



CANNABIS QUALITY

STRATEGIES & SOLUTIONS SUMMIT

July 19-21, 2016 | Millennium Biltmore Hotel Los Angeles | Los Angeles, CA

BUILDING BEST PRACTICES & POLICIES TOWARDS A GLOBAL INDUSTRY

Agenda

Wednesday July 20, 2016 | Main Summit Day One

7:00-8:00 *Registration & Hot Breakfast Buffet Sponsored by:
Perry Johnson Laboratory Accreditation, Inc. (PJLA)*

8:00-8:15 *Introductory Chair Remarks*

Ezra Michael Pryor, *President, EZ CHEM CONSULTANCY INCORPORATED and Founder & Chair, CANNABIS CHEMISTRY SUBDIVISION AT THE AMERICAN CHEMICAL SOCIETY*

8:15-8:45 *Day One Keynote A: **Banking: The Big Elephant in the Room**
Status of banking in general, what CA and other states are doing, progress at the federal level and what other countries are doing.*

Fiona Ma, CPA, *Chairwoman, CALIFORNIA STATE BOARD OF EQUALIZATION*

8:45-9:15 *Day One Keynote B : **Political and Legal Challenges of Implementing MMRSA at the Local Level***

In 2015, California passed groundbreaking legislation in the Medical Marijuana Regulation and Safety Act that creates State licensing opportunities for cultivators, manufacturers, testing labs, and other business categories, starting in 2018. But MMRSA is a dual licensing system, meaning a local license or permit for the activity is a pre-requisite to obtaining a State license and municipalities can prohibit the activity entirely. Michael Chernis will discuss some of the practical problems faced in getting local buy-in to MMRSA from elected officials, using the City of Los Angeles as a model, given its size and importance to the cannabis industry and his experience as a lawyer and as Policy Director for the Los Angeles Cannabis Task Force.

Michael Chernis, Esq., *Policy Director, LOS ANGELES CANNABIS TASK FORCE*

Session I: Updates from Western State Oversight Offices

9:15-10:15 **Panel Discussion: State Regulatory Approaches to Cannabis Testing, Operations and Product Logistics**

This panel will consist of state officials “leading the charge” in coordinating different agencies around marijuana rules, as well as Quality Assurance/Operations /Toxicology experts who have insight into the complex, nuanced challenges of medical marijuana – a medicinal substance that straddles naturopathy, herbology, holistic health and doesn’t fit neatly with the conceptual models or business practices of big allopathic medicine.

- *What challenges are state officials facing in devising and deploying the right regulatory framework?*
- *What efforts and discussions are underway between states, that might lead to eventual harmonization?*
- *What are the different philosophies in play around specific safety, quality, standards, labelling issues?*
- *How are they handling permitting, licensing & enforcement timelines? What types of penalties are being envisioned? Will the penalties be calibrated to the different sizes and types of organizations?*
- *Where do industry-generated standards connect with state regulatory frameworks?*
- *What formal mechanisms are there for industry representatives to influence implementation?*
- *What kind of science needs to be done to support standards – will state agencies channel funding towards science R&D? Actions at FDA re opening up of cannabis R&D?*

Moderator:

Nate Bradley, Executive Director, CCIA

Panelists:

Ken Groggel, Manager, NEW MEXICO DEPT. OF HEALTH

Heather Krug, M.S., Marijuana Laboratory Inspection Program Coordinator, STATE OF COLORADO

Shannon Swantek, ORELAP Compliance Specialist, Oregon Public Health Lab, STATE OF OREGON

Kristi Weeks, JD, Review Officer and Policy Counsel, WASHINGTON DEPARTMENT OF HEALTH

10:15-10:45 **Networking Break**

Session II: The Challenge of Compliance for Small and Medium Size Operators

10:45-11:45 **Panel Discussion: The Cannabis Community Responds**

The idea of self-production and administration of treatments represents the very antithesis of institutionalized medicine – the system of hospitals, HMOs, insurers and prescription pharmaceuticals. Many long-time pioneers, patients and advocates of medical marijuana are worried, legitimately, that the push to full legalization, and the “industrialization of pot,” will wipe out many hard fought gains; the ultimate fear being the complete takeover of marijuana by giant corporations with patented, GMO single ingredient pills, and no individual grower or self-administration rights. Some trends in the full legalization and commercialization movement appear to be feeding this sentiment. Yet in many other cases protection of personal, small-scale and “boutique” grow operations is being built into the foundations of the laws, as in California. More pragmatically, the cost burden of compliance with new operational rules on small operations is a paramount concern. This panel will give a cross-section of voices from the medical marijuana and marijuana business community a chance to comment on what they have heard from state regulators and guide future efforts to craft workable operational, quality and safety guidelines.

Moderator:

Francis DellaVecchia, *Cannabis Funding Consultant*, BLAK BOX GROUP; *Start-up Consultant*, FIX IT FRANCIS

Panelists:

Hezekiah D. Allen, *Executive Director*, CALIFORNIA GROWERS ASSOCIATION

Deepak Anand, *Executive Director*, CANADIAN NATIONAL MEDICAL MARIJUANA ASSOCIATION (CNMMA)

Lezli Engelking, *Founder*, FOCUS: FOUNDATION OF CANNABIS UNIFIED STANDARDS

Valerie Leveroni Corral, *Director*, THE WO/MENS ALLIANCE FOR MEDICAL MARIJUANA (WAMM)

Steph Sherer, *President*, AMERICANS FOR SAFE ACCESS and *Director of Innovation*, INTERNATIONAL CANNABIS AND CANNABINOID INSTITUTE

Taylor West, *Deputy Director*, NATIONAL CANNABIS INDUSTRY ASSOCIATION

11:45-1:15 *Group Luncheon*

Session III: Operations: Protecting Revenues and Brand by Assuring the Quality of Your Product

1:15-1:45 **Presentation: Contaminants Overview & Pesticide Cases– Legal Implications for Participants?**

It is an accepted fact that no one has ever died from a marijuana overdose. Yet many medical marijuana patients are immune-compromised, and repetitive consumption of even trace pesticides could pose a health risk. A recent paper identified pesticides in various marijuana products in Washington state. In Colorado 24,000 cannabis-infused items were recalled (but just recently released) over similar concerns. With the growth of a more fluid, opaque market, product from less scrupulous growers is getting into dispensaries. This presentation will provide the latest survey and insights into the challenges of identifying pesticide traces and practices around pesticide use in grow operations.

Jeffrey C. Raber, Ph.D., *CEO and CVO*, THE WERC SHOP

1:45-2:15 **Presentation: An Introduction to Quality Operations – What You Need to Know**

While a lot of the focus of late has been on testing, the reality is that testing of cannabis samples is only useful when “Good Manufacturing Practices” (GMP) are already being carried out. The results of the test need to be traced back to the exact conditions under which the samples were grown or processed. Many “garage” growers, processors and infused product makers have next to no knowledge of the standards used in production operations of related industries, such as supplements, food products or cosmetics, for example. This presentation will give a basic background on quality manufacturing and why it is essential for a successful business operation, the different organizations that set the standards, and in what ways these need to be adapted to the unique needs of the cannabis world.

Nic Easley, *CEO*, COMPREHENSIVE CANNABIS CONSULTING

2:15-3:00 **Panel Discussion: Quality Manufacturing Practices for Cannabis: “A Pathway to Perpetual Improvement”**

Building on the previous presentations, this panel will explore practical business questions around implementing and improving GMP in operations, from a cross-section of speakers with deep knowledge. In some cases the speakers will represent large, professionalized cannabis operations, in others they may provide a perspective from a complementary, neighboring industry. Topics addressed will include:

- *What’s the value of GMP, and what’s the ROI and timeline to fully implement?*

- *Developing a quality system – what is this, it boils down to what are you doing how and can you prove it?*
- *Getting your feet wet – a gap analysis? Where do you stand vis-a-vis peers and what seems to be coming down the line*
- *What is the rationale for setting up an internal lab? What is the cost of accreditation for ISO etc? What kinds of equipment, skillsets and training does it require?*
- *Which tests are mandated to be performed by independent labs?*
- *How will independent labs be certified?*
- *How do you get buy in from all the levels of your organization*

Moderator:

Alex Conn, Co-Founder and President, METAGREEN, INC.

Panelists:

Joshua Eades, PhD, Vice President & Chief Science Officer, TILRAY

Trish Flaster, Executive Director, BOTANICAL LIAISONS, LLC

Holly E. Johnson, Ph.D., Laboratory Director, ALKEMIST LABS

Cindy Orser, PhD, Chief Scientific Officer, DIGIPATH, INC & DIGIPATH LABS

Aundre Speciale, Director, CBCB; ABATIN; PHYTOLOGIE

3:00-3:30 Networking Break

Session IV: Product Standards: Developing Testing Standards and Understanding What Test Results Mean

3:30-4:00 **Presentation A: A Medical Marijuana Testing Overview**

- *Why bother with testing? Safe products for medical and recreational users and legal requirements*
- *What testing is required? A review of required testing in various jurisdictions*
- *Potency, microbial, residual solvents, pesticides and heavy metals*
- *What does having a “validated” method mean? What potency methods are available and requirements for validations for in house development*
- *Building your own laboratory vs. out sourcing to a third party lab*
- *Challenges for Cannabis testing*
- *Future of Cannabis testing*

Emily Kirkham, Chief Operating Officer, SIGNOTO CORPORATION

4:00-4:30 **Presentation B: Establishing Quality Assurance in a New Industry**

- *Selection criteria for Cannabis QA testing ☐ We're testing for what?*
- *"AREAS" protocol (Achievable, Reproducible, Easy to Understand, Affordable, and Scientifically valid Problems with pesticides*
- *Problems with residual solvents*
- *Cannabis laboratories as a source of new information/education*

Robert W. Martin, Ph.D., Co-Founder and Chief Operating Officer, CW ANALYTICAL, INC.

4:30-5:00 **Presentation C: The Cannabis Chemistry Subdivision at the ACS**

- *Presenting on the origin, present and future of CANN.*
- *Who should become a member?*

- *How CANN is changing the industry for the better?*

Ezra Michael Pryor, *President*, EZ CHEM CONSULTANCY INCORPORATED and *Founder & Chair*, CANNABIS CHEMISTRY SUBDIVISION AT THE AMERICAN CHEMICAL SOCIETY

5:00-5:30

Presentation: Cannabis Lab Accreditation and the Strength of ISO 17025

This presentation will include an overview of ISO/IEC 17025:2005 and its benefits for testing facilities and state regulatory bodies. The number of states regulating medical marijuana laws is rapidly growing. One very important aspect is to ensure that products are being tested and that the laboratories have been deemed competent to test for containments and potency levels that can cause health risks to consumers. ISO/IEC 17025:2005 captures various critical aspects for testing laboratories to adhere to. This standard promotes good laboratory practices and sets a consistent model among all laboratories holding the same accreditation credential.

Tracy Szerszen, *President*, PERRY JOHNSON LABORATORY ACCREDITATION, INC (PJLA)

5:30-5:40

Remarks by the Networking Reception Sponsor

Ezra Michael Pryor, *President*, EZ CHEM CONSULTANCY INCORPORATED and *Founder & Chair*, CANNABIS CHEMISTRY SUBDIVISION AT THE AMERICAN CHEMICAL SOCIETY

5:40-6:40

Networking Reception Sponsored by:

Cannabis Chemistry Subdivision of American Chemical Society (ACS)



Thursday July 21, 2016 | Main Summit Day Two

7:00-8:00

Registration & Continental Breakfast

8:00-8:05

Chair Remarks

Ezra Michael Pryor, *President*, EZ CHEM CONSULTANCY INCORPORATED and *Founder & Chair*, CANNABIS CHEMISTRY SUBDIVISION AT THE AMERICAN CHEMICAL SOCIETY

8:05-8:30

Day Two Keynote: Cannabis Pharmacovigilance

- *On the Health and Safety Audit*
- *Adverse events - mitigation, liability, self-reporting*
- *Adoption of AHPA standards by 16 states*
- *Internal regulation initiatives - creation of industry open repositories, data sharing among manufacturers ("pre-regulatory")*
- *Good public and private policy, being respectful of consumers*

Jahan Marcu, Ph.D., *Chief Scientist, AMERICANS FOR SAFE ACCESS*

Session IV, continued: Product Standards: Developing Testing Standards and Understanding What Test Results Mean

8:30-9:30 **Panel Discussion: Defining the Right Standards for a Unique Medical and Consumable Product**

This panel will bring together technical leaders from independent marijuana testing labs as well as testing and tox experts from related disciplines to discuss the state of the art, how industry-led initiatives can fit in with state regulatory programs, and how the testing role fits into evolving state of knowledge and medical practice around cannabis, its unique consumption formats, its unique complexity, and the rapidly emerging biomedical revolution of the EndoCannabinoid signaling system.

- *How does a testing capability internal to an operation look different from a full independent testing lab? Is this a future trend?*
- *Who will certify the testing labs?*
- *What technical societies are in the lead – will the marijuana movement need to develop its own technical society?*
- *Discussion of “pharmacokinetics” of the different administration routes – vaporizer vs. edibles vs. e-cigarettes, etc.*

Moderator:

Cindy Orser, PhD, *Chief Scientific Officer, DIGIPATH, INC & DIGIPATH LABS*

Panelists:

Jennifer Bash, *Senior Analytical Forensic Toxicology Specialist, UIC ANALYTICAL FORENSIC TESTING LABORATORY*

Alex Conn, *Co-Founder and President, METAGREEN, INC.*

Christopher J. Hudalla, Ph. D., *Founder and Chief Scientific Officer, PROVERDE LABORATORIES*

9:30-10:00 **Networking Break**

10:00-10:45 **Panel Discussion: Managing the Cost and Operational Challenges for All of the New Mandated Practices**

This panel will provide a closing discussion reviewing everything that has been said and learned over the previous two days, in terms of the business and management challenges of moving to the next level of professionalism and technical chops. Panelists will include a large grower or growers alliance, alliance of dispensaries and/or pioneering coop, an infused product manufacturer, a testing lab and a policy advocate from a leading marijuana trade or advocacy association. Panelists will address topics such as:

- *What are the problems? Cost factors for growers, collectives, startups and extractors?*
- *What is the trade off in brand credibility and customer loyalty versus myriad costs to boost technical competency, procedures and equipment?*
- *What solutions are currently in use, or needed?*

- *What needs to be developed? What are the emerging best practices for tracking, labelling & packaging?*

Moderator:

Nate Bradley, *Executive Director, CCIA*

Panelists:

Aaron Justis, President, BUDS & ROSES

Aundre Speciale, Director, CBCB BERKELEY, PHYTOLOGIE OAKLAND AND ABATIN SACRAMENTO

Lindsay Topping, Director of Marketing, DIXIE BRANDS

Session V: Cannabis Innovation, IP & Investing

10:45-11:15 *Presentation: **Cannabis Patents and IP: Facts vs. Myths***

How to build a patent that will protect your strain, allow your neighbor to protect his strain, and not fall afoul of the Patent Technical Officer, who views preemption in a very bad light.

Reggie Gaudino, Ph.D., *Vice President, Scientific Operations & Director of Intellectual Property, STEEP HILL LABS, INC.*

11:15-12:30 *Panel Discussion: **Investment, IP & Cannabis Business Model & Product Innovation***

- Cannabis investing's unusually heavy sensitivity to politics & changing regulatory environment
- The "picks & shovels" analogy for cannabis investing – how does it apply to extraction, testing, services, product and device innovation?
- What new kinds of business models are we seeing in the cannabis space? Advent of digital, tech, app solutions & services helping entrepreneurs navigate the complex regulatory environment, and the complexities of testing, tracking, labelling.
- Cannabis strain and genetics IP strategies and challenges

Moderator:

Francis DellaVecchia, Cannabis Funding Consultant, BLAK BOX GROUP; Start-up Consultant, FIX IT FRANCIS

Panelists:

Alex Conn, *Co-Founder and President, METAGREEN, INC.*

Evan Eneman, Founding Partner and Managing Director, CASA VERDE CAPITAL

Jeffrey Friedland, *Author, MARIJUANA: THE WORLD'S MOST MISUNDERSTOOD PLANT; Founder, ISRAEL PLANT SCIENCES; CEO, INTIVA INC.; Advisor, FIRST HARVEST FINANCIAL; Director, CANNRX; and Managing Director, FRIEDLAND GLOBAL CAPITAL*

Christian Groh, Partner and Co-Founder, PRIVATEER HOLDINGS

Ben Larson, Co-Founder & Managing Partner, GATEWAY

Tohid E. Starr, *Founding Patient & CEO, EPOCH VENTURE GROUP*

12:30 Summit Adjourns