise to the requirements of patent law. "The scary part about the cannabis industry is that any clone you can buy from a dispensary shelf right now is already open-source," he said. "There are no patent rights for anything that has already been offered for sale.

"Dry flower is different," he continued. "By selling the bud, you don't ruin your rights. But you cannot patent clones internationally if they have been sold, and if they have been offered for sale for more than a year in the United States, they can't be patented here. It doesn't even have to be a signed deal. If it's a public offer, the clock starts ticking. The only people who might be able to save their stuff are people who have not yet released it for sale."

Licensing deals and appellation control hopefully will provide much-needed protections while the patent situation works itself out. "But licensing deals only work



Pipetting Solutions / Prep Station for Molecular Biology. Photo: Wilson Linker

if you have not done what everyone else has done and put your cuts on dispensary shelves," noted Gaudino. "You have to have the discipline to develop your unique strain, and only give it out to you, you, and you in licensing deals. If it's seen anyplace other than there, one of those places screwed up."

EXPANDING THE GLOBAL FOOTPRINT

Steep Hill Labs spends a fortune on research and development, which Gaudino said is core to the company's mission to add to the industry's body of knowledge in tangible ways. "One of our projects is to be able to develop everything—by which I mean the ability to develop markers for breeding, not just for THC, CBD, or terpenes, but for anything," he explained. "One of the quests is to augment all the minor cannabinoids and terpenes; to have them expressed at a higher level."

The company also is involved with some collaborations in Israel, where Gaudino recently visited. "They have clinical trials for things like epilepsy, and they also have a monumental cancer-screening program where they are taking different strains, making extracts from the strains, and testing them against a battery of eighty cancer cell lines," he said. "They take the strains and apply them to each of the cell lines to see what happens. Some kill everything, some kill nothing, and some kill specifically. The ones that kill everything are great, but you can't do anything with them because they kill everything. The specific ones are the ones you follow. This is what is going on at a very high rate of speed now in Israel.

"The purpose is to create something called a genome-wide association study, which is taking the phenotypic data the morphology, chemistry, color—and mapping it by meta-analysis to the genetics. We have a lot of whole genome sequences."

Steep Hill's vast amounts of data will be of immense value to agricultural and pharmaceutical companies looking for specific applications, but it also will be part of a larger study that overlays cannabis genetics and human genetics. "This is ultimately where we have to go, because everyone's cannabinoid system is a little bit different, which is why people respond differently to the same strain. This is the next level we are working toward and let me tell you, if you think there is intellectual property now, wait until you get to that point."

As we were going to press, Steep Hill Labs, which last year expanded its testing services to include every Canadian province and territory, announced an impressive expansion of its global footprint with a bevy of new international licensing agreements. "The licensee for Steep Hill Canada will expand their testing umbrella to include Mexico, Germany, Spain, France, Italy, Switzerland, and the United Kingdom," according to a company statement.

For Gaudino, the expansion just means more of the same. As the individual in charge of all research and development and intellectual property initiatives at Steep Hill, he is more than up to the challenge.

"I have a very exciting job," he said. 👦



| COLUMN |

CROWD-SOURCING OUR COVERAGE: WHAT DO YOU REALLY WANT TO KNOW?

RICARDO BACA

ELL, HELLO AGAIN.

Funny how we keep running into each other like this. Last time we spent time together was December 2017ahh, the holiday crush-when I was lucky enough to grace the cover of this fine publication.

And now I'm back! Only this time, I'm writing from inside the belly of the beast, as mg's new national cannabis columnist.

I'm obviously excited to share this news with you, our readers, and it's important for you to know we're announcing the news here first-before Twitter, before the press release goes out, before I even tell my own mother. Because without you, there is no mg. Too often media outlets forget their true North Star: the readers.

But not this time. My colleagues and I are announcing our new partnership here (and later on Twitter, via press release, and a call to my mom) because we want your help in shaping what this column ultimately becomes. We have lots of ideas, to be sure, but as we struggled to choose just one focus for this new endeavor, which will appear in print and online, I had a zany suggestion for mg's editorial board:

"What if we ask our readers what they want from me and this column?"

Their interest was piqued, so we kicked around the

crowd-sourced construct on a few phone calls to test its merits.

Above all else, mg serves cannabis industry professionals the world over, offering a singular focus on the people, plants, and products fueling the unprecedented growth of this trailblazing sector. Those three Ps-people, plants, and products-are so central to mg's mission that you'll see how they define the magazine's editorial direction every time you thumb through the print version or click around on mgretailer.com. But there are other Ps in there, too, including politics, psychopharmacology, and policyand plenty of other categories from other headings in the dictionary.

As for me and what I bring to the mix: You might have read in mg's December cover story that I'm an experienced journalist who has been covering drug policy for five-plus years. As The Denver Post's firstever cannabis editor, I founded and served as editorin-chief of groundbreaking site The Cannabist, where my team and I unexpectedly became the subjects of the documentary film Rolling Papers (still available on Netflix). I left The Cannabist and the Post in December 2016 to create Grasslands-a fullservice communications agency helping businesses in marijuana, hemp, and other industries with public



relations, content, events, and thought-leadership but I still cover the industry for The Daily Beast. I've also written for *Cannabis Now* and *Sensi Magazine*.

"I like the idea," the *mg* editorial gang told me after a few minutes spent kicking the tires. "But do you think it will work?"

"I do," I said. And right here is where I unveil my big ask to you, dear reader, because you are instrumental in making this crazy idea work.

My question to you is simple: What do you want me to cover in these pages in the months and years to come?

Would you like in-depth features about the worldwide industry's top decision-makers, or perhaps deep take-outs that discuss and dissect the various regulatory environments, revealing the most businessfriendly states and provinces for specific subsections of the legal cannabis industry?

Would you like me to break down the biggest issues of the day with thoughtful perspective and insider knowledge, or perhaps you'd prefer columnizing on the future-forward trends we're starting to see in today's leading-edge environments? What if this column specifically chronicled the creeping process of normalization, closely monitoring our shared experiences as legal marijuana increasingly becomes the law of the land the globe over?

Or maybe you'd rather this column didn't have a specific focus, allowing me to editorialize on whatever strikes my fancy each month?

As I said, I know this is a big ask. We're all too busy for our own good, and corresponding with a journalist you've never met likely falls at the bottom of the evergrowing to-do list on your phone. But I wouldn't ask you for your thoughts and time if I didn't see the potential reward for both of us.

Just think about it: How often does a media brand reach out specifically for your feedback? And this isn't some faceless survey tangentially related to the article you're trying to pull up in a browser. This is me giving you my official email address (ricardo@cannmg.com) and my personal Twitter handle (@bruvs), respectfully asking for thoughtful input that will absolutely shape the future of what is covered in this column.

Here's how this will work: If you're hitting me up on Twitter, you know how to do that (again, @bruvs). If you're emailing me, start your subject line with "My ideas for **mg**'s national cannabis columnist" and tell me what you think. Whether two sentences or two pages, I promise to read and consider everything sent my way.

What a great experiment this could be! Writer and readers, ideating and conversing together to determine the direction of a column before the column gets started in earnest. What a triumph of modern technology and thoughtful communication this could be. Yet, on the flip side, there's also a chance this conversation is one-sided and falls flat, with you deciding you aren't interested in participating or don't have five to ten minutes for such an endeavor.

So really, it's all up to you. I've done my part. After hours of conversations and brainstorming and more hours spent writing this initial correspondence and unusual proposal, I'm turning this crowd-sourced experiment over to **mg**'s readers, and I'm hoping some of you recognize the unique opportunity ahead and reach out my way in the coming days.

I will follow up on this modest proposal, and the feedback I hope is to come, in the next issue of mg.

Have an idea for our national cannabis columnist? Send your thoughts to Ricardo Baca via Twitter @bruvs or via email at ricardo@cannmg.com. Be sure to start your subject line with "My ideas for mg's national cannabis columnist."

| CORNER OFFICE |



SUPPLYING THE GOODS

With the acquisition of its biggest competitor, Greenlane launched the first phase of a long-range development plan.

REENLANE FOUNDER and Chief Executive Officer Aaron LoCascio admits he's been obsessed with acquisitions "for a very long time"—which is why his company's recent acquisition of its closest competitor, VaporNation, should have surprised no one familiar with LoCascio's growth strategy. The buy gives Greenlane a much greater scale, which LoCascio said should allow the company to achieve greater savings throughout its supply chain and logistics.

"We want to take our savings and pass them on to our customers," he said. "Providing first-class service and premium products are really what we are about, [so] the acquisition of VaporNation doesn't change anything [where customers are concerned]. It only emphasizes who we are."

Greenlane will continue to operate VaporNation's retail site, VaporNation.com, while absorbing the company's wholesale operations into its own. Although he keeps most plans to himself, LoCascio hinted even more acquisitions could be on the way as part of a broader development plan. "We've been hard at work and steadily growing for over thirteen years now," he said. "In the past couple of years we have really pulled ahead of our competition, and with this acquisition we have sprinted ahead even farther."

mg: YOU STARTED GREENLANE IN 2005 WHILE YOU WERE A SOPHOMORE IN COLLEGE. WHAT JOBS HAD YOU HELD BEFORE THEN?

Aaron LoCascio: I was a full-time student at the University of Central Florida, majoring in accounting. My working background is pretty marginal. I'd just turned 20 years old, so all my jobs previous to [Greenlane] were working as a cashier at a carwash and movie theater. I'd also mowed lawns and was a restaurant busser and host. In addition to permanently imbuing me with a strong work ethic and sense of humility, the service industry taught me you should treat every person you meet with respect, dignity, and kindness.

THE INDUSTRY SEEMED TO SHIFT BIG-TIME AROUND 2007 OR 2008. THE MARKET BEGAN TO GET CROWDED. TOO.

Did vou

In dispensaries, Greenlane's

but premium child-resistant

packaging from Pollen Gear.

When I first started, no one knew what a vaporizer was. When people would ask what I did for a living, I'd say "I sell vaporizers" and would get a very broad array of responses, including the assumption that I was selling nebulizers for infants and children. There was a disconnect in people's best-selling products aren't the understanding, because the vapes for which they are known market was so young and still fairly unknown.

In 2007 electronic cigarettes became more popular, and that brought about awareness. At the

present time, a broad population of people know what a vaporizer is, and when a lot of people know about products and industries, it invites a lot of competition.

YOU'VE HAD A FRONT-ROW SEAT TO INCREDIBLE TECHNOLOGICAL ADVANCEMENTS IN THE VAPE SECTOR, ESPECIALLY THE REVOLUTIONARY LITHIUM-ION BATTERIES.

Product evolution has been pretty significant since I first started. Prior to lithium-ion batteries and smartphone technology, vaporizers were very large and clunky, with most of them having to be plugged into walls.

Another big advancement was expanding vaporizer medium capabilities. Originally, devices were made for use with loose-leaf; there weren't any for oil or concentrates. It wasn't until about 2011 or 2012 that vaporizers for oil and concentrates came out.

For me, the technological changes were really about having to stay ahead of the curve and seeing the trends before they happened, so we could have priority access to products we believed the market would want. You have to stay ahead and anticipate what people want, which is always very difficult to do.

WHEN IT COMES TO SALES, HOW MUCH OF YOUR **BUSINESS IS FOCUSED ON DISPENSARIES?**

We've been the leader in distributing premium brands to smoke shops for a number of years and have really built a deep relationship with those retailers. It's still the bulk of our business, but the dispensary side is starting to grow very quickly. Dispensaries have, for the most part, been slow to develop robust accessory offerings in their stores, [instead] choosing to focus more on selling the plant in its various forms.

MORE HARD GOODS AND **MERCHANDISE HAVE BEEN** SHOWING UP IN DISPENSARIES **OVER THE PAST SIX MONTHS** TO A YEAR.

As the dispensaries evolve, and in some cases consolidate, we are seeing them increase their merchandising acumen and begin to offer a highly curated selection of premium products. We are helping them identify the best products and build out their merchandising assortment to maximize their revenue

and profitability, which is leading to real growth for us in the sector.

WHEN YOU TALK TO DISPENSARY OWNERS AND BUDTENDERS, WHAT FEEDBACK DO YOU HEAR ABOUT CONSUMER TRENDS?

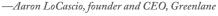
I've noticed two significant trends. The first is that everyone is now putting their focus on brands-their own brands and consumer brands. A lot of energy and effort are being put into the branding of packaging and devices. Branding has become incredibly important to dispensaries.

The second trend I've noticed is a lot of regulations. Regulations are rapidly changing, so there's been a pretty constant evolution of packaging and product requirements for dispensaries in accordance with their state and local laws.

| CORNER OFFICE |



ONE OF THE MOST EXCITING LAUNCHES THIS YEAR WILL BE THE OTTO BY BANANA BROS. OTTO IS THE WORLD'S FIRST AUTOMATIC SMART-ROLLING MACHINE AND IS ABLE TO GRIND AND PACK TWENTY TO THIRTY PERFECT CONES PER CHARGE.





WHAT'S SELLING WELL FOR YOU RIGHT NOW?

In dispensaries, our best-selling products aren't actually the accessories we are known and loved for in our wholesale business, but [instead] are premium child-resistant packaging from Pollen Gear, which we sell to cultivators and processors. Also, closed-system vaporization devices like G Pen Gio and Double Barrel which we sell to licensed processors who fill them. Those products end up on the shelves at many dispensaries across the country. On the accessory side, Volcano, PAX 3, Davinci IQ, G Pen Elite, Dr. Dabber Aurora, Marley Natural Glass, and Aerospaced Grinders all do really well.

WHAT LAUNCHES ARE YOU MOST EXCITED ABOUT IN 2018?

We have some pretty unique, compelling, and innovative products that we will be bringing to market in the near future. One of the most exciting launches this year will be the OTTO by banana bros. OTTO is the world's first automatic smart-rolling machine and is able to grind and pack twenty to thirty perfect cones per charge.

WORK-WISE, WHAT KEEPS YOU UP AT NIGHT?

Taking our eyes off the prize is what keeps me up at night. We've done a fantastic job of getting where we are today. I never want Greenlane to be one of those here today, gone tomorrow stories. I'm always thinking about never losing sight, staying humble, being grateful for what I have, and making sure I never stop innovating, or else it could be gone tomorrow. I want to make sure everyone is enjoying this experience along the way.

YOU'RE A BIG FAN OF ELON MUSK. AS AN ENTREPRENEUR, WHAT HAVE YOU LEARNED FROM HIM?

Elon Musk is definitely a hero of mine. He was on the brink of losing everything, but one day he got a phone call and his whole life changed for the better: He got the NASA contract. That's pretty inspiring to have a dream and watch it almost crumble to pieces, but believe in it so much that it comes true. Elon Musk never stopped believing. He has such immense conviction in his dreams. To see that follow through and actually become a reality is very moving.

WHAT'S THE BEST BUSINESS ADVICE YOU'VE RECEIVED?

I occasionally tell a story about what someone once said to me a long time ago. I don't even know if it qualifies as business advice, but it's something that resonated with me.

When I was working at a carwash, I was asked to go pick up some parts. There I was in the store, looking around in amazement because I didn't know a store like that ever existed, and some random stranger looked over at me and said, "You know, you could sell anything." Then he pointed at the lights on the ceiling and said, "Light bulbs, for example. You could sell light bulbs. If you sell the most light bulbs out of everyone else, then you're doing pretty well for yourself."

It was a completely random stranger that I wouldn't recognize if I ever saw him again, but his words stuck with me, and it really drove me to want to build a company that was the biggest and most excellent. It made me want to start a company that everyone loves —something that would focus on service. @

JULY 25-27, 2018 | SAN JOSE, CA







CULTIVATING A NEW ERA OF ENTERPRISE

THE MOST INFLUENTIAL, AWARD-WINNING CANNABIS TRADE SHOW IN THE U.S.



FEATURE

Can ANERICA Catch Up to CANNABIS?

Despite growing state legalization, the U.S. has fallen behind in the global cannabis race—and we're all suffering because of it.

BY JOANNE CACHAPERO



IGHT NOW, U.S. federal prohibition on cannabis stands in the way of establishing any comprehensive nationwide policy or real legitimacy for the emerging American cannabis industry.

But, by the time you read this, prohibition could be over. Developments in mid-April—strangely enough, right around unofficial cannabis holiday 4/20—have some thinking the tipping point is near.

First, former Speaker of the House John Boehner, a Catholic Republican, announced a week before 4/20 he would join the board of Acreage Holdings, a cannabis sector investment firm. Boehner, who smokes cigarettes, also has served on the board of tobacco giant Reynolds America in an advisory capacity.

Then, days later, Colorado Senator Cory Gardner, also a Republican, announced he had secured a promise from President Donald Trump that states will be allowed to establish their own cannabis policies. That may have been a signal Trump will nix Department of Justice action against cannabis businesses operating legally in legal states.

On 4/20, Senate Minority Leader Chuck Schumer (D-NY) announced his intention to introduce legislation that would decriminalize cannabis nationally. Over the 4/20 weekend, news network CNN announced the latest installment in its *Weed* docuseries, hosted by chief medical

| FEATURE |

Considering its high degree of medical utility and low potential for abuse, cannabis is wholly unfit for Schedule I controls, which impede not only its medical use but also further research. — KevinMurphy, founder and CEO,

Acreage Holdings

correspondent Sanjay Gupta. The first segment of the series, in 2013, almost singlehandedly changed the national cannabis conversation by introducing CBD to the American viewing mainstream as an alternative treatment for pediatric epilepsy. In the newest episode, Gupta looked at how cannabis could be used to battle the U.S. opioid crisis amidst growing demand for alternatives to slow the increasing rates of opioid addiction, overdose, and death.

The Food and Drug Administration in April also accepted public comment on cannabis, which will be reported to the World Health Organization. The comments will be taken into consideration when WHO reviews potential reforms to its international cannabis policy. In his comment to the FDA, Acreage Holdings founder and Chief Executive Officer Kevin Murphy wrote,

"Considering its high degree of medical utility and low potential for abuse, cannabis is wholly unfit for Schedule I controls, which impede not only its medical use but also further research. The WHO Expert Committee on Drug Dependence has repeatedly recognized this fact, having called for a move to Schedule II or IV on multiple occasions.

"We would suggest, however, that cannabis should not be on any schedule," Murphy continued. "Like alcohol and nicotine, it is simply not the type of substance for which control is appropriate; its widespread use, and the high degree of uselessness and wastefulness associated with its prohibition, should lead the FDA to recommend to the WHO that cannabis no longer be controlled under international law, freeing member nations, as well as regional and local governments, to legalize and regulate this extraordinarily useful plant as they see fit."

Additionally, the FDA seems poised to approve the first cannabis-based medication, Epidiolex, on June 19. Developed by U.K.-based GW Pharmaceuticals, the medication is plant-derived CBD oil (containing no psychotropic cannabinoid THC) that treats specific, extreme forms of pediatric epilepsy, including Dravets and Lennox-Gastaut syndromes. GW Pharmaceuticals' other cannabis-based medication, Sativex, a 1:1 blend of THCA to CBD, is formulated to treat spasticity related to multiple sclerosis and is available in thirty countries. The U.S. is not one of them.

So...what's it going to take to convince U.S. lawmakers to reschedule cannabis?

CannaKids founder, chief executive officer, pediatric medical cannabis advocate, and cancer mom Tracy Ryan thinks education and more pushing will be



Sophie Ryan takes the mic at a CannaKids fundraiser. Photo courtesy of CannaKids



PATENTED 2-WAY HUMIDITY REGULATOR

CURE BETTER • STORE LONGER

Humidity Protection That Adapts & Responds to It's Environment

INTEGRA

umidity Repulato

55

REGULATE HUMIDITY AT **55%** OR **62%** R.H.

- ✓ Tear & Spill Resistant
- Preserve Flavors and Aromas
- ✓ Biodegradable
- ✓ Non-Toxic

KNOW WHEN TO REPLACE

✓ Each Pack Includes One Replacement Indicator For Hands Free Monitoring



Prevent Mold & Overdrying

INTEG

- Maintain Potency & Aroma
- ✓ Salt-Free Solution
- FDA Compliant

INTEGRA"

required, even if that means her daughter, 5-year-old cannabis patient Sophie, has to projectile vomit all over officials.

WHAT'S THE PROBLEM?

Status as a Schedule I drug means cannabis has no medicinal value, as far as the WHO and U.S. government are concerned. THC—the psychotropic cannabinoid in marijuana—is defined as "hazardous" like fellow Schedule I narcotics cocaine and heroin (also plant derivatives). The designation for cannabis means any research necessary to document potential benefits (or adverse effects) of cannabis plant compounds is prohibited, with research organizations, scientists, and academics unable to access even basic raw materials—namely, federally illegal, medicinal-grade cannabis.

Beyond just trying to keep up with a hodgepodge of regulations that vary from state to state and jurisdiction to jurisdiction, the lack of federal guidelines for cannabis crops also makes it difficult for cannabis companies to implement standard practices or effectively regulate hundreds of areas of specific concern.

To end U.S. cannabis prohibition, federal authorities will have to reschedule marijuana, allowing national legalization to follow. That would open the doors for companies, especially those already heavily invested or pursuing costly patents for FDA-approved cannabis-based medicines, to nationalize their businesses, access banking, diversify into other sectors, conduct increased research and development, and compete in the global markets like any legal industry.

But, in many ways, lifting prohibition would be only the start of the often slow-moving process of dealing with the federal government.

"I think we're a long way from talking about a global cannabis market," said litigation and real estate attorney Brad Blommer of Portland, Oregon-based Greenlight Law. His experience in the highly regulated area of real estate law gives him insight into how complex regulations could become for cannabis.

"Here in Oregon, there have been significant challenges marrying the new recreational cannabis regulations [with] the existing zoning and occupancy laws on the state and county levels," he said. "Each of the states with recreational programs has created significantly different regulatory schemes, and I imagine that will continue as each new state passes laws to establish a recreational marijuana program. Consequently, even when marijuana becomes legal at the federal level, it will remain regulated by each state in the context of its own regulatory program. Before interstate commerce can begin in the cannabis industry, the creation of some type of uniform regulations will need to occur."

From a recreational perspective, the FDA cannot and will not approve whole-plant cannabis as a pharmaceutical, because its effects and dosage are hard to measure and vary greatly from individual to individual. But producing pharmaceutical-grade





SEVENPOINT

IF YOUR PRODUCT ISN'T FLYING OFF THE SHELVES, IT'S TIME FOR SOME NEW SHELVES.

From turnkey solutions to single service options, Seven Point Interiors is a provider of premium retail environments for the cannabis industry. With over 30 years of design, build, manufacturing and branding experience, we're ready to take your business to new heights.

sevenpointinteriors.com

TRICARICO ARCHITECTURE & DESIGN PC, SELECTED PARTNER OF SEVEN POINT INTERIORS

Before interstate commerce can begin in the cannabis industry, the creation of some type of uniform regulations will need to occur. - Brad Blommer, attorney, Greenlight Law

cannabis medications is a wholly different and very expensive kettle of cannabis oil. By the time a new FDA-approved medication reaches pharmacies, the product can have cost its manufacturers more than \$2 billion in development, testing, and marketing.

While on its face legalization in the U.S. seems to be inextricably linked to recreational use of cannabis and its potential liabilities, that's increasingly outweighed by the promise of billion-dollar tax revenues and employment possibilities. That said, regulation for the recreational sector probably would look a lot like alcohol regulation at the state level.

The global cannabis market largely is focused on medical cannabis, its compounds and applications, in forms that can be considered for governmental and regulatory approval.

As an advocate and mother, CannaKids' Ryan turned to cannabis oil when Sophie, not yet one year old, was diagnosed with an aggressive, non-malignant, tumor called an optic pathway glioma. With dim prospects for Sophie's quality of life even with conventional cancer treatment, Ryan and her husband sought alternatives.

In the four years since, Ryan has traveled the world on behalf of cannabis medication research for treatment of pediatric conditions including cancer, autism, and epilepsy. Her efforts to conduct clinical trials on her own daughter's tissue samples illustrate the difficulties presented by federal prohibition in the U.S.—and the limitations on conventional pharmaceutical research for little-known diseases. Two years ago, Ryan hand-delivered tissue samples from Sophie's original tumor biopsy to researchers in Israel for genomic sequencing and so the scientists could observe specific effects and reactions of cells to treatment with cannabinoids in an effort to block mutations in Sophie's tumor. That kind of research is impossible to do in the United States because of prohibition.

This year, to further the research, Ryan is working with Israel's prestigious Technion Institute on a project partially funded by Oxnard, California-based Cure Pharmaceuticals.

"One problem area that we have is finally operable, though the rest of the disease has been pretty stable for a while now," Ryan said. "[The mass], which is in the temporal lobe, is easy to access, easy for them to operate on... So, [Sophie] is going to have this mass removed, not only to relieve the pressure in her brain but also so we can understand what new mutations are in this tumor.

"I've solidified a relationship with a research scientist who is going to implant Sophie's tissue into [mice]," Ryan continued. "We are then going to have those mice flown to Israel, to the Technion Institute, and we are *finally* going to get my daughter the research she deserves; that no one else will do for her because she has pediatric cancer."

Even if there were no prohibition on cannabis, Ryan isn't sure the research for Sophie's type of cancer would be conducted in the U.S. There isn't much demand for medicines to address rare conditions like the aggressive glioma assaulting Sophie. Most children diagnosed with so-called "orphan diseases" have a low life expectancy, so most pharmaceutical companies aren't eager to spend billions to develop new treatments.

That's why Ryan won't stop pushing back against prohibition. Sophie traveled with her mom and dad on a recent trip to speak to lawmakers in Hawaii. During the trip, Sophie developed a sinus infection. Her parents didn't know until the three of them were aboard the plane in mid-air.

Upon landing, the family was rushed to the hospital with Sophie projectile-vomiting and generally miserable. An emergency MRI was required to obtain a definitive diagnosis when sinus fluids made initial X-rays cloudy and inconclusive for possible tumor growth.

Veterans of emergency rooms and navigating hospital protocols, the Ryans were calm until staff informed the family the hospital couldn't administer the cannabisoil medicine used to relieve the side effects of Sophie's

INTRODUCING THE ALL NEW



G I O

(FOR LIQUIDS)

g<u>reen</u>lane





WHOLESALE ORDERS CALL 877.292.7660 | GNLN.COM

NOT FOR SALE TO MINORS

| FEATURE |

Israel is definitely way, way ahead of the rest of the world because they've been [researching] longer than anyone else.

いいい

-Tracy Ryan, on human trials

cancer treatment. Even though Hawaii approved medical cannabis in 2000, laws prohibit hospitals administering cannabis medicines to patients.

Ryan pointed out the hospital was able to administer morphine when Sophie complained of a headache. Ryan refused the opioid medication, saying Sophie's headache did not seem severe enough to require narcotics.

Later, when speaking to Hawaiian legislators and officials at a conference sponsored by dispensary Lau Ola LLC., Ryan relayed the whole scary, frustrating story. She explained why it was imperative Sophie and other children like her have access to their cannabis medicine no matter where they are.

"Some of the most powerful decision makers in Hawaii were sitting right in front of us, and I let them all know what had happened," Ryan said. "I used [the address] as a learning opportunity to have us take a look at how we're treating patients in America—offering children morphine but denying them cannabis, when cannabis is helping us target the opioid crisis.

"Now that we have done this and told our story in front of Hawaii, [lawmakers] are working on legislation to let patients consume cannabis inside hospitals," she continued. "It's something they never thought of, because we are so behind. We just don't understand how we can be using this plant in so many different ways."

'GROW ROOTS WHERE YOU'RE PLANTED'

One thing astute entrepreneurs and researchers have learned from global trade in other industries: There's more than one way to prune a plant, so to speak. American cannabis companies are doing their strategic best to establish early in every market, despite the risks attendant upon operating in legal limbo—even if the strategy means going overseas to do research, strike licensing deals, or partner with multinational cannabis companies in Israel, Canada, Australia, and other progressive nations. The U.S. market may be fifty shades of gray, but the global potential for big business is red-hot and green.

"Our researcher in Israel is currently part of thirteen human trials that are being conducted in hospitals, where patients are healing from [taking cannabis medications]," Ryan said. "But this isn't just in Israel, though Israel is definitely way, way ahead of the rest of the world because they've been [researching] longer than anyone else. We're working in Australia now, because CannaKids has been licensed in Australia."

In fact, according to a 2018 report by IVC Research Center in Tel Aviv, seventy Israeli companies operate in the medical cannabis space. Israeli researchers are leading studies and clinical trials on using cannabis medications to treat cancer, chronic pain, epilepsy, asthma, insomnia, autism, post-traumatic stress disorder, inflammatory bowel disease, Parkinson's, Crohn's, and multiple sclerosis, among others. The list of conditions that show potential for further research is growing rapidly.

On the business side, big Canadian cannabis companies with legally established vertical integration, global partnerships, and ticker symbols on the Toronto Stock Exchange anticipate legalization of adult-use cannabis in early August. Canadian multinational cannabis company The Cronos Group recently partnered with U.S.-based dispensary chain MedMen to develop retail storefronts in Canada.

Aurora Cannabis, another Canadian megacompany, expects to produce up to 270,000 kilograms of cannabis by 2019. One hundred thousand kilograms will be grown at Aurora's Sky facility, a state-ofthe-art grow located on the property of Edmonton International Airport and developed in a joint venture with Denmark tomato grower Alfred Pedersen & Søn (also known as Aurora Nordic). The partnership also will yield a one-million-square-foot, fully automated, high-tech grow facility in the Netherlands, which the companies believe will be the largest cannabis production facility in Europe. The first phase of construction, 200,000 square feet, is expected to be complete by the third quarter of 2018.

America, the world is waiting. 🜚

Need glass?

The **LO-PRO** is the latest addition to the Pollen Gear family. Designed with a lower profile and wider mouth to accomodate extra large nugs, while 30% less-expensive than our original HI-LINE glass line.

Air-tight, water-tight, smell-proof, and induction sealable, LO-PRO is ideal for flower, edibles, and salves. Flat or Rounded lids available. FDA Food Safe, CPSC Child-resistant and ASTM Compliant.

Call 877.916.0480 for more info.









pollen gear





g<u>reen</u>lane

WHOLESALE ORDERS CALL 877.916.0480 | GNLN.COM | FEATURE |

Cannabis on a Global Scale

THESE COUNTRIES ARE UPDATING THEIR CANNABIS POLICIES. WILL THE U.S. EVER JOIN THE CROWD?

Global market predictors speculate the worldwide cannabis industry could be worth \$55 billion by 2025. Many countries have updated their outdated drug policies, moving cannabis businesses from illicit blackmarket operations to a cottage industry. Eventually, inevitably, cannabis (and hemp) are destined to become global commodities. How will the U.S. stack up if federal prohibition is lifted?



AUSTRALIA

Australia legalized medical cannabis in 2016. Since then, companies like Medical Cannabis

Ltd. (Vitahemp), AusCann Group Ltd., BOD Australia Ltd., Botanix Pharmaceuticals, Eve Investments, Creso Pharma, Algae. Tec, and MedLab Clinical have emerged. Many have deep roots—and pockets—in diverse other industries, including biofuels, bio-pharmaceuticals, agriculture, technology, and even mining.

Government support for the cannabis sector encourages overseas companies to enter the market. Israel-based e-Sense Labs, which primarily develops synthetic terpenes and other plant compounds, is working with Young Henry's Brewing Company, based in Newtown, New South Wales, to create a cannabisinfused beer. Colorado-based Elixinol Global maintains an Australian headquarters in Sydney, from which the company distributes hemp-based CBD products to twenty-seven other countries.

A January decision to allow exports of Australiangrown cannabis has fueled the market. Australia already produces about half the world's legal poppy crop, which supplies the raw material used to create opiate medications.



COLOMBIA

If any country in the world should have a zero-tolerance policy about psychoactive substances,

Colombia would be the country. Since the 1970s, the U.S.-led "war on drugs," primarily focused on illegal

Looking to Grow Your Business Profit Beyond Buds?



Pope Glass 2" Still



Turnkey Multistage Automated Large Production Still System

Post-Extraction Distillation Equipment From Pope Can Clearly Help

For growers expanding their cultivation operation and moving into trim extracts, vapes, dabs and edibles, unmatched THC and CBD purity & yield will be achieved with Pope Scientific's advanced technology and distillation equipment.

Since 1963 Pope Scientific has manufactured thousands of distillation systems used throughout the world in many different industries and labs. Our classic 2" wiped film still has quickly become the proven standard in the cannabis industry, whether the extraction type is butane/propane, supercritical CO₂, ethanol or others.

For greater throughput requirements, our 4"and 6" units are extensively used; plus 9", 12" and larger turnkey multistage systems are offered, capable of processing beyond 50 kg/hour. Our stills are also equipped with external condensers to collect terpenes. Pope's scientists and engineers, the same professionals who build and back our equipment with the highest levels of chemical processing knowledge and experience, are also available to assist in any application input you need to build your cannabusiness.

Pope stills deliver the highest possible quality, yield and ultimate product value—all at surprisingly reasonable pricing. And our standard glass systems are available in weeks, not months, with spare parts and accessories shipped overnight.

It's Never Been More Clear! The Leader in Cannabinoid Distillation Technology is Pope Scientific.



For more information call **262.268.9300** or visit **www.popecannabisdistillation.com**



| FEATURE |

cocaine trafficking and the associated organized criminal activity perpetrated by drug cartels, has resulted in many thousands of deaths. There is no end to the war in sight.

The black market for illegal narcotics remains a major concern for the Colombian government, but with the emergence of global cannabis legalization, officials are taking a different stance on marijuana: They'd like legendary Colombian Gold to be sanctioned and sold on the open market.

In 2016, Colombia's congress passed legislation that allows domestic cannabis use and export. In January, the Colombian government issued thirty-three cannabis cultivation licenses; almost half allow growers to produce psychoactive strains. Officials are hoping farmers and individuals who traffic in illegal drugs will see the benefits of doing legal business, leading to a reduction in illegal activity.

The weather, as well as the favorable regulatory climate, are attractive components for crop growers. In the 1990s, several U.S.-based floriculture companies moved cut-flower growing operations to Colombia, establishing the country's global dominance in longstemmed rose production. Canadian companies PharmaCielo and ICC Labs, as well as Australia's Creso Pharma, already have established cannabis licenses in Colombia.

Determined to supply the worldwide legal market, Colombian companies have extended their reach to work with distributors in Canada and other legal markets.



Subjected to a

of economic crisis, with unemployment topping 20

decade

percent since 2012, Greece is eager to benefit from a billion-dollar global industry. In late March, Parliament approved legislation allowing the production of medical cannabis. At the beginning of April, medical marijuana products were made available at Greek pharmacies under a new pilot program. Officials expect to approve legislation soon that will allow Greek companies to export medical cannabis.

Agricultural production and distribution company Golden Greece Holdings is overseeing a planned cannabis cultivation facility scheduled to begin operation as early as this summer. The project, which reportedly is funded by a group of investors from Canada, Kazakhstan, Poland, and Israel, will focus on cultivation, extraction, and production of cannabis products and is expected to bring 2,000 jobs to the region around Veria, Macedonia, in the northern part of the country.

Greek officials have said local job-seekers will be hired and trained in cannabis production over a two- to threeyear period. Officials also are considering reforms to recreational marijuana laws. Currently, medical marijuana in Greece, as in several other countries, is available only in extracted or edible form.

JAMAICA



In the home of reggae and *ganja* icon Bob Marley (whose youngest son Damien owns the U.S.-based

Marley Naturals and is part of the investment group that owns the legendary *High Times* magazine) and the global center of Rastafarianism, government officials are wasting no time in overcoming obstacles that stand in the way of establishing a cannabis industry.

The Cannabis Licensing Agency (CLA) has been formed to oversee "implementation of regulations for licenses, permits, and other authorizations for the cultivation, processing, distribution, sale, and transportation of *ganja* for medicinal, scientific, and therapeutic purposes," according to the government agency Jamaican Social Investment Fund. The CLA is working with officials in the Ministry of Industry, Commerce, Agriculture, and Fisheries.

"There is a sense in which there needs to be an advanced conversation between both ministries to ensure there is no intention to break any rules, but there is intention to ensure that we are not left behind in the aggressive growth that is taking place in the [cannabis and hemp] sector,"the Honorable Audley Shaw, minister of Industry, Commerce, Agriculture, and Fisheries, said during an April meeting about agricultural practices.

Jamaica's chief agricultural export is sugar cane, and the island nation hopes to diversify its commercial agricultural base with other export crops including soybeans, citrus, castor beans, cannabis, and hemp. In February, Jamaican producers Kaya Farms and Timeless Herbal Care harvested the first-ever legal cannabis crops.



SPAIN

Technically, cannabis use is prohibited in Spain. However, individuals 21 or older have a

constitutional right to do what they like with their bodies as long as their activities do not harm others. In addition, a liberally interpreted and somewhat vague legislative act allowed for "personal use" of

A

| FEATURE |

cannabis in a "private environment." Enabled by these legal loopholes, the first cannabis social clubs (CSCs) emerged in the early 1990s.

Without consistent federal cannabis policy or regulation, CSCs have flourished and even attracted cannabis tourism from around the world, although they are under constant threat of federal prosecution.

By 2017, the city of Barcelona reportedly harbored 300 CSCs where members purchase and consume cannabis, with some clubs listing thousands of private members. Annual cannabis industry revenue in Spain for the year was estimated at about €60 million, roughly equivalent to USD \$72 million. When U.S.-based online portal WeedMaps expanded into Europe, Spain was the first country on the platform.

In December 2017, Spain's Supreme Court ruled cannabis social club activities violated Spanish Penal Code articles pertaining to illicit drugs, leaving the CSCs in legal uncertainty. Uneven enforcement of poorly defined policy has pro-CSC advocates calling for clarification of federal laws. In independent regions of Spain, including Catalonia, the Basque country, and the Canary Islands, local officials have not subjected CSCs to prosecution and club operators are working with officials to create new policy standards.

THE NETHERLANDS

Amsterdam may have been the world's first modern cannabis destination, famous for its

cannabis-vending coffee shops, red light district, and the drug culture that has flourished there in a legal gray area since the late 1960s.

A

The emergence of the legal cannabis industry means times are changing in the liberal Dutch enclave. Updated regulations closed Amsterdam's oldest coffee shop, the Mellow Yellow, at the beginning of 2017 after fifty years of operation. Under new zoning regulations, the shop's location was deemed too close to a nearby hair stylist academy; twenty-eight other coffee shops were too close to schools or other prohibited locations. Local officials implemented the new policies in order to cooperate with the Netherlands federal government's plans to enforce a program called Weed Pass, which prohibits tourists from accessing cannabis in restricted areas. Amsterdam, for its cooperation, will be exempt from the program's restrictions on tourists. Reduced in numbers by half over the past twenty years, only 167 coffee shops remain in Amsterdam.

Legislation for a five-year cannabis legalization pilot program was introduced to Dutch lawmakers in early April. The program would allow cultivation in six to ten municipalities which could sell cannabis to coffee shops and, presumably, disrupt the illegal supply chain.

URUGUAY

As in can

As citizens of the first country in the world to fully legalize cannabis, Uruguayans have been

able to purchase flower over the counter at select local pharmacies since last summer. They may purchase up to forty grams per month, and the government-controlled price is roughly USD \$2.50 per gram.

So far, 22,0000 Uruguayans have registered for access to legal cannabis, but the presence of only two licensed cultivators and a lack of banking resources are creating obstacles for the legal market, according to officials at the country's regulatory agency. U.S. bank regulators play a role in international banks' reluctance to accommodate cannabis businesses in other countries. With recreational legalization in Canada pending for early August, Uruguayan officials hope issues will ease with the opportunity to access Canadian banks.

Citizens also are allowed to grow marijuana for personal use or obtain cannabis at cannabis clubs, which may have up to forty-five members and grow up to ninety-nine plants.

In March, Washington D.C.-based nonprofit public policy think tank the Brookings Institution issued a report on Uruguay's regulatory model and cited "important lessons" to be learned for other countries grappling with legalization. Among several suggestions in the report: Uruguayan policymakers should explore access to global banking resources, implement widespread education and training about new regulations, and consider wider retail distribution to alleviate shortages on the consumer end. Brookings also recommended:

In order for the regulated cannabis market to displace the black market more effectively, authorities may need to reconsider rules that require users to choose only one of the three legal forms of cannabis supply: home-growing, clubs, or commercial purchase.

Uruguayan authorities also may need to address a growing informal market by allowing legal sales to non-citizen tourists.

| LEGAL |



IP LICENSING: A PATHWAY FOR International Cannabis Branding

BY AMMON FORD, GLEAM LAW

HE ONE THING almost everyone knows about cannabis is that it cannot legally cross most borders. In the United States, at least, the law prohibits any cannabis product from being shipped over state lines, and U.S. Customs and Border Protection will not allow any importation from other countries despite a growing number of states and other nations legalizing. International treaties, too, ensure many nations have similar prohibitions on cannabis imports and exports.

Geopolitical limitations on market access have stunted the growth of the industry. Cannabis companies are mostly local businesses driven by dedicated entrepreneurs. Brands are known only in the areas where their products are sold, and expansion too often seems limited only to a single state or province. However, the market does not have to be that way.

Even with current laws and political struggles in the U.S., there are enormous untapped opportunities for brand development and growth. The next phase will be

a multi-jurisdictional brand expansion across borders. If we do it well, we can grow individual companies and the industry as a whole without triggering oversight or law enforcement action from unfriendly governments.

For any company in any industry, it is crucial to build brand awareness by getting your products and brands in front of as much of your target demographic as possible. For cannabis farms and edibles companies, this often includes distributing products to a wide number of different retailers. For retailers, it might include opening a second or third location and dreaming of becoming a successful chain. The more people recognize a brand and buy its products, the more valuable trademarks become.

For most U.S. cannabis companies today, brand expansion efforts stop at the state line. This limitation stems directly from the conflict in laws between state and federal governments, which is why every state with friendly cannabis laws prohibits transporting cannabis across state lines, why Nebraska sued Colorado in

BOOST PROFITS BY CREATING YOUR IDEAL GROWSPAN GREENHOUSE

FOR NEARLY 40 YEARS GROWERS SUPPLY has been supplying commercial growers with GrowSpan Greenhouse Structures, the most versatile line of cannabis greenhouses

BUILT TO LAST - GrowSpan greenhouses feature energy-efficient designs that are built to last. With durable materials and automated blackout systems, you will be producing the finest bud for years to come.

EXPERT CANNABIS CONSULTATION - We staff cannabis consultants with industry experience. They can provide valuable design advice, and their knowledge of the energy grid allows growers to increase profits by reducing energy consumption, as well as obtain energy-related rebates and financing.

IN-HOUSE FINANCING IS BACK - As low as 4.99%.



VISIT **WWW.GROWSPAN.COM** OR CALL **1.800.476.9715** TO FIND OUT HOW WE CAN HELP WITH ALL YOUR GROWING NEEDS



| LEGAL |



2016, and why nearly every cannabis brand is limited to only one state's market.

A brand need not be limited in this way, however. Products cannot cross state or national lines, but a brand certainly can. Even in states like Washington, where cannabis business owners have to be instate residents, intellectual property licensing agreements offer a huge opportunity for brand owners to reach into new markets to build awareness and customer loyalty.

An intellectual property (IP) license is a contract under which a business sells the right to use its trademark, copyright, or patent for a royalty. In practice this can take many shapes, and a creative IP attorney can help craft a custom fit to satisfy the companies' needs and the requirements of complex regulations. IP licenses can provide additional ongoing revenue from a licensee's use of a trademark, copyright, or patent, which in turn increases the value of the intellectual property.

As with everything else in the cannabis industry, IP owners need to be careful not to endanger their trademarks by signing a bad contract—or worse, endanger the business itself by accidentally violating local cannabis laws.

The following are just a few common pitfalls to keep in mind when planning a multi-jurisdictional branding campaign.

NAKED LICENSING

Naked licensing refers to a trademark licensing agreement where the trademark owner does not properly control the quality of the products bearing its trademark. A brand's owner is the only one who can ensure products sold under its trademarks are of the kind and quality customers expect. If the brand owner does not police quality, then it is possible to lose control of the trademark entirely.

STATE REGULATIONS

Licensing across state or national lines implicates at least two sets of laws. The license will need to abide by both to keep both partners out of trouble.

LIMITED, EXCLUSIVE, AND OVERLAPPING LICENSES

Most licensing agreements are limited in time and geography. When purchasing or selling licenses to use a brand, always ensure there are not two overlapping licenses. For instance, selling two exclusive licenses to use a brand in the State of Nevada would mean selling the same thing twice, which might provoke a long and costly lawsuit from one or both of the licensees.

FINDING GOOD PARTNERS

When one company uses another's branding, the licensee's successes and failures often become a part of the licensor's brand's identity, and vice-versa. Always conduct proper due diligence. Is the potential licensee or licensor using ethical business practices? Are they producing a quality product? Have they been sued recently? Employment problems? Partnership disputes? Can they pay their rent without relying on an IP partner? Any partnership requires a degree of trust, but diligently investigate potential partners. A crazy story about one easily can reflect on the other. Some consumers will never forget bad headlines, and that can damage a brand.



AMMON FORD specializes in cannabis law across the spectrum, from intellectual property to entertainment. Find him at GleamLaw.com or email ammon@gleamlaw.com.





AWARDED "BEST OIL VAPORIZER OF 2017" BY THE VAPE



AVAILABLE AT



WWW.VAPORNATION.COM 888-321-VAPOR (8276) • WHOLESALE@VAPORNATION.COM

| PRODUCTS |

HARD GOODS

GLASS BONG AND PIPE CLEANING KIT

With everything needed to keep glass bongs and pipes as clean as the day they were bought, Bong cleaning kit combines innovative Res Caps with Res Gel resin-removing solution. Drop glass pipes into patented Shake-a-Bag resealable pouch for quick, easy cleaning.

HUXTON GEAR

For the on-the-go lifestyle. The double-lined, premier-guality activated carbon lining is itself lined with an antimicrobial layer. Heavy-duty construction, H₂O-guard zipper for Smell Proof industrial Velcro make the gear durable. Available

GOLDLEAF ART PRINTS

CANNADOR

â

Focused on the science behind cannabis. Informative, visually pleasing, and a unique decor choice for enthusiasts. Designs include Terpenes

CANNADOR DUAL CANNASTER

connector ring—A convenient way to pack two different strains and extremely durable for

NUGGY DAB TOOL

Four dab tools in one device. The stainless steel construction and heat-resistant aluminum oxide (ALOX) shell with raised bumps are super-thin and lightweight. The heat-resistant shell doubles as a carb cap. Available in blue or pink; gift box included.

GG Is marijuana addictive? Yes, in the sense that most of the best things in life are worth

Resolution

ABIS HELPS DUCE THE ERENITY ID INSIGHT, SITIVITY AND FELLOWSHIP) DESPERATELY EEDED IN THIS INCREASINGLY MAD AND DAN-GEROUS WORLD. CARL SAGAN

endlessly

repeating.

72 mg

Your Money Is Safe With Us.

Exclusively Offering Life Insurance For Cannabis Professionals.

ONEILINU



INSURANCE • EMPLOYEE BENEFITS • HR • PAYROLI

For more information contact Scott Zimmerman at 800-914-3564 ext. 111 or visit us at Corpstrat.com

| PRODUCTS |

HORTICULTURE & GROWING

BLACKDOG PHYTOMAX-2 1000

At 1050 actual watts and 1602 µMol/s total photon flux, patent-pending PhytoMAX-2 1000 LED grow lights are undeniably powerful. The product employs top-bin LEDs to deliver Black Dog LED's proprietary full-cycle Phyto-Genesis Spectrum evenly over the entire footprint. BLACKDOGLED.COM

SPECTRUM KING LED SK602

Designed specifically for use as supplemental greenhouse lighting, this 610-watt full-spectrum LED grow light replaces 1000-watt double-ended bulbs. The rugged, waterproof housing is designed especially for use in wet and humid conditions; device produces less heat than most competitors. Made in the U.S.A.

SPECTRUMKINGLED.COM

DS1000R DRY SIFTER

The DS1000R transforms a labor-intensive process into something bountiful with the flip of a switch. Designed as a double pass-over system with the ability to use various screen sizes, the device was tested and refined over several years to give users quality control.

AGRO PEST CONTROL

All-natural, organic pest control specially formulated for use on sativa plants, AGRO also works on other indoor and outdoor flowering plants. A safe, pet-friendly alternative to commercial pesticide, AGRO is made from 100-percent plant-based essential oils and produced in small batches for quality and potency. ZACKSCCL.COM

GEMMACERT LAB ON A DESK

Designed for commercial farms but affordable enough for home growers, the compact GemmaCert uses FDA-endorsed infrared spectroscopy to determine total THC and CBD levels in about one minute. Roughly the size of a kitchen appliance, the machine requires no solvents. GEMMACERT.COM





LIQUID. TEMPERATURE. CONTROL.



Chillers – Coolers – Circulators

for

Extraction • Rotary Evaporator • Short Path Distillation • Cold Trap Reaching a temperature isn't enough. Temperature control is about keeping that temperature where it needs to be, for as long as you need it. PolyScience products have been delivering reliable, accurate and consistent temperature control for over half a century.

Find out more at EXTRACTIONCHILLER.COM

PolyScience®

| PRODUCTS |



KIN SLIPS

Compact, portable slips dissolve under the tongue, delivering a precise dose quickly. Carefully crafted blends of cannabinoids, terpenes, and natural ingredients are formulated for positive effects on lifestyle and health. All-natural and plant-based. KINSLIPS.COM.

HENRY'S ORIGINAL BRANDED STRAINS

Artisanal, heirloom cannabis grown under the strictest standards in renowned Mendocino County, famed for its terroir and ideal cultivation conditions. Henry's works closely with top-quality farms that have undergone third-party certification and are Clean Green certified. Handcrafted in small batches. California only. HENRYSORIGINAL.COM

WANA MANGO GUMMIES

Made from an original artisanal recipe with all-natural flavors and colors, Wana Mango Gummies are handcrafted and infused with tincture in the cooking process to create intense mango flavor. Gluten-free and vegan. Available in Colorado and Arizona;10-piece packs, 10mg THC per piece. WANABRANDS.COM

WILDSEED VAPE OILS

Terpene-rich oil contains terpenes extracted from only selected small batches of cannabis. Helps stabilize mood, relieve pain, and reduce inflammation. Tests at 65- to 75-percent THC with 5 percent to 10 percent terpenes; 100-percent free of pesticides, contaminates, thinning agents, and petroleum-based solvents. WILDSEEDOIL.COM

WHITE RABBIT 20:1 CBD:THC ORANGE TABLETS

20mg of CBD, 1mg of THC, with a solventless, C0₂-extracted cannabis oil formulation and no artificial sweeteners. Lab-tested and fast acting. "Revitalization with just a touch of delight." ENJOYWHITERABBIT.COM

NON-PSYCHOACTIVE

PAIN RECOVERY FORMULA CBD CAPSULES

Full-body relief for pain and inflammation. The all-natural, proprietary infusion formula reportedly helps users resume activity with improved mobility. 1,500mg CBD per capsule; available in starter packs or 30-cap bottles. Sourced and produced in the U.S.A. GREENHELIX.COM

TEA POT CHAMOMILE LAVENDER PEPPERMINT TEA

A pleasing blend of organic chamomile, organic lavender, organic peppermint, and cannabis-infused fractionated coconut oil (MCT Oil). Customer testimonials cite benefits for intractable pain, insomnia, fibromyalgia, arthritis, and other conditions. 25mg CBD per serving. Available in California. HONEYPOTBEAR420.COM

SUPER SATIVA MEDICINAL MEDICATED HYDRATING BALM

Formulated using 100-percent natural, organic, and non-GMO ingredients. The soothing, medicated formula contains nutrient-rich sativa seed oil and organic ingredients including hydrating coconut oil, cocoa butter, lavender essential oil, natural menthol, and vitamin E. Paraben-free; no THC.

BOTANICAL CBD ORAL ELIXIR FOR STRESS RELIEF

Unwind from tension and brighten your outlook with a delicious synergy of full-spectrum CBD and whole-plant extracts and aromatics. Taken orally, as-needed. All-natural, organic ingredients with MCT oil. No chemical additives, preservatives, or THC. 540mg active CBD per bottle; 60 servings per bottle. FORIAWELLNESS.COM

CBD COTTON CANDY

Patented CBD cotton candy for people who want a sweet way to take CBD. Melts in your mouth for effective and quick absorption. Very high bioavailability makes Medi-Puff easy to absorb. Tested for potency and purity. Zero pesticides, zero THC. MEDI-PUFF.COM













78 mg Our personal collection of noteworthy Instagram accounts. While we do our best to credit the original image source, sometimes this is challenging with social media. If you would like to call attention to an account, you may email us or tag your image with **#mgmagazine**.

KEEPING CANNABIS AT IT'S PEAK CONDITION

Based on the natural process of osmosis, Boveda releases and absorbs pure water to maintain the optimal humidity level for cannabis and creates a 100% stable and safe environment for curing and storing it.

Experience it yourself.



THE GLOBAL LEADER IN 2-WAY HUMIDITY CONTROL

BOVEDAHERBAL.COM FIND US ON amazon

A GRAN

| OPINION |

JESSICA COLE,

high hostess and founder of White Rabbit High Tea, recommends...

Vape

I really enjoy **Beboe** (*Beboe.com*). I love the quality of the oil and the design. I also like **The Clear** (*ClearConcentrate.com*) because it is just that, clear, and it's 100-percent solvent-free cannabis concentrate with big potency, purity, and flavor.

Edibles

Fruit Slabs (*FruitSlabs.com*) rock. They are tasty, healthy, sweet, and strong at 100 mg each. **Défoncé** (*Defonce.com*) chocolates are exquisite. Their matcha bar is to die for.

Flower

I like **PremaFlora** (*PremaFlora.com*) for its quality and how they have made their products like fine wines. They also print cute little stories on their jars about the farm the product came from. **Bon Vivant** (*BonVivantFarms.com*) has amazing flavor and strength from a farm in Willits, California, in the Emerald Triangle.

Dispensary

Rose Collective (*RoseCollective.com*) is very cool. Their staff—Kelsey, lan, and Ingrid—are the best. **Bud and Bloom** (*BudAndBloomOC.com*) is gorgeous and functional. Really top-notch design and service.

Hemp

Vital Hemp (VitalHemp.com) is great loungewear—soft and tactile. Hempcrete (AmericanHempLLC.com) will revolutionize the building industry. Just wait and see.

Accessories

Dawson + Hellmann (*DawsonHellmann.com*), because I dream of weed and now I can sleep in it. Check out their nightgowns and PJ sets. **Van der Pop** (*VanDerPop.com*) because their pipes, jewelry, and trinkets are very modern and cool.

CBD

TONIC (*TonicVibes.com*) is what I am into right now. The branding and quality are high-end. **Jelly Shamans** (*TheJellyShamans.com*) has amazing quality honey and CBD. Combined, it's a dream. I drink tea every day, so it's a must-have.

Topical

Kiskanu (*Kiskanu.com*) face oil is my favorite daily beauty routine, along with my Vor-Mag rosewater. **Humble Flower Co.** (*HumbleFlowerCo.com*) ointment has really improved my broken ankle scar and all other epidermis-related matters.



Jessica Cole fell in love with tea while growing up in Ashland, Oregon. In 2014, she merged her two loves, cannabis and tea, and started the monthly White Rabbit High Tea gatherings. Part Alice in Wonderland, part traditional English tea time, WRHT strives to support the burgeoning professional cannabis industry in Los Angeles. WHITERABBITHIGHTEA.COM



YOUR LAB NOW HAS THE OPTION OF UL/CSA ROTARY EVAPORATORS AT A FRACTION OF THE COST!



AcrossInternational.com 888-908-0228



Scan Use promo code: MBOT18 for 5% off your next purchase order!

To grow world-class strains, you need world-class nutrients.

Ken Estes, Grand Master Grower and originator of the world-famous medical marijuana strain **Grand Daddy Purp**, puts his faith in Advanced Nutrients to get bigger, more potent yields.



Raising the Bud Weights... and Reputations... of Top Growers

AdvancedNutrients.com