

Six commercial cultivators highlight their favorite strain to grow

\$12.95

Marijuana Business Magazine®

Insights for cannabis executives, investors & entrepreneurs

VOL 4 • ISSUE 9 • October 2017

Renaissance WOMAN

**A diverse background helped Chanda Macias build
a successful dispensary in the nation's capital**

**Experimental grow space
Startup lessons
Using speedy strains
Creating a 5-Star experience**





312.869.9070

IF YOU'RE NOT MESSAGING YOUR CUSTOMERS, THEN SOMEBODY ELSE IS!

*SMS is the best and most effective way to increase your daily store traffic.
Our clients say a blast brings in 10-50 incremental customers (per 1000 messaged).*

MESSAGING PAYS FOR ITSELF 10 TIMES OVER!

- ✓ A 420 sending number to increase brand effectiveness.
- ✓ UP TO 240 CHARACTERS PER MESSAGE (50% more than others). More info to your customers means more sales.
- ✓ Picture messaging (MMS) available.
- ✓ Reliable delivery. No blocking.
- ✓ Excellent customer service. Need help building your opt in list? We got you covered.
- ✓ Great prices. Discounts for higher volumes.
- ✓ No contracts or setup fees.

90%

OF SMS ARE READ WITHIN
3 MINUTES OF RECEIPT.
YOU CAN'T AFFORD
NOT TO USE
NORTHTEXT.



WWW.NORTHTEXT.COM/DISPENSARY | 312.869.9070



In business since 2007

The choice of professionals



Rare Dankness Industries, Denver - CO



GAVITA
HORTICULTURAL LIGHTING

www.gavita.com



MEDICINE MAN
TECHNOLOGIES

WELCOME TO OUR FAMILY OF BRANDS



**INDUSTRY LEADING CULTIVATION
& DISPENSARY CONSULTING**

License Application Support
Operating Plans & Procedures
Facility Planning & Design Services
Cultivation Max™ Services
Seminars & Private Consultations

OTC Markets, Symbol: MDCL • 303.371.0387

MedicineManTechnologies.com



SUCCESS™

N U T R I E N T S

**HIGHER QUALITY • INCREASED YIELDS
LOWER OPERATING COSTS**



SUCCESSNUTRIENTS.COM

Marijuana Business Magazine®

Insights for cannabis executives, investors & entrepreneurs

President and CEO	Cassandra Farrington CassandraF@MJBizDaily.com
Vice President of Editorial	Chris Walsh ChrisW@MJBizDaily.com
Senior Editors	Roger Fillion RogerF@MJBizDaily.com Kevin Huhn KevinH@MJBizDaily.com
Staff Writers	Matt Lamers MattL@MJBizDaily.com Kristen Nichols KristenN@MJBizDaily.com Omar Sacirbey OmarS@MJBizDaily.com Bart Schaneman BartS@MJBizDaily.com John Schroyer JohnS@MJBizDaily.com
Data and Charts	Eli McVey EliM@MJBizDaily.com
Contributors	Margaret Jackson, John Rebchook, Essdras M Suarez
Sales	Mary Pemberton MaryP@MJBizDaily.com Molly Ford MollyF@MJBizDaily.com Angela Toney AngelaT@MJBizDaily.com Brooke Moore BrookeM@MJBizDaily.com
Marketing	Christopher Day Kendra Branch-Brett Andrea Evers Seth Mitchell
Technology	Amy Davis, Jeff Farrington Laura Femino
Graphic Design	Brian Gilbert
Subscriber Services	Lisa Burstein
Customer Service	CustomerService@MJBizDaily.com 401.354.7555 ext. 1
Co-founder	Anne Holland

To start/change/cancel your subscription, visit MJBizMagazine.com, call us at 401.354.7555 x1 or email us at CustomerService@MJBizDaily.com. Marijuana Business Magazine subscriptions are currently free to qualified US cannabis business professionals and investors age 21 and over only.

To advertise with us, email Sales@MJBizDaily.com or call us at 401.354.7555 x 2.

Marijuana Business Magazine, Volume 4, Issue 9, October 2017

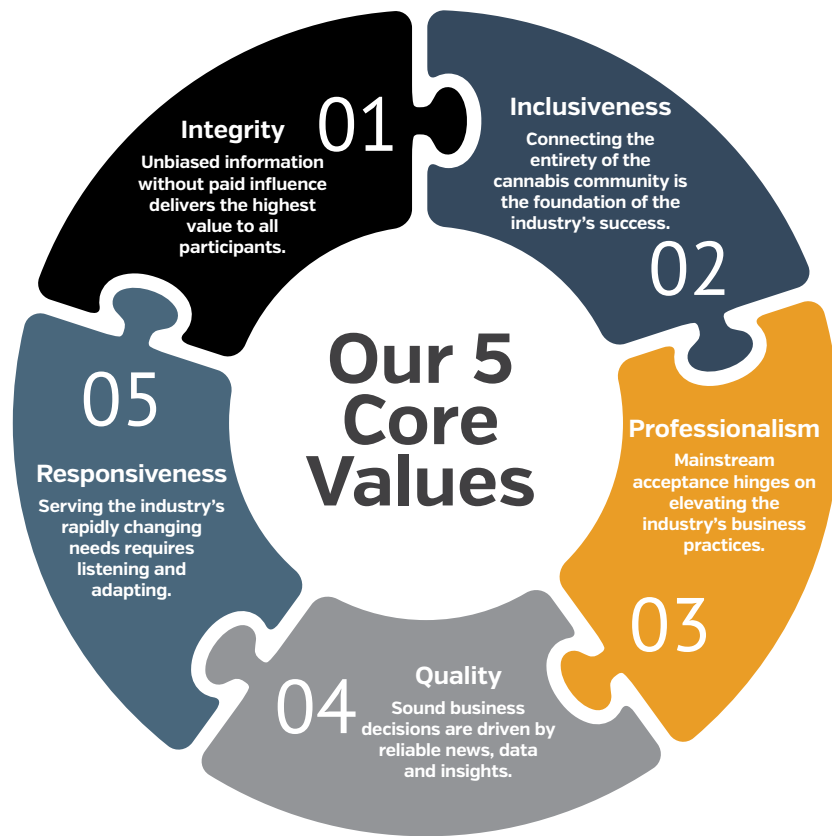
ISSN 2376-7375 (print); ISSN 2376-7391 (online)

Marijuana Business Magazine is currently published ten times per year by *Marijuana Business Daily*™, a division of Anne Holland Ventures Inc. POSTMASTER: Please send address changes to: Marijuana Business Daily, 2750 S. Wadsworth Blvd., Suite D200, Denver, CO 80227.

Copyright 2017 by *Marijuana Business Daily*, a division of Anne Holland Ventures Inc. All rights reserved. Materials may not be reproduced in whole or in part without written permission. For reprints of any article, please contact Customer Service.

<http://MJBizMagazine.com>

Who's Behind This Magazine?



Founded in early 2011, *Marijuana Business Daily*™ focuses solely on cannabis businesses and the investors who back them.

If you are leading or financing a cannabis-related company, we help you prosper via trusted information services and exceptional events.

Our publications have the highest business readership in the industry. Our events are sellouts, year after year after year. And, we've been cited everywhere from *Harvard Business Review* and the *Wall Street Journal* to *Forbes*, *Fortune* and *Fast Company*.

Do you need practical information, real-life data or industry connections to help your business grow? You'll find what you need in one of our publications or at our national events.

We are here to help the multibillion-dollar cannabis industry prosper. Let us know how we can serve you.

Marijuana Business Daily®

A division of Anne Holland Ventures Inc.
Marijuana Business Daily Headquarters 2750 S. Wadsworth Blvd. Suite D200, Denver, CO 80227
CustomerService@MJBizMedia.com • Phone: 401.354.7555 x1
Twitter: @MJBizDaily • www.MJBizDaily.com

ASTM CERTIFIED

ULTRA
CHILD
RESISTANT

GLASS

SHATTER

WAX

SAUCE

POLLEN GEAR

LIVE RESIN

ROSIN

DRY SIFT

BUDDER

CRUMBLE

CO2

DISTILLATE

BUBBLE HASH

SUGAR WAX



877-916-0480
www.pollengear.com

@ronburgundabs

In This Issue



FEATURES

36 Speedy Strains

Growers in competitive markets aim to gain an edge by using strains that mature more quickly and can be harvested sooner.



44 Room to Tinker

To stay ahead of rivals, set aside space in your grow to experiment with new cultivation methods and technologies.

54 Renaissance Woman

Washington DC dispensary owner Chanda Macias used her scientific and business know-how to land a license and launch a successful company.

70 Balancing Act

Ancillary companies serving marijuana clients and mainstream customers must tread carefully and take steps to prevent potential snafus.



80 Cannabis Crossover

Hemp farmers mulling a move into marijuana need to know the differences in regulations and growing techniques.

COVER PHOTO by Essdras M Suarez

DEPARTMENTS

10 Cannabusiness by the Numbers: MMJ Dispensaries Per Capita

The number of dispensaries in a state depends on many factors, although some of the most successful medical marijuana programs have a high number of dispensaries relative to their adult populations.

90 Retail Business Strategies: A 5-Star Experience

Florida medical marijuana company Trulieve concentrates on personalized service and cultivating doctor relationships to stay on top.

96 Hire Learning: Bud Trimmer

How to find, train and successfully manage the right person to be a bud trimmer for your cultivation facility.

104 In Focus: Nutrient and Soil Companies

The cannabis nutrient and soil industry is exploding, as the number of legal growers skyrockets and the demand for quality and potency increases among consumers.

From the CEO's Desk	8
Investing & Funding Corner	12
My Favorite Things	14
Five Questions with Neil Closser	16
Industry Developments.....	18
Trends and Hot Topics.....	32
Company News.....	114
Movers & Shakers.....	120
Market at a Glance: Illinois	125
Advertiser Index.....	126
Insightful Industry Observations	128

PRINT +
PDF DOWNLOAD

Marijuana Business Factbook 2017



All-new research from
the editors of Marijuana
Business Daily

Order now at
MJBizFactbook.com
or call **401.354.7555 x1**

Getting Together and Giving Back



Next month, cannabis professionals will gather for what is arguably the most important week of the year for advancing the business side of this remarkable industry: MJBizCon in Las Vegas, which runs from Nov. 15-17.

MJBizCon has evolved from a noteworthy gathering of 400 people in Denver in 2012 to a can't-miss annual event expected to draw 14,000-plus attendees this year in its new home: the Las Vegas Convention Center. Those who have been involved and engaged along the way recognize how the team here at MJBizDaily has constantly evolved this event to meet the ever-changing needs of the cannabis industry's executives, investors and entrepreneurs.

As we move to our new venue, new possibilities open up, and traditions must evolve. One of those evolutions will be evident next month with the MJBizCon Mixer.

The Mixer has long been a great addition to the MJBizCon experience, where the business side of the industry could connect and engage with the legalization advocates advancing cannabis causes in the halls of Congress and in statehouses around the country. Fundraising, networking and celebration of the industry's advancements took over the conference venue.

For the upcoming event, we've decided to engage the entire MJBizCon audience in this worthwhile effort. To that end, the Mixer will be held on the exhibit hall floor and is open to everyone, with no additional registration or donation required to participate.

Also evolving: the focal point for donations. As the industry has progressed and international legalization takes root, we recognize that continued advancement of the industry relies not just on legalization of the plant in the United States. The future of the cannabis industry rests on presenting a responsible, professional face to the world – and collectively developing an industry that is engaged with its communities and the environment.

So, what about our donations to those great causes? Rather than raising money through ticket sales, MJBizDaily will provide a direct contribution to causes that support and advance the business interest of the market: **Legalization Advocacy, Professional Development and Inclusion, and Sustainability and Community Development.**

I encourage all of you to join me in selecting the causes that speak to you and support your own business interests ... and contributing alongside me.

I'm excited to see all of you in Las Vegas next month! Let's move this industry forward – again.

All the best,
Cassandra Farrington
President & CEO

Smart cultivation solutions rooted in experience.

POWER SOLUTIONS/COGENERATION | →

← | DESICCANT DEHUMIDIFICATION

FERTIGATION/WATER RECIRCULATION | →

← | ENERGY EFFICIENT LIGHTING

MOBILE PLANT TRANSPORT | →

← | CONSTRUCTION/INSTALLATION

ADVICE: PLANNING & DESIGN | →

← | HIGH PERFORMANCE SUBSTRATES

You know EnviroTech. But did you know our roots throughout the entire industry run especially deep? It's true. From design to fertigation to installation and beyond, our expertise knows no bounds.

Visit envirotechcultivation.com for answers to all your questions.



Plants, People, Passion

Number of MMJ Dispensaries Per Capita

The number of medical marijuana dispensaries in any given state depends on many factors. However, some of the most successful medical cannabis programs in the nation – such as Colorado, New Mexico and Arizona – have a high number of dispensaries relative to their adult populations.

More dispensaries per capita typically is a reflection of – rather than a precursor to – a successful MMJ program.

In fact, new medical cannabis programs appear to be borrowing a page from their successful counterparts. To wit: Many state programs set to come online in the coming months are placing comparatively high caps on the number of dispensaries allowed to operate, which will increase access to MMJ and boost patient enrollment.

With that in mind, here are some figures tied to dispensaries per capita across the industry and in specific states:

1.65

Average number of operating dispensaries per 100,000 residents age 18 or older in states where MMJ programs are up and running. Excluding Colorado, this number drops to 1.05.

1.39

Average number of dispensaries – per 100,000 18-plus residents – that will be allowed in states where MMJ programs have yet to come online, including Arkansas, Hawaii, Louisiana, Maryland, North Dakota, Ohio, Pennsylvania and West Virginia.

12.33

Number of dispensaries per 100,000 18-plus residents in Colorado, the most of any state MMJ program.

0.07

Number of dispensaries per 100,000 18-plus residents in New Jersey, the least of any state MMJ program.

*Note: California, Michigan and Montana are excluded from these figures because they do not currently license dispensaries at the state level
Sources: MMJ program websites, U.S. Census Bureau 2015 population estimates*



integraboost.com



PATENTED 2-WAY
HUMIDITY REGULATOR

CURE BETTER • STORE LONGER

Humidity Protection That Adapts & Responds
to It's Environment

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



The Safest
2-WAY
Humidity Regulator

- ✓ Prevent Mold & Overdrying
- ✓ Maintain Potency & Aroma
- ✓ Salt-Free Solution
- ✓ FDA Compliant

Innovative Industrial Properties' Stock Performance in 2017

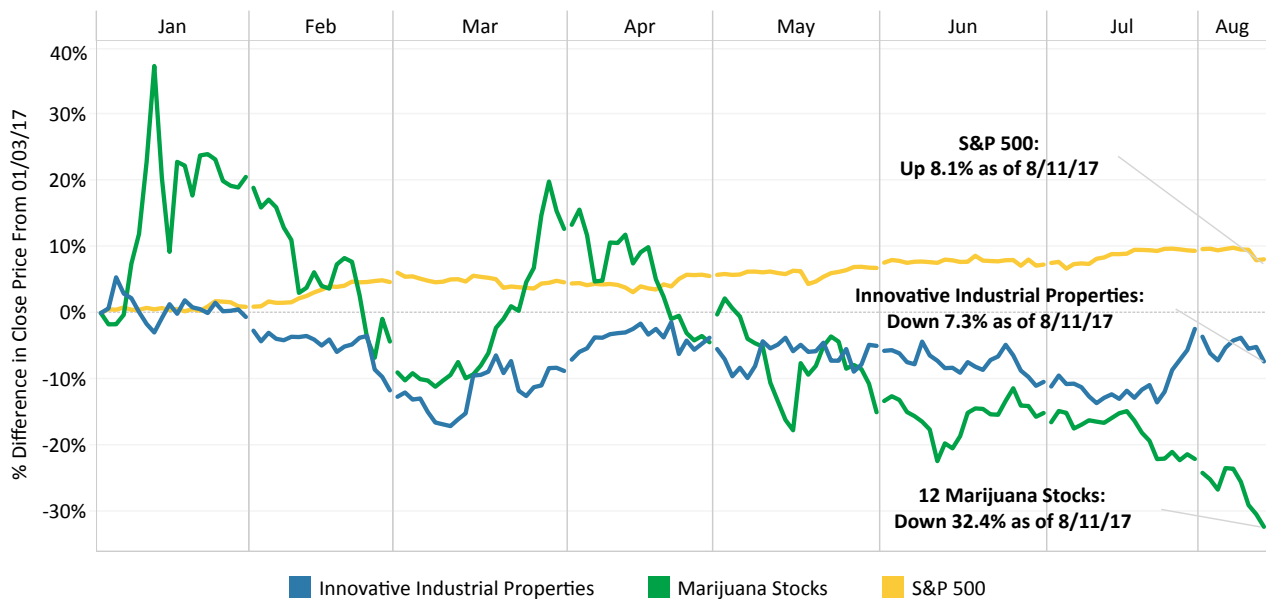
In December 2016, Innovative Industrial Properties – a cannabis-focused real estate investment trust (REIT) – became the first marijuana-related company to trade on the New York Stock Exchange. Marijuana business owners and advocates celebrated the San Diego company's listing, which trades under the ticker symbol IIPR, as another milestone in the cannabis industry's march toward mainstream acceptance.

But the stock's performance has been sluggish – down more than 7% this year through Aug. 11. Mainstream investors have been put off by the perceived risk of investing in a marijuana business, as well as Innovative Industrial Properties' relatively small size and status as the new REIT on the block.

However, the stock has soundly outperformed an index of 12 marijuana stocks that trade on over-the-counter markets. And certain investors are bullish on the stock's long-term prospects.

Here's a closer look at Innovative Industrial Properties' stock performance through the first half of 2017:

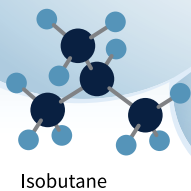
Innovative Industrial Properties Stock Price: Performance Vs. S&P 500 & 12 Marijuana Stocks in 2017



Note: MJ stocks are: AMMJ, AXIM, CANN, CBDS, CNAB, CVSI, KSHB, MSRT, SRNA, TRTC, VAPE, XXII

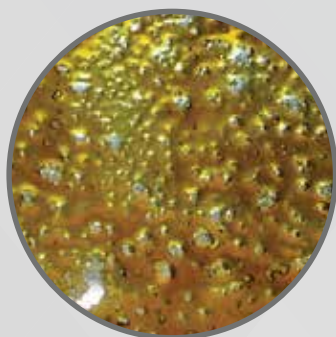
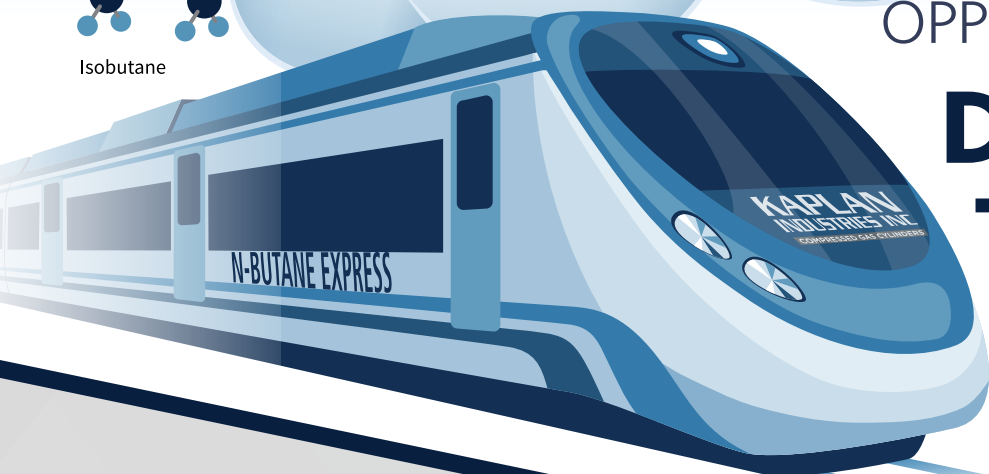
Source: Yahoo! Finance

© 2017 Marijuana Business Daily, a division of Anne Holland Ventures Inc. All rights reserved.



TOMORROW'S
OPPORTUNITIES TODAY

Don't Miss The Train



N-Butane for BHO Refrigeration Process

"NOT YOUR FATHERS MARY JANE"

- ✓ 99.5 + High Purity N-Butane
- ✓ Shipped in DOT and CGA approved cylinders and valve
- ✓ All cylinders 100% cleaned and washed prior to filling
- ✓ Returnable/Re-fillable
- ✓ Pre-packaged, in stock ready to ship



MY FAVORITE THINGS

Each month we survey a group of marijuana industry executives, asking them to name a favorite item – such as a trimmer, extraction technology or edibles ingredient. We welcome your suggestions for topics. Email us at editorial@mjbizdaily.com.

This month we've asked six growers to share their favorite strain to grow:



MATT TONKOVICH *Chief Growing Consultant, Green Growers Technology Alliance*

Three Rivers, Michigan | Pick: Mikey Kush

My favorite strain to grow is the Mikey Kush: the way it grows, the bud structure and the strain itself. Its high-in-CBG content works perfectly for myself as a Purple Heart veteran.



JIM PARCO *Founder and Co-Owner, Mesa Organics*

Pueblo, Colorado | Pick: Ghost of Lee Roy

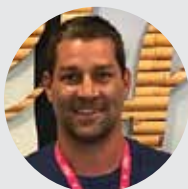
Ghost of Lee Roy is a strain we came across last year. Our customers and budtenders agree, hands down, it's among the best strains we've come across. It's an ideal strain to grow, extract and consume. It's a Rare Dankness genetic as a Ghost OG x Lee Roy. But as an indica-dominant hybrid, nothing else can quite compare in our collective opinion. We're growing it now and looking forward to a harvest this fall.



SIOBAHN DARWISH *Owner, Blessed Coast Farms*

Carlotta, California | Pick: Harle-Tsu

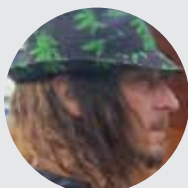
We love our Harle-Tsu. This strain is not only happy to grow, but happy to produce. Created here in Humboldt County, she is a high-in-CBD hybrid cross between Harlequin and Sour Tsunami. With her CBD content 20 times higher than her THC content, Harle-Tsu brings relief to pain and inflammation without the psychoactivity.



MATTHEW AIKEN *CEO and Founder, Sweet Leaf*

Denver | Pick: Sour Diesel

Clearly the pungent kerosene-smelling buds turn out amazing, but it's the cultivation that sets it apart. It's a difficult plant to grow, especially in veg, so the end result being "fire" makes it that much more special.



PETE GENDRON *Cultivator and Board Member of Oregon SunGrown Growers' Guild*

Sunny Valley, Oregon | Pick: Too close to call

Some of my all-time faves as a grower include the Original Oregon Big Buds all around, and frosty Black Domina indoors, with banging Kush Hybrids doing the best as outdoor crops. For robust flavor it's hard to argue with a Blueberry Kush or Pineapple Kush, the latter of which is also great for multiple sclerosis patients. Headband produces a great yield and is disease resistant as well. I still love the old AK-47, San Fernando Valley 818 (and daughters) and Northern Lights for clear, predictable effects and consistent yields.



MATTHEW WOOLLEY *Executive Director, Legion of Bloom*

Oakland, California | Pick: Nina Limone

My current personal favorite is Nina Limone, a sativa-dominant hybrid that is a cross of Super Lemon Haze and Rebel God Smoke. The flowers are sparkling with trichomes, and the high is uplifting and playful. The sweet-citrus flavor is dominant with a hint of underlying musk. Perfect for daytime use or evening relaxation. It's a beautiful plant that responds well to our organic and sustainable cultivation practices.

ENHANCE THE EXPERIENCE THROUGH INTERACTIVITY

Cannabis 101

Learn about strains, products and treatments

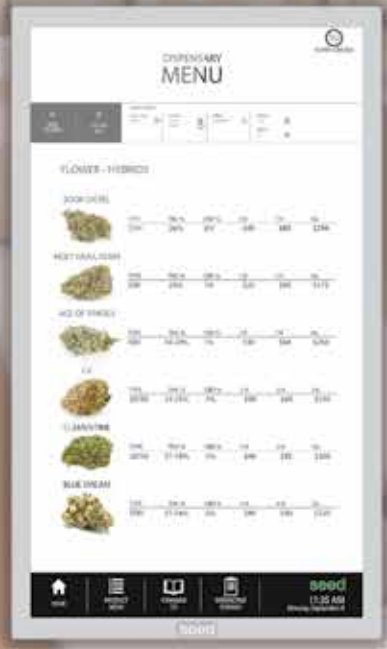
Explore



Educate.

Enlighten.

Cannabis can be confusing.
Seed educates customers so
budtenders can focus on selling.



Sell.

seed
www.horizondisplay.com/seed

VISIT US AT BOOTH #2727
Marijuana Business MJBizCon

Preparing for a Sea Change in Canada



Five Questions with Neil Closner, CEO of MedReleaf

by Matt Lamers

MedReleaf is locked, loaded and ready to grow. The Ontario company is flush with money as it prepares for the anticipated rollout of Canada's recreational marijuana market next summer and the major changes sweeping through the nation's cannabis industry.

MedReleaf – based in the city of Markham – recently raised 100 million Canadian dollars [\$79.5 million] through an initial public offering and a secondary offering of its shares.

The company is taking steps to put the money to productive use. MedReleaf, for starters, plans to expand its local production capacity more than fivefold to meet demand for both the medical and adult-use markets. It also plans to expand internationally.

In an interview with Marijuana Business Magazine, CEO Neil Closner discussed consolidation within Canada's cannabis industry, how he is positioning MedReleaf to capitalize on the medical and adult-use sectors, and whether the recent flood of capital raises among MJ companies is sustainable.

Do you foresee industry consolidation, with smaller growers getting purchased by more established companies?

If they struggle, then there will be an opportunity for consolidation and for assets that will be on the market.

This is not an easy industry. It's not easy to service patients, to grow high-quality product. It's a difficult business.

But there's no doubt that some of them will figure this out. Some of them will be formidable competitors. Given that there's likely going to be dozens if not hundreds of new license holders, there's no doubt that some will stumble.

How do you balance the opportunity between medical and rec from a business standpoint?

The question really is about how we balance inventory and product availability. That's the question all producers are going to have to wrestle with to one degree or another.

We recently went public and raised CA\$100 million. Those dollars are now being allocated to build out capacity.

We're hoping to have substantially more capacity coming a year from now. We're hoping that will enable us to serve both markets. It will all depend on how quickly the adult-use market ramps up in terms of our ability, as well as our industry overall, to satisfy that demand.

Right now we are very committed to the medical market. Any excess capacity we do have, as long as it doesn't come at the expense of serving our medical patients, we'll find a way to allocate to the adult-use market.

Capital raises in Canada rose about 1,700% in the first half of 2017. Is that sustainable?

As the business evolves and grows and as certain companies emerge as leaders, they might need to raise hundreds of millions of dollars to continue to grow – whether that’s here in Canada or even internationally.

I think the concern and the question is the number of companies that have been able to raise substantial dollars, meaning CA\$10 million, CA\$20 million, CA\$30 million. Is that sustainable? I think that’s the big question. My personal opinion is that’s not sustainable.

Can you offer advice for young companies?

We’re building a business, and we’re helping to build an industry at the same time. That’s really hard to do successfully. You need to find good people. Without that, any company will fail.

Specifically in this space, there are a lot of complexities – dealing with regulators, dealing with growing live plants, dealing with production process issues. You really need to trust and rely on your people. Otherwise you get tripped up. So anyone starting out should make sure they have the right complements of skills and staff.

The provinces are working on regulatory structures for the rec industry. Do you have a preference in terms of taxes and distribution?

We would like to see a federal excise tax on the product rather than a sales tax, because that will help alleviate a lot of the challenges, especially in Canada, that we see with the sale of contraband tobacco.






From a retail standpoint, we have a number of thoughts on that both from MedReleaf and the industry overall. We’d really like to see that producers will not be prevented from operating in the retail space on our own directly with the patient. Having that direct relationship with our patients has been invaluable.

At a physical retail level, we’d like to be able to be participants in that. Our preference is not for a government, province-by-province monopoly on retail. That seems to be the way some of the provinces will go. We just don’t think government should be in the business of retailing products. ♦



CannaBusiness Technology

Track it all from seed to sale

-  Manage operations, finance and accounting in one system
-  Connect directly to state regulatory systems
-  Track products automatically with RFID
-  Reduce labor costs
-  Runs in the cloud

Visit our website:
nextecgroup.com/cannabis

What's Happening:

National & International News Developments



Task Force Tells Sessions to Keep Status Quo for Legal Cannabis

A task force assembled by U.S. Attorney General Jeff Sessions is giving him no ammunition to go after the legal marijuana industry, according to documents obtained by The Associated Press.

The Task Force on Crime Reduction and Public Safety offered no new policy recommendations to advance the attorney general's aggressively anti-marijuana views. The group's report largely reiterates the current Department of Justice's policy on marijuana.

The task force encourages officials to keep studying whether to change or rescind the Obama administration's hands-off approach to enforcement – a stance that's allowed the nation's experiment with legal cannabis to flourish.

Marijuana Cultivators Up Nearly 25% in Canada After Licensing System Revamped

The number of licensed medical marijuana producers in Canada has jumped nearly 25% over the past few months after the nation's top regulator dedicated more resources to processing cultivator applications to meet growing demand for cannabis.

Since revamping and streamlining the application process in late May, Health Canada awarded another 11 licenses through late August, bringing the number of licensed producers (LPs) to 56. Health Canada had issued six licenses in the previous five months.

The increase in cultivators has positioned the industry to better meet the nation's growing demand for medical marijuana. The jump in cultivators also comes as Canadian marijuana growers prepare for the planned rollout of the nation's recreational cannabis market next summer. LPs are scrambling to build new capacity amid concerns about a potential supply shortfall.

Banking Troubles for Uruguay's Rec Cannabis Businesses

It didn't take long for recreational marijuana businesses in Uruguay to encounter a key challenge that hinders U.S. cannabis companies: banking.

Uruguayan pharmacies began selling adult-use cannabis July 19, but the South American nation's banks are refusing to do business with companies tied to marijuana.

A government official – speaking on the condition of anonymity – said Uruguayan banks that deal with companies that sell adult-use marijuana risk running afoul of international finance laws. U.S. financial institutions, meanwhile, are hesitant to bank marijuana businesses because cannabis remains illegal at the federal level.





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

SUCCESS

MADE WITH PRECISION[®]

#1 in Quality, Customer Service & Tech Support

Precision[®]

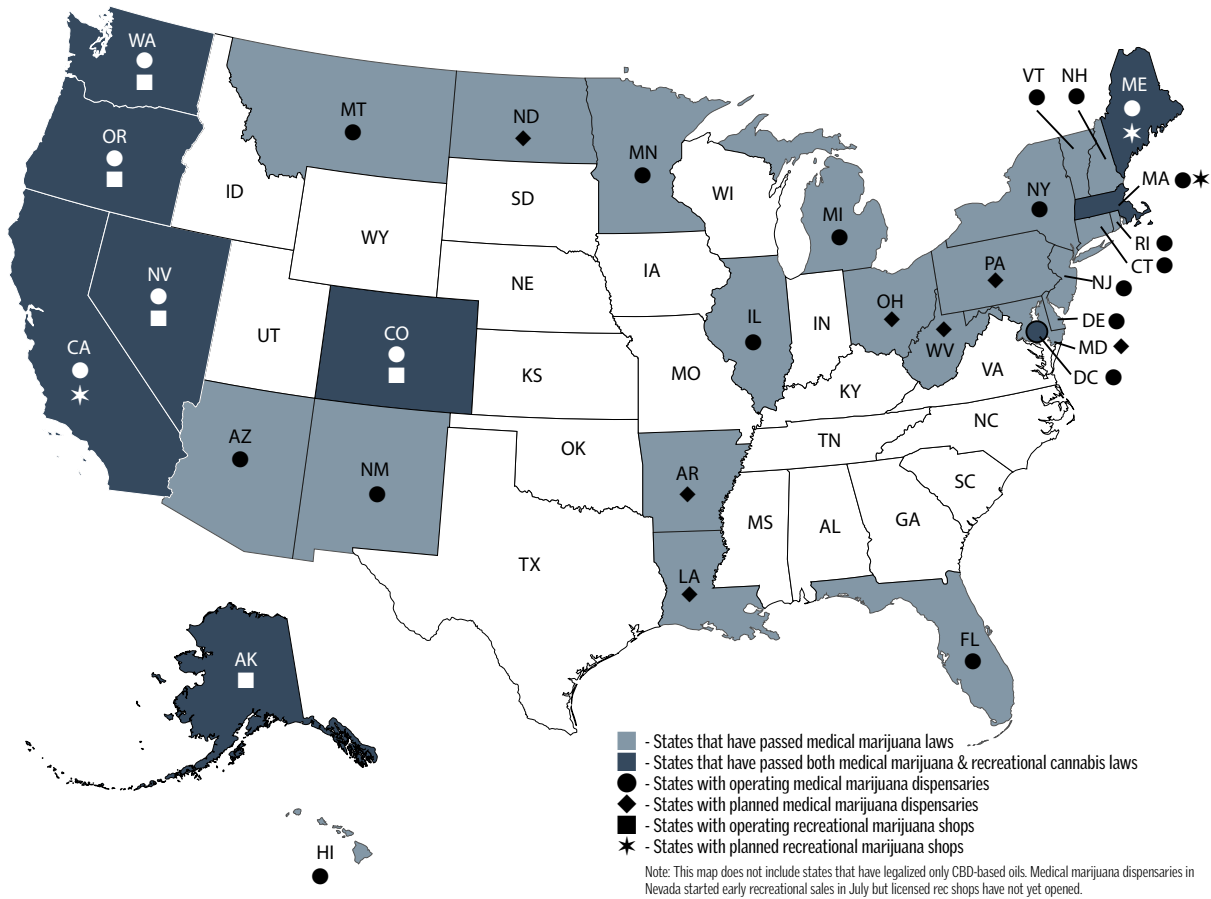
Extraction **solutions**

855-420-0020

PRECISIONEXTRACTION.COM

EQUIPMENT | TRAINING | COMPLIANCE | SUPPORT

State News Developments



© 2017 *Marijuana Business Daily*, a division of Anne Holland Ventures, Inc. All rights reserved.

Data is current as of 9/11/2017



Alaska

Regulators plan to take public comment through Oct. 27 on a proposal that would allow authorized recreational marijuana shops to provide a place for people to consume the cannabis products they buy. Alaska's Marijuana Control Board has gone back and forth on whether to allow onsite consumption but agreed once again to seek comment on draft rules. The proposed regulations include giving local governments the right to protest a store's application for onsite use.



Arkansas

Regulators received their first application for a medical marijuana dispensary license. The application was submitted in mid-August, and regulators anticipated more applications to arrive by the Sept. 18 submission deadline. Arkansas began accepting MMJ business applications June 30 for five cultivation facilities and 32 dispensaries.



agrolux

MADE IN HOLLAND

Tomatoes need 220 μmol to grow.
Imagine what you could do with

2100 μmol



• WIDE REFLECTOR MODEL SHOWN



• OPTIMAL REFLECTOR MODEL SHOWN

Exclusive Distribution
in North America by



HYDROTEK
HYDROPONICS

ALSO AVAILABLE

ALF 1000R

Engineered by Agrolux in Holland

HIGH POWER
DE REMOTE BALLAST

•120 KHz•



New York

1 866 411-0865

Detroit

1 855 447-9233

Phoenix

1 844 439-6595

Montreal

1 877 777-0767

Vancouver

1 888 507-8002

www.hydrotek.ca



California

To ensure they can meet their January 2018 deadline to establish a new regulatory system for medical and recreational marijuana businesses, legislators have established an “emergency rulemaking process” that won’t include a normal public comment period. Lawmakers fear that going through a typical comment period would prevent the state from issuing marijuana business licenses beginning Jan. 2. Missing that mandated deadline would also delay the launch of the state’s recreational industry. The new emergency regulations for the state’s medical cannabis market are expected sometime this fall.



Colorado

Colorado Gov. John Hickenlooper defended his state's cannabis regulatory regime and pushed back against the possibility of federal intervention, joining his counterparts in Alaska, Oregon and Washington state. Hickenlooper is the last of the four governors – each received letters from U.S. Attorney General Jeff Sessions in July expressing concern about the effects of marijuana legalization – to respond to Sessions. Hickenlooper made it clear he believes Colorado has “worked diligently to ... build a comprehensive regulatory and enforcement system that prioritizes public safety and public health.”

Because we care about your customer's health

Share your buds... NOT the germs.



Bud Bar.
DISPLAYS.
BudBarDisplays.com



Hawaii

The state's first two operating medical marijuana dispensaries ran out of product just days after opening. Maui Grown Therapies and Aloha Green couldn't move flower quickly enough through the state's testing bottleneck. With 17,000 registered patients waiting for medical cannabis, demand has quickly outpaced supply. Maui Grown Therapies sold out of its supply just five days after becoming the first dispensary to open in Hawaii. Aloha Green sold out of its initial stock three days after beginning operations.



Louisiana

Three Louisiana companies have been chosen as finalists to operate Southern University's medical marijuana program. Advanced Biomedics and Med Louisiana from Lafayette as well as Southern Roots Therapeutics from Baton Rouge remain the three firms in the running. Southern's Agricultural Research and Extension Center estimates the cost for running the business will initially range from \$5 million to \$7 million. The company that gets the winning bid will pay that cost.



CALIFORNIA'S PREMIER MARIJUANA REAL ESTATE & LICENSING GROUP

Services Include:
Merit-Based Application Consulting
Locating Eligible Real Estate

We have won more Southern California dispensary, cultivation and manufacturing licenses than any other group. Put us to work for you!

CONTACT US ABOUT CALIFORNIA DISPENSARY LICENSES FOR SALE

WWW.CALCANNHOLDINGS.COM
(949) 386-8440



Maine

Maine officials say the state won't be able to meet its February deadline to allow recreational marijuana sales. Republican State Sen. Roger Katz said the agencies responsible for the recreational market rollout don't have sufficient time before the deadline to perform such tasks as licensing growers, writing departmental rules and hiring new inspectors. The president of Legalize Maine estimates the delay means adult-use business licenses won't be issued until summer 2018.



Maryland

At least two of Maryland's 15 licensed medical marijuana producers have started growing their plants, giving some badly needed good news to the state's embattled MMJ program. ForwardGro has posted photos of its plants on Instagram, and Curio Wellness has also planted seeds. The developments came shortly after MMJ regulators approved licenses for three more cultivators, two processors and one testing lab.



1 GRAM FILLS

AUTOMATED WEIGHING

ALL MADE POSSIBLE WITH MULTIPOND

MULTIPOND

Advanced Weighing Technologies
German Engineered & Manufactured

Proven solutions to accurately weigh 1 gram target weights more. Backed with over 70 years of weighing experience, MULTIPOND provides a reputable solution within the packaging industry offering the most reliable and accurate radial combination scales.

Edible Gummies?
Sticky or sugar sanded we can weigh those too.



See us at MJBizCon
in the THC Automation
booth #225

MULTIPOND America Inc. | 2301 Hutson Road | Green Bay, WI 54303 | 920-490-8249
sales@multipondamerica.com | www.multipond.com



Massachusetts

Massachusetts has finalized its Cannabis Control Commission (CCC), and four of the appointees to the five-member panel voted against recreational marijuana legalization.



Michigan

A second – and competing – campaign to legalize recreational marijuana has gotten the green light to begin collecting signatures in a bid to make the 2018 ballot. The campaign, Abrogate Prohibition Michigan, was approved by the state board of canvassers to move ahead with its goal of 315,654 signatures. An existing campaign, the Coalition to Regulate Marijuana Like Alcohol, has collected more than 100,000 of the 252,523 signatures it needs. The Marijuana Policy Project supports the coalition.

Increase yields with data

- Simple, fast, accurate
- 1-100% Cannabinoid content



- 6 major Cannabinoids
- Concentrates, flower

LightLab | Cannabis Analyzer
by Orange Photonics



603.573.9212

www.orange Photonics.com



Minnesota

At least one Native American tribe – on the White Earth reservation in northwestern Minnesota – has decided to enter the hemp business. The tribe has spent \$100,000 on just a few acres of the crop but is hoping it will be enough to bolster the reservation’s economy. It’s one of many tribes that developed an interest in the broader cannabis business after the Department of Justice issued a memo in 2014 that appeared to give Native Americans the go-ahead to grow and sell marijuana and hemp.



Montana

The number of registered medical cannabis patients in Montana has continued its steady upward pace this year, with the number of program enrollees more than doubling between December and July. As of July, 17,819 patients had registered with the state to purchase MMJ, up from just over 8,000 at the end of 2016. The trend equates to about 1,300 new medical marijuana cardholders a month.

ALL BAGS COME PRINTED WITH YOUR ARTWORK!

REUSABLE & TESTED EXIT BAGS



Tested Child Resistant Exit Bags
- Made To Order - Choose Your Color
- Low Minimums - Choose Your Size

REUSABLE SHOPPING BAGS



704-815-4600
imexpackaging.com

FOIL BAGS AND POUCHES





Nevada

The 50 dispensaries licensed to sell recreational marijuana experienced a 20%-30% decline in sales since an initial burst of activity on July 1, according to a report by the Nevada Department of Taxation. The department said the drop in sales stemmed from the dispensaries' inability to meet demand. The dispensaries – which are selling adult-use cannabis under the state's early start program – have seen the supply of marijuana goods they can offer shrink by more than 50% because of Nevada's ongoing distribution problems.



New Hampshire

The state's four medical marijuana dispensaries were ramping up for an expected boost in both patient registrations and the resulting uptick in sales, thanks to new qualifying MMJ conditions that went into effect in August. New Hampshire updated its MMJ law in July to allow those suffering from chronic pain and post-traumatic stress disorder to purchase medical marijuana.

Complete Control

Cooling, Dehumidifying, Heating – All in One System

The DeltaCool™ environmental system provides precise temperature and humidity control.

Engineered for indoor or greenhouse growing, the chilled water and hydronic heat package with system controller delivers the ideal growing environment for healthy cannabis crops.

Healthy Plants = High Yields



www.deltatsolutions.com

800.552.5058

Creating custom horticultural heating & cooling solutions for over 30 years



New Jersey

The Medicinal Marijuana Review Panel has recommended that the state's health department add 43 conditions to the list of illnesses that would qualify patients to receive medical cannabis cards. Many of the suggested additions are variations of the same condition. For example, there are several categories of chronic pain, anxiety, migraines and fibromyalgia, among others. Other conditions recommended by the panel include arthritis, autism, asthma, opiate-use disorder and irritable bowel syndrome.



New York

New York's medical marijuana dispensaries have been given permission to sell ointments, lozenges and chewable tablets. The proposed regulations are intended to expand a program that's been limited by its restrictions on allowable forms of cannabis – no smokable flower, for example – and a small patient pool. Regulators also hope to increase the number of participating physicians by cutting in half – to two hours – the time it takes a doctor to become registered to recommend MMJ. The new rules were expected to be in place as soon as September.



North Dakota

The state is in the market for a testing laboratory for its nascent medical marijuana program. The chosen lab will be responsible for collecting and testing samples from in-state marijuana cultivators. North Dakota's medical marijuana program is expected to be up and running by mid-2018.



Ohio

Regulators don't expect to issue the state's first medical marijuana cultivator licenses until around November, at least a month later than growers expected. The new timeline could delay the startup of the state's MMJ program beyond the planned September 2018 launch date. The state Department of Commerce's announcement drew concern from the National Cannabis Industry Association of Ohio. The association's president said Ohio cultivators will face difficulties getting the necessary local zoning approvals under the adjusted timeline.



Washington state

A dozen marijuana retail businesses in Washington state are employing an unusual strategy on the mergers and acquisitions front: package their assets together for a combination sale. In a move that's being described as "unprecedented," Seattle-based investment bank GRN Funds is asking \$60 million-\$70 million for the 12 retail cannabis firms.

– Roger Fillion

Note: Entries sourced from *Marijuana Business Daily* and other national and local news outlets. These developments occurred before this magazine's September publication deadline, so some situations may have changed.



1000W CMH?



YES...IT'S REAL

Lighting Technology at its Finest

USES
MAXPAR DUAL ARC
950 CMH LAMP

NCCS & 0-10 V
CONTROL READY

200HZ
DIMMABLE BALLAST

ENGINEERED
REFLECTOR FOR
DUAL ARC LAMP

208V/240V

FIND OUT MORE AT
WWW.NANOLUXTECH.COM

URBAN-GRO'S SYSTEMS **MAXIMIZE THE ECONOMIC YIELD** OF CANNABIS CULTIVATION FACILITIES ACROSS THE COUNTRY **NOW DESIGNING HYBRID LIGHT PLANS COMBINING D/E HPS AND LED**



Best in Class Reflector Technology

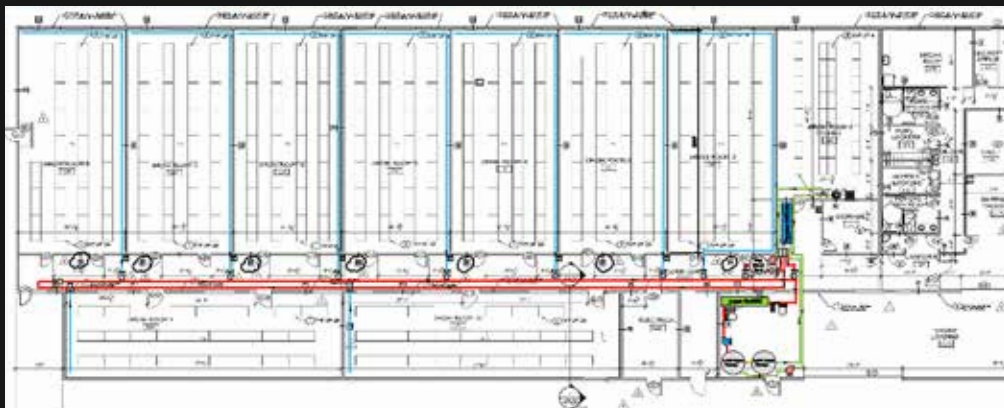
Best in Class 2.7 $\mu\text{mol}/\text{j}$ Output

OUR CUSTOMERS GET COMPLIMENTARY FERTIGATION DESIGN

urban-gro provides fertilizer injection and irrigation (fertigation) system design for Cannabis cultivation facilities across the United States.

BENEFITS

AutoCAD design by professionals experienced in commercial Cannabis cultivation
Quality products (filters, pumps, emitter) specified for precision and durability
System commissioning services available



UPCOMING EVENTS

**booth
721**

visit us at the
SWCC in
Phoenix

**booth
1103**

visit us at
MJ Biz Con in
Vegas

HPS / LED / HYBRID LIGHTING ●

COMPLETE FERTIGATION DESIGN ●

IRRIGATION DISTRIBUTION ●

NUTRIENT INJECTION ●

CLIMATE CONTROL ●

RECIRC/RECYCLE SYSTEMS ●

WASTEWATER TREATMENT ●

BIOCONTROL ●

PESTICIDES ●

SPRAYERS ●

ODOR MITIGATION ●

AIR SANITATION ●

ROLL TOP BENCHES ●

urban-gro

YOUR SOURCE FOR CULTIVATION PRODUCT SOLUTIONS

720 - 390 - 3880 | info@urban-gro.com | urban-gro.com



Women Grow founder Jane West admits her company made some mistakes as it dealt with rapid growth.
Photo courtesy of JaneWest.com

5 Lessons Learned From Women Grow's Stumbles

Company's troubles offer a valuable case study for cannabis entrepreneurs

by John Schroyer

As a for-profit endeavor, Women Grow expanded incredibly quickly during its first 18 months in existence, growing from a Colorado startup in 2014 to a network of 44 chapters across North America.

But things went south over the next year and a half. Flaws in the company's business model surfaced, and Women Grow – created to empower female marijuana professionals through

networking, mentoring and business support – began to struggle.

Ultimately, many of the problems the company encountered can be traced back to its origins as well as a general lack of planning and several missteps that cost Women Grow goodwill throughout the cannabis industry. Those same issues could affect its ability to survive in the long term.

Following are five business lessons

learned from Women Grow's difficulties – information that cannabis entrepreneurs can use when launching or growing their own ventures.

1. Don't Overreach

Perhaps the first mistake made by Women Grow was its willingness to open chapters in nearly every city where it found an enthusiastic supporter of the company's vision.

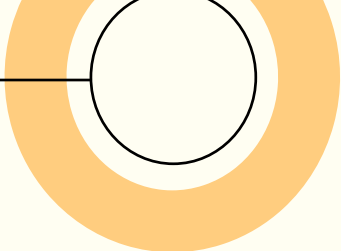
By founder Jane West's account, multiple women across the country had contacted her by August 2014, when the inaugural Women Grow meeting was held in Denver. Those contacts followed a TV report the previous month that had looked at West's plans for a company.

West thinks things have ultimately worked out and that Women Grow learned a lot through trial and error along the way. But there's no denying

EXECUTIVE SUMMARY

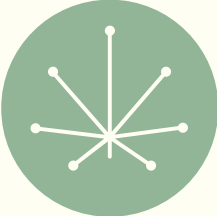
As a for-profit venture, Women Grow expanded quickly initially but then began to struggle. The company's experience offers five business lessons:

- Don't overreach – other companies looking to aggressively expand should be careful not to let their exuberance override careful planning.
- Have a business plan from the outset so you know how your company will create a revenue stream and grow it over time.
- Make it clear whether you're a for-profit or a nonprofit, especially if your company is mission-driven – otherwise, you'll risk alienating those in your company who have a mistaken understanding.
- Build morale and a sense of company to retain good personnel and develop a reputation as a good place to work.
- Make sure your business partners know exactly where they stand with you, communicate with them and be clear about your expectations and limitations.



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.



SEVENPOINT
INTERIORS



sevenpointinteriors.com



that Women Grow's hypergrowth – which occurred without controls on who could operate a local chapter and how it should be done – created problems for the company.

Other companies looking to aggressively expand should be careful not to let their exuberance override careful planning.

2. Have a Business Plan From the Get-Go

Coupled with the company's willingness to bless new but mostly unguided chapters was a lack of a business plan: West had no concept for how Women Grow would create a revenue stream from the outset and grow it over time.

Asked what her original business plan in 2014 was, West said, "Maybe we'll become a job board. Maybe we'll become the LinkedIn of marijuana. I wasn't sure what would happen, like what the network would need."

As a result, dozens of Women Grow chapters across the nation operated independently and under their own protocols. Moreover, confusion reigned at the top and among the local chapters over how profits were supposed to be generated. Ultimately, many chapters shuttered.

Women Grow eventually issued a new licensing agreement in May 2017, nearly three years after the company was founded.

Several years of turbulence could have been avoided if Women Grow had developed a business plan from the outset to ensure the company was at least stable – if not profitable – and had a roadmap of what it wanted to be.

3. Make It Clear Whether You're For-Profit or a Nonprofit

Another common complaint from multiple former chapter chairs and volunteers: They didn't realize Women Grow was structured as a for-profit limited liability corporation.

While there's nothing inherently wrong with choosing a for-profit model over a nonprofit, it's clear Women Grow failed to effectively communicate to supporters, members and volunteers

Women Grow failed to effectively communicate to supporters, members and volunteers that it's actually a company and not just a philanthropic cause.

that it's actually a company and not just a philanthropic cause.

Many women volunteered their time believing it was a nonprofit.

Making sure that everyone was aware of its business structure almost certainly would have prevented unnecessary ill will.

4. Support Your Team

Another common complaint among former Women Grow chapter chairs and volunteers: The national company didn't really support them with a positive work environment or overall message.

"I definitely felt like they did not appreciate the effort that was involved," said former Denver Women Grow chapter Chair Anne Marie Doyle. "They didn't really offer any positivity. The only time you heard from them was when stuff wasn't going right or if you weren't doing enough."

Jackie Subeck, a former vice chair of the Los Angeles Women Grow chapter, said another such example was when West expected her and other volunteers to pay to attend the annual Women Grow leadership summit, as well as other company events.

"They were happy to give away tickets to the leadership conference to our guests, but not to us," Subeck said, adding that such a company "is never going to work if they don't take care of the people who continue to build their network and their brand."

Building morale and a sense of camaraderie – especially with a decentralized company like Women Grow, which relies on licensed contractors spread out nationwide – can be key in both retaining good personnel and developing a reputation as a good place to work.

5. Communicate

A lack of communication probably ties together all of Women Grow's problems and is perhaps the most obvious takeaway for entrepreneurs.

Aside from confusion over its business structure as a for-profit, Women Grow failed to communicate to chapter chairs that it didn't exactly have a plan for the venture. It also didn't effectively inform chairs how they could help the company become a sustainable, profitable venture.

This lack of communication caused significant problems and damaged Women Grow's reputation with many female cannabis entrepreneurs.

The lesson may sound simple, but it's easier said than done: Know exactly where you stand and make sure your business partners know exactly where they stand with you. Communicate. Be clear about both your expectations and limitations.

Anything else is a recipe for serious misunderstandings, which can create a host of negative business repercussions – as the Women Grow case study demonstrates. ♦

EVERYBODY LOVES



**THE ALL-IN-ONE
CLIMATE CONTROL
SOLUTION TO
OPTIMIZE
YOUR GROW**

MONEY DUDE

GROWER

In 2014, when cannabis was legalized for recreational use in Colorado...visionary engineers and cultivators joined forces to develop gPod – a single environmental control unit with multiple functions and benefits.

Now, three years later, gPod is the industry leader with an incredible feature set, all contained in one unit that can be monitored via internet and controlled via laptop, smartphone or tablet:



Precision cooling & dehumidification with energy cost savings



CO₂ distribution, monitoring & control



Temperature, humidity & CO₂ set-point control for lights on/off

The solution is simple – set it to maintain the optimum environment for your grow rooms – whether the lights are on or off – and watch your plants grow to their full potential.

Cannabis growers love the precision control and performance – and the bigger/better yields. Owners love reducing energy costs while increasing output and profits.

gPOD BY DATA AIRE... WHAT'S NOT TO LOVE?

CONTACT A DATA AIRE EXPERT TODAY TO LEARN HOW TO OPTIMIZE YOUR YIELDS AND PROFITS.

dataaire.com/gpod ☎ 800.347.2473 @ sales@dataaire.com

dataaire
Precise by Design

SPEED **STRAINS**



Y Growers in competitive markets are turning to strains that mature more quickly and can be harvested sooner



Left to right: An Orange Cookies test crop at Skydweller Farms, No Quarter in early flower phase at Skydweller Farms, Orange Cookies in flower phase at Skydweller Farms. Photos courtesy of Ryan Haub

by Omar Sacirbey

Time is money in any business. And the marijuana business is no different – particularly when it comes to cultivation.

In large, competitive markets with many licensees, some growers are finding an edge with plants that mature more quickly than others. Such strains allow these growers to squeeze in more harvests per year versus cultivators who stick to varieties that take longer to mature into the flowering stage. More harvests can translate into more money.

Compared to most traditional strains, which usually take 11 or 12 weeks to reach maturity, these faster-growing strains take closer to nine, eight or even seven weeks.

“What you’re seeing is a move toward phenotypes that finish quicker so you can have more harvests in the course of a year,” said Ryan Haub, chief cultivator at Skydweller Farms in Norco, California.

But speedy strains may not be for all growers. And special steps must be taken – by way of feeding and lighting – when growing these varieties.

More Harvests, More Revenue

In Norco, most of the more traditional strains Haub grows require nine to 12 weeks, such as the five OG Kush varieties that take 65-70 days before they are ready for harvest.

But Haub has also started growing newly developed strains that can mature in less than seven weeks. For example, Haub just finished a test batch of a strain called Orange Cookies that he said took 47 days. He is also trying another fast-maturing strain, No Quarter.

“If you’re growing in a ‘light dep’ greenhouse and can finish in 45 days versus 70 days, you can see how much more productivity you’d get in a year,” Haub said of a facility that uses light deprivation to force plants to flower.

Autumn Karcey, a longtime grower and now president of Cultivo, a cannabis cultivation consulting firm in Los Angeles, agreed.

“If you’re looking at economics, and you have a 12-week strain, like many Sour Diesels, you’re pulling four harvests per year. But if you have an eight- or nine-week strain, you’ll get more harvests,” said Karcey, who noted these strains have been around for at least 10 years. “Unless it was something that was in incredibly high demand, I wouldn’t grow strains that take 12 weeks. Losing



Autumn Karcey, president of Cultivo.
Photo courtesy of Autumn Karcey



Ryan Haub, chief cultivator at Skydweller Farms. *Photo courtesy of Ryan Haub*

a cycle throughout the course of a year is substantial.”

Fast-maturing strains that are popular with clients that she’s worked with include Mimosa, Do-Si-Dos and Skittlz.

Abbreviated Regimens

To get the most out of these accelerated strains, you must adjust your regular feeding and lighting practices to the shorter time frame.

“If I’m feeding something at week eight on a 70-day plant, I would be feeding it at week five if it were a 47-day-cycle plant,” said Haub, who uses Mad Farmer’s Mother of All Blooms nutrient mix.

“If you know that you’re coming close to the ripening of the flower in week seven of a short-cycle-strain plant, then you would treat it like you would a regular-cycle plant that is ripening in week 10,” Haub explained.

Shorter-cycle plants also require less lighting, Haub said. For example, Haub uses Gavita’s 1000-watt E-Series automated lights. He doesn’t run them full blast the whole time. Rather, with his regular-cycle plants, he’ll run them at about 400 watts at the beginning of the cycle, 750 watts midway through the cycle, then up to 1,000 watts for the penultimate two or three weeks, followed by up to 1,250 watts for the final “maximum bloom” phase.

EXECUTIVE SUMMARY

In large, competitive markets with many licensees, some cannabis growers are finding an edge with plants that mature more quickly than others. These strains are gradually becoming more popular. If you’re thinking of trying one, keep in mind that:

- Some growers are increasingly using strains that take as little as seven, eight or nine weeks to grow versus, say, 12 weeks.
- By growing strains that have shorter cycles, growers can harvest one or two more cycles per year, generating additional revenue.
- Growers that choose shorter-cycle strains must adjust their feeding and lighting regimens accordingly.
- Some growers believe breeders exaggerate claims of how fast a certain phenotype will mature, and it is better to let these strains mature for another week or two to get the maximum yield.

But if you are growing speedier strains such as No Quarter or Orange Cookies, you don’t need to bring the wattage up to 1,250 watts for the final week of the cycle, according to Haub, who said 1,000 watts is sufficient.

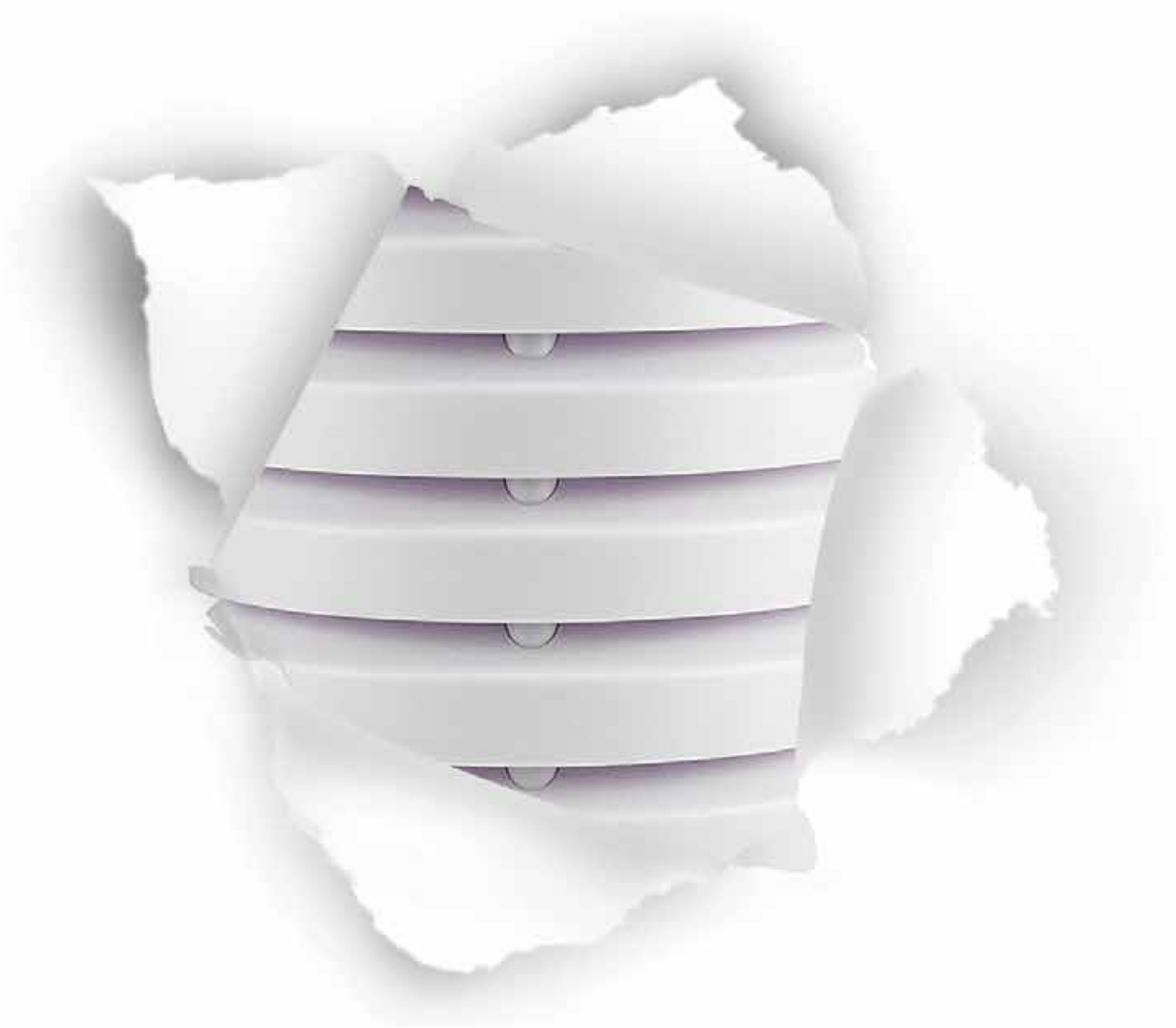
These strains can also perform outdoors, said Haub, who in August was running a trial outdoor grow of Orange Cookies that had just “full on” entered their flowering phase.

“The plants know genetically when to start flowering. As we head to a 12 (hours of light)-12 (hours of darkness) cycle, these plants are already pushing for the finish line,” Haub said.

Cautions

Knowing what strains run shorter cycles and finding them can be difficult, Karcey said. For example, while many Sour Diesels will typically take 12 weeks to hit full flower, some can take as few as eight weeks. “It just depends on the gestation period of that strain for flowering cycle,” Karcey said.

The next generation of Smart Farming
is almost here... stay tuned!



Be the first to know

www.growlink.com/staytuned

According to Karcey, how long these strains actually take to mature will depend on several factors, including:

- How much water they take up.
- The types of nutrients they receive.
- The amount of sunlight they get.

And while shorter-cycle strains have clear advantages, they aren't always the answer. In markets with limited licenses, like New York, Minnesota, Connecticut and Delaware – where growers enjoy near-monopoly status – there is less competition and therefore less need to grow faster-maturing plants.

Cultivators should also know what's popular in their market before accepting or rejecting a strain that takes longer to grow. In some markets, strains that take 12 weeks to grow may be wildly popular, and to leave them out of your rotation because they take a few weeks longer would be a mistake, Karcey said.

“To stay competitive in consumer-driven markets, it's important to know what market demands and saturation points are.”

“To stay competitive in consumer-driven markets, it's important to know what market demands and saturation points are,” Karcey said.

And not everybody believes that shorter-cycle strains can really hit full maturity after only seven weeks.

“It's more of a marketing ploy on the seller's end,” said Joshua Haupt, a

growing consultant with Medicine Man Technologies in Denver. He doesn't disavow shorter-cycle strains but lets them grow between 60 days and 70 days.

Waiting longer with such strains can provide growers with up to 20% more yield, Haupt said.

“That way we make sure we don't cheat ourselves on our yield,” Haupt added. ♦

HIGHER YIELDS THROUGH 'SCHWAZZING'

While cultivating faster-yielding strains is one way to increase your grow's productivity, using techniques that increase yields is another option.

One way to grow stronger plants is by “stressing them” – putting them through moderate stresses such as less watering, pruning or added wind generated by fans.

Joshua Haupt's favorite method is deleafing, or what the grow consultant from Medicine Man Technologies in Denver dubs “schwazzing.”

Schwazzing involves clipping away the fan leaves, a stress technique that induces regeneration, resulting in greater plant growth. But deleafing also allows more light to hit the actual flower, which not only increases size but brings out the terpenes that give flowers their unique tastes.

“You want to schwazz when your focus is on getting the plants as big and tall as possible, and pushing out as many roots as possible,” Haupt said.

Timing is also important when you deleaf your plant, Haupt said. In his view, plants flower in three stages, each 20-25 days. Haupt starts on the first day of the flowering phase and then follows up just before the end of the initial flowering phase.

“We'll cut off every single plant leaf from the plant,” Haupt said.

The initial phase of flowering is the best time to deleaf because the plant is pushing roots out and is able to repair itself quickly, Haupt said. You never want to deleaf after the first phase of flower. In the second phase, the plant is mostly focused on fruit development; in the third phase, it is focused exclusively on fruit development. Therefore, you want all the plant's energy to go to fruit generation – not leaf regeneration.

“In phases two and three, schwazzing is more harmful than helpful,” Haupt said.

But an important caution: Plants absorb micronutrients from fan leaves. To ensure your plants aren't deprived of their normal micronutrient intake, it's important to add them back in during your regular feedings.

“If you don't replace those micronutrients by adding them to the water, you're shooting yourself in the foot,” Haupt said. “Your plants need those micronutrients to reach their full potential.”

– Omar Sacirbey

System 420™ Hybrid Greenhouses

Larger Yields, Better Crops, Lower Costs



PRODUCTION YIELDS

Light deprivation, environmental controls, and benching systems provide the tools to optimize the grow system for high capacity crop output.

QUALITY PLANTS

Growing healthy, natural plants is practical with insect screens for organic farming. Irrigation and fertilizer systems provide optimal plant dosing levels.

ENERGY SAVINGS

Insulated walls and roof coverings provide highly diffused, natural light energy usage for significant cost reductions.

Why Nexus? With over 1 million square feet of cannabis greenhouses constructed in 11 states, Nexus has developed unique expertise in designing integrated cannabis growing systems. Beyond cannabis, Nexus has served the horticulture industry for 50 years as an industry-leading greenhouse manufacturer. Facilities are strategically located in Colorado and Illinois for convenient shipping to the entire U.S.

That's why cannabis growers choose Nexus.

www.NexusCann.com
800-228-9639 ext. 558
info@nexuscann.com

**N·E·X·U·S**
GREENHOUSE SYSTEMS
LEADERS IN GREENHOUSE SYSTEMS INTEGRATION

R(revolution)²



\$499

DEva - 1000W DE

- High efficiency through low frequency Silent Square wave technology runs cooler.
- Ushio Pro Plus bulb included in your choice of HPS or Metal Halide DE.
- Pick your voltage: 120/240/277v or the Industrial 347/480v.
- 3 Year warranty.
- Aerospace grade parts and design.
- 40% more usable, brighter light.
- Field repairable for zero downtime.

THE NEW CHOICE OF PROFESSIONALS



\$299

RLC-1 CONTROLLER

All digital. <

Controls 512 lights in two zones. <

LEARN MORE AT
REVMICRO.COM



ROOM *to* TINKER

To remain competitive, set aside space in your grow to experiment with new cultivation methods and technologies

by Bart Schaneman

With technology and cultivation techniques developing all the time, it's imperative for cannabis growers to experiment with new growing methods to stay ahead of competitors.

But you don't want to risk your entire crop by introducing something new all at once. Instead, consider setting aside a room or a section of your facility to try out different growing methods and technologies.

Experimenting with new techniques on small samples of plants can lead to increased production, better efficiency and lower costs – all without risking the health of your entire crop.

Rooms can be set up to experiment with nearly all parts of the cultivation process, including:

- Nutrient mixes
- Lighting
- Plant arrangements
- Different strains
- CO2 levels

Just remember that not every test will produce successful results. And experimentation takes time and money.



Tim Cullen, CEO of Colorado Harvest Company, inspects plants at his grow facility.
Photo courtesy of Colorado Harvest Company



However, even occasional success can be a boon to your company's long-term health.

"Without this research-and-development mentality, you run the risk of going out of business because your other competitors are pushing the envelope and you're left in the dust," said Jonathan Cachat, CEO of Cleveland-based CCV Research, which develops new indoor cultivation techniques.

It's also something many cultivators are simply naturally interested in.

Gary Mancini, co-founder of San Diego-based Innovative Solutions, said that even though his company offers case studies and data when providing air purification and sanitization equipment to cultivators, growers still want to try out the new gear.

EXECUTIVE SUMMARY

Setting aside space to experiment and try new techniques is an essential part of any forward-thinking cultivation operation. When experimenting at your cultivation facility, keep in mind that:

- It pays to innovate with different lighting, strains, nutrient mixes and other variables to remain competitive.
- Experimenting with lighting can lead to significant gains in yield.
- The cost of experimentation is worth it, even if it causes a temporary loss of yield.
- You should limit your experiments to one variable at a time to better understand the changes that are occurring.
- Experimentation takes time and patience.

"With the value of a crop it makes sense to me that before (a cultivator) makes any major change in the process that they would test it on a smaller scale somehow," he said.

Tim Cullen – CEO of Colorado Harvest Company, a vertically integrated cultivation and retail business in Denver – noted that new technology is entering the market constantly. And while not all of it is something his company wants to pursue, "some of it is," he said. "And the only way to really test it is to run an experiment with it."

He has set aside a 2,500-square-foot room with 22 lights for experimentation.

"(That's) enough of a sample size to make it valid," Cullen added. "To be able to look at different aspects of plant production."



A cultivation facility at Colorado Harvest Company in Denver. Photo courtesy of Colorado Harvest Company

Planning to grow indoors but concerned about huge electric bills?

*The solution is natural
gas chillers and CHP
(cogeneration).*

- *Reduce power requirements by 60% to 100%*
- *Cut energy cost by 50% using inexpensive natural gas*
- *Keep plants safe during utility blackouts*
- *Free engine heat recovery available for dehumidification*
- *Ultra-clean exhaust gas available for CO₂ enrichment*
- *Suitable for grow facilities 10,000 Sq. Ft. or larger*



Tecogen 
Advanced Modular CHP Systems

781.466.6400 • www.tecogen.com

SMART EXPERIMENTS

Putting Lights Under the Spotlight

At Colorado Harvest Company, a recent experiment involved double-ended Gavita lights.

Cullen said the initial test resulted in yields of an extra half a pound per light. A second test produced the same outcome, so Colorado Harvest Company applied the results to its entire operation, resulting in a purchase of more than \$200,000.

Cachat also recommends that cultivators try out new lights before making a major purchase.

“Switching lights is a huge consideration for any operation because you don’t know how it’s going to affect yields or product quality,” he said.

If you’re drastically changing your types of light – from high-intensity discharge (HID) to light-emitting diodes (LEDs), for example – you must fundamentally approach growing differently.

“So, it makes sense to test first,”

Cachat said.

Changing lights can create different gains – more phenotypes, lower electrical bills or larger yields.

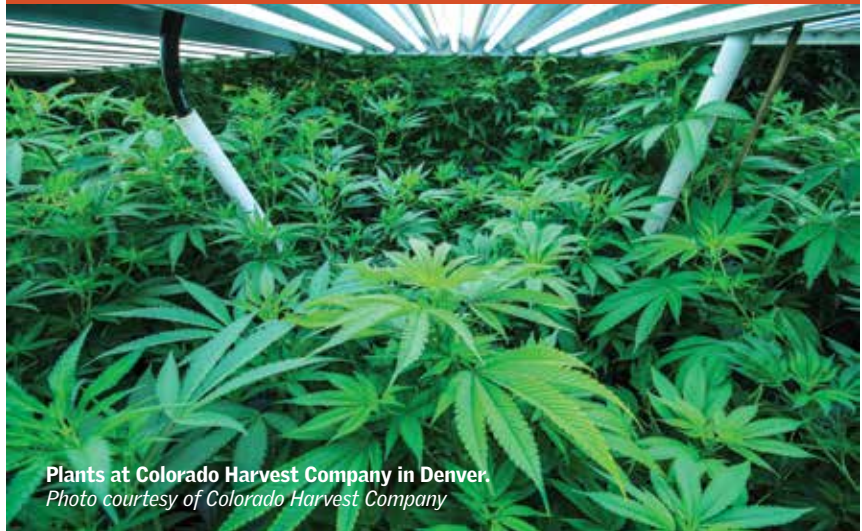
Cachat would like to see more light experimentation to develop cannabinoid synthesis.

“Some people say it’s UVB that increases cannabinoids,” he said, referring to a type of ultraviolet ray. “Some people say it’s UVA. Ultimately we’re not going to know until there’s a series of controlled experiments wherein there’s measured differences there.”

To Cachat, that’s the next frontier in marijuana production.

“To stay relevant in this rapidly normalizing and expanding industry, it’s going to take much more than to just be the next Skittlz or the next Tangie,” he said. “It’s can you get the new cannabinoids? Can you get CBG? Can you get THCv?”

Cullen’s current experiment is based on a book, “Three A Light,” whose title references a yield of 3 pounds of cannabis per light. The gold standard has been trying to get to 2 pounds per light, he added.



Plants at Colorado Harvest Company in Denver.
Photo courtesy of Colorado Harvest Company

While it’s important to take risks in your experimentation room, it’s also crucial to be smart about any undertaking.

At Denver-based Colorado Harvest Company, CEO Tim Cullen approaches his experiments from a financial standpoint, carefully selecting the right project.

“We would never run an experiment where we leave half the lights off to see how that impacts our electricity costs versus costs of production,” he said.

Even if it was cheaper to do it that way, he knows it wouldn’t help him reach his cultivation goals.

Cullen’s main goal when experimenting is to increase quality and production.

“It’s maybe not as truly experimental because we’re trying things that we think we know the outcome of already,” Cullen added. “It’s just a question of, ‘Did we see the results we wanted?’”

He pointed out that his vertically integrated operation pays close attention to the data from the cultivation side, something he often doesn’t see at other similarly structured companies. Most vertically integrated businesses track retail and sales data but don’t focus as much on the cultivation data, according to Cullen.

“I think every commercial production facility should have some way to measure their success by changing a few variables,” Cullen said. “Anyone who’s been to a trade show knows there are new developments all the time, and new ways to do things.”

His cultivation operation is also careful when it takes on new strains.

“We’re looking for the same thing any farmer is looking for,” Cullen said. “We want fast-growing, high-yielding, disease-resistant, easy-to-work-with plants. And most plants don’t meet all those production characteristics.”

He’s trying to maximize what his plants can do.

“The goal of plant production has changed,” Cullen added. “I think plant production is at a point now where it’s possible to reach the genetic potential within any individual strain.”

– Bart Schaneman



Don't Learn the Hard Way About the Importance of Odor Removal

An Air-Filtration Revolution in PERFORMANCE & PORTABILITY



AIRNUG 800 CFM

AIRNUG 1200 CFM

AIRNUG 2200 CFM



- 20 years Industrial Air Systems Experience
- Available Worldwide
- Designed by Airganics Engineers & Built in the USA

Portable Ready to Use Equipment:

No Installation Required - Plug and Play
Roll into place, plug in and turn on

No Duct Work:

Standalone self-contained filtration: Treated
odor-free air comes directly out of the machine

Small to Large Spaces:

Treats air in 5K to 30K SF spaces or larger
spaces when multiple machines are used

Regular Electricity:

Works with standard 110V household power

Best filtering in the Industry:

Air travels through three stages of filtration with
the final stage using Airganics DUAC
(Dual Activated Charcoal Media)

Latest Technology:

Unique engineering using the newest advances in filtration

Industrial-Grade Air Filtration at Affordable Prices
Call: +1(424)247-6849 • Email: sales@airganicsusa.com
www.airganicsusa.com



A cultivation facility at Colorado Harvest Company in Denver. Photo courtesy of Colorado Harvest Company

After the book came out in 2015, Cullen's team read it and incorporated the recommendations. But before Cullen and his team changed everything in the production facility, they decided to run the new system in the experimental room for two harvests.

"If we can get an extra pound per light it's absolutely worth it to go through that experiment," Cullen said.

About one in four of Colorado Harvest Company's experiments end up working so that the company incorporates the new technique or equipment into its operation.

One at a Time

Both Cachat and Cullen emphasized the importance of altering only one variable per experiment.

"Don't increase your CO2 and your nutrients and your light spectrum, because you're never going to know what was what," Cachat said. "It's very important for you to understand what happens when you change one variable at a time.

"But you have to know that you're going to try new genetics and new

technologies that are coming out and that are worth putting the time in to explore."

Sticking to one variable can take patience. One experiment can take two months, and Cullen, a former high school biology teacher, likes to run each experiment twice.

"One of the most difficult parts of the experimental room is trying to convince everyone there's enough time to run all of the experiments," he said.

He's caught his staff changing nutrients in the experimental room while at the same time testing different lights.

"You just can't do that," Cullen said. "You need to have one variable that you're testing."

Experimentation Isn't Cheap

Cachat recommended that business owners anticipate a decrease in yield when trying out new lights or other experiments, so separating the experimental space from the main grow operation is important.

"As a grower, your primary concern is to consistently produce the same amount of cannabis over and over again so your revenue is pretty steady," he said.

"By setting aside that R&D space, you don't have to justify to the financial guys or the investors, I'm cutting production here to try and experiment."

Cullen hasn't ever lost the entire crop in the experimental space, but he's been forced to deal with issues from experimenting.

He's tried LED lighting that didn't produce optimal results, for example. In the case of poorer quality flower, he'll flash freeze it and send it to extraction for use as hash oil.

"So, we never really have a total loss," Cullen said. "But we do suffer lower yields because of those experiments."

In the end, the experiments that result in a boost to production, such as the Gavita light test, make it worth it and add to the bottom line.

"That made up for several experiments that did not produce," Cullen said. "If we came to the table with the mindset that what we do is the absolutely best way to do it and there's no room for improvement, I think you become stagnant. Improvement and streamlining that process is what gives you a competitive advantage." ♦

—SOLEXX GREENHOUSE COVERING—

YOUR ALL-AROUND WINNER



Proven Performance—High quality yields and robust flowers.

Higher Profits—Lower lighting, cooling, heating, water and fertilizer costs drive profitability

Security—Protect your investment from peering eyes and the harshest elements including: burning rays, hail, strong winds, and heavy snow loads

Performance—Accelerate growth by 25% with diffuse light, less condensation and 30% more insulation than our competition*

Versatility—Lengths up to 900 feet adapt to gable or arched greenhouses or a sun-filled roof for metal buildings

Peace of Mind—Do the right thing for your business and the planet



Insist on Solexx™— Call us today for a quote 1.877.476.5399
www.adaptiveplastics.com/cannabis-greenhouse

*With a 2.3 R-value, 5mm Solexx beats 6mil double poly film 1.7R and 8mm twin-wall polycarbonate 1.6R.
Solexx is a trademark of Adaptive Plastics, Inc.





PRICE \$7.9M

SACRAMENTO MEDICAL MARIJUANA LICENSED DISPENSARY PRE ICO FOR SALE

GROSS SALES – \$4,913,419.00
CASH FLOW/NET TAKE HOME- \$1,014,901.00
FIXTURES – \$25,000
RENT – \$3400 (1900 SQ FT)
PAYROLL – \$24,000 / 10 EMPLOYEES
BEEN IN BUSINESS FOR 7 YEARS
REASON FOR SELLING – OWNER WANTS TO RETIRE



PRICE \$5.1M

BEVERLY HILLS PRE ICO 3 LICENSED DISPENSARIES LOS ANGELES PLUS CULTIVATION FOR SALE



PRICE \$310,000

MEDICAL CANNABIS DISPENSARY DELIVERY SERVICE SAN CLEMENTE FOR SALE (NEW LISTING)

\$500,000 A YEAR
NET SALARY OF \$240,000
1300 QUALIFIED PATIENTS
FULLY TURN KEY



PRICE \$120,000

ORANGE COUNTY MEDICAL MARIJUANA DISPENSARY DELIVERY SERVICE FOR SALE (NEW LISTING)

WHOLESALE INVENTORY: 16-17,000
PATIENTS - 350
GROSSES \$300,000 YEAR
NET SALARY \$85,000 YEAR



WAREHOUSE CANNABIS GROW

2000 SQUARE FT • 135 PLANTS
SOLD \$1.2M



PRICE \$2.4M

LICENSED DESERT HOT SPRINGS MARIJUANA DISPENSARY RECREATIONAL

GROSSES \$1,665,740.00 / OVERHEAD EXPENSES \$1,160,771
TAKE HOME NET AFTER ALL EXPENSES \$505,000
MARKET VALUE IS \$3.5M,
ASKING PRICE – \$2.4M

619.795.4340 Office
619.653.0483
greenlifebusinessorg@gmail.com
www.greenlifebusiness.com

We will do a Free Business evaluation and tell you what your dispensary, or delivery service, or Grow operation, or any other cannabis business is worth today on the market and what buyers will pay for it. We don't get paid anything unless we sell your business. Give us a call 619-653-0483.



GREENLIFE

BUSINESS

Brokerage

We help individuals and businesses who want to buy or sell a business. Our process looks like this, we do an extensive business evaluation and determine a fair price for the company, making sure the business's finances and financial records are in order, negotiating a price, going through escrow and closing the sale. We weed out all of the unqualified buyers and ensure a very smooth process for both the buyer and the seller. We sell more cannabis businesses than any other company in California.

Start up Business from Scratch

We are Cannabis Specialist who assist in starting a storefront dispensary, delivery service, cultivation, edible company, essentially any cannabis business from start to finish. Our core competency is simple we focus primarily in making our clients money and building relationships. We challenge all of our clients to ask other consulting firms how are you going to eliminate the trial and error of running a successful cannabis business from scratch and provide us a business model that will give me the highest chance of success. Here at Green Life Business we take great pride with being very responsive and hands on with every single client of ours who chooses to start a cannabis business from scratch. Green Life Business has an extensive background in starting cannabis businesses from scratch and running them for years and selling them. We will be side by side with our clients building a recognized brand.

Consulting & Management

Not sure how to enter into the cannabis industry and need guidance or questions answered, here at Green Life Business we listen to every clients needs and provide guidance to this always evolving industry. Green Life Business will go over what kind of capital you are looking to invest, what level of risk you are willing to take and what kind of ROI can be expected. We will discuss exit strategies and provide a complete understanding of the laws and how recreational use will effect medical use. If you don't know if you should go into cultivation, retail, distribution or manufacturing, that is ok, we will go over the pros and cons of each category of the cannabis business. That way our clients will feel completely comfortable and make a decision how they want to enter the industry after understanding all of the facts.

"There are two kinds of people on this earth, there are people that watch things happen and there are people that make things happen," we have already watched Colorado, it is time to make things happen. How much longer are you going to wait?

Call Today

2878 Camino del Rio S. Ste #303 San Diego 92108

619.653.0483 | 619.795.4340

greenlifebusiness.com
businessfirm@greenlifebusiness.com

DC dispensary owner Chanda Macias used her scientific and business know-how to land a license and launch a successful company

by Omar Sacirbey | photography by Essdras M Suarez

RENAISSANCE

WVON

A woman with dark hair, wearing a maroon jacket, is looking upwards and to the right. The background shows a cloudy sky with power lines and a utility structure. The word "VIANN" is overlaid in large, white, sans-serif letters across the middle of the image.

VIANN

Take a peek at Chanda Macias' diverse educational and professional background, and it's easy to see why she's been able to build a thriving medical marijuana business in Washington DC.

In fact, one could argue that everything she did up until starting her dispensary, National Holistic Healing Center, prepared her for success as an entrepreneur in the MMJ industry:

- She earned a Ph.D. in cell biology at Howard University in 2001, immersing herself in the study of cannabis along the way and building a comprehensive understanding of the plant and how it can help patients.
- That same year, she transitioned into the business world, landing a gig as a research scientist at Colgate-Palmolive, a Fortune 500 corporation known for toothpaste and dishwashing soap. During her time there, she deepened her knowledge of cannabis and also learned how companies run.
- In 2006, she left Colgate and spent a year at the U.S. Patent and Trademark Office before taking a

position in 2008 as director of Science, Technology, Engineering and Mathematic (STEM) Education at Howard, where she honed her scientific knowledge and developed her management practices. She also mentored students – a skill she would eventually parlay into an informative and comforting approach with patients.

- A few years later, while keeping her Howard post, she enrolled in the MBA program at Rutgers University in New Jersey, specializing in supply-chain management. That experience helped round out a powerful arsenal of scientific and business know-how.

Macias' background in these areas helped her land a hotly competitive dispensary license in the nation's capital and navigate a challenging business environment with stiff black-market competition. It also has helped her overcome several hurdles, including suspected discrimination she has faced as an African-American woman, skittish business neighbors, price-gouging growers and an issue with key software her dispensary uses.

EXECUTIVE SUMMARY

Chanda Macias, owner of the National Holistic Healing Center dispensary in Washington DC, has overcome a challenging local market to establish a thriving business. Her task was made all the more difficult by being an African-American woman in an industry dominated by white males. Macias succeeded because she:

- Used her experience as a trained scientist and her business background to land a license in Washington DC's limited medical marijuana market.
- Cultivates good relations with growers to ensure a steady supply of product at an affordable price.
- Keeps a lid on costs by purchasing ancillary products such as packaging and glassware in bulk.
- Collects a trove of data detailing her customers' needs and how many out-of-state medical marijuana patients inquire about reciprocity.
- Records her dispensary's daily transactions and relevant customer data on Excel spreadsheets to serve as a backup in the event the automated system malfunctions or crashes.



BETTER YIELDS BEGIN WITH PRECISE CLIMATE CONTROL



ENGINEERED SOLUTIONS FOR CULTIVATION.

There's a significant difference between harvesting a healthy crop and harvesting a crop with greater yield, more security, and better energy efficiency. Surna cultivation environments change everything.

With innovative climate control solutions, we'll help you change the way your crops grow, from seed to harvest. Visit [Surna.com](https://www.surna.com) today.



INFO@SURNA.COM

Macias' story shows that investing in a scientific and medical education pays off by helping cannabis entrepreneurs build trusting relationships and reputations that keep patients coming back. Moreover, it highlights how a business education and professional experience can lay the groundwork for dodging unexpected bullets.

Today, National Holistic – which launched in 2015 – is a thriving dispensary that Macias says accounts for more than 25% of Washington DC's MMJ patients. Additionally, Macias was able to parlay her experience into a sought-after cannabis consultancy, working in new markets such as Pennsylvania, Ohio

and Maryland, where dispensary license winners have hired her to help get their businesses started.

An overachiever, the 43-year-old Macias also:

- Founded and leads a group of mothers who are involved in the marijuana business.
- Leads the Women Grow chapter for Maryland and Washington DC.
- Sits on the advisory board for the medical marijuana program at Southern University in Louisiana.

The extracurricular activities consume valuable time, but they have allowed



BEING AN AFRICAN-AMERICAN WOMAN IN CANNABIS

by Omar Sacirbey

Chanda Macias has had to confront numerous challenges in her three-year marijuana career.

One of them stems from her gender and race: Macias has often felt alone, given that she's one of a limited number of African-American female business owners in a male-dominated industry.

"As an African-American woman, I have unique challenges that I face day to day in my community ... that leave me in an isolated place," said Macias, the owner of National Holistic Healing Center, one of Washington DC's five medical marijuana dispensaries.

Macias' answer was to network, seeking out other women and African-Americans in the cannabis industry with whom she could commiserate – and even do business. In 2015, she started The Canna Moms Professional Group, which caters to mothers who own marijuana businesses or work in the Washington DC and Maryland cannabis industries. She also became head of her local Women's Grow chapter and started serving as a paid consultant for entrepreneurs launching their own marijuana businesses.

"Consulting with these different groups has helped me set up my own support network," she said. "I'm consulting, and helping build an industry around other cannabis businesses that respect – and have actually hired – an African-American woman" – as Macias herself has done.

Macias noted she tries to support women- and minority-owned businesses. But she's had to seek out such

businesses, because white males own the vast majority of marijuana firms.

"I have to go find them because everything else is done by white America. It's just the way society is. And if someone goes to a dispensary, by default it's going to be a white dispensary," Macias said. "If I'm going to support a black person in this industry, I'm going to have to find that person. It's highly unlikely that I'm going to just bump into them," Macias said.

She'll also tap her network of peers for assistance. For example, when Macias needs help filling job openings at her business or those of her consulting clients, she calls on another minority woman business owner, Shaleen Title, CEO of THC Staffing in Boston. And when she needed help expanding her patient pool, she sought out another African-American businesswoman, Shawnta Hopkins-Greene, the owner of MyCannX in Columbia, Maryland.

While the networks have proved invaluable, they too have their limitations.

"I get support from groups like Women Grow. But even in that realm, it doesn't address necessarily the issues that a black woman would encounter," Macias said.

Will these gender and racial disparities ever change? Macias responded with her own question and answer.

"When will it change in mainstream America?" she asked. "I'm not a pessimist. I believe it's a question of when. Will I see it in my lifetime? I don't know. I doubt it, but I don't know."

Co2 Extraction **SCALED**

Capacity Options:

2, 15, 30, 75 or 125 lbs

No Flammable Solvents Required



**Extractions in
2 Hours**

**No Need
to Winterize**

**Less Post
Processing**

#XactXtract

**Contact Us Today
for the Demo Schedule**
Sales@Azoth.Solutions



Engineering, Training & Consulting by



www.Azoth.Solutions

206.800.3007  Azoth.Solutions

Macias to raise her profile in the local and national community, resulting in a strong business and support network for Macias and her cannabis industry colleagues.

For all the value Macias got from her education and experience, her success would not have been complete without healthy doses of perseverance and savvy.

"I know that the people who hire me respect my craft and my knowledge," Macias said.

Writing a Winning Application

Macias' first big challenge was putting together a winning license application, one made all the harder because so few licenses were available – five were on offer in the District in 2014.

Macias emphasized her scientific background. At Howard, for example, she performed cancer research and had an interest in marijuana's ability to shrink cancerous tumors. When her professors nixed the idea of her pursuing that line of study, Macias kept learning about medical cannabis in her free time.

In addition to her medical research, Macias laid out to the District's MMJ regulators how she planned to incorporate cannabis into her patients' treatment plans. She also explained how, over many years of study, she had learned what cannabinoids fought tumors, controlled muscle spasms or induced sleep. And Macias detailed how she had developed a treatment methodology called "strain-ailment alignment," which matches strains based on their cannabinoid and terpene profiles with the ailments they are best suited for, such as cancer, multiple sclerosis or insomnia.

In her application, Macias noted that her staff would include a clinical engineer whose job would be to examine the biochemical composition of the flower, record what cannabinoids and terpenes it possessed, and then relay the results to Macias – who would match the strain with the ailment it would be best suited to fight.

READYING FOR RECIPROCITY

While it's not clear when Washington DC regulators will implement a new regulation allowing medical marijuana cardholders from other states to purchase medicine in the city, Chanda Macias plans to hit the ground running when it does happen.

For the past year or so, Macias and her staff at the National Holistic Healing Center in Washington DC have been collecting data on how many out-of-towners with medical marijuana cards either drop by her dispensary looking for product or call to see if they can get it during an upcoming visit to the District.

"Daily, we have at least five people that come in that are from out of town that have medical cards that are looking for a place to provide them their medicine," she said. "In terms of phone calls, it's unbelievable. It's like 10 phone calls a day from people traveling to Washington DC that are looking for a place to get medicine."

Macias, who as a scientist instinctively likes to collect data that can be used to help her better treat patients and better run her business, said the record-keeping will help her dispensary be ready to take in the influx of patients when reciprocity does begin.

"Because we're collecting data now, we can forecast what the reciprocity numbers might look like," Macias said. She expects many of the reciprocity patients to come from Maryland, where the state's patient registry has opened but the industry has been slow to launch.

"They're still some time away from having product ready. That being said, patients are looking to source their medicine elsewhere, and that includes DC," Macias said.

How else is she getting her business ready for reciprocity?

"The first thing to do is talk to your suppliers, because no matter how good your systems are, without supply, you can't service your patients," Macias said. "You need to get your suppliers to increase their supply."

Because Macias has cultivated good relations with her growers, she's already spoken with them about increasing supplies.

"They're on it," Macias said. "We're going to be ready."

– Omar Sacirbey

"So, when patients come in, we have this knowledge already recorded, like in a library, and we can call up this knowledge and use it to help the patient," Macias explained.

Drawing from her business background, Macias also brought on a lawyer, a business operations specialist, and sales and marketing talent and other professionals.

"The key is to show that you understand the regulations, and emphasize

compliance. To do that, you need to have those people on your application: the scientists, the medical staff, the lawyer, the operations specialist and the compliance specialist," Macias said. "You need subject-matter specialists, and when you can show that you have these people on your team, you show that you're serious."

The approach worked. Having highlighted professionalism and her

#1 IN SOUTHERN CALIFORNIA

WE HELP YOU

Please join us at the The Marijuana Business Conference
And Expo, Nov, 2017 in Las Vegas. Booth #3325

EXPAND
YOUR BUSINESS
TO SOUTHERN CALIFORNIA



Desert Pacific
PROPERTIES, INC.
CANNABIS REAL ESTATE



GET YOUR CUP &
REGULATORY PERMIT
BY DECEMBER 2017

GROW



Sales
Leasing
Financing
Acquisitions



Paula Turner
paula@dppllc.com
BRE License #00702492
Mobile 760-578-6564

CalCannabisRealtors.com
Call 760-360-8200

Bruce Hutchison
bruce@dppllc.com
BRE License #00957590
Mobile 310-753-7059



Desert Pacific Properties 77-933 Las Montanas Rd. #101 Palm Desert, CA 92211

specific medical treatment plans, Macias emerged from a pile of applicants as one of the license winners.

Real Estate Rescue

In a city full of embassies and consulates, Macias is also a skilled diplomat. She complements her scientific and business know-how with an ability to connect with patients and colleagues. It's a skill that also rescued her from losing her license – before she had even opened her dispensary's doors.

Before winning her license, Macias had leased a spacious, no-nonsense office space in the basement of a three-floor commercial building in 2013 and informed the landlord that she was hoping to open a medical marijuana dispensary if she won a license. The landlord said fine, according to Macias.

Name: National Holistic Healing Center

Founder and Owner: Chanda Macias

Founded: 2014

Location: Washington DC

Business Status: For-profit medical marijuana dispensary

Patient Count: 1,600 as of August 2017

Annual Revenues: \$4.5 million

Employees: 10

Ancillary Consulting Business: National Holistic

But when she won her license in October 2014 and it became known to the neighboring business owners, they told the landlord to cancel the lease or they would move out.

Macias started scouting out a new location. The hunt was interrupted when one

of her former Howard professors offered her a temporary post with the National Institutes of Health in Ethiopia, where she trained students and investigated infectious diseases such as malaria.

That work was interrupted, however, when District regulators told Macias



Serving The Cannabis Community Since 2015

FREE YOURSELF FROM CASH



payQwick[™]
It's Safe and Easy to PayQwick.™

BUSINESS TO BUSINESS
ELECTRONIC PAYMENT HUB

🌐 WEB BASED INTERFACE + 🍏 📱 MOBILE APPLICATION

CALL **888.PAY.QWICK** OR VISIT **WWW.PAYQWICK.COM**

© 2017 PayQwick, Inc. All rights reserved.

in 2015 that she had one month to get her dispensary ready for opening – or she'd lose the license. Macias returned to Washington DC and, with the landlord's permission, met with the other tenants in the building to explain her business.

The views of the tenants – who included lawyers, architects and a bagel

store operator – had progressed in the roughly year and a half since she had won a license. So, changing minds was easier.

By emphasizing the medical and health aspects of her business, Macias disarmed tenants of their prejudices against cannabis. Macias also brought her security chief with her to answer

concerns that her dispensary might be a target for armed robbery.

"They wanted hard-core facts. I gave them research, and let them talk with my security chief, who explained to them how we keep things secure," Macias said.

The education blitz worked: Macias was granted her final license on July 17, 2015.

SHARING THE EXPERIENCE

On top of the day-to-day rigors of running the National Holistic Healing Center dispensary in the nation's capital, Chanda Macias has used her business acumen to become a sought-after cannabis consultant.

Macias found that people would ask her about the ins and outs of operating a dispensary. In response, Macias always seemed to have the answers to their questions. Having survived suspected discrimination, skittish tenants, price-gouging cultivators and software crashes – and having won a license in a limited market like Washington DC – Macias figured she could parlay her experience into consulting.

"There was a need in the market. When I started, I couldn't get information from anywhere," Macias said, recalling fruitless searches for standard operating procedures and best practices that she could refer to in getting her own business set up. "That meant that I had to make them myself."

She added, "With our success rate and high [patient] retention rate, I felt confident about sharing my skills with businesses."

Being a consultant, she explained, was also a natural extension of her previous science-academic life, where she would take younger students under her wing.

"The heart of what I do is training people," Macias said. "I consider myself a mentor. As a minority woman in this industry I know what obstacles there are to face." She also knew there would be several minority clients in Maryland, and wanted to help.

Now, Macias – whose consulting business goes by the name of National Holistic – is working with eight license winners in Maryland, advised one client in Pennsylvania who was ultimately unsuccessful and has started taking enquiries from Ohio, where she has one confirmed client. She charges \$100-\$200 per hour, she said.

For her Maryland clients, Macias has helped arrange bulk discounts with ancillary product vendors that she uses.

"I know how making those first buys [of packaging and other products] at premium prices can be burdensome," Macias said.

What Macias doesn't do is take financial stakes in other people's businesses, and she strongly advises her clients to avoid giving up a piece of their business for capital.

"Don't sell your business and end up working for other investors," Macias said. "Don't sell off any interest."

– Omar Sacirbey

Shut Out of Supplies

Macias, however, wasn't able to open right away because she couldn't source any product. At the time, there were only four vertically integrated MMJ businesses in Washington DC. They all had limited product and weren't eager to wholesale to the new solo operator who threatened to swipe market share.

Why didn't she have her own cultivation operation?

Macias had been interested in running a grow with her dispensary. But she couldn't secure the necessary capital – at least \$500,000 – to pay for a grow site. She was well aware of studies that suggested banks and other lenders discriminate against minorities, who are disproportionately denied capital more than non-minority capital seekers, and suspects that discrimination played a role in her struggle to raise funding.

"Being a minority, it was hard for me to get funding to fund a grow. It was hard to find the investors that would help fund a grow. It's hard for minorities to get funding period. For a grow, it cost at least half a million (dollars), and I just couldn't get that kind of investment at that time. So I did what was in my capacity," Macias said.

Macias' supply troubles changed when she was in Colorado on business and by chance met Corey Barnette, CEO and chief cultivator at District Growers, one of DC's vertically integrated marijuana businesses. Macias won him over. Impressed by her science-driven approach to business, Barnette ended up selling a pound of Skywalker OG and a pound of Buffalo Soldier

Glass & Plastic Concentrate Jars

- U.S. PAT. NO. D781,151
- Certified Child Resistant
- 5ml, 9ml and 15ml



Glass Syringes

- Direct Dab or Refill Cartridges
- Airtight
- German Schott Glass



Vape Carts

- Top or Bottom Fill
- Wick or Ceramic Cup
- Stainless Steel or Plastic Tip



Glass Bud Jars

- Superior Package for Your Premium Customers
- Crystal Clear and Airtight



Plastic Bud Jars

- Light Weight and Air Tight
- Odor Resistant
- Certified Child Resistant



CANNABIS PACKAGING BY INDUSTRY EXPERTS FOR OVER 35 YEARS

Distribution Centers in Los Angeles, Denver & CT

www.eBottles420.com
888-215-0023

to Macias so she could get her doors open. That allowed National Holistic to launch in September 2015.

Locating product remained a problem, however. The next vertical operator who offered Macias product demanded she buy a minimum of 10 pounds at a whopping \$6,500 per pound. Most pounds at that time fetched about \$4,000. Today, prices range from about \$2,400 to \$4,000 per pound.

Macias didn't have ready access to \$65,000. But turning down the offer carried the risk of running out of product and perhaps closing. Weighing that risk, Macias and her husband - part-owner Michael Bobo - took out a second mortgage and bought the 10 pounds.

Over the course of that first year, however, supply eased up, more growers came online and the market became one

where dispensary operators and growers buy and sell product from one another.

"I have the gamut of everyone's strains now," Macias said.

Building a Patient Base

Macias didn't raise prices to compensate for the high wholesale product price; instead, she instead focused on building her patient base. When patients visited, Macias and her staff would talk with them, gauge their illnesses and needs and then use the strain-ailment alignment methodology to find a variety that suited their condition. That scientific approach appealed to patients, especially new ones unfamiliar with marijuana's therapeutic benefits and leery of its stigma.

National Holistic grew its patient base, but only moderately - and not enough to reach Macias' patient growth goal of about

100 new clients per month. Macias started contacting area doctors she knew who wrote recommendations for MMJ cards, and one connected her with Shawnta Hopkins-Greene, an African-American woman who owned MyCannX. The firm oversees a network of physicians in Washington DC and Maryland who are certified to recommend medical cannabis, and it connects patients and dispensaries to those doctors.

The move paid off. National Holistic now gets about 100 new patients per month, and through early August, it had more than 1,600 patients. Even more important, National Holistic has a patient retention rate of 98%.

Keeping Costs Under Control

Macias' business smarts have allowed her to keep a lid on costs. Because



LABELS & PACKAGING

- MEETING ALL YOUR LABEL NEEDS
- FAST TURNAROUND
- INSTANT ONLINE PRICING
- ANY TYPE - SHAPE - SIZE

800 537-8816

www.CannaMay.com/mb4

 A division of MaverickLabel.com



Macias didn't want to raise prices, she sought ways to cut costs and maximize her dollars. One way she does so is by buying ancillary products, like packaging and glassware accessories, in bulk.

For example, Macias said she can forecast up to three months in advance her supply needs for product packaging, which she sources from California-based Marijuana Packaging. That three-month bulk purchase of about 6,000 units saves National Holistic 5-10 cents per unit on packaging.

"That cost savings adds up," Macias said.

Macias also gets bulk-purchasing discounts from companies like Florida-based Greenlane – owner of the largest vaporizer distributor in North America, VapeWorld – and Maryland-based Cannaline, which makes glass jars for cannabis.

"These are savings that we can pass



A sampling of National Holistic Healing Center's medical marijuana topicals.

Package more in less time

Leading edge weighing, container filling & bagging solutions



Delicate transfer to PrimoCombi



PrimoCombi multi-head weigher



Container filling solutions



Container Filling

Visit our [Las Vegas System Center](#) or schedule an on site demonstration now!



Swiftly Bagger for Stand Up Pouches



SleekWrapper for Edibles



Wholesale Bagging

on to the patient without sacrificing our own revenue,” Macias said. “Bulk purchasing is everything.”

The other benefit of bulk buying and streamlining costs? Macias doesn't have to ask her cannabis suppliers for discounts or favors: “I don't have to nitpick, and say, ‘Can you do this for \$7 a gram instead of \$8?’ I don't want to have that conversation with my cultivator.”

The reason, she explained, is she doesn't want to introduce any awkwardness or tension into her relationships with growers in the city.

“Most of my business is driven by cultivators,” Macias said. And, she noted, many growers now come to her and offer bulk-purchase discounts. The upshot: She essentially gets discounts without having to ask for them.

Preparing a Backup Plan

Reliable inventory management also means having a manual plan ready in case your automated system goes down – as happened with Macias. She uses a software platform operated by MJ Freeway, which suffered a hacking incident in early January that resulted in a major crash of the Denver company's point-of-sale system.

“Of all the DC dispensaries, we stayed open because we had a manual dispensing protocol previously approved through the Department of Health,” Macias said.

For that manual backup plan to work, however, National Holistic staffers follow a daily routine that includes making sure all transactions and relevant customer data are recorded on Excel spread sheets.

“We were able to stay open because everything is properly backed up. We knew what our patients' limits were, how much of their allotted quantities they had used, and we kept our doors open throughout that shutdown ordeal,” Macias said.



A Natural Holistic Healing Center employee uses dry oregano to demonstrate how to properly roll a marijuana cigarette.

Macias credits the strategy of having a manual backup to her experience in academia and at Colgate, which had its own standard operating procedures and best practices and where meeting compliance and safety standards was built into the day-to-day company culture.

“I adopted the model from that previous experience,” she said.

Experience – medical, scientific and business – and knowing how to apply it have served Macias well. They have helped put her in a position to capitalize

on growing medical cannabis opportunities in the eastern and southern United States, as well as in the District, which will become a destination for medical marijuana cardholders from Maryland and tourists from across America.

Professional experience, she stresses, can serve the whole industry well.

“The more medical knowledge we have about this plant, and the more understanding we have, the better it's going to be for everyone in this industry,” Macias said. ◆

SmartStorage

Your contents are only as great as their containers.

EAGLE

STAINLESS



CTH SERIES (4L TO 500L)



CTL SERIES (10L TO 500L)



BTB SERIES (0.5L TO 30L)



STB SERIES (1mL TO 750mL)

- > Servicing the Pharma Industry for more than 25 years
- > Highly-Polished Stainless Steel ideal for easy cleaning and UV protection of product
- > 316L Stainless Steel Construction – superior strength vs. glass/plastic
- > Platinum-cured silicone gaskets for air tight seal
- > Tamper resistant SS Ring Seal on CTL models
- > Stackability for minimal shelf space on CTL models
- > Custom modification to add ports for gas purges
- > Material Traceability for quality assurance
- > Passivation & Electropolishing finish options

EagleStainless.com | 215.957.9333

Highly-Polished Sanitary Stainless Steel Vessels for the Pharmaceutical Industry | ISO 9001 Certified



BALANCING

Ancillary companies serving marijuana clients and mainstream customers must tread carefully – and take steps to prevent potential snafus

Ancillary

by John Rebchook

A national sales director for a lighting company transmitted an email blast telling clients she'd be attending a marijuana business conference. One of her emails landed with a thud in the inbox of a client in a state where marijuana sales are illegal, resulting in a complaint that the message was inappropriate.

As this professional and others have discovered, running an ancillary business can be more challenging if you're juggling both marijuana and non-marijuana clients.

"Unfortunately, until marijuana is legalized at the federal level, there is still a stigma to it and you just have to deal with it," said William Askinazi, a Maryland lawyer who serves

mainstream clients as well as those in the cannabis industry.

Seeking to capitalize on the marijuana industry's growth, ancillary companies that are involved in other industries increasingly are providing goods and services to cannabis growers, retailers and makers of infused products.

Executives from some of these companies say it's a good idea to keep the two sides of the business separate but equal. That could mean, for example, setting up a website specifically for your marijuana clients or devoting a portion of your staff to handle cannabis businesses exclusively.

Below is a more detailed look at three ancillary companies and how they balance their marijuana and non-MJ clients.

TIME IS MONEY, WE SAVE YOU *BOTH!*



Your Single
Source
for Supplies
& Equipment

Over 3,300 items!

One Cart.

One Bill.

Way less worry.

Visit us in Booth #4116 @MJBiz Con in Vegas!

Just a few of the awesome brands we carry:



TOTAL
PHARMACY SUPPLY

(800) 878-2822

www.totalpharmacysupply.com/botanicals

Follow us!  [total_botanical_supply](https://www.instagram.com/total_botanical_supply)

A trusted name in the pharmacy industry since 1989, now providing the same service to the cannabis industry.

Total Selection | Total Service | Total Satisfaction

EXECUTIVE SUMMARY

Running an ancillary business can be more challenging if you're juggling both marijuana and non-marijuana clients. Treating the two groups as one can cause snafus. Here are steps three ancillary companies suggest:

- Set up a separate website for your marijuana clients.
- Devote a portion of your staff to handle cannabis businesses exclusively.
- Do not send information regarding marijuana to clients in states where cannabis sales remain illegal.
- If you accidentally promote your marijuana-related services or products to traditional clients in states where cannabis is not legal, apologize immediately and take steps to make sure it won't happen again.
- Don't hide the marijuana side of your business from your non-marijuana clients. You don't want those in traditional businesses to learn from other sources that you have MJ clients.

Company: Nanolux Technology

Business: Engineers, manufactures and distributes horticultural lighting, environmental controls, ballasts and a full lamp line to hydroponic shops and electrical supply stores.

Headquarters: Petaluma, California

Preventive Measures

"We don't share pictures of marijuana. We do not put (marijuana) plants in our ads," said Emily Walter, Nanolux's national sales manager – even though she estimates 98% of the company's customers are in the marijuana business. She's also careful not to send any information regarding marijuana to clients in states where cannabis sales remain illegal.

Past Mistake or Notable Development

Walter transmitted an email blast telling clients she would be attending a marijuana business conference in Chicago. One of the recipients was in a state where marijuana sales are illegal. That person complained.

"I never used the word 'marijuana,' but I did include a logo from the conference," Walter said of the 2015 incident.

"It was my mistake, and I owned up to it," Walter added. "We are all human and we make mistakes."

The client forgave her.

Advice

"If you make a mistake like I did with the email blast, apologize immediately and take steps to make sure it will never happen again," Walter said. "Maybe send a care package, a little gift, as a way to say you are sorry."

Also, make sure you know your clients' needs are and then address them.

"Realize it is not a one-size-fits-all business," Walter said. "Lighting for growing marijuana indoors in Colorado is totally different than the lighting needed for growing lettuce."



“If you make a mistake like I did with the email blast, apologize immediately and take steps to make sure it will never happen again.”



FILL:

- VAPES
- CAPSULES
- TINCTURES
- BOTTLES
- VIALS
- THC is Consistently Heated from Vessel to Nozzle TIP
- Less than 1.5% Filling Variation

Take your
THC and CBD
Filling and Banding
Equipment to the Next Level !



STI LAB-TOP
CAPSULE BANDER



BANDED
CAPSULES



VAPE
FILLING

SCHAEFER TECHNOLOGIES, INC.
www.medical-marijuana.equipment



(800) 435-7174

Company: RW Group

Business: Accounting firm founded in 2009 that is just dipping its toes into the marijuana industry – although it expects MJ could ultimately account for more than 51% of its business.

Headquarters: Kenneth Square, Pennsylvania

Preventive Measures

The company hasn't established a wall between its marijuana and non-marijuana segments, but going forward, its accountant and others who service cannabis clients will work exclusively for them – and not others.

“It's not like we want to bifurcate our business, but we will have a department or a division where teams work exclusively with marijuana clients,” said Richard Wortmann, the firm's founder. “It just wouldn't make sense to have people working on cannabis 75% of the time and then spend 25% of the time with a broker-dealer client or something.”

Past Mistake or Notable Development

In April, Wortmann met with the junior and senior partners of an architectural firm. The junior partner

mentioned he had been approached to design a grow facility and a dispensary – but he nixed the assignment.

Wortmann was concerned this would segue to criticism of his efforts to serve the MJ industry.

Quite the opposite: The senior partner turned to the junior partner and exclaimed: “What do you mean you turned away a client?”

Advice

Wortmann used this incident as an opportunity to educate the junior partner on myths surrounding marijuana – i.e., unsavory types typically purchase cannabis, or MJ leads to the use of harder drugs. He also discussed how medicinal marijuana can help patients without the side effects of opioids or other drugs.

“Some people in the business world have the same misinformation about marijuana as some legislators, so I like to use these opportunities to gently educate them,” Wortmann said.

He ran into a similar situation when a “very conservative” accounting firm decided not to buy or merge with his company because of his push to seek marijuana clients.

“They were scared about what their other clients would think. I said, ‘Why don't you ask your clients?’”



Richard Wortmann

“It's not like we want to bifurcate our business, but we will have a department or a division where teams work exclusively with marijuana clients.”



CLEAR CLASS

CUSTOMIZED CLASSES

- Ⓢ SHORT PATH DISTILLATION
- Ⓢ WINTERIZATION
- Ⓢ CRYSTAL ISOLATION

PRIVATE EDUCATION

- Ⓢ TERPENE MANIPULATION
- Ⓢ PESTICIDE REMOVAL
- Ⓢ SOLVENT SAFETY

WE SPECIALIZE IN PREMIUM

- Ⓢ EQUIPMENT
- Ⓢ EDUCATION
- Ⓢ PACKAGING

Make your reservation at
www.TheClearClass.com

USE PROMO CODE:

ROCKET

for a \$200 rebate!
(888)738-5517

DON'T GET LEFT BEHIND!

Check out our schedule at

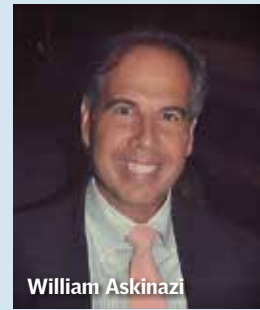
www.TheClearClass.com

Follow @salemlabs Los Angeles

Company: Askinazi Law & Business/Cannabis Law & Business

Business Roughly 25% of the practice – founded by William Askinazi – is currently devoted to the MJ industry, which is handled through the separately named entity Cannabis Law & Business. Non-marijuana clients have ranged from Fortune 500 companies to mom-and-pop businesses during past 34 years.

Headquarters: Potomac, Maryland



Preventive Measures

“I don’t think a Chinese wall would be exactly the right way to describe it, because a Chinese wall means you are going to compartmentalize your business because of conflicts of interests. I don’t see my marijuana clients as having conflicts of interests with my other clients,” Askinazi said.

He maintains a separate website for his MJ practice, Cannabis Law & Business.

“There are some clients out there who are looking for a lawyer who just does cannabis, so I want to reach them. On my regular website, I don’t highlight the cannabis aspect, but I do mention it,” he explained.

Still, he doesn’t want traditional clients to think he is hiding that aspect of his practice.

“I am a firm believer in full disclosure,” Askinazi said.

Past Mistakes or Notable Development

Askinazi and some partners are launching a 3,000-square-foot medicinal marijuana dispensary outside Washington DC. He insisted that being a partner in a dispensary will not be a conflict with others he advises in the industry. Askinazi said he is totally open about it with clients in and out of the MJ business.

Advice

Don’t hide the marijuana side of your business from your non-marijuana clients. You don’t want those in traditional businesses to learn from other sources that you have MJ clients, Askinazi advised. Be especially open and transparent with your non-MJ clients that you have forged business ties with an industry that remains illegal at the federal level, he added.

“Disclose, disclose, disclose. That should be your headline,” Askinazi said. ♦

NO BIG DEAL

Ancillary companies with a foot in both the marijuana and non-MJ business often find their traditional clients are immensely curious, rather than apprehensive, about cannabis.

“If you walked into our office, right on our reception desk you would see our brochure about the cannabis side of our business and marijuana business publications are prominently displayed,” said Richard Wortmann, founder of RW Group, an accounting firm in Kenneth Square, Pennsylvania.

“What is interesting is when clients come in they don’t pick up any of the journals of accounting or tax strategies. They go straight to the cannabis stuff.”

Even his father, “who I joke made [President] Reagan look liberal,”

supports Wortmann’s initiative to provide accounting services to the cannabis industry.

Maryland lawyer William Askinazi, with 34 years of practicing business law and providing advice to businesses big and small, also has found huge acceptance and interest from non-MJ clients.

“My clients give to charities regularly,” said Askinazi, whose namesake law firm is based in Potomac, Maryland. “They raise money for cancer on walks. They give to United Way. They give money to AIDS research. They are pleased to see a lawyer step up to the plate and support medicinal marijuana.”

Indeed, he contrasted the support for medical marijuana operations with

the fear engendered by the early days of the AIDS crisis.

“I’m old enough to remember in the early days of the AIDS issue when you couldn’t find a lawyer who would help, because they were afraid of what people would think,” Askinazi said. “Getting involved with medicinal marijuana is just the opposite of that.”

Even though 75% of his clients are outside of the MJ business, he is so confident his reputation will not take a hit because he has become a partner in what he hopes will be among the first operating medicinal marijuana dispensaries in Maryland, Potomac Holistics, outside Washington DC in Rockville.

– John Rebchook

ARE YOU A MASTER OF YOUR CRAFT?

SCHOOLS
& TOOLS 

**Don't Let Improper
Equipment Hold You Back**

SCHOOLS
& TOOLS 



Strategic Equipment Purchasing

Customization To Fit Your Product Line

Product & Equipment Instruction

Facility Design

Trouble Shooting and Support

**Our Equipment
Recommendations
Are Used Daily By
OVER 100+ LICENSED ALUMNI
Worldwide**

SCHOOLSANDTOOLS.NET

206.890.1847

Education ♡ **Production Optimization** ♡ **Laboratory & Facility Design** ♡ **Engineering**
I-502 Product Integration ♡ **Customized Product Lines** ♡ **Production Diversification**
Lab, Farm, & Kitchen Tenancies ♡ **Lab & Extraction Equipment** ♡ **Equipment Design**

Are you interested in winning a medical

Join our **one day conference** and learn the tips, tricks



MARIJUANA LICENSING SEMINAR: DISPENSARY, CULTIVATION AND PROCESSING

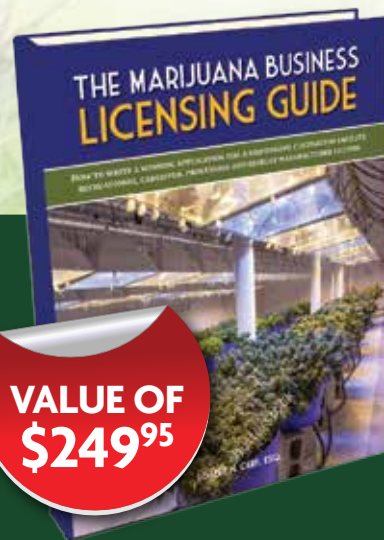
Attend our 1-day conference and you'll leave with the following:

How to write a winning application, including:

- ✓ Anti-diversion and chain of custody plan
- ✓ Security plan including camera placement, records retention and redundancy
- ✓ Facility design – what you need in a dispensary, cultivation facility or processing facility
- ✓ How to spotlight your team on the application
- ✓ Plans for producing sufficient quantities (to insure an uninterrupted flow of medical cannabis)
- ✓ Cultivation procedures narrative for your application
- ✓ Marijuana waste and disposal plan
- ✓ Creating Standard Operating Procedures
- ✓ Transporting marijuana and how to create an electronic manifest

**Plus, all attendees leave with a FREE copy of
“The Marijuana Business Licensing Guide”**

A 400 page manual with over 400 answers to questions asked on all merit based applications nationwide.



or recreational marijuana license? and traps!



Register Today – Space is limited.

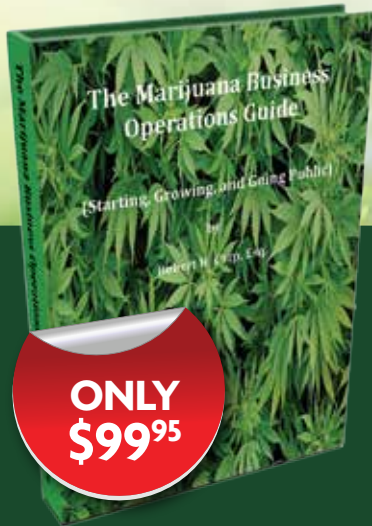
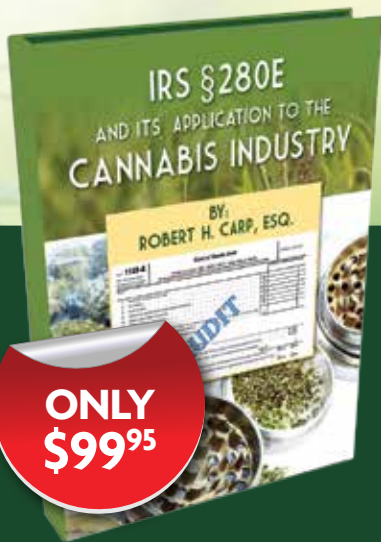
The full day seminar (9am to 5pm) is \$495 per attendee.

DATES & LOCATIONS:

- Columbus, Ohio • October 4
- Cleveland, Ohio • October 11
- Detroit, Michigan • October 18

- Cincinnati, Ohio • October 25
- Lansing, Michigan • November 2
- Ann Arbor, Michigan • November 30
- Charleston, W Virginia • December 7

Register online at:
MarijuanaBusinessOperations.com



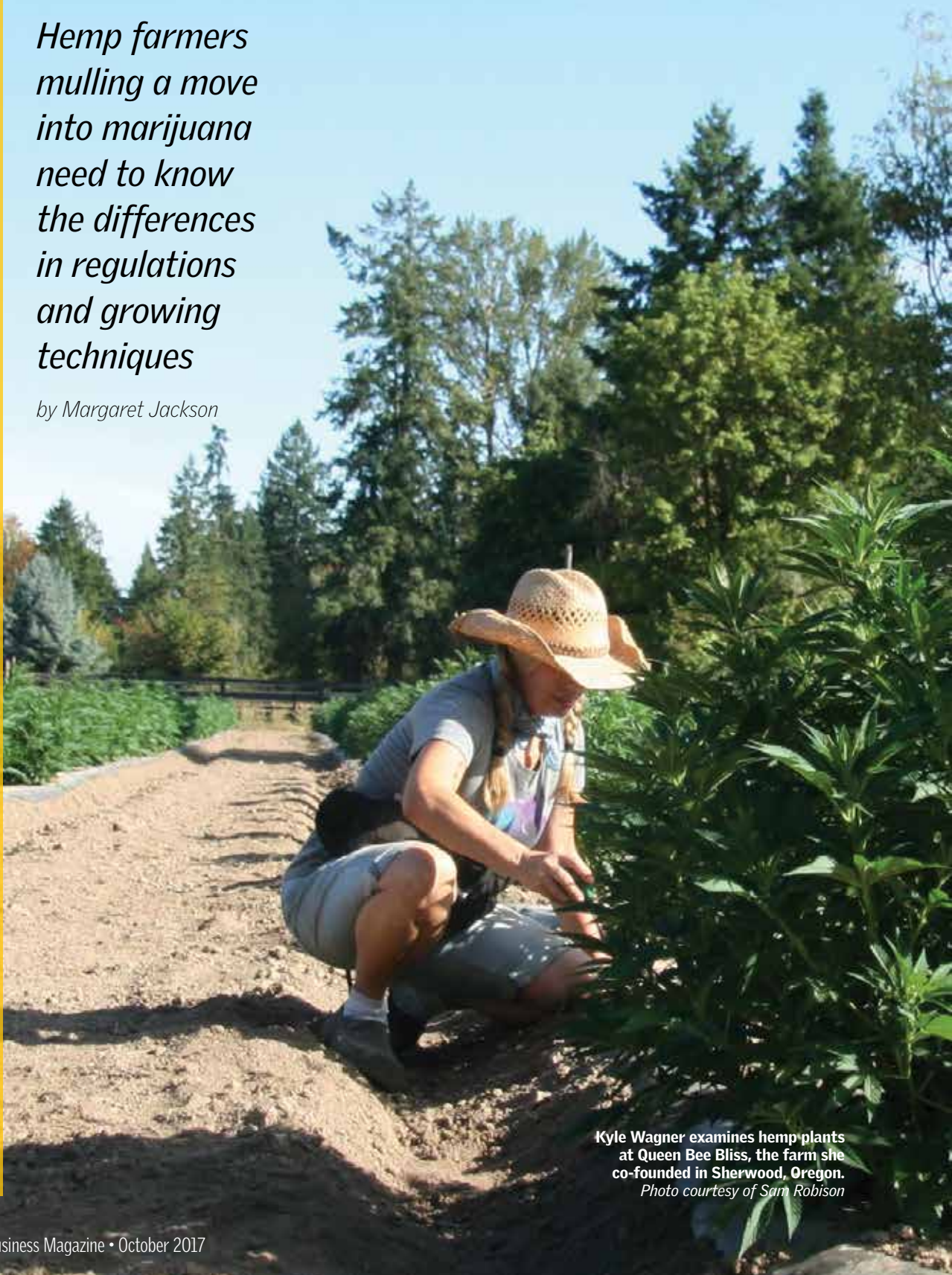
Purchase ALL 3 books now at
MarijuanaBusinessOperations.com
or www.irs280e.com

CANNABIS

CROSSOVER

Hemp farmers mulling a move into marijuana need to know the differences in regulations and growing techniques

by Margaret Jackson



Kyle Wagner examines hemp plants at Queen Bee Bliss, the farm she co-founded in Sherwood, Oregon.
Photo courtesy of Sam Robison

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.

FINANCING AVAILABLE - Speak to your GrowSpan Cannabis Specialist today.



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



VISIT OUR GREENHOUSE
DEDICATED WEBSITE
GROWSPAN.COM

On the surface, it might seem like a no-brainer for a farmer who is growing hemp to cross over to marijuana, given the growing number of medical and recreational MJ products on the market.

Hemp, for starters, is a cousin of marijuana. It's a distinct variety of the plant species *cannabis sativa L* that is frequently confused with marijuana. So there must not be much difference when it comes to growing the two plants ... right?

Not quite. It's tough enough navigating the voluminous regulations governing the cultivation of medical or recreational cannabis – to say nothing of understanding the sometimes stark differences between how the two plants are grown.

But tackling the transition is possible.

If a farmer is growing hemp for CBD – versus fiber or seed – there's not as steep a learning curve to begin

growing marijuana. But be aware that the regulations governing each crop are vastly different.

"They're two different components and are treated differently under the law," said Michael Bronstein, co-founder of the American Trade Association for Cannabis and Hemp. "You can't just move one license over to another. There are legal barriers in certain states. Many states have industrial hemp pilot programs. Some have MMJ laws and others do not."

Navigating the Rules

More than 30 states allow hemp cultivation under provisions spelled out in the federal 2014 Farm Bill. The law authorized production for research purposes and select pilot programs. A handful of states allow farmers to grow both hemp and marijuana, including California, Washington and Maine.

EXECUTIVE SUMMARY

Transitioning from hemp cultivation to marijuana may seem like a slam dunk, given that hemp is a cousin of cannabis and both crops are heavily regulated. But, in reality, it's not necessarily easy to cross over. If you're thinking of making such a transition, keep in mind:

- Medical and recreational marijuana are governed by voluminous regulations.
- The regulation of marijuana varies from state to state – and even municipality.
- If your existing hemp crop is being produced for fiber or seed, there are few similarities between the way hemp and marijuana are cultivated.
- But if the hemp is being grown for CBD, the crops are virtually identical and should be nurtured in the same way.



Hemp farms in Pueblo County, Colorado, must be situated at least 5 miles from marijuana grow sites, like Los Sueños Farms (pictured), to ensure the plants do not cross-pollinate. *Associated Press*



**CALIFORNIA
LIGHTWORKS**

SolarSystem 1100



Time For An
UPGRADE



LIGHT 2.0

GROWERS UPGRADING TO OUR LATEST SPECTRUM CONTROL LEDS REPORT:

- More yield per watt
- Less electrical consumption
- Lower cooling costs

- Better quality flower
- Higher THC & CBD levels
- Higher terpenes & shelf appeal

- Zero maintenance costs
- Higher ROI than HPS
- Rebates available to 70%



SolarSystem 550



SolarSystem 275



SolarSystem Far Red



Programmable Digital
Spectrum Controller

**SIGN UP NOW FOR OUR LIMITED TIME RISK FREE UPGRADE PROGRAM:
californialightworks.com/upgrade or call **800.575.3475****

Different state agencies regulate cannabis and hemp. In Colorado, for example, the state's Department of Agriculture regulates hemp while the Department of Revenue's Marijuana Enforcement Division oversees cannabis.

The laws and regulations for growing cannabis also vary greatly by state – and even municipality. Some towns, for example, may ban recreational or medical cannabis in a state where the hemp plant is legal.

“Follow the regulatory guidelines that have been published,” Bronstein said. “Follow the application guidelines, and get yourself familiar with the licensing process in general.”

Similarly, be aware that some areas have regulations that cross over between cannabis and hemp.

In Oregon, for example, hemp and marijuana can be grown on the same property as long as there are separate licenses. But in Pueblo County, in southern Colorado, a hemp crop must be at least 5 miles from a farm that grows marijuana for its THC content,

given concerns that the two plants may cross-pollinate.

“Hemp farms grow males,” said Michael “Caddy” Cadwell, former director of sales for Los Sueños Farms, a Pueblo County cultivator. “The pollen gets in the air and saturates the female plants. You don't want males around females. They don't mix very well.”

Finally, be aware that finding banking services can be a bigger issue in cannabis than it is in hemp.

“Make sure you have access to capital. You're talking about millions of dollars. There's no access to banking, so it has to be privately raised,” Bronstein said of cannabis.

Getting Started

The ease of transitioning from growing hemp to marijuana depends largely on what your legacy hemp crop is being produced for. If the crop is being cultivated for fiber or seed, there are few similarities between the way the two plants are cultivated. Unlike cannabis, such hemp plants don't need fertilizer or

KNOW YOUR TARGET MARKET

Say you're a hemp farmer. You grow your plants outdoors, and you're making the transition into marijuana.

Here's a question you need to consider: What cannabis products are you targeting for your future crop?

If you plan to grow marijuana for sale off the shelf of a dispensary as a smokable product, the appearance of the buds is important. So the plants are generally cultivated in a more controlled indoor environment, like a grow or a greenhouse, versus outdoors.

But if your cannabis is being grown for use in an infused product or to extract the CBD for medicinal purposes, the aesthetics are less important. It doesn't matter whether it's grown indoors or out.

“I don't need it to look beautiful,” said Chris Driessen, co-founder and president of Organa Brands, which makes infused products under the O.penVAPE, Bakked, Magic Buzz and District Edibles labels. “It comes down to yield and the terpenes and THC extract.”

Organa Brands sources its cannabis extracts from Los Sueños Farms, the nation's largest legal outdoor marijuana grow, in Colorado's Pueblo County. Organa Brands pays about \$600 a pound for marijuana grown outdoors, compared with the up to \$1,200-a-pound price that indoor product fetches.

“It's a clear advantage for folks who are able to leverage that volume,” Driessen said.

– Margaret Jackson



Queen Bee Bliss' Kyle Wagner does her best to keep male hemp plants from pollinating the females.
Photo courtesy of Sam Robison



ACCELERATED GROWTH SOLUTIONS

888-369-1395
AG-SOLUTIONS.NET

Mechanical Systems For Controlled Environment Agriculture



- Precision air conditioning & dehumidification
- Cogeneration systems
- Custom air handlers
- Facility automation controls
- Odor abatement systems
- Chilled water systems
- Project management & engineering



Unrivaled Precision In Environmental Control

Offices in California, Colorado, and New York
Contact us or our authorized representatives:

envirotechcultivation.com
cultivationefficiency.com
gardeningunlimited.com



Member of the National Cannabis Industry Association

pesticides and are grown outdoors. Sunlight and water are generally sufficient.

But if you're growing hemp for CBD, the crops are virtually identical – and should be nurtured in the same way, said Kyle Wagner, co-founder of Queen Bee Bliss, a Sherwood, Oregon-based hemp farm.

Wagner, who relocated from Colorado to Oregon to start the business, studied and trained in Colorado to go into the recreational marijuana industry. But she soon determined she didn't want to deal with all the regulatory complexities. So she opted to become a hemp farmer. Still, Wagner is also growing several medical marijuana plants; she battled cancer twice and has an MMJ card.

Given the similarity between marijuana and hemp grown for CBD, Wagner is frustrated by the misinformation that surrounds the latter. For example, it's widely believed that all hemp plants are male and marijuana plants are female. But Wagner spends a lot of time pulling any male plants she finds out of her hemp crop so they can't pollinate the females.

When her hemp crop reaches its pre-flowering stage, Wagner examines each non-clone plant – not all seeds are feminized, so the ones grown from seed need to be sexed – to ensure there are no males lurking in the rows. If there are, she pulls and destroys them.

"I stop, drop to my knees and look through a magnifying glass," she said. "With marijuana, it's possible to find far more feminized seeds than it is with hemp, and thus with hemp we have to sex out the males once they start the pre-flower phase.

"If you wait too long to sex the plants, you can see the boys' parts ... with the naked eye," she added. "But I like to get them the heck out of there long before that so there's no chance that the pollen will disperse. Hence, the magnifying glass, which I would use on marijuana plants, too."

According to Wagner, both plants can be started from seeds or by cloning the mother plants. Germinating plants

should be kept in a greenhouse until they're about 12 inches tall and can then be transplanted to the field.

Wagner puts her hemp plants into planting cups with FoxFarm's Ocean Forest, a potting soil that's considered the standard bearer for well-rounded soil, before planting them in the ground. She said the same can be done for cannabis.

Soil and Planting

As with hemp grown for CBD, high-quality soil is critical to ensure a healthy marijuana crop, Wagner said.

Good soil is dark brown in color, compacts when you squeeze it and easily breaks apart again with a small amount of pressure. The soil should be rich in organic matter with a slightly acidic pH of 5.5 to 7. Cannabis likes a slightly acidic environment at the roots, which is what makes it thrive outdoors. Soil also should be well-drained because waterlogged cannabis can lead to bud rot.

Wagner's hemp property previously was a horse farm, so she and her crew spread stored manure and slow-release calcitic lime across her field and brought in a special tractor to turn her rows into raised beds with 3 feet between them.

Wagner dug holes a foot deep and augmented the soil with kelp, blood meal and garden-grade lime before dropping the transplants into the ground – the same technique, she said, that can be applied to cannabis.

Before transplanting her hemp crop, she picked her favorite plants and put them in the greenhouse so she can clone the mothers for future crops – again, the same can be done for marijuana.

In addition to such similarities, Wagner said a benefit of growing marijuana is the plant effectively telegraphs its condition. So it's easier to nurture the plants.

"The great thing about cannabis is that it tells you what it needs," she said. "What kind of bugs, whether it's dehydrated – it shows itself amazingly readily." ♦

CARBON COPY

Kyle Wagner offers a mirror image of a hemp farmer who opts to transition into marijuana.

Wagner was for many years a Denver food and travel writer. Earlier this year, she pulled up stakes and trekked to Sherwood, Oregon, to co-found the hemp farm Queen Bee Bliss.

But before getting into hemp, Wagner thought she wanted to get into cannabis.

Initially, she studied and trained in Colorado to go into the recreational marijuana industry. But Wagner determined soon after arriving in the Pacific Northwest she didn't want to be subject to regulation by the Oregon Liquor Control Commission, which regulates marijuana in that state. Instead, she chose to become a hemp farmer.

"If you're not already dealing with the craziness of medical or recreational cannabis, I don't know why a hemp grower would even go that route," she said.

The Oregon hemp market is competitive. Last year the state issued just 77 licenses to grow hemp, a number that ballooned to 300 this year. Wagner is persevering in hopes her final products will enable her to cash in on the crop. Roughly 10,000-15,000 acres of hemp is planted nationwide each year, with the majority of that in Colorado. Most hemp is grown on plots of 10 acres or less.

Wagner pointed to one of the big differences between cannabis and hemp, which is harvested for its fibers, seed, seed oil and CBD.

"Cannabis is a crop," she said. "The money is in the final product, rather than the raw product."

– Margaret Jackson



GROWER'S CHOICE

It's the **RIGHT** Choice

GC-315 CERAMIC METAL HALIDE

HORTICULTURAL FIXTURE



**A.I Controller
Compatible**



**Intertek
5008543**

STRONG • COMPACT • EFFICIENT

For more info visit: www.growersc.com

8,000,000 A3 CARTRIDGES SOLD IN 2016

TRANSPRING ORIGINAL PRODUCT

PATENT No. 201530088409.9

REACH CERTIFICATE No. ATZ2016110

TRANSPRING USA AFTERSALES SERVICE

A3



Capacity: 0.3/0.5/1.0 ml

Oil intake holes size: 0.4 /0.7/0.9/1.2/1.6 mm

\$2,000,000 PRODUCT LIABILITY INSURANCE SECURITY



Better Choice Better Life

Shenzhen Transpring Enterprise Ltd.

NCIA sponsoring member
US top essential oil brands supplier

≥300 employees, 5000m² workshop
≥1,000,000 A3 cartridges produced every month

Transpring China

Alan Zhang

+86 755 27823701-666

market@transpring.com

3&4F, Bldg A5, Huangtian Industrial Zone,
Xixiang Town, Baoan Dist, Shenzhen, China

Transpring USA

Peter Hackett

925 405 5582

usa@transpring.com

200 Mason Circle, Suite A, Concord, CA 94520

MED-ePEN (Distributor)

Ted Nicols

310 844 7671

wholesale@medepen.com

1732 Aviation Blvd, Ste 317, Redondo Beach,
CA 90278

ONE DAY DELAY, 1% LESS PAY

ORDER GUARANTEE:

If your order not finished as promised,
compensation shall be offered.



www.transpring.com



@TranspringChina

A 5-Star Experience

Florida MMJ company concentrates on personalized service, cultivating doctor relationships to stay on top

by Bart Schaneman

For Florida-based Trulieve, a simple strategy offered a path to initial success: Get there first.

After winning a license under the state's CBD-focused program in 2015, the company racked up an impressive list of "firsts" once Florida approved a broad medical cannabis program last year.

Trulieve claims it was the first to:

- Get the green light to process full-strength medical cannabis.
- Receive authorization to dispense MMJ.
- Open a dispensary (in Tallahassee) in July 2016.
- Make a home delivery.
- Transact an in-store sale.

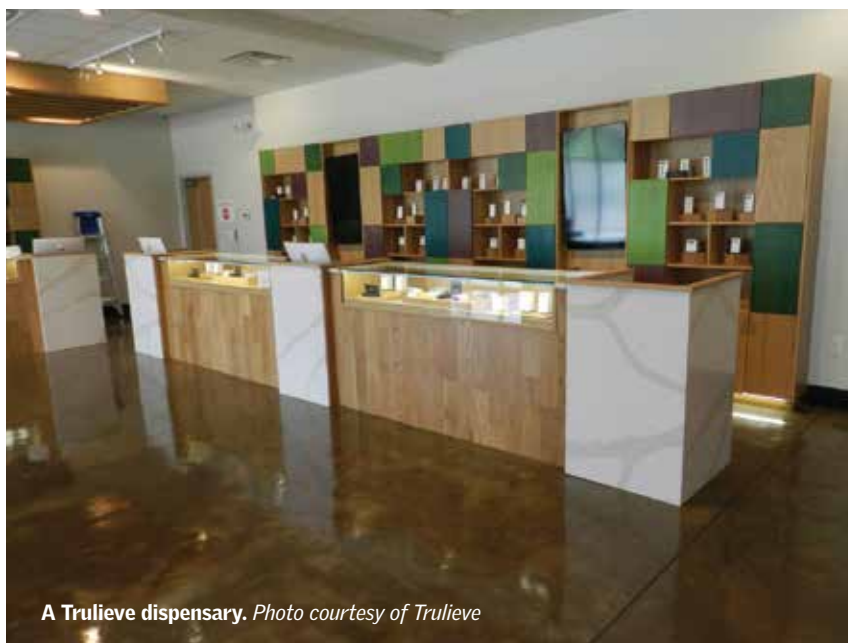
But creating a sustainable medical marijuana business that can achieve success in the long run requires more than just being first.

To that end, the vertically integrated MMJ company has focused on building its customer base through personalized service, which involves holding patients' hands every step of the way in the enrollment process and beyond. Trulieve also nurtures relationships with the doctors who recommend medical marijuana.

"Our strategy is pretty straightforward," said Trulieve CEO Kim Rivers.

The strategy seems to be paying off.

The company now operates nine



A Trulieve dispensary. Photo courtesy of Trulieve

dispensaries across Florida and accounts for about a sixth of the state's medical marijuana market, serving roughly 5,000 patients out of a total pool of 31,000 as of late August. Trulieve plans to open another 16 dispensaries by the end of 2018 – this in a state where annual dispensary sales are forecast to be \$600 million-\$800 million in the next three to five years, according to *Marijuana Business Daily* estimates.

The company also employs approximately 225, including greenhouse staffers, cannabis growers, scientists, a toxicologist, a nuclear engineer, a physician, a nurse and a lawyer, as

well as managers and consultants at each dispensary.

Holding Patients' Hands

Rivers characterized the Florida system as "somewhat challenging" for patients to navigate, so her team works to create what she calls a five-star experience.

To deliver that service, Trulieve management ensures the company's patient consultants undergo a rigorous training process, "making sure the patient feels cared for and connected."

When voters passed Amendment 2 last year legalizing MMJ, the measure



Grow Like an Expert!

YEAR-ROUND

PODS STARTING AT \$87,500

- Increase your profits by creating the optimal cannabis growing environment.
- Our PODS achieve optimal growth in any climate, year-round.
- Our PODS provide the clean-room needed to grow medical cannabis.
- Get into production immediately with our plug and grow solution.
- Reduced risk of crop loss from various diseases.
- Scale your operation easily by adding more stackable PODS.
- Expert consulting and financing options are available.



Control your Pod's environment in real time from your Smart Phone, Tablet or Computer



MICRO LAB FARMS

MicroLabFarms.com • (800) 320-0761

EXECUTIVE SUMMARY

Florida-based medical marijuana company Trulieve has positioned itself to capture a significant share of the state's potentially lucrative MMJ market. CEO Kim Rivers said the company has achieved its foothold by:

- Aggressively pursuing first-to-market status with its products.
- Growing the patient pool by holding patients' hands throughout the enrollment process and beyond.
- Educating doctors about Florida's medical marijuana program to make it easier for them to recommend MMJ.
- Maintaining open lines of communication and feedback among its employees.
- Focusing on quality as much as quantity, particularly with the products it provides.

required the Florida Department of Health to develop an ID card program for patients to receive medical marijuana recommendations.

To help patients comply, Trulieve notified them of the requirement and then provided educational materials on its website detailing the necessary steps to obtain cards, such as the required paperwork and where to send it.

Trulieve also set up kiosks in its dispensaries so patients could take passport-style photos. The company then mailed the photos with the applications into the DOH for patients. Additionally, Trulieve rolled out a program where patients who spent \$150 get back \$75, which covers the full cost of the ID card.

"Even though it's been somewhat of a burdensome process for patients to go through the ID card program

in Florida," Rivers said, "we wanted to make it as easy as possible for patients to become enrolled in the program or continue to be enrolled in the program."

Now that the MMJ program is up and running, Trulieve uses social media and an email list to notify patients of any changes. And it provides information. For example, the company posted a link on its Facebook page that directs visitors to videos hosted on its website that answer common questions from patients.

Focusing on Doctors

As an important step in building the patient pool, the company strives to ensure doctors know how to recommend MMJ.

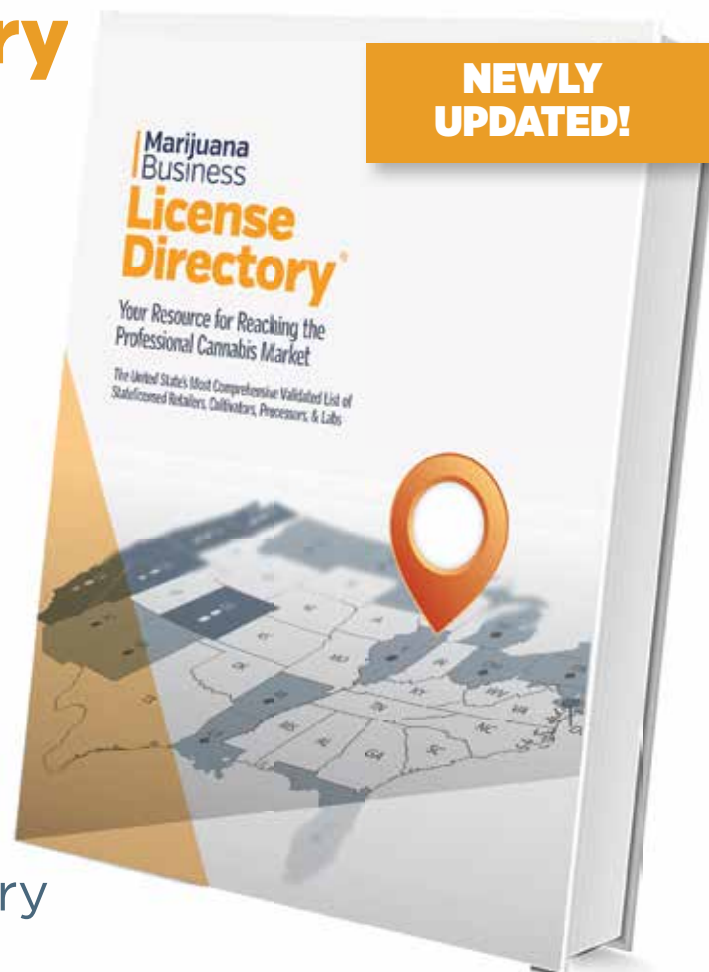
Rivers said Trulieve has been very focused on building relationships with

Marijuana Business License Directory

All-In-One Sales Lead and Competitive Intelligence

Contains 8,391 validated addresses, numbers and contact information nationwide!

Order your copy today at:
MJBizDaily.com/license-directory



registered physicians in the state. Her company functions as a resource for doctors looking for information on the MMJ program by providing education, communication and ongoing support.

Trulieve offers free physician training in both individual and group formats for doctors entering the industry. The training includes information on how to navigate the compassionate use registry and other paperwork associated with the program, including compliance materials. The company also offers a dedicated website for physicians that includes information on products, dosing guides, educational materials and condition-specific resources.

"The Florida laws have been in a constant state of evolution," Rivers said. "So being that trusted resource for physicians has been key for us and for physicians feeling comfortable with



A lab technician works on an extracted product at Quincy, Florida-based Trulieve. Photo courtesy of Trulieve

our products and with our program in Florida in general!"

Capturing the Market

Building up the patient pool and number of doctors willing to

recommend medical cannabis is part of the larger company ethos to succeed.

"We're absolutely not afraid to go full force 100% of the time," Rivers said. How?

You're a Professional. **Trim like one.**



With daily complications and pressing timelines, uptime is crucial to your harvest. Twister Trimmers are meticulously designed to give you the quality, speed and reliability you need to make this the best harvest yet.



Full 3 Year Warranty



Twister Edge Extended Care



Tech Support Open 12 Hours Daily

Trim WET or DRY

The T2 and T4 are the only trimmers on the planet that can trim both.

Higher speed, Better quality

Get a 20% boost in speed and better quality control with a conveyor and multi-machine setup.



LEARN MORE AT
TWISTERTRIMMER.COM
Need a hand? Give us a call.
1.888.254.3204

"I would say one of our biggest attributes is we're very, very responsive to our customers," Rivers said. "We make ourselves available to our patients and physicians pretty much 24/7. Stores and call centers are open seven days a week, pretty much around the clock."

Rivers said the company plans to open all 25 dispensaries it's allowed to under the new state law.

"The starting point has always been we feel a responsibility to be able to serve all of the patients in the state of Florida," she said.

For that to happen, the company needs a robust logistics plan.

Each week Trulieve convenes planning meetings to analyze trends, patient counts and how many physicians are active in the state's program.

Recently, for example, staffers discussed the time it takes for patients to obtain ID cards – and steps the company can take to assist in expediting that process. Staff members also strategize regarding new products to develop based on patient

segment growth and patient demand and feedback.

"We do goal set often," Rivers said.

One of the company's goals, for example, was to be first to market.

"That's something we were focused on really before we were even awarded the license," she added.

Management carves out time dedicated to working on the business rather than working in the business. At these meetings, executives discuss both nationwide and statewide trends. They also discuss market positioning and areas of opportunity. That ensures goals continue to be set and the company's mission implemented.

Smart Growth

While Trulieve aims to establish a presence in the Florida market, it's not necessarily the goal to simply become the largest in the state.

"We're focused on quality and quantity," Rivers said.

For the company's executives, it's important to remember that growth happens one patient at a time. That

means the patients' experience is paramount to the company's success.

Patients are asked to write reviews on the company's website and via comment cards. Then upper management reviews feedback at a weekly meeting.

For example, if the company produced 1,000 units of a vaporizer cartridge, executives want to know how many comments came back, how many cartridges were returned and why, and whether specific feedback issues need to be addressed.

Recently, patients reported they wanted a cartridge with a stronger pull. Trulieve heard that comment and released a new version.

"Of course, we have folks who liked the old style," Rivers said. "Now we continue to offer both styles."

For Rivers, it's important for a growing company in a high-growth industry to pivot in response to customer demand.

"It's about being able to balance," Rivers said. "You're not going to have patient satisfaction if the quality of your product suffers." ♦

OPEN LINES OF COMMUNICATION

In order for Trulieve to successfully expand its footprint, the company has encouraged a culture of open communication to ensure all employees are working together to achieve the same goal.

"Ten thousand group texts," Trulieve CEO Kim Rivers said, joking about how often the team has texted each other since the company formed in 2014. "We do communicate with each other often. Our philosophy is never complain about an overcommunication."

It's easy to read a text or delete an email. It's much more difficult if you don't have that communication in the first place, Rivers said.

The staff also jokes about the advent of the iPhone



Trulieve CEO Kim Rivers.
Photo courtesy of Trulieve

and the ability to add and merge a call, which allows them to loop other people in and add lines of communication during a conversation.

"That's a wonderful feature," Rivers said.

From a companywide perspective, management tries to include all employees in discussions about the goals and direction of the business.

At the all-hands meetings that are held regularly, anyone can ask questions. Nothing is off-limits, Rivers said.

"We are growing rapidly, so maintaining that continuity of communication is key," she added.

– Bart Schaneman

The WEIGHT is over!

Introducing the World's First Planter Made With Antimicrobial Plastic!

THE **Medical**  **Planter**™ &  **Planter**™

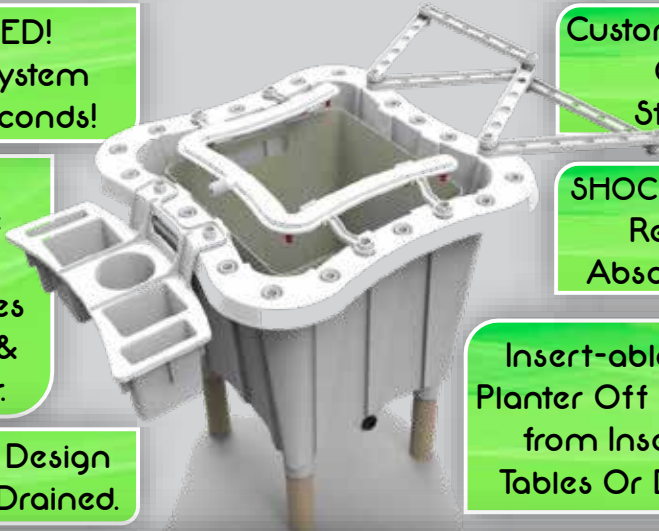


The Revolutionary Complete Re-Design of The Planter.

NO TOOLS REQUIRED!
Irrigation/ Feeding System
Snaps On & Off in Seconds!

Maximize Your
Efficiency & Minimize
Lost/Misplaced Tools.
Workerstation Organizes
Your Scissors, Pruners &
Features a Cup Holder.

3 Degree "V" Bottom Design
Keeps Plants Properly Drained.



Customizable Easy to Use Snap
On Spreaders Keeps
Stakes Out of Your Roots.

SHOCK-FREE TRANSPLANTING!
Removable Non-Water
Absorbing, Breathable Insert.

Insert-able 1-1/4" PVC Legs Keeps
Planter Off Of Cold Slabs And Away
from Insects. Can Be Placed On
Tables Or Directly On The Ground.

Our Patent Pending Plastics have Anti-Mold & Antimicrobial Properties built in!
Air-Channels Create A Steady Flow Of Oxygen To Your Roots.

Universal Application Works With All Types of Medium!



Clay &
Lava Rocks



Vermiculite



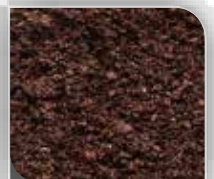
Perlite



Rockwool



Coco &
Coco Coir



Soil

Be a part of the Revolution & Visit us in Vegas!

Marijuana Business
Conference & Expo Nov 15th-17th • Now Booth # 4823

America's Oldest & Largest National Cannabis Tradeshow



Learn
more
at

THE **Bucket**  **Company**.com™

Follow
us
on



We've
moved
Booths!

How to hire - and train - trimmers for your cultivation operation

by Bart Schaneman

Marijuana cultivators keen to hire bud trimmers should look for candidates with a passion for the cannabis industry, a tolerance for tedium and a good attitude.

Trimming can be monotonous and repetitive. Trimmers typically spend their days harvesting buds from plants by hand, playing a key role in the quality of a product a cultivator produces. But trimmers can be a transient lot, with high turnover rates. Keeping trim crews staffed is an ongoing challenge for many cannabis operations.

EXECUTIVE SUMMARY

Hiring quality bud trimmers can be difficult. But they're a linchpin of any cultivation operation. When staffing your trim crew:

- Look for people who are passionate about cannabis and who want a long-term career in the industry.
- Find trimmers who are comfortable with tedium and have a keen attention to detail.
- Post trimmer jobs on employment sites and social media.
- Be aware that the position is viewed as a steppingstone in the marijuana industry.
- To keep your trimmer motivated, provide concrete incentives such as decent pay and the opportunity for advancement.



Handler Cherish Hobbs trims some Pineapple Express at Greatland Ganja. Photo courtesy of Chevelle Abel



BELLPARK
HORTICULTURE



DryGair

- End humidity problems
- Effective & Efficient
- Increase Airflow
- Increase Yield
- Decrease costs

bellparkhorticulture.com

Despite the monotony, being a trimmer is a way to get a foot in the door of the rapidly growing marijuana industry. In fact, many trimmers have gone on to much higher, better-paying positions, such as extraction technicians or growers. A business owner should remind prospective trimmers of that fact when staffing a crew to handle an upcoming harvest.

"Trimmers are definitely not the easiest bunch to work with," said Aaron Spindler, production director at L'Eagle, a vertically integrated marijuana retailer in Denver. "It's important for the trimmers to understand that they're a crucial part in the process and have them take pride in the product."

Below are tips from three industry professionals who wrangle and manage teams of trimmers throughout the year.

WHAT TO LOOK FOR

Leif Abel – co-owner of Greatland Ganja, a grower in Kasilof, Alaska – seeks out candidates who have a strong interest in cannabis.

"The prerequisite for any employee at Greatland Ganja is that you're passionate about what we do," he said.

He'd prefer to hire trimmers with experience, but such candidates can be tough to come by in Alaska.

In Alaska, people who work directly with the plant must first have a marijuana handler permit.

"That's the first step to them showing that they want to work in this industry," Abel said.

Alaska's cultivation typically is done indoors so the harvest isn't seasonal. That means Abel wants part-time workers who will commit to work for him when the plants need to be harvested.

Interestingly, he's had good luck with grandmothers, stay-at-home moms and others who can't work 40 hours a week but enjoy the part-time schedule.

He's also willing to take a chance on a good candidate even if the person has a criminal record.

"We don't like to discriminate against people who have had a hard time in the past and have turned their life around," Abel added.



Trimming at the AltMed facility in Coolidge, Arizona.
Photo courtesy of AltMed

For Spindler, punctuality, a good attitude and an ability to follow directions are a must.

"We'll know right away if they can't even keep a schedule," he said.

L'Eagle's harvest schedule allows for trimming work to be done in batches. So the company has to work with part-time crews, and it will arrange for work to be done 30-60 days in advance of the harvest.

"Most of the time these people weed themselves out by not showing up on scheduled dates," Spindler said.

Trimmers must show up with their proper documentation, including their Marijuana Enforcement Division Occupational License and corresponding badge. Spindler views it as a good sign if they can at least manage that.

But the requirements for the job don't stop there.



A trimmer inspects a cannabis plant at AltMed's facility in Coolidge, Arizona.
Photo courtesy of AltMed

Introducing the Newest CO₂ Extraction System from Druk Engineering



- Fully automated for unattended operation
- 2 Easy-Load Extractors - 25 liter
3000 psig, subcritical or supercritical CO₂
- 2 separators
- All Vessels are ASME code stamped
- Extractors and separators can run together or separately
- Vapor and liquid pumps for higher flow and higher yields
- Full extraction in 30 minutes or less per pound

Druk also sells used CO₂ extraction equipment, and services any manufacturer's pumps, chillers or other support equipment.

We offer service contracts

Same-day telephone support

We can consult to help you increase throughput, design your lab, develop standard operating procedures for your entire process.

No matter your needs, our engineers and consultants will help you fill them quickly, expertly, and permanently.

We know that your operations are time-sensitive, which is why clear, quick communication is our standard. With expertise and decades of experience in the industry, you can trust that you are in good hands with Druk.



Druk Engineering
YOUR SUPERCRITICAL CO₂ EXPERTS

See us in Las Vegas at the **Marijuana Business Expo, Booth 3227** November 15-17

“For our company, it’s attitude,” Spindler said. “Most people are recognized in this business for being easy to work with.”

Monica Prisoc, trim supervisor for Florida-based AltMed’s indoor grow in Coolidge, Arizona, wants an energetic, detail-oriented worker.

“I’m looking for someone who has an interest in a long-term career in the industry,” she said. “Somebody who is excited to be here and who is willing to go with the flow and find their place naturally.”

She also wants candidates who are satisfied doing manual labor – but are meticulous, too.

“When we’re trimming, there’s a lot of small details,” Prisoc said. “It’s really tedious. So we want someone who isn’t going to be bored with that and is going to pay attention to those fine details.”

WHERE TO LOOK

When Abel began his business, he found most of his trimmers through word-of-mouth connections.

Now he advertises in local newspapers, on social media and through his company’s website. He tried to recruit trimmers through Alaska’s online job bank – but his ads were yanked because the system is federally funded.

“Just because we’re a cannabis business, we are limited on how we can advertise,” Abel said.

Spindler said the trimming operation supervisor advertises a running list of company events on L’Eagle’s social media platforms so people are informed of an upcoming harvest and can sign up beforehand.

The company also advertises jobs on Craigslist, Facebook and Instagram.

AltMed’s Prisoc said she mainly posts ads on websites such as ZipRecruiter and Indeed.

The company also has an employee referral program: Staffers are paid a \$250 referral bonus if a contact works out.

HOW TO TRAIN AND MANAGE

At Greatland Ganja, Abel’s trimmers go through a two-week training period during which they aren’t left alone.

He has an experienced employee monitor new hires to watch their production – and because he’s cautious about losing any product.

“It’s kind of like a bank,” Abel said. “We deal with a high-value product.”

The trimmers also shadow one of the lead trimmers or the manager. Greatland Ganja has rigid standard

HOW TO RETAIN A GOOD TRIMMER

Retaining a quality bud trimmer is extremely important. Good trimmers are not easy to find. And a decent trimmer is a vital part of a successful harvest team.

Offering a new trimmer the opportunity for advancement is one way to keep that person on board. So is decent pay.

Aaron Spindler, production director at L’Eagle, a vertically integrated marijuana retailer in Denver, tries to work successful candidates into other parts of his operation.

“Trimming’s not a glamorous job,” Spindler said. “But those who do it well and do it fast, they tend to have skills beyond just trimming.”

L’Eagle’s trimmers are valuable and crucial to quality control, he added.

“Once they understand that and take pride in what they’re doing and know that there is a path forward, they take more accountability for the product,” Spindler said.

At Florida-based AltMed’s operation in Coolidge, Arizona, trim supervisor Monica Prisoc asks her trimmers if they have any interest in ultimately moving into another department – for example, the cultivation facility or the extraction lab.

“We’re constantly checking in with our new hires about how they’re feeling,” she said. “We try mostly to hire from within so they have a chance of moving into another department.”

Many trimmers, in fact, see the job as a ladder to more prestigious positions in the cannabis industry.

Prisoc agreed, saying “absolutely” trimmers can move up in the company.

“I had no experience in the industry,” she added. “I just started out trimming and learning as much as I can.”

Trimmers also need decent compensation. Leif Abel, co-owner of Greatland Ganja, a grower in Kasilof, Alaska, starts his trimmers at \$15 an hour.

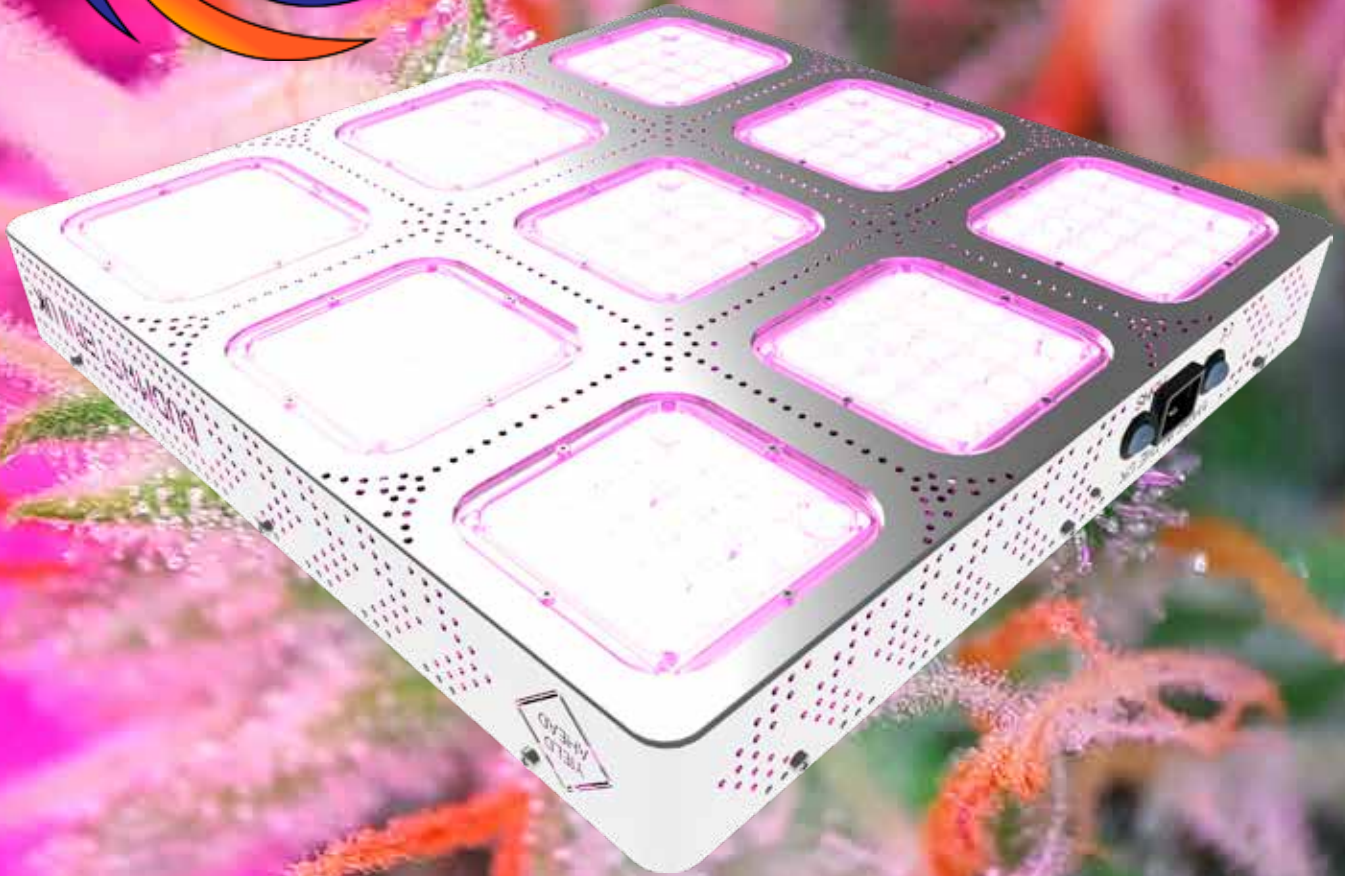
“You’re not going to keep good people if you’re paying them too little,” he said. “But you’re going to put yourself out of business if you pay too much.”

– *Bart Schaneman*



Budmaster LED

MADE IN THE UK



558	708	852	724	557
720	976	1204	960	741
846	1197	1561	1217	861
708	953	1213	991	706
558	702	862	774	558

PPFD Map, Lamp @90cm

Budmaster G.O.D-9

1.83 $\mu\text{mol}/\text{j}$, 677 μmol

373.5w , 1274.4 BTU

Osram SSL80 Horticultural LED

100,000 Hour LED lifespan

WWW.BUDMASTER.CO.UK

operating procedures for every step of the process, beginning with how the buds are cut and ending with how they're stored.

"We're very particular about the process so the terpenes and trichomes aren't damaged," Abel added.

He conducts a review after the trial period and then, when appropriate, gives raises after each review period.

"With trimmers, it's about if they're really, really productive, making sure you give them the right raises and the right feedback," Abel said.

It's also important that trimmers feel they're as much of a part of the team as everyone else.

"That kind of stuff is as important as pay," he added.

At L'Eagle, trimmers play an important role in quality control, Spindler said.

Trimmers can inform the grower if the flower meets the company's standards, for example.

"So we train them to look for certain things as far as if the product is coming out well and to give feedback on the harvest," he added.



Freshly trimmed Pineapple Express is ready to cure at Greatland Ganja. Photo courtesy of Chevelle Abel

Once trimmers are hired, L'Eagle pays them by the hour, not the pound, as some in the industry prefer.

"We don't want them to feel stressed out to have to do so much that day," Spindler said. "The trimmers love performance, don't get me wrong, but I personally feel the quality of the trim suffers when speed is the only thing that matters."

Spindler will watch new hires to see if the trimmers respond to the training they've received and make sure they aren't destroying the product.

"Here we're more worried about quality than speed," he said.

Over time, the trim managers will watch new hires' productivity and compare it with that of more seasoned trimmers.

"See if they can get up to speed," Spindler said. "If they can't, we'll get rid of them."

AltMed's Prisoc asks her trimmers to complete hands-on training.

An experienced employee stands or sits with the new hire and observes throughout the first week. The new trimmer is given pointers on basic techniques as well as more refined instructions on how to trim a specific strain.

"I try really hard to make sure that if anybody's struggling with a certain strain that I take extra time to show them different techniques," Prisoc said. She's found it takes about two weeks for a trimmer to become proficient at trimming a certain strain.

AltMed also pays trimmers by the hour, not by the pound. One reason behind that is a trimmer might get pulled away for another task while they're on the clock.

"If this trimmer's getting paid by the pound and he gets pulled away to help someone out now, he's losing that incentive for the whole day," she said. ◆



Greatland Ganga co-owners, and brothers, Arthur Abel, left, and Leif Abel trim part of their 2016 outdoor crop. Photo courtesy of Chevelle Abel

BOOTH
#1214



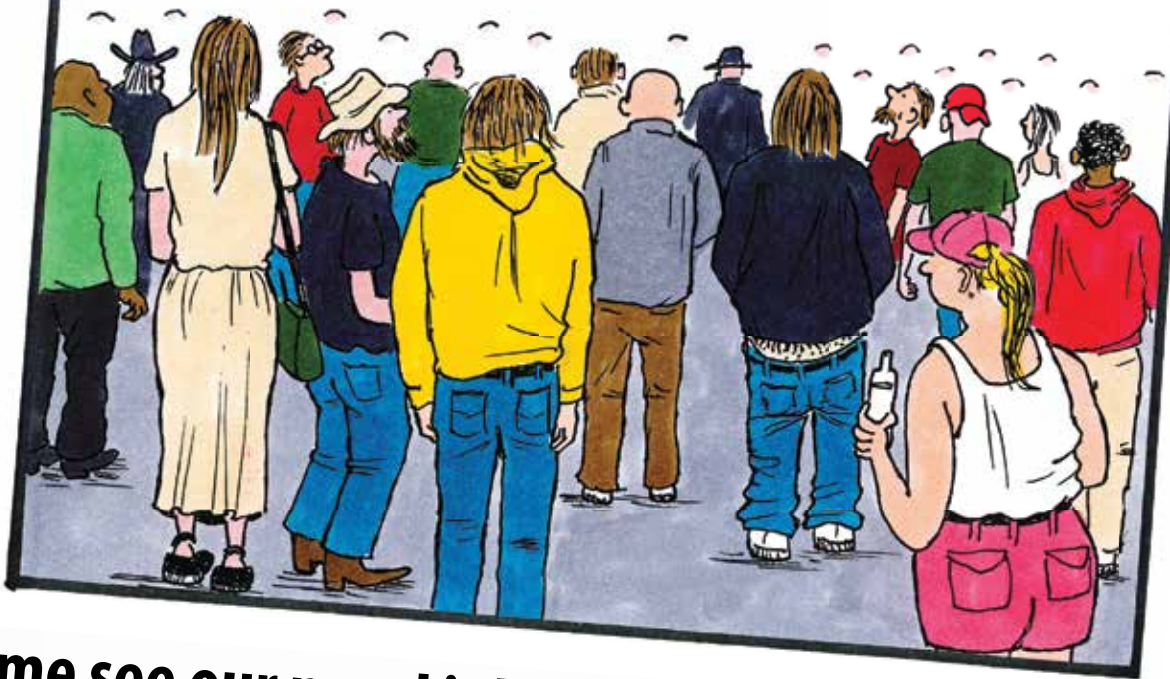
HORTILUX[®]

horticulture lighting specialists™



DE & LED

GROW LIGHTING SYSTEMS



Come see our new Lighting Systems at MJBizCon
Las Vegas, NV | November 15-17, 2017 | Booth #1214



HORTILUX[®] is a trademark of Iwasaki Electric Co., and is registered in USA and Japan.

www.eyehortilux.com
Quality Spectrum. Quality Yields.





Loaders pull raw ingredients for bulk soil blends at Sanctuary Soil's production facility in California. Photo courtesy of Sanctuary Soil

Industry Snapshot: Nutrient and Soil Companies

Data, trends and challenges

by John Schroyer

It's no longer enough to simply grow and sell marijuana. As the industry has exploded – in popularity and legality across the nation and the globe – growers and retailers have begun focusing more on quality.

That's where nutrient and soil companies enter the picture. Their products help bolster cannabis potency, flavor and crop yields, and these businesses have become a virtual necessity for professional growers.

Many of the sector's industry leaders are easily generating tens of millions of dollars or more in annual revenue – think lawn and garden care giant Scotts Miracle-Gro. But

even some of the newer players are already making a killing as more niches are explored.

Take Australia-based S.J. Enterprises, producer of the Cyco Platinum Series brand of nutrients. The company's top-selling cannabis nutrient product, Ryzofuel, is booming in popularity with growers because it utilizes Tasmanian kelp instead of Norwegian kelp, said Deonna Nieves, one of S.J. Enterprises' U.S. sales representatives. She said the latter is used in most other common MJ nutrients.

"The difference is ... it has more natural growth hormone than Norwegian. Five times more," Nieves added.

As a result, the company's nutrients are now carried in roughly 800 hydroponic retail stores in the United States, according to Nieves.

"We're talking over \$1 million a month in sales, easily," she said, emphasizing that's an estimate for only one of the company's seven U.S. sales representatives.

S.J. Enterprises is far from the only nutrient or soil company riding the green rush, especially because large-scale commercial grows proliferate around the United States and Canada.

Advanced Nutrients, based in Abbotsford, British Columbia, is among the oldest and most established

Customized Solutions for Indoor Cultivators.

- Water Purification, Reclamation and Recycling Experts
- Industrial-Grade Components
- Security and Camera Integration
- Automatic Nutrient Mixing, pH adjustment and Delivery
- Turn-key Containerized systems for Growing, Curing & Extraction
- Unparalleled data collection, reporting & analytics to replicate success and identify/eliminate mistakes.

MEET *Eden*, THE MOST COMPREHENSIVE CONTROL SYSTEM FOR INDOOR CANNIBIS GROWERS.

For Cultivators seeking the greatest efficiency, reliability and flexibility in your facilities. Eden maintains the perfect environmental growing conditions including temperature, lighting, humidity, CO2 to Oxygen ratio, automatic nutrient mixing, pH adjustment and delivery.

Increase yield and reduce expenses.

Free Consultation!

 info@totalgrowcontrol.com



CALL US NOW! **(720)316-6284**

www.totalgrowcontrol.com

companies in the cannabis business. It has a presence in 95 countries and is on track to ring up \$105 million in sales this year, said CEO and owner Mike Straumietis.

And while smaller-scale cultivation operations with 100 grow lights or less still account for about 60% of the company's sales, that's probably not going to last, Straumietis predicted.

"The tide is going to change very quickly here. Because the [licensed producers] are huge. We've got guys out there with 4,000 lights ... and they're expanding even more," Straumietis said. "The writing is on the wall."

That means more demand for supplies that will give those cannabis producers high-quality cannabis that allows them to compete for market share.

EXECUTIVE SUMMARY

The cannabis nutrient and soil industry is exploding thanks to at least two factors: The number of legal growers globally has skyrocketed, and the demand for quality and potency has gone up among consumers. Here are some takeaways about the sector:

- The customer base for nutrient and soil companies is quickly expanding, comprised of small-scale growers and huge commercial grows with thousands of plants.
- Innovation among nutrient and soil companies remains key, with most developing cannabis-specific products that cater to the needs of marijuana growers and their plants, as opposed to general agricultural crops.
- Keeping up with overall demand for nutrients and soil has been a major hurdle for many companies, which report a decrease in seasonal demand because greenhouses are turning cannabis cultivation into a year-round cycle.
- An increase in competition is expected in coming years, but contraction is likely to be driven by acquisitions involving larger firms such as Scotts Miracle-Gro, which already has bought Arizona-based Botanicare.



Advanced Nutrients CEO and founder Mike Straumietis.

Photo courtesy of Advanced Nutrients

Market Dynamics

Several dozen companies already specialize in cannabis-specific nutrients, fertilizers or treated soil for growing. And even more retailers and distributors carry those products. Most retailers work with brands such as Advanced Nutrients and S.J. Enterprises' Cyco Platinum Series.

Many – if not most – of the manufacturers don't even sell directly to growers. Instead, they sell to retail shops or distributors like Oregon-based Savant Plant Technologies.

"The retail partners are a big piece of this pie. They really grew this market, and they've been the shepherds of it for the past 20 years," said Renee Shoppach, sales director at Botanicare, an Arizona-based cannabis nutrient producer.

For wholesale distributor Savant, only about 35% of the company's sales are for nutrients or soil, said

CEO James Knox. The other 65% represent other types of grower supplies.

Knox also runs a pair of hydroponic stores in Oregon, simply because smaller growers typically don't purchase enough in bulk to justify the expense of him delivering soil or nutrients directly.

"I'm able to hit both fronts. I have retail stores where the smaller growers can go, but Savant is here for the big dogs that need to do big work that, truthfully, can't afford to buy at retail stores because that price point isn't affordable," Knox said.

But Savant, like Advanced Nutrients and S.J. Enterprises, has seen tremendous growth since its founding in 2013. Advanced Nutrients was founded in 1999, and S.J. Enterprises in 2008. Knox said his sales figures are easily in the millions.

"I have steadily grown 100% in [soil and nutrients sales] every year.

HempTech Solutions Address Cultivation's Pain Points: **Energy, Water, Labor, Security** to Produce Consistent, Repeatable, High-Quality Yield



GrowCOMM™ Engineering & Consulting Services for commercial or industrial cannabis cultivation

Design & Build Automated Grow Facility

- **Controlled Environment**
- **Utility Specification and Design**
- **Energy Efficiency**
- **Fault Detection**
- **Facility Management**
- **Total Computer Control Integration**

Upgrade & Automate Current Grow Facility

- **Integrate HempTech platform with 3rd party products**
- **Engineer and Integrate (partial or complete) an existing production facility**
- **Convert current operations to automated cultivation**

Design. Construct. Automate. Integrate.



For more information:
727-474-1810
www.hemptechcorp.com
sales@hemptechcorp.com



Last year, we saw 157% growth,” Knox said.

Another West Coast company – one that specializes in soil – is California-based Sanctuary Soil. It has a sister company that supplies organic fertilizers, California-based Mission Fertilizer. Mitch Davis, an owner of both companies, said Sanctuary Soil delivers to “literally hundreds” of cannabis growers in four western states, primarily California.

“Five years ago, it was probably mostly in the three counties [of the Emerald Triangle]: Mendocino, Trinity and Humboldt,” Davis said. “I would say that only represents half of the soil, or less now. ... I'd say year over year, in the last three years, we've probably doubled delivered soil loads.”

And, Davis added, his company's soil sales are in the “tens of millions.”

Arizona-based Botanicare, founded in 1996, also has revenues in the tens of millions, Shoppach said. The company was doing so well it was acquired last October for \$40 million by the Hawthorne Gardening Co., a subsidiary of Ohio-based Scotts Miracle-Gro. [Scotts has also purchased four other MJ-focused companies, including General Hydroponics and Gavita Horticultural Lighting.]

“On paper, 100% of our revenue comes from our retail partners. Of their business, I would say about 95% of their business comes from cannabis,” Shoppach said.

More broadly, the nutrient business already has gone global.

S.J. Enterprises, for instance, distributes its Cyco Platinum Series of nutrients in the United Kingdom, Spain and Canada aside from its home country of Australia and the United States.

Advanced Nutrients has manufacturing centers or warehouses spread out across the United States and Canada as well as Bulgaria, Germany and Spain.

“We're all over the world,” Straumietis said.



Above: Botanicare's Growilla line of cannabis nutrients. Below: Botanicare's Pure Blend Pro line of cannabis nutrients.
Photos courtesy of Botanicare



BUSINESS HURDLES

Scaling for Growth

One of the easiest hurdles for each of these nutrient and soil companies to identify was simply keeping pace with demand, and the growing pains that accompany rapid expansion.

“With all the growth and as big as we get and all of the improvements we make, every year it gets wiped away. Literally, it's been nonstop trying to scale. Literally, nonstop,” said Sanctuary Soil's Davis.

That's changed in recent years, Davis added, due to the increasing popularity of greenhouses, which has turned his formerly seasonal business into a year-round cycle.

“If we look back three years ago, we would be in a slowdown time,” Davis said in August. “This would be a time for us to regroup and get set for next season. Well, it hasn't slowed down. We're still busy and we're delivering to a lot of greenhouses that are just starting to function year-round.”

Shoppach agreed that scaling appropriately is one of the biggest challenges Botanicare has had to confront.

“When you're seeing doubling of revenues in five years, your business has to prepare for that,” she said, referring to how much Botanicare's sales surged in the past half a decade. “Just ensuring a consistent supply chain, ensuring that the product is reaching the consumer in a timely fashion – those are always challenges for any business that's growing as fast as the cannabis sector.”

Supply Chain

One of the biggest issues for soil producers especially – it's arguably less of a hurdle for fertilizer and nutrient companies – is keeping materials in stock to produce soil that's specifically tailored for marijuana.

“We're literally bringing in ingredients that we don't produce now for next season,” Davis said, noting the company must order materials such as coco coir from Asia, peat from Canada and multiple other components it uses to produce cannabis-friendly soil.

“We're talking 40-foot containers, and we'll bring in 150 of those oceangoing containers just of that one ingredient,” Davis said.

Customer Education

Another issue many nutrient and soil companies face is convincing potential clients of the value of their



Some of the cannabis nutrient offerings from Oregon-based wholesale distributor Savant Plant Technologies.

Photo courtesy of Savant Plant Technologies

Be in Compliance

Child Resistant / Senior Friendly Metered Dose Pumps and Packaging

NEW IMPROVED

ASTM Certified

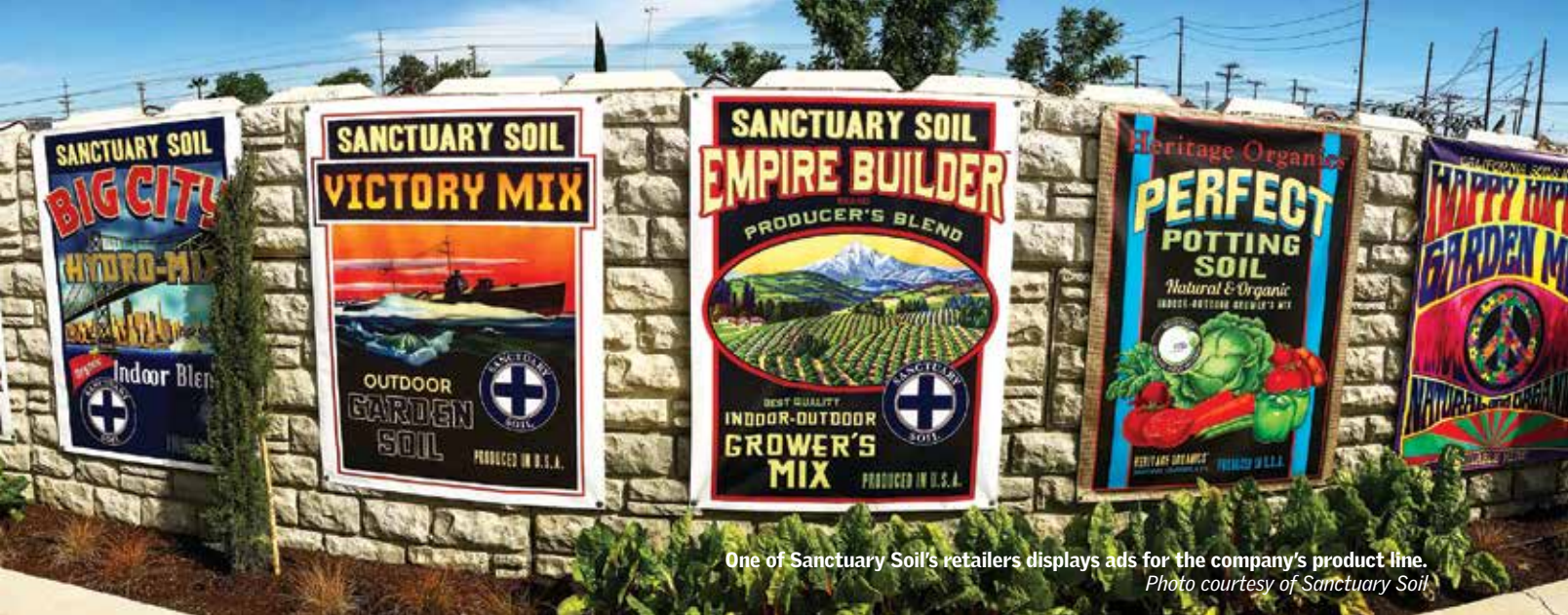


ISO 9001:
2015 Registered
Quality Management System

Contact David Meshberg
david.meshberg@packagingconcepts.com

203-209-3625





One of Sanctuary Soil's retailers displays ads for the company's product line. Photo courtesy of Sanctuary Soil

product, especially when growers are set in their ways.

"Reaching the customer base is always a challenge for any company, especially when they do sell through such a vast network of partners," Shoppach said. "We often will go at all measures, where they are at, forums, trade shows, social media. ... We try to have as many conversations with our consumer base as possible."

Advanced Nutrients' Straumietis said many growers are trying to replace professionally made marijuana nutrients with homemade salts, which he said is a big mistake that will end up costing more in the long run because of lower yields.

"Guys are mixing ... their own micronutrients, and they're saving money by doing it. But they're actually costing themselves money, because what they're not looking at is what they're pulling back in bud weight or extracts," Straumietis said.

TRENDS TO WATCH

Competition and Consolidation

While many expect competition in the nutrient and soil game to ramp up in the near future, several also say the space will end up being dominated by a few major players. Scotts Miracle-Gro already is making such a play, with the acquisition of Botanicare and several other companies, said S.J. Enterprises' Nieves.

The word through the industry grapevine is that many growers are refusing to use Scotts products because of the company's ties to Monsanto, said both Nieves and Straumietis. Scotts serves as the exclusive agent for the marketing and distribution of Monsanto's herbicide Roundup.

Straumietis predicted that after the industry dust settles, only a handful of companies will be left standing.

"In the beginning, there'll be more competition. Then there'll be rollups, and at the end of the day, there'll probably be three or four top brands, and one or two will have most of the market share," Straumietis said.

Maturation, Partnerships as Customer Base Splits

As part of that consolidation, Shoppach predicted more acquisitions will probably occur, like that of Botanicare by Scotts Miracle-Gro. Alongside that will come professional partnerships and joint ventures.

"You're going to see mass production. It's going to become like Big Ag," Shoppach said.

As a byproduct, she and others agreed the customer base will undergo a polarization between huge corporate growers and small-scale boutique growers and hobby cultivators.

"The two different paths are going to work on different product offerings

and will have different needs," Shoppach said. "Botanicare is going to be ... servicing a niche for the commercial sector, but at the same time we're going to be modifying our home hobbyist systems."

Sanctuary Soil's Davis agreed: "We can't customize for small mom and pops, but we can for larger users, and that seems to be where we're moving with our business."

More Scientific Developments

As the cannabis industry matures, another thing to watch for is products honed by increased scientific research. Advanced Nutrients, for instance, is putting considerable time and money into developing new ways for growers to fight pests.

"Right now, there are no [federally] approved pesticides for cannabis. Zero. This is a huge, huge problem," Straumietis said.

So Advanced Nutrients' team of scientists is trying to find a way to get cannabis plants to kill pests by themselves.

"That is something we're working on right now," Straumietis said. "We've already sequenced powdery mildew, red spidery mites – those genomes have already been sequenced. ... So now, what we're doing is looking to where we can knock out how the RNA can deliver a message to DNA that self-destructs the organism." ♦

Cannabis, meet capital.

Prohibition is crumbling. Invest in what comes next.

160+
Funded Companies

\$150M+
Invested


\$3M+
Raised for Legalization

600+
Investor Members



THE
ARCVIEW
GROUP

Arcview is the #1 source of deal flow in the fastest growing industry. If you qualify as a high net worth accredited investor or if you are an entrepreneur raising capital, Arcview might be right for you.



“ This is an industry that’s ever changing, and if you miss an opportunity to become educated on those new trends, you’re behind. So you have to be here, in order to stay on top of what’s going on and stay current. ”

-Patrick Rea,
CEO & Co-Founder
at Canopy Accelerator

Marijuana
Business **MJBizCon**

Las Vegas Convention Center
November 15-17, 2017

MJBizCon: The Industry Show You Can't Miss

14,000

cannabis business
leaders and investors

650+

exhibitors ready for serious
business discussions



REGISTER TODAY AT
MJBizCon.com
OR CALL (401) 354-7555 X 1

Final Registration Deadline
ENDS 10/19
Register Today &
SAVE \$200!

Wheelin' & Dealin'

Recent deals, acquisitions and other announcements from North American cannabis companies

by Roger Fillion

Privateer Reels in \$58 Million

Marijuana-focused private equity company **Privateer Holdings** – coming off a \$122 million funding year – has increased its coffers with a significant raise of \$58 million. The Seattle-based company's recent Series B raise



is a combination of equity and a convertible note.

In 2016, Privateer became the first marijuana company to raise more than \$100 million,

and its latest funding brings the 7-year-old firm's total to \$180 million. Privateer owns U.S. cannabis companies **Leafly**, **Marley Natural** and Canadian medical marijuana licensed producer **Tilray**.

Cannabis Company Buys California Town

An Arizona-based ancillary marijuana company purchased a California town with the aim of transforming it into a cannabis tourism mecca, although the purchase already has encountered legal issues with the local county. **American Green**, based in Phoenix, paid \$5 million for the 80-acre town of Nipton, near the California-Nevada border. Nipton is about a one-hour drive from the Las Vegas Strip and four hours from Los Angeles.

But the plan could be in jeopardy because of a county ordinance that bars all sales, distribution and production of marijuana in unincorporated areas, including Nipton. The

county counsel's office reportedly sent American Green a letter soon after the deal notifying the company of the law, warning it will take appropriate legal action if necessary.

Maricann Inks Acquisition, Funding

Maricann Group, a Toronto medical marijuana producer and distributor, agreed to purchase biotech company NanoLeaf Technologies for \$30 million (CA \$38.5 million).

Under the acquisition, shareholders of Toronto-based NanoLeaf will receive some 18.3 million common shares of Maricann stock at \$1.68 per share. Maricann will also loan NanoLeaf roughly \$1.3 million in cash.

In another development, Maricann secured up to \$28 million in funding through a private placement of convertible debt. The funding will allow Maricann to expand annual production capacity at its facility in Langton, Ontario, by roughly 77,000 pounds to more than to 125,000 pounds.



American Green wants to make Nipton, California, a marijuana tourism mecca.



AiroClean420
AIR SANITATION

STOP POWDERY MILDEW **INCREASE PROFITS**



Visit us at Booth # 3506
Marijuana Business Conference
November 15-17, 2017
Las Vegas Convention Center

AiroClean420 is your completely Safe and Effective Preventive Control Solution

NO EMISSIONS!

Utilizing a patented Photocatalytic Oxidation (PCO) process, AiroClean420 processes contaminated air through a bio-conversion reactor that destroys powdery mildew and other fungal diseases inside the system without using or emitting toxic gases or chemicals!

- ✓ No Emissions
- ✓ Promotes Maximum Yield
- ✓ Ensures Quality Products
- ✓ Optimizes Production
- ✓ Destroys Airborne Powdery Mildew
- ✓ No OZONE or Toxic Gases/Chemicals
- ✓ Energy Efficient & Low Maintenance
- ✓ Regulatory Compliance

“Yes the Airoclean420 systems are working very well, the mold has disappeared from the grow, it was like magic that soon as I put up the last one the mold was gone! Excellent product I have recommended to many of my colleagues.”

Adam Silvestri – Choice Cannabis

For more information
Call 1-844-247-3913 or Visit airoclean420.com



MADE IN THE USA SINCE 1984

Franwell Lands Ohio Contract



Ohio medical marijuana regulators have chosen two vendors to develop the state's seed-to-sale and online licensing systems.

The Ohio Department of Commerce awarded a \$1.3 million contract to Florida-based **Franwell** for its Marijuana Enforcement, Reporting, Tracking and Compliance [METRC] seed-to-sale system. METRC is used in several cannabis states, including California.

Persistent Systems, a technology company headquartered in India with U.S. operations, won a \$574,000 contract to design and build Ohio's e-licensing system to track the licenses required for marijuana growers, processors, testing labs and their employees.



Tilray is converting a pepper farm into a marijuana production facility.

Tilray to Invest \$24 Million to Create Large Facility

Canadian medical marijuana producer **Tilray** will invest \$24 million [CA\$30 million] to convert an Ontario pepper farm into one of the nation's largest MJ production facilities. The project's initial phase will give Tilray – a unit of **Privateer Holdings** – a fivefold increase in production capacity to almost 90,000 pounds a year by the end of 2018.

The boost in output will allow the company to serve Canada's rapidly expanding medical marijuana program and, ultimately, the nation's new recreational market. Full rollout of the Ontario facility, in the township of Enniskillen, ultimately would see Tilray's annual production rise to over 220,00 pounds over the next few years.

Dixie Elixirs Issues Recall

Dixie Elixirs, one of the biggest names in the edibles business, has issued a voluntary recall for six products in Colorado because of potentially unsafe non-food-grade essential oils. **Left Bank LLC**, which does business as Dixie Elixirs in Colorado, recalled four recreational cannabis products and two that are medical, including specific batches of Dixie mints, tablets and chocolate bars.

Canadian Firm Buys Florida Land to Boost MMJ Output

The Canadian holder of a license to cultivate medical marijuana in Florida plans to expand its production capacity in the state by more than 35 times.

Liberty Health Sciences, based in Toronto, agreed to purchase 36 acres of land in Alachua County for \$866,975 in cash. The deal will help the company capitalize on the

launch of the Sunshine State's full-fledged MMJ market.

The parcel is adjacent to the company's existing 13,000-square-foot grow facility at Chestnut Hill Tree Farm, which produces 1,543 pounds of MMJ annually. Liberty holds one of Florida's 11 MMJ cultivation licenses.

Florida Firms Win MMJ Licenses

Sun Bulb Co. in Arcadia, Florida, and **Treadwell Nursery** in Eustis won medical marijuana business licenses from the state. The move increases to 11 the number of companies authorized to grow, process and distribute MMJ in Florida.

A week earlier, regulators issued approval letters to **Plants of Ruskin** and **3 Boys Farm**, both in Ruskin.

Company Wins Final New Jersey License

Six years and several executive and investor changes later, **Harmony Foundation** became the sixth and final medical marijuana business in New Jersey to get its state license.

The dispensary plans to be operational by the end of the year. Harmony will operate as a vertically integrated grow and dispensing business out of a 10,000-square-foot greenhouse and retail space in Secaucus, New Jersey.

CCRI Wins Delaware's Fourth Medical Cannabis License

New Jersey-based **Compassionate Care Research Institute** [CCRI] won a medical marijuana production and distribution license in Delaware – the fourth permit the state has given out. CCRI previously applied for permits in two counties but lost out to other applicants, so regulators decided the company was the best suited candidate for the fourth license.

Oregon Testing Company Expands to Florida

Signal Bay – a marijuana-focused holding company in Bend, Oregon – has expanded its marijuana testing division to Florida through a licensing agreement with a Fort Lauderdale-based holding company, **Kaycha Holdings**. Under the agreement, Signal Bay subsidiary EVIO Labs will operate under the EVIO Labs brand.

Florida Bank Welcomes MMJ Businesses

Orlando, Florida-based **First Green Bank** has opened accounts and granted financial services to six licensed Florida medical marijuana businesses.

First Green Bank's services include accepting large cash deposits from marijuana firms – without touching the money – and transporting the funds straight from the business to a Federal Reserve location via armored trucks.

MassRoots Buys CannaRegs for \$12 Million

Cannabis social media platform **MassRoots** acquired **CannaRegs** in a stock deal valued at about \$12 million. CannaRegs is a website dedicated to helping cannabis companies stay atop of ever-changing industry regulations.

According to Denver-based MassRoots, CannaRegs is cash-flow positive and has annual revenue of at least





Your all-in-one sales lead and competitive intelligence

Marijuana Business Daily brings you the 2017 newly updated and verified Marijuana Business License Directory. This directory provides you with information you can trust with over 8,391 validated addresses, numbers, and contact information nationwide. Whether you purchase the hardcopy or stick to the periodical updated digital versions, you'll know you have the best and most current information available.

**ORDER YOUR
NEW COPY TODAY!**
MJBIZDAILY.COM/LICENSE-DIRECTORY

**Marijuana
Business
License
Directory**

\$450,000 through client contracts. MassRoots CEO Isaac Dietrich said the acquisition will help his company ramp up its “compliance offerings” to customers while also helping his company bolster its income.

Cronos Secures \$32 Million for Big Indoor MJ Facility

Cronos Group secured \$32 million [CA\$40 million] for the continued construction of its 315,000-square-foot new Peace facility in Stayner, Ontario, which it says is the largest purpose-built indoor cannabis production facility in the world.

Cronos, based in Toronto, entered into a commitment letter for \$32 million in debt financing with **Romspen Investment Corp.**, which will provide the funds to Cronos' wholly owned licensed producer, **Peace Naturals Project Inc.**



Steep Hill Labs Raises \$2 Million

Steep Hill Labs, a marijuana-focused science and technology company, closed a second \$2 million investment round.

The Berkeley, California-based company said it will use the funding to scale up in California and expand its global footprint. The company, citing investor interest, opened an additional \$2 million round of preferred convertible notes.

Aphria Invests in Scientus, Unveils Partnership

Canadian medical marijuana producer **Aphria** is increasing its stake in the booming cannabinoid-based extracts market with a \$9 million [CA\$11.5 million] investment in **Scientus Pharma**, a vertically integrated biopharmaceutical company.

Toronto-based Scientus Pharma conducts research and product development related to medical cannabinoids and their derivatives. The investment is in the form of senior, secured convertible debt.

Aphria, based in Leamington, Ontario, said the investment also gives it access to Scientus' so-called dealer's license. The holder of such a license is permitted to buy, process and sell cannabinoid derivatives in international markets.

Separately, Aphria is partnering with an upstart Canadian producer to build a 1 million-square-foot MJ greenhouse in Leamington. Aphria also is pumping \$1.6 million into its new partner, **Nuverra Corp.**, through a share purchase. Nuverra is in the final stages of the Health Canada review process to become a licensed producer.

Company to Acquire New York Licensee

iAnthus Capital Holdings is poised to acquire **Citiva Medical** – one of five companies recently awarded a medical marijuana license to operate in New York – in a deal valued at \$18 million.

Simplify your labeling from seed to sale.

Label compliance is easy with Afinia Label's Desktop Digital Color Label Printers



Label Printing Solutions for Every Level of Production
Learn more about our solutions at afinialabel.com/mjbiz

The acquisition must be approved by New York regulators and the Canadian Securities Exchange (CSE). CSE approval is needed because iAnthus – which has offices in New York and Toronto – trades on that exchange. The transaction includes \$3.6 million in cash and \$14.4 million in iAnthus shares priced at \$2.40 per share.

In announcing the deal, iAnthus also said it's no longer seeking to acquire Valley Agriceuticals, which obtained its New York MMJ license at the same time as Citiva Medical.

Two Canadian Companies Win Licenses

Experion Biotechnologies of Vancouver, British Columbia, and **Zenabis** of Atholville, New Brunswick, have won licenses to cultivate medical cannabis in Canada.

The country now has approved 54 licensed producers, though it has a backlog of more than 400 applications.

Cannabis Sativa Buys Majority Stake in PrestoDoctor

Cannabis Sativa – which owns cannabis and hemp companies and is based in Mesquite, Nevada – acquired 51% of **PrestoDoctor**, a medical marijuana telemedicine platform that provides consultations for medical marijuana patients. Terms weren't disclosed.

PrestoDoctor launched in California in 2015 and expanded its services to Nevada the following year.

According to a news release, PrestoDoctor has facilitated tens of thousands of appointments and is the first MMJ company to be accepted into the American Telemedicine Association. PrestoDoctor joins other subsidiaries owned by Cannabis Sativa, including iBudtender, Hi Brands International, Wild Earth Naturals and White Rabbit.

California Law Firm Launches Cannabis Practice

Dickenson Peatman & Fogarty, a California law firm, launched a cannabis practice group that will serve companies in the state's marijuana industry. DP&F said it has a long history of representing businesses in regulated industries, including the alcohol sector.

Erin Carlstrom, a senior counsel, will lead the new cannabis practice group based out of DP&F's Santa Rosa office. ◆



Attorney Erin Carlstrom leads a new cannabis practice group.

Have a company announcement you want us to consider? Send a press release or general information to: OmarS@MJBizDaily.com. [Note: We're looking for news about expansions, financing, deals, partnerships and similar developments, not product-related announcements.]



It's the 21st Century.
Don't just lower your temperature.
CONTROL IT.



Visit us at
MJBizCon
in Las Vegas

USING **DRY ICE** AND **TAP WATER** IN YOUR SHORT PATH DISTILLATION WEAKENS YOUR PRODUCT PURITY. **POLYSCIENCE TEMPERATURE CONTROL WILL SAVE YOU MONEY AND INCREASE YOUR YIELDS.**

 **PolyScience**[®]
Temperature Control Solutions

EXTRACTIONCHILLER.COM
Extraction • Rotary Evaporator • Short Path Distillation • Cold Trap

Movers & Shakers

A look at some recent hiring moves in the marijuana industry

by Omar Sacirbey



Taylor West

Taylor West Accepts Opportunity to 'Stretch Out'

Attention to detail and curiosity have led to a new career path for **Taylor West**, former deputy director of the National Cannabis Industry Association.

Earlier this year, West noticed that an NCIA member, Denver-based Cohn Marketing, had renewed its membership under a new name, Cohnnabis. The name change reflected a new canna-centric division the firm was creating and also formalized the company's commitment to the marijuana sector.

Founded in 2000, Cohn built its reputation in the mainstream business world but moved into marijuana marketing relatively recently. The new moniker and direction piqued West's curiosity. So, when she bumped into Cohn's vice president of marketing at the Cannabis Business Summit in Oakland in June, conversations about the company's cannabis efforts soon grew into discussions about how West might be a part of that effort.

"It became clear they had some very exciting plans but needed some additional industry expertise," West

said. "Those conversations kind of organically grew into how I might be in a good position to help them achieve their goals."

The move was also appealing to West because her work at NCIA was almost exclusively about policy change and lobbying Congress while the new post is more about marketing for young, growing marijuana companies.

"It's fun for me to stretch out into the business areas since I haven't done as much of that before," she said.

West spent her first few weeks at Cohn looking at the marijuana industry as a whole and identifying industry segments and companies that can benefit from Cohn's services.

The move is also good news for the marijuana industry, since having a successful non-cannabis firm like Cohn entering the sector adds more legitimacy, West said.

"One of the things that made this position so attractive to me is that this is a company that has proven its ability in lots of large established industries," West said, "and they see a lot of opportunities in cannabis, and an exciting, evolving business sector."

West said Cohnnabis has national ambitions in the long term, especially in California, which will soon launch its recreational marijuana program.



Surna Revamps Management Team

Surna, a Boulder, Colorado, supplier of cultivation equipment, revamped its senior management team, including hiring a new CEO and CFO.

Chris Bechtel is Surna's new CEO and president; **Paul Kelly** is the new CFO and treasurer.

Bechtel, 58, replaced former CEO and president **Trent Doucet**, who is now vice president of business development for Surna's West Coast operations.

Surna also hired:

- **Camille Lupton** as head of sales
- **Jaime Loos** as director of project management
- **James Holmstead** as director of operations and product development

Bechtel joined Surna's board of directors on May 31. His cannabis industry experience dates to 2014, when he joined the board of Supreme Pharmaceuticals, a Canadian federally licensed producer of medical cannabis in Ontario. From October 2014 to April 2016, Bechtel also served as a director at Ebbu, a privately held Colorado company that offers branded cannabis products and a bulk oil extraction service for marijuana producers.

Since 2015, Bechtel has been the principal of Bechtel Consulting, which provides consulting services in

mergers and acquisitions, financial and investment analysis, capital markets, turnarounds and special situations.

Kelly, 60, has held senior management posts at PricewaterhouseCoopers, Adolph Coors, Technology Management Advisors and other major firms. He has also served as consultant to smaller startup companies.



Jim McCormick

Kush Hires Tobacco Vet as CFO

Kush Bottles, the Santa Ana, California, provider of packaging, supplies, vaporizers and other marijuana-related products, appointed tobacco industry veteran **Jim McCormick** as chief financial officer.

McCormick spent 16 years with British American Tobacco, where he held multiple general management and CFO roles. He also has served as CFO at Electronic Cigarettes Group International and as senior vice president and CFO of the Corporate Services Division at Sodexo, a Massachusetts facilities management company. More recently, he has worked as a management consultant in the California cannabis sector.

As CFO, McCormick leads Kush Bottles' financial operations and also is responsible for managing liquidity,

balance sheet risk and capital market transactions. He reports directly to Nick Kovacevich, Kush's co-founder and CEO.

Kush Bottles' previous CFO, **Chris Martin**, is consulting for Kush during the transition.

Houston MMJ Company Selects Officers

Indoor Harvest, a Houston company that makes medical cannabis and cultivation products, appointed **Rick Gutshall** as interim CEO and CFO. Gutshall has served as CFO of Alamo CBD since June 2016 and has been a principal in KW Gutshall & Associates since 1999.

Annette Knebel is Indoor Harvest's new chief accounting officer. Since June 2016, she operated a financial reporting and business consulting firm that offered outsourced accounting management.

Arkansas Industry Group Hires Media Specialist

The Arkansas Cannabis Industry Association made its first hire, adding **Erin Holland** as media specialist and membership consultant. Owner of Amplify, a new digital media and marketing company in Little Rock, Holland is responsible for building and implementing the ACIA's

media, marketing and event promotion strategies. She also works with industry professionals to develop a membership program for medical cannabis patients, physicians and business leaders in the Arkansas cannabis industry.

Holland previously held digital advertising and production positions with the Arkansas Times, Sells Agency and Agency501.



Erin Holland

Arkansas Trade Association Gets New Board Chair

The Arkansas Medical Marijuana Association, a trade group, appointed **Dr. Regina Thurman** of Fayetteville as chair of its board of directors. Thurman is medical director for Optimal Pain and Wellness in Fayetteville. She replaced Dr. Steve Cathey, who chose not to serve on the board to avoid any appearance of a conflict of interest with his position on the Arkansas State Medical Board.



Dr. Regina Thurman

HiLUX GRO™

professional grade horticulture lamps

USHIO Professional Grade Lamps

Professional growers will not use just any lamps to get just any results. They require specialty grade lamps to maximize their growth and profits. This is why professionals choose USHIO, a Japanese specialty lighting manufacturer.

Don't wait, upgrade your system today with USHIO's Hilux Gro™ professional grade CMH, MH and HPS lamp types.

(Operate lamps on suitable ballasts and ignitors only. Operate lamps on high frequency ballast only specifically designed for DE lamps.)

USHIO

www.ushio.com | 800-838-7446





George Jage

Dope Lands New CEO

The board of directors of Seattle-based Dope Media has hired former *Marijuana Business Daily* president and publisher **George Jage** to serve as chief executive officer.

Jage, who worked at *Marijuana Business Daily* from 2014 until April 2017, started with Dope in August.

David Tran, who founded Dope in 2011, moved from CEO to chief brand officer and continues to serve on Dope's board. The company owns Dope Magazine, which circulates monthly to about 70,000 readers and is sold in retail locations across the country.

BudTrader Gets New Adviser

BudTrader.com, which bills itself as the nation's largest online platform for the legal cannabis industry, appointed a new member to its advisory board - **Douglas Leighton**, co-founder and a principal partner of Dutchess Capital, a Boston-headquartered global hedge fund.

At Dutchess, Leighton oversees risk management, facilitates all the fund's trading on worldwide exchanges

and manages deal origination in North America, Europe and Australia. He has managed an investment portfolio of over \$2 billion in transactional value.

BudTrader says it has 1 million registered users.

Oregon Lab Hires Operations Director

Cascadia Labs, an Oregon cannabis testing company, brought on **Dennis Wells** as director of operations. Wells has 30 years of environmental testing experience and has held roles as laboratory director and senior chemist. Wells is responsible for day-to-day operations at Cascadia's Portland and Tigard locations.

MMJ Company Taps Breeder for Board

United Cannabis Corp., a medical marijuana producer in Denver, appointed **David Watson** to its advisory board. A seed and cultivar breeder, Watson founded and serves as CEO of HortaPharm B.V. in the Netherlands. ♦

Hired or promoted someone for a senior-level position? Send a news release or general information to OmarS@MJBizDaily.com

VegeLumax
DOUBLE ENDED
 Grow Light Fixture Kit

NEW!

Compact patent design
 Improve strengthen reflector
 For 600W & 1000W DE lamps

G-Star Kit

E-Star Kit

UL LISTED

Scan TO Buy

<http://www.vegelumax.com>
 info@vegelumax.com

GROW GREEN

Remove mold spores and contaminants from incoming air and indoor air, and remove odors from exhaust air, without the high costs of energy and maintenance.

Dynamic V8 Air Cleaning System

Dynamic Activated Carbon Matrix

dynamic
 Air Quality Solutions

www.DynamicAQS.com

Marijuana Business **License Directory**

All-In-One Sales Lead and Competitive Intelligence

Contains 8,391 validated addresses, numbers and contact information nationwide!



ORDER YOURS TODAY AT MJBizDaily.com/license-directory

INTRODUCING KUSHIEJOBS.COM

KUSHIEJOBS
KUSHIEJOBS.COM

SET YOUR SIGHTS HIGHER • FIND TOP SHELF TALENT
SEARCH JOBS IN THE MJ FIELD!

Holistic Security Solutions for the Legal Cannabis Industry



Viridis
Security Group

Learn more at:
www.ViridisSecurityGroup.net



Green Mill 
SUPERCritical

MORE PRESSURE. MORE PROFIT.

2000 psi simply isn't enough to get the job done.

Visit us at MJBizCon
BOOTH 4614

greenmillsupercritical.com



NOVEMBER 15-17 | LAS VEGAS CONVENTION CENTER

Marijuana Business **MJBizCon**

REGISTER BY OCT 19TH AND SAVE UP TO \$200.00 ON SELECT REGISTRATIONS

REGISTER NOW AT MJBizCon.com or call (401) 354-7555 x1

John Chigbu, Esq

Citigroup Center
One Sansome Street
Suite 3500
San Francisco, Ca 94104

CHIGBU & C^o LLP
Attorneys at Law

Lake Merrit Plaza
1999 Harrison Street
Suite 1800
Oakland, Ca 94612

Tel: 415-946-8866; 510-496-4675
Fax: 415-946-8801; 510-496-4601

jchigbu@chigbu.com
www.chigbu.com

Chigbu & Co, LLP is a boutique International Business and Tax Law firm specializing in business structuring that comply with applicable Marijuana laws in California and other states. Our goal in every set-up is to ensure that your company and its operations are compliant with our state laws, federal regulations such as §§280(e), inventory accounting for mutual benefit corporations/coops, and bank secrecy act (or banking prohibitions).

Our team of attorneys are experts in all forms of business set-up and will ensure that your visit to us is a one-stop shop because we collaborate with regulatory attorneys that can assist your company in obtaining licenses and permits for Cannabis operations, as well as patents, trademarks, and copyrights.

We are responsive and work very fast because of our familiarity with the issues facing cannabis operators after representing over 30 companies and providing winning structures that minimize legal and tax exposures.

Illinois

The size of the medical marijuana patient pool in Illinois tripled throughout the course of 2016, driven by a streamlined MMJ recommendation process and the addition of post-traumatic stress disorder and terminal illness to the list of qualifying conditions. Patient counts also have continued to rise in 2017, suggesting that the state's MMJ program may have found its footing. The growth in patients was sorely needed, because Illinois' medical marijuana businesses – which face some of the most expensive licensing fees in the nation – have struggled to remain financially viable.



Main measure	House Bill 1	
Year passed	2013	
Cannabis business regulations	Very heavy. Illinois is a complex market for MMJ businesses to navigate. The state has implemented caps on the number of dispensaries and cultivation sites allowed to operate, and licensing fees are pricey. Strict rules govern nearly all aspects of business operations, including location, security, inventory tracking and testing. Illinois' MMJ program is technically a pilot program, set to expire July 1, 2020.	
Patient registry	Mandatory – a recommendation from a physician is required, and patients are required to submit fingerprints and undergo a background check.	
Sampling of state medical marijuana licensing fees	<p>Application</p> <p>Dispensary - \$5,000</p> <p>Cultivators - \$25,000</p>	<p>License</p> <p>Dispensaries - \$30,000 (new), \$25,000 (renewal)</p> <p>Cultivators - \$200,000 (new), \$100,000 (renewal)</p>
What to watch	<p>In March, a federal judge struck down an Illinois law barring MMJ businesses and cannabis-centric political action committees from donating to PACs and candidates within the state. The development could allow the state's MJ industry to exert more influence over politicians and give it a bigger say in local elections.</p> <p>As of July 31, more than 23,000 patients had enrolled in Illinois' MMJ program – up 57% from December 2016. Such strong growth appears to be attracting out-of-state MJ brands looking for their next opportunity. Kiva Confections – a major manufacturer of infused chocolate edibles based in California – struck a partnership with Illinois-based Cresco Labs that allows Kiva to sell its products in the state.</p>	

Our Advertisers

Accelerated Growth Solutions LLC.....	85
Afinia Label.....	118
Airganics Filtration.....	49
AiroClean420.....	115
Bellpark Horticulture.....	97
Bud Bar Displays.....	22
Budmaster LED Ltd.....	101
CalCann Holdings, Inc.....	23
California Lightworks LEDs.....	83
CannaMav.....	66
Chigbu & Co LLP.....	124
Colorado Extraction Systems.....	Inside Back Cover
Delta-T.....	27
Desert Pacific Properties.....	61
Druk Engineering.....	99
Dynamic Air Quality Solutions.....	123
Eagle Stainless Container.....	69
eBottles.....	65
Envirotech Greenhouse Solutions.....	9
Gavita Horticultural Lighting.....	1
gPod by Data Aire.....	35
Green Life Business LLC.....	52-53
Green Mill Supercritical.....	124

Greenlane Dispensary Services.....	5
Grower's Choice.....	87
Growers Supply.....	81
Growlink.....	39
HempTech Corp.....	107
Horizon Display.....	15
Hortilux.....	103
Hydrotek.....	21
IMEX Packaging.....	26
Integra by Desiccare.....	11
Kaplan Industries Inc.....	13
Marijuana Business Daily.....	117
Marijuana Business Daily.....	127
MarijuanaBusinessOperations.com.....	78-79
Medicine Man Technologies.....	2-3
Micro Lab Farms.....	91
MJBizCon.....	112-113
MULTIPOND America Inc.....	24
Nama Science.....	75
Nanolux Technology Inc.....	29
NexTec Group.....	17
Nexus Greenhouse Systems.....	41
NorthText Inc.....	Inside Front Cover
Orange Photonics.....	25
Pacific Media Inc.....	124
Packaging Concepts Associates, LLC.....	109
Paxiom Group.....	67
PayQwick, LLC.....	63
PolyScience.....	119
Marijuana Business Daily.....	92
Precision Extraction Solutions.....	19
Revolution Microelectronics Co., Ltd.....	42-43
Schaefer Technologies, Inc.....	73
Schools and Tools.....	77
Shenzhen Transpring Enterprise Ltd.....	88-89
SIVA Enterprises.....	Back Cover
Solexx.....	51
Suluxlight Lighting Co., Ltd.....	123
Surna.....	57
Tecogen.....	47
The Arcview Group.....	111
The Bucket Company.....	95
Total Grow Control.....	105
Total Pharmacy Supply.....	71
Twister Trimmer by Keirton.....	93
United Label.....	126
Urban-Gro.....	30-31
Ushio America, Inc.....	122
Viridis Security Group.....	124
Visual Elements.....	33
Xact Xtract & Cubix.....	59

UNITED LABEL & SALES CANNABIS LABELING SOLUTIONS



The Most Impactful Event In The Industry

“Every business decision maker is here, you have to be here every year. This is the one-stop-shop for all your business development needs at a conference.”

-Jennifer Hanser,
VP of Global Business
Affairs at Tilray Global

Marijuana
Business **MJBizCon**

Las Vegas Convention Center
November 15-17, 2017

Final Registration Deadline
ENDS 10/19
Register Today &
SAVE \$200!

REGISTER TODAY AT
MJBizCon.com
OR CALL (401) 354-7555 X 1



“
**What They're
SAYING**
”



"If you don't have enough flower for the foreseeable future ... you shouldn't open. That's like going to a soft opening for a restaurant and all they have is buns for the hamburgers. No meat. No filler."

- **Chris Garth**, executive director of the Hawaii Dispensary Alliance, on his concerns about medical marijuana businesses opening without enough product.

Source: Marijuana Business Daily



"Marijuana is a property industry, a real estate industry. Square foot equals revenue equals profit. Early on, you had to get low rent because you didn't have a lot of revenue. But now that revenues are higher, [cannabis retailers] are moving into nicer areas."

- **Greg Gamet**, founding partner in cannabis businesses in Colorado and California, on the evolution of marijuana companies initially locating in low-income areas and then moving to more desirable digs.

Source: Marijuana Business Daily



"It is extremely important that, as this industry develops here in the city of Los Angeles, it is done with consciousness, that it is science [and] data driven [and] based ... We intend to protect legal businesses here serving Los Angeles."

- **Cat Packer** on the approach she plans to take as executive director of Los Angeles' newly formed Department of Cannabis Regulation.

Source: City News Service



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.



+



SCHEDULE A DEMO

ColoradoExtraction.com | 1.800.513.5560 | sales@coloradoextraction.com



**THE FIRM TO LEAD. THE VISION TO INNOVATE.
THE EXPERIENCE TO TRANSFORM.**

CONSULTING | MANAGEMENT | INSURANCE | BRANDS | INVESTMENTS | DISTRIBUTION

S I V A
ENTERPRISES

SIVALLC.COM

LOS ANGELES, CA | E: INFO@SIVALLC.COM | T: 818.562.3362

CA License# 0L85212