



# STANDARDS BULLETIN

December 2024

This [Standards Bulletin](#) from the Organization of Scientific Area Committees (OSAC) for Forensic Science provides a monthly update on forensic science standards moving through the OSAC Registry and standards development process, along with other OSAC news and standards-related information.

## STANDARDS UPDATES

### New Standards Added to the OSAC Registry

The following **seven** new SDO Published and OSAC proposed standards have been added to the Registry **effective December 3, 2024**.



#### SDO Published

- ANSI/ASB Standard 055, *Standard for Breath Alcohol Measuring Instrument Calibration*. 2024. 1st. Ed.
- ANSI/ASB Standard 175, *Standard for Interpreting, Comparing and Reporting DNA Test Results Associated with Failed Controls and Contamination Events*. 2024. 1st. Ed.
  - NOTE: This will replace OSAC 2020-S-0004, *Standard for Interpreting, Comparing and Reporting DNA Test Results Associated with Failed Controls and Contamination Events* on the Registry.

#### OSAC Proposed

- OSAC 2023-N-0020, *Standard for the On-Scene Collection and Preservation of Friction Ridge Impressions*
- OSAC 2023-N-0023, *Standard Guide to the Forensic Speaker Recognition Landscape*
- OSAC 2023-S-0018, *Standard Test Method for the Restoration of Obliterated Serial Numbers and Other Markings*
- OSAC 2024-N-0005, *Standard Training Guideline for Iris Image Examiners*

- OSAC 2024-N-0010, *Requirements and Recommendations for Competency Testing in Forensic Firearm and Toolmark Laboratories*

Visit the [OSAC Registry webpage](#) to view these new standards!

**The OSAC Registry now contains 217 standards (149 published and 68 OSAC Proposed) representing over 20 forensic science disciplines.**

## Registry Extensions

The following standards have received a three-year Registry extension:

- ANSI/ASB Standard 017, *Standard for Measurement Traceability in Forensic Toxicology*. 2018. 1st. Ed.
- ANSI/ASB Standard 037, *Guidelines for Opinions and Testimony in Forensic Toxicology*. 2019. 1st. Ed.
- ANSI/ASTM E3148-18, *Standard Guide for Postmortem Facial Image Capture*.
- ANSI/ASTM E3149-18, *Standard Guide for Facial Image Comparison Feature List for Morphological Analysis*.

## Standards Open for Comment

### SDO Published Standards Under Consideration for the OSAC Registry

The [OSAC Registry approval process for published standards](#) is used to review existing SDO published standards for technical quality and placement on the Registry.

- There are no SDO published standards under consideration for the OSAC Registry at this time.

### OSAC Proposed Standards Under Consideration for the OSAC Registry

The OSAC Registry approval process for OSAC Proposed Standards is used to review OSAC drafted standards for technical quality and placement on the Registry.

- There are no OSAC Proposed standards under consideration for the OSAC Registry at this time.

## **Standards Open for Comment at Standards Development Organizations (SDOs)**

There are **13** forensic science standards currently open for public comment at the following SDOs:

ASB:

- One in crime scene investigation & reconstruction with a comment deadline of December 16.
- One in wildlife forensic biology with a comment deadline of December 23.
- One in toolmark examinations with a comment deadline of January 16, 2025.

SWGDE:

- Ten standards with a comment deadline of January 27, 2025.

Visit OSAC's [Standards Open for Comment](#) webpage to access these documents and for instructions on how to submit your comments.

## **SDO Updates**

### **New Published Standards**

- There are no new published standards at this time.

### **Work Proposals for New or Revised Standards**

- There are no work proposals for new or revised standards at this time.

## IMPLEMENTATION IMPACTS & RESOURCES

### FY2025 Annual Implementers Meeting



freepik.com

On November 14, over 120 OSAC implementers virtually attended the FY2025 Annual Implementers Meeting. During this meeting, we celebrated the phenomenal increase of implementers in our community, with OSAC receiving 61 NEW FSSP implementation surveys and 89 updates between July 1 and September 2, 2024. This significant growth is a testament to everyone's hard work and dedication, and we appreciate your contributions!

Vincent Desiderio, OSAC Implementation Manager, shared other notable program highlights.

Based on the data from the 207 FSSP implementation surveys on record at the close of FY24:

- The top three most commonly selected disciplines by FSSPs are interdisciplinary (79%), seized drugs (54%), and friction ridge (44%).
- The top three most implemented standards are:
  - ISO/IEC 17025:2017, *General Requirements for the Competence of Testing and Calibration of Laboratories* (131 FSSPs)
  - ANSI/ASTM E2917-19a, *Standard Practice for the Forensic Science Practitioner Training, Continuing Education, and Professional Development Programs* (106 FSSPs)
  - ANSI/ASTM E2329-17, *Standard Practice for the Identification of Seized Drugs* (104 FSSPs)
- 188 out of the 199 standards on the Registry during the 2024 Open Enrollment period were implemented with a range of 1 to 131 implementers per standard.
- At the end of FY24, a total of 4,430 implementations had been recorded giving an average of 24 implementers per standard with a median of 13.

A detailed report containing implementation data will be available in early 2025.

### Mentorship

At the end of FY24, OSAC had 207 implementers, and new surveys continue to come in, (the total as of this writing has reached 217). This growth is a manifestation of the continued diligence of the implementers and points towards a promising future for forensic science. We encourage

everyone to reach out to your fellow FSSPs who have not implemented yet and help get them on track! If you would like to be connected to an implementation mentor, please complete the [Mentor Request Form](#), and you will be connected to an implementer with a similar jurisdiction, size, type of FSSP, and capabilities.

A Mentor Program Orientation will be held at the beginning of the year, so there is still time to [Volunteer as a Mentor](#). Your expertise and guidance are invaluable to our community, and we encourage you to consider this opportunity to contribute. The orientation date will be announced soon!

## OSAC UPDATES

### OSAC FSSB Meeting: Public Feedback Session

The OSAC Forensic Science Standards Board (FSSB) will hold a public feedback session available during its upcoming quarterly meeting. The purpose for this public session is to provide stakeholders with an opportunity to share feedback with the FSSB related to agenda items or matters within the FSSB's authority. The FSSB will consider all feedback from the public, and remarks can be made by the submitter or by the OSAC Program Office on behalf of the submitter.

The public session will take place virtually on **Thursday, December 12, 2024 from 2:30 - 3:00 p.m. ET.**

**If you wish to share feedback with the FSSB, please [complete this form](#) by December 6, 2024.**

The schedules and agendas for upcoming FSSB meetings can be found on the [FSSB Meetings webpage](#).



unsplash.com

## OSAC in the News



usatoday.com

On November 18, *USA Today* released, [“‘Betrayed’: Forensic Science Failures Undermine Justice as Labs Fail to Adopt Standards.”](#) In this article **John (JP) Jones, II**, OSAC Program Manager highlighted the importance of standards implementation and the voluntary movement towards it.

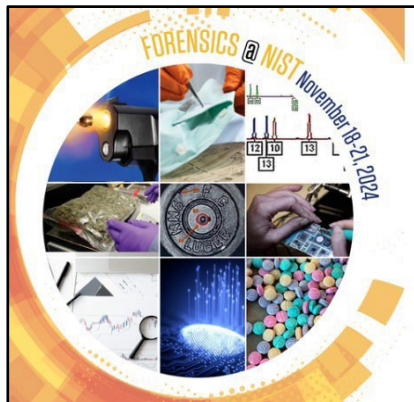
## OSAC OUT & ABOUT

### 2024 Potomac Regional Symposium on Forensic DNA Analysis



**Charlotte Word**, [OSAC Human Forensic Biology SC](#) Vice Chair, presented at the 2024 Potomac Regional Symposium on Forensic DNA Analysis in Richmond, VA, on October 9. The presentation, *“Implementation, and Advantages of Two New ANSI/ASB DNA Standards (123 and 175) with ASB/OSAC Standards and Best Practices Updates,”* provided brief overviews of the requirements for two recently published ANSI/ASB Standards: 1) ANSI/ASB Standard 123, *Standard for Routine Internal Evaluation of the Laboratory’s DNA Interpretation and Comparison Protocol*. 2024. 1st. Ed.; and 2) ANSI/ASB Standard 175, *Standard for Interpreting, Comparing and Reporting DNA Test Results Associated with Failed Controls and Contamination Events*. 2024. 1st. Ed. Updates on the status of all other Human Forensic Biology and DNA documents, whether published on the OSAC Registry, at the ASB SDO under development, or in draft at OSAC, were presented.

## 2024 Forensics@ NIST Event



On November 18, OSAC Program Manager **John (JP) Jones, II** presented during NIST's 3-day Forensics@NIST Event. During the presentation, over 400 attendees learned about:

- OSAC's background and why forensic science standards are important.
- OSAC Registry updates and activities.
- Standards implementation data and analysis
- Implementation tools and resources.

A recording of the [Forensics@NIST](#) event is coming soon!

## 2024 National Association of Forensic Science Boards (NAFSB) Conference

Several members of the OSAC Program Office, along with **Lynn Garcia**, General Counsel of the Texas Forensic Science Commission and FSSB Liaison to OSAC's Legal Task Group, brought their extensive expertise to the National Association of Forensic Science Boards (NAFSB) meeting in Albany, NY on November 21 and 22.



Approximately 90 stakeholders from across the country actively participated in the meeting, contributing to a rich exchange of information regarding the constitution and activities of forensic science boards and commissions. During the meeting, Vinny Desiderio and Lynn Garcia participated in a panel discussion acknowledging the critical role that boards and commissions can play in implementing standards on the OSAC Registry.

*Lynn Garcia, General Counsel of the Texas Forensic Science Commission and FSSB Liaison to OSAC's Legal Task Group, presenting with Vincent Desiderio, OSAC Physical Scientist, at the 2024 National Association of Forensic Science Boards (NAFSB) Conference in Albany, NY, on November 21 and 22, 2024.*

## 2024 Society of Forensic Scientists (SOFT) Annual Conference



**Dr. Robert Johnson**, [OSAC Forensic Toxicology SC](#) Chair, and **Dr. Rebecca Wagner**, OSAC Forensic Toxicology SC Vice Chair, presented at the 2024 Society of Forensic Scientists (SOFT) Annual Conference in St. Louis, MO, from October 27 through November 1, 2024. Dr. Wagner and her colleagues organized and moderated a workshop titled “*ASB Standards: Overview, Implementation, and Updates.*” An overview of OSAC was presented, including the history, structure, and processes. The workshop was then followed by four speakers who covered the following standards

that are currently on the OSAC Registry:

- ANSI/ASB BPR 037, *Best Practice Recommendation 037 Guidelines for Opinions and Testimony in Forensic Toxicology*. 2019. 1st. Ed.
- ANSI/ASB BPR 122, *Best Practice Recommendation for Performing Alcohol Calculations in Forensic Toxicology*. 2024. 1st. Ed.
- ANSI/ASB Standard 054, *Standard for a Quality Control Program in Forensic Toxicology Laboratories*. 2021. 1st. Ed.
- ANSI/ASB Standard 036, *Standard Practices for Method Validation in Forensic Toxicology, 2019, 1st Ed.*

Dr. Wagner reports that the workshop was a resounding success, with 150 enthusiastic participants. Despite the extra workshop fee, the event was fully booked, a testament to its popularity. The feedback was overwhelmingly positive, with many participants expressing surprise at how 'we made standards fun, haha.'

Dr. Wagner also gave a platform presentation titled “*Update: OSAC Forensic Toxicology Subcommittee and the Development of a Standard Test Method for the Analysis of Volatiles.*” This presentation covered two ethanol standards that are currently under development with the OSAC Forensic Toxicology Subcommittee:

- *Standard Test Method for Ethanol in Blood*
- *Standard for the Identification and Quantitation of Volatile Compounds in Biological Fluids.*



**Dr. Rebecca Wagner** presenting at the 2024 Society of Forensic Scientists (SOFT) Annual Conference in St. Louis, MO, from October 27 through November 1, 2024.



## 2024 Arizona Identification Council (AIC) Educational Conference



*Steven Johnson, OSAC Implementation Ambassador presenting at the 2024 Arizona Identification Council (AIC) Educational Conference in Tucson, AZ, on November 20, 2024.*

OSAC Implementation Ambassador, **Steven Johnson** recently attended the 2024 Arizona Identification Council (AIC) Educational Conference in Tucson, AZ, from November 20 through November 23. AIC is one of 41 subdivisions of the International Association of Identification (IAI). Their annual conference hosted over 100 attendees and provided workshops and lectures covering multiple forensic topics including an update on the OSAC implementation mission.

## UPCOMING OSAC & OTHER FORENSIC SCIENCE EVENTS

- January 13-16, 2025: Scientific Working Group on Digital Evidence (SWGDE) Meeting | San Jose, CA
- February 17-25, 2025: American Academy of Forensic Sciences (AAFS) | Baltimore, MD
- February 27, 2025: Facial & Iris Identification Subcommittee Research Needs Symposium
  - [Join Virtually HERE](#)
- March 1-5, 2025: Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy (PITTCON) | Boston, MA
- March 24-28, 2025: OSAC All-Hands Meeting for DMSAC, Medicine SAC, Trace Evidence SAC, and Physics/Pattern Interpretation SAC's Firearms & Toolmarks SC | St. Louis, MO

## OTHER FORENSIC SCIENCE NEWS & TRAINING

### **NEW! Best Practice Guide for the Calibration and Quality Control of 3D Surface Topography Measurement Instruments Used for Virtual Comparison Microscopy (VCM)**



The Technical Working Group for 3D Toolmark Technologies (TWG3D2T) has completed its first best practice document.

This [best practice guide](#) describes the calibration, verification, and monitoring of 3D surface topography measurement instrument metrological characteristics that may affect the virtual comparison microscopy (VCM) of toolmarks. This guide provides quality control procedures to detect significant changes in the metrological characteristics relative to their calibrated state and is applicable to the development of a quality control system for a single 3D surface topography measurement instrument.

### **COMING SOON: The Authentic Drug Sample Library - A New Resource for Researchers**

NIST's Characterized Authentic Drug Samples (CADS) Project was created for forensic scientists and researchers for three reasons:

1. Source authentic seized drug samples from collaborating forensic laboratories,
2. Characterize the samples using a variety of analytical tools, and
3. Make available small amounts of the samples and corresponding data to researchers and practitioners.

By providing access to authentic drug samples and data, NIST is not just accelerating technology development but also revolutionizing the way developed approaches are fit-for-purpose. This is a game-changer for laboratories, offering a unique opportunity to obtain samples for validation and implementation efforts.

The CADS panels are available by request through the NIST Store. Each panel, comprising 24 samples (approximately 10mg of material per sample), is a powerful tool. The first panel is expected to be released in late 2024 or early 2025.

To learn more, visit [The Authentic Drug Sample Library - A New Resource for Researchers Characterized Authentic Drug Samples \(CADS\)](#).

Your role in this project is crucial. If you would like to be part of the panel release updates or if

your laboratory is willing to provide samples for future panels, we encourage you to email [DRUGID@nist.gov](mailto:DRUGID@nist.gov). Your contribution is invaluable.

## Calling all Forensic Science Students!

NIST partners with the National Academies/National Research Council (NRC) on a competitive postdoctoral program. Check out these forensic science opportunities:

- [NIST/NRC postdoctoral opportunities](#) - the next application window is from December 1, 2024 - February 1, 2025:
  - Applications in forensic proteomics
  - Strengthening forensic fire debris analysis
  - Mass spectrometry metrology for trace detection and chemical imaging
  - Forensic trace evidence analysis and standards
  - Mass spectrometry and chemometrics for forensic science

## AAFS Checklists and Factsheets

As part of a cooperative agreement with NIST, the American Academy of Forensic Sciences (AAFS) is developing [training, tools, and resources](#) to enhance implementation efforts and broaden awareness of forensic science standards among communities of interest.

[Standards factsheets](#) provide a clear, concise, and easy way to understand the purpose of a specific standard, why it is needed, and the benefits of adoption. Standards factsheets are available for 135+ standards on the OSAC Registry.

- [Standards checklists](#) are a tool that forensic science service providers can use to track progress towards implementation, identify gaps or barriers to implementation, or document objective evidence of implementation or compliance with a standard. Checklists are available for 130+ standards on the OSAC Registry.
- AAFS Connect offers free standard videos and webinars. Learn about the standards development process, standards development activities in various disciplines, and information about specific SDO published standards on the OSAC Registry.

## CONNECT WITH OSAC



**Follow us on social media.** To stay up to date on the latest OSAC news, be sure to follow us on [LinkedIn](#) (#ForensicOSAC).

**Contact us.** If you have feedback, questions, or want to learn more about how you can strengthen forensic science through standards, email us at [forensics@nist.gov](mailto:forensics@nist.gov).