

Title: NIST 2022 Forensic Cannabis Workshop

Host: Walter Brent Wilson and Annie Yarberry

Description:

The legal cannabis market in the US grossed \$18.3B, which can be attributed to the passage of the 2018 Farm Bill that defined hemp as cannabis containing 0.3% or less of decarboxylated- Δ^9 -tetrahydrocannabinol and removed hemp from the US Drug Enforcement Agency controlled substance list. As a result, the legal cannabis market exploded with a large production of floral hemp plant that is used to produce a wide range of finished products. Forensic laboratories were dependent upon qualitative measurements prior to the 2018 Farm Bill and are now required to quantitatively measure decarboxylated Δ^9 -THC in seized cannabis to differentiate between hemp or marijuana, despite the lack of analytical tools.

In response, the National Institute of Standards and Technology (NIST) developed an integrated measurement services program for cannabis to ensure the quality of routine analysis in forensic laboratories, third party testing companies, and throughout the cannabis industry. The tools developed by NIST will include the development of fit-for-purpose analytical methodologies, standard operating procedures, administration of a series of interlaboratory studies for direct stakeholder engagement, and development of Reference Materials (RMs) for routine analysis in forensic laboratories.

This workshop will include presentations from NIST researchers and forensic scientists from outside of NIST. Session 1 presenters will provide an overview of the current state of cannabis testing in forensic laboratories moving from qualitative to quantitative measurements. Speakers will provide insight on modifications/issues encountered, while also providing insight into current and future needs. Session 2 presenters will focus on laboratory quality assurance in forensic laboratories and the Cannabis Laboratory Quality Assurance Program. The workshop will include a live round table discussion for the presenters to answer questions and exchange ideas with the audience.

Workshop Agenda: 8 Presenters and 2 Roundtable Q&A

1:00 pm Welcome Remarks/NIST Cannabis Overview – Kate Rimmer

Session 1: From Qualitative to Quantitative Evaluation of THC – Moderator Brent

1:10 pm Presenter 1 – Jerome Mulloor, NIST – Method Overview

1:30 pm Presenter 2 – Annie Yarberry, NIST – Survey of Current Forensic Lab Status

1:50 pm Presenter 3 – Sarah Shuda, NMS Labs – Testing Lab Perspective

2:10 pm Presenter 4 – Amber Burns/Katelyn Wentworth, MSP – Forensic Scientist Perspective

2:30 pm Round Table Q&A – Presenter 1 – 4

2:50 pm Break

Session 2: Laboratory Quality Assurance – Moderator Andrea Yarberry

3:05 pm Welcome Back/QAP Overview – Melissa Phillips, NIST

3:15 pm Presenter 5 – Walter Brent Wilson, NIST - CannaQAP

3:35 pm Presenter 6 – Christopher Larson, Las Vegas Metropolitan Police Department

3:55 pm Presenter 7 – Forensic CannaQAP Participant

4:15 pm Presenter 8 – Melissa Kennedy, ANAB – Forensic Accreditation

4:35 pm Round Table Q&A – Presenter 5 – 8

5:00 pm Closing Remarks – Walter Brent Wilson