



Florida Society of Environmental Analysts 2022 Fall Conference October 26-28, 2022

Day 1 - Wednesday October 26, 2022 – Workshops Environmental Labs – Track A

Wednesday Morning Session 8:15am – 12:00m (Break 10:00-10:30am)

Workshop 1 – Understanding and Using QC Measures ~0.35 CEUs – Silky Labie, ELCAT (Plaza Réal A)

Every analyst knows that a method blank and an LCS are included with each batch of 20 samples. During the analysis several kinds of blanks are analyzed. Too often, QC is performed “because it is required,” not because it provides useful information. This class will look at the types of QC measures that are routinely used during a sample’s lifetime in the laboratory and discuss how each measure helps to provide the laboratory and the data user with useful information on the quality of the test result.

Lunch 12:00-1:00pm – Provided by FSEA

Wednesday Afternoon Session 1:00pm – 5:00pm (Break 3:00-3:30pm)

Workshop 2 – Internal Audit ~0.40 CEUs – Michelle Wade, A2LA Workplace Training (Plaza Réal A)

A half-day workshop starting with a presentation on the nuts and bolts of internal audits including the TNI requirements and best practices. Followed with multiple exercises for the class in creating their own unique internal audit checklists for V1M2 of TNI as well as examples for both chemistry and microbiology methods. Final “product” from class will be shared with all participants following the conclusion of the course.

5:00-6:30pm Reception in Exhibit Area with Hors d’oeuvres and Door Prizes

Day 1 - Wednesday October 26, 2022 Cannabis Labs – Track B (Vista del Mar)

8:15 – 8:20am *Opening Remarks – Robin Cook, FSEA President*

8:20 - 9:10am *How to Prepare and Talk with Assessors – Shepherd Technical Services (REPEAT from Spring conference)*

This presentation is ideal for new analysts and/or people that are nervous about being assessed. We will cover how you can prepare before the assessor arrives and what to do when they are at your facility. The presentation will provide action items you can do to prepare for the best possible outcome of your assessment.

9:10 – 10:00am *Considerations for Seeking or Maintaining Cannabis Laboratory Accreditation – Michael Hintz, Dynamic Technology Solutions (REPEAT from Spring conference)*

As medical and recreational cannabis becomes legal in more states, the need for quality cannabis laboratories has increased substantially. This presentation is ideal for both new cannabis laboratories seeking accreditation for the first time, and existing laboratories trying to maintain accreditation in a rapidly changing regulatory environment. The presenter will take a mid-level dive into common regulatory, standard and method deficiencies identified during numerous preliminary (gap) audits and ongoing annual assessments performed at cannabis labs throughout the U.S., with a targeted focus on conformance to the required ISO/IEC 17025:2017 standard, and considerations for compliance with regulatory requirements in Florida.

10:00–10:30am *BREAK in Exhibit Area - Plaza Réal B & C*

Day 1 - Wednesday October 26, 2022 Cannabis Labs (continued) – Track B (Vista del Mar)

10:30–11:15am *What is Required in Cannabis Microbiology Method Validations – Anthony Repay, Method Testing Labs*

In Cannabis compliance laboratories all methods of analysis need to be confirmed internally through method validations. In this section validation protocols for microbiology will be explained while following United States Pharmacopeia and A.O.A.C guidelines. In doing this each section of the validation protocol will be broken down on how to Pass ISO, State and Customer audits.

11:15am-noon *Proficiency Testing for Cannabis: The New Frontier – Patricia Atkins, NSI*

Presentation on proficiency testing for the cannabis laboratories. More details coming soon!

Lunch 12:00-1:00pm – Provided by FSEA

1:00-2:00pm *Considerations for Cannabis Microbial Testing in the Age of Genome Sequencing – Kevin McKernan, Medicinal Geonomics*

Microbial testing standards for cannabis products vary tremendously state to state. Many states rely on ‘total tests’ that employ a non-descriptive unit of Colony Forming Units (CFU/g). These total tests often fail to capture unculturable microbes with a singular media, time and temperature used. The total tests also fail to itemize the microbes that do grow into pathogenic or beneficial microbes and thus de facto ban the use of bio control agents. We have performed several genomics-based surveys on cannabis flowers that capture the unculturable microbiome and also speciate the beneficial from pathogenic microbes found on cannabis flowers. These data can help inform policy and offer a more productive cannabis market for both patients and growers.

2:00 – 3:00pm *Robust Testing Methods: How to Know if Your Data is Accurate, Reproducible and Legally Defensible – Jini Curry M.S., Modern Canna*

Cannabis laboratories need to guarantee that their data is accurate, reproducible, and legally defensible. Ultimately, standardized methods are needed to ensure that laboratories are processing samples properly and that compounds of interest are being identified and quantified accurately. However, because cannabis is a complex matrix, additional fail-safes need to be put in place to assist with the proper identification of contaminants. This presentation will provide laboratories with various processes that can be implemented to ensure that the testing methods currently used are robust and capable of processing cannabis samples, regardless of the matrix. Additionally, benefits and pitfalls of various methodologies, the role of quality control, and the effect that sample matrices can have on a method will be discussed.

3:00–3:30pm *BREAK in Exhibit Area - Plaza Réal B & C*

3:30–4:15pm *Regulatory Updates – Dr. John Kaba, OMMU*

More details coming soon!

4:15–5:00pm *Peer Mentoring Session – Moderator Keith Kibbey*

This session is an opportunity to talk with your peers in a collaborative environment. Discuss challenges and opportunities faced by others in your field.

5:00-6:30pm Reception in Exhibit Area with Hors d'oeuvres and Door Prizes

Day 2 - Thursday October 27, 2022 Technical Sessions in the Plaza Réal A Ballroom - ~0.75 CEUs

7:45am Registration Opens	Grand Colonnade
7:45 – 8:15am Continental Breakfast	Plaza Réal B & C
7:45am – 3:15pm Exhibitor area open	Plaza Réal B & C
12:00 – 1:15pm Lunch (provided)	Grand Colonnade
7:30-10:00pm Scholarship Fundraiser & Social	Vista Del Mar

8:15 – 8:20am *Opening Remarks – Robin Cook, FSEA President*

8:20 – 9:30am *Peer Mentoring Session – Robin Cook, City of Daytona Beach, Moderator*

This session is an opportunity to talk with your peers in a collaborative environment. Discuss challenges and opportunities faced by others in your field.

9:30-10:15am *pH: Is it Really That Hard? – Michael Shepherd, Shepherd Technical Services*

Laboratory scientists, analysts, regulators, and assessors commonly believe some of the testing environmental labs perform is very simplistic. Testing for pH is probably very close to the top of the list of being considered simplistic. This presentation will address this overlooked fundamental method of analytical chemistry and identify some common misconceptions and pitfalls of performing a proper pH analysis.

10:15–11:00am *BREAK in Exhibit Area - Plaza Réal B & C*

11:00-11:45am *Ammonia Colorimetric Testing by Gas Diffusion on Continuous Flow Analyzers – Sarah McFaul, SEAL Analytical*

The use of gas diffusion for ammonia colorimetric testing has become more popular over the last several years as an alternative to distillation. We will discuss the principle behind gas diffusion and how gas diffusion compares to distillation. We will also discuss EPA acceptance for the ammonia by gas diffusion method, maintenance and care for the system, what types of samples the method is suitable for, as well as the ammonia colorimetric testing following gas diffusion.

11:45am-noon *FSEA Business Meeting, Presentation of Fredrick C. Bothe Scholarship for Environmental Studies*

12:00-1:15pm *LUNCH provided in the Grand Colonnade*

1:15-2:00pm *New EPA PFAS Health Advisories Set at Part Per Quadrillion Levels – Now What? – Lindsay Boone, Pace Analytical*

On June 15th, the EPA updated its Health Advisories (HAs) for PFOA and PFOS from 70 ppt to 0.004 ppt and 0.02 ppt, respectively. This is a significant drop for water quality managers and raises many unanswered questions and concerns. During this presentation you will learn: What is a lifetime drinking water Health Advisory, how are these developed, and how are these used? What's the difference between an Interim vs Final health advisory? What are Maximum Contaminant Level Goals (MCLGs) and Maximum Contaminant Levels (MCLs), and how are these developed? What happens with the Health Advisory levels when MCLs are issued? How do the new Health Advisory levels correlate to current EPA test methods and their detection limits which are higher?

2:00-2:45pm *Cut it With an Axe and Measure it with a Micrometer: How untraceable and non-representative samples can make your data worthless – John Moorman, SFWMD*

Representativeness and traceability are THE most important data quality objectives in the field. We cannot neglect the field aspect of the data collection process. Otherwise the results of non-representative samples could be off by an order of magnitude and untraceable data aren't defensible. Therefore it's imperative we take the field quality system from the SOP page to implementation in the field. Here we will discuss what to do when the laboratory has direct control over the field collection process and discover strategies to use when it does not.

Day 2 - Thursday October 27, 2022 Technical Sessions in the Plaza Réal A Ballroom (continued)

7:45am Registration Opens	Grand Colonnade
7:45-8:15am Continental Breakfast	Plaza Réal B & C
7:45am –3:15pm Exhibitor area open	Plaza Réal B & C
12:00 – 1:15pm Lunch (provided)	Grand Colonnade
7:30-10:00pm Scholarship Fundraiser & Social	Vista Del Mar

2:45-3:15pm ***BREAK in Exhibit Area – Plaza Réal B & C***

3:15-4:00pm ***Microbiology Quality Systems – Delineating SM9020 – 2015 and TNI V1M5 – 2016
– Angela Cimino-Washington, JEA***

The sheer amount of information regarding microbiology quality requirements can be overwhelming. Footnotes can be frustrating. Having requirements from different sources can be confusing. This workshop will provide an integrated outline of the microbiology quality requirements from SM9020 and TNI Volume 1, Module 5, and share best practices for meeting those requirements.

4:00-4:20pm ***Regional Meet and Greet – break out into small groups by Region to meet your Regional Director and other region members, offer suggestions for topics you would like to see in your region.***

4:20-5:05pm ***Updates from FDOH – Vanessa Soto-Contreras, Florida Department of Health***
Updates and future plans for certification!

5:05-5:20pm ***Door Prize Drawings***

7:30-10:00pm ***Social Event and Scholarship Fundraiser - Join us for a fun evening of BINGO and game night. We will be playing multiple games of BINGO to raise money for our scholarship fund. We will also have various other games available. Bring some cash – we will provide everything else!***

**Day 3 - Friday October 28, 2022 - Regulatory Sessions in the Plaza Réal A Ballroom ~0.45 CEUs OR
Field Sampling Workshop in Vista del Mar Ballroom ~0.30 CEUs**

7:45am Registration Opens	Grand Colonnade
7:45am – 8:15am Continental Breakfast	Grand Colonnade
10:30-11:00am Break	Grand Colonnade

Field Sampling Workshop in Vista del Mar Ballroom ~0.30 CEUs

8:00-11:00am *Professional Field Samplers: How the Little Details can have Big Results – Vance Reiman, JEA*

Representative sampling is vital to ensuring environmental and public health. An unrepresented sample poses a public health risk or may negatively impact a plant's performance. As operators/laboratory sampling staff the focus is often the end goal- a representative sample. Therein lies a need for the sampler and their support team to understand the little details that create this end goal. These details include: adhering to Florida DEP SOPs and Internal SOPs, knowledge of the method's analysis, QA/QC requirements prior to/during sample collection, and how the laboratory can potentially help with these endeavors. For the laboratory's Quality Assurance team, the Project Manager and the data's end user, knowing how imperative this process is and how you can help will cultivate representative and defensible results.

**** Bring your meters that use Automatic Temperature Compensation (e.g. pH, DO, specific conductance) and your organization's method of documentation as we will perform a temperature verification during this workshop.**

Regulatory Sessions in the Plaza Réal A Ballroom ~0.45 CEUs

8:15-9:30am *Outrageous Lab Practices and Outlandish Findings – Michelle Wade, A2LA Workplace Training & Valerie Slaven, PDC Labs (repeat from Spring)*

The "Darwin Awards" of assessment findings, from both the laboratory and assessor perspectives. A compilation from multiple and anonymous sources of outrageous laboratory practices and outlandish assessment findings. The ultimate "what not to do" for both sides of the aisle.

9:30-10:30am *How to Prepare and Talk with Assessors – Mike Shepherd & Mei Beth Shepherd, Shepherd Technical Services*

This presentation is ideal for new analysts and/or people that are nervous about being assessed. We will cover how you can prepare before the assessor arrives and what to do when they are at your facility. The presentation will provide action items you can do to prepare for the best possible outcome of your assessment.

10:30-11:00am *BREAK in Grand Colonnade*

11:00-11:45am *Updates from FDEP – Kristen Sapp, FDEP*

11:45am-1:00pm *Regulatory Forum*

This session will allow attendees to submit questions in advance for our panel to answer. Typical questions include those related to laboratory accreditation, standards, regulatory interpretations and data issues.

Please e-mail your questions to secretary@fsea.net by noon on October 27, 2022 so our panel has time to review the questions and prepare their answers. If time allows, questions may be asked from the floor.

Panel members:

Kristen Sapp or Sarah Noble – FDEP

Robin Cook – Microbiology Expert

Michelle Wade -TNI Chemistry Expert Committee Chair

Vanessa Soto-Contreras and/or Dr. Carl Kircher – FDOH

Save the Date for the 2023 Spring Conference – May 24-26, 2023 at the Sand Key Marriott in Clearwater Beach!