# **OSAC Technical Series 0003**



# Annual Report February 2017 – February 2018

Annual Report Working Group Organization of Scientific Area Committees for Forensic Science (OSAC)

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# **OSAC Technical Series 0003**

# **Annual Report**

February 2017 – February 2018

By
The Organization of Scientific Area Committees for Forensic Science (OSAC)
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#### **Executive Summary**

### Organization of Scientific Area Committees for Forensic Science (OSAC)

OSAC is an initiative of the National Institute of Standards and Technology (NIST). The purpose of OSAC is to strengthen the nation's use of forensic science by:

- Providing technical leadership that facilitates the development and promulgation of consensus-based documentary standards and guidelines for forensic science
- Promoting standards and guidelines that are fit-for-purpose and based on sound scientific principles
- Promoting the use of OSAC standards and guidelines by accreditation and certification bodies
- Establishing and maintaining working relationships with similar organizations and other stakeholders.

# Accomplishments – February 2017 through February 2018

Below are a few examples of accomplishments seen within OSAC from February 2017 through February 2018.

- Continued progress on interdisciplinary projects focused on terminology, training, statistics, and conclusions.
- Supported the development of roadmaps within some disciplines that outline gaps in standards and research to enable subcommittees to better prioritize standards development.
- Facilitated the interaction of academic scholars, legal professionals, and forensic scientists to help identify research gaps that exist and go hand-in-hand with standards' needs.
- Continued investment in developing and reviewing over 200 draft standards across 25 forensic disciplines that will improve the current and future practice of forensic science.
- National Institute of Justice (NIJ) incorporated OSAC published research and development needs into forensic science research and development their solicitation process.
- Convened second annual OSAC Leadership Strategy Session successfully resolving organizational framework, policy and operational challenges.
- Published a new OSAC Lexicon of Forensic Science Terminology.
- Published the new OSAC Standards Implementation Plan documenting numerous strategic pathways to encourage adoption and implementation of the standards on the OSAC Registry.
- Introduced the new NIST Technical Publication Series for impactful and relevant OSAC documents.

#### OSAC Registry Approvals as of February 2018:

- As of February 2018, there were eight (8) standards on the OSAC Registry, and an additional four (4) in the final approval process,
- More than 200 draft standards currently in the OSAC pipeline, and
- Continued partnership with SDOs including the Academy Standards Board (ASB), American Dental Association (ADA), ASTM International, International Organization for Standardization (ISO), and National Fire Protection Association (NFPA).

The OSAC Communications efforts have included a monthly Standards Bulletin designed to update stakeholders on the latest activities within forensic science Standards Developing Organizations (SDO) and documents progressing onto the OSAC Registry. Additionally, the OSAC Technical Publications Series was established at NIST in 2017. As of February 2018, OSAC has two publications under this series with two additional technical publications currently in process.

- OSAC Technical Series 0001: 2017 OSAC Annual Report
- OSAC Technical Series 0002: A Framework for Harmonizing Forensic Science Practices and Digital/Multimedia Evidence

# Message from the Forensic Science Standards Board (FSSB)

OSAC entered into its fourth year of existence with increased productivity regarding standards language development as well as improved communications and interaction with our internal and external stakeholders. Highlights over the period include:

- Creation of a standardized "Roadmap" for the subcommittees and SACs to better track and articulate the progress of standards in development
- Creation of a Technical Issues Task Group to help address cross-discipline and other stakeholder concerns that arise during the vetting of standards
- Drafting and socializing an "Implementation Strategy" that describes the outreach
  efforts required to encourage adoption of standards listed on the OSAC Registry by
  various stakeholder groups as well as metrics to track and potential barriers to
  implementation
- Continued engagement with our forensic science professional association partners through in-person presentations at annual meetings and conferences
- Continuous review and revision of our Charter and Bylaws and Terms of Reference (TORs) to improve operational efficiencies and address emerging challenges
- Supported NIST's Request for Information (RFI) regarding the future of OSAC outside of NIST control and financial support (OSAC 2.0)
- Maintaining our open communication and interaction with SACs and subcommittees through the OSAC Leadership Strategies Sessions (OLSS).

The FSSB has made several management improvements that allow for better functionality at all levels of OSAC which include improving the processes employed to both review standards destined for SDOs and for assessing published standards eligible for the OSAC Registry.

As we close in on the completion of our fourth full year, all of our original members, who received staggered two, three, or four year initial terms, will have fulfilled their commitment to their first term and we're encouraged that the majority of our members have decided to reengage with their respective units for a second term.

The FSSB has recruited some new members and achieved a good balance of stakeholder representatives to ensure multiple points of view are considered when addressing any issue. The FSSB is composed of:

- SAC chairs and Resource Committee chairs
- Six professional forensic science organizations (representing over 20,000 practitioners)
- Researchers, scientists and academicians.

That said, turnover in an organization this size does occur, and this permits the healthy infusion of new ideas and leaders enabling the organization to reach new heights and explore fresh concepts. We continue to encourage practitioners, statisticians, researchers, academics and members of the legal community to apply for positions on OSAC.

Additionally, we will continue the OLSS effort with an emphasis on the future, empowering that body to provide the FSSB with recommendations to help sustain our forward-thinking enterprise. Finally, we will continue to strategize as to the best way forward with OSAC 2.0. There appears to be general consensus that OSAC has a viable and important mission and our efforts have not gone unrecognized. With the elimination of the President's Council of Advisors on Science and Technology (PCAST) Forensic Science review panel and the fact that the charter for National Commission on Forensic Science (NCFS) was not renewed, OSAC becomes the preeminent leader in standards development for the forensic sciences and will face additional scrutiny from the public sector. The FSSB is confident that we have a good cross-section of experts that will represent the best interests across the spectrum of our representative disciplines.

The FSSB thanks all OSAC volunteers for their time and input to the OSAC process, all of the federal, state, and local government agencies, academic institutions, and criminal justice and forensic science organizations that support the OSAC mission by allowing their staff to continue to participate.

Improving forensic science standards requires listening to others external to OSAC and we welcome all comments from stakeholders and partners. If you have questions about this report or about OSAC, please contact us at <a href="mailto:forensics@nist.gov">forensics@nist.gov</a>



Fig. 1. FSSB Members from the left:

**Back Row** - Jose Almirall, Greg Davis, Richard Vorder Bruegge, Robyn Ragsdale, Jeff Salyards, Ray Wickenheiser, Christopher Plourd, William Thompson, Mark Stolorow, Lucy Davis, and David Fowler.

**Front Row** - Karen Reczek, JoAnn Buscaglia, Mark Keisler, Melissa Gische, Laurel Farrell, Steven Johnson

Absent - Karen Kafadar, Sarah Kerrigan

**Guests** - Back Row (far right) - Richard Cavanagh; Front Row (far left) - William Guthrie

**Location** - Taken outside the Indianapolis State Crime Laboratory, Indianapolis, IN



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#### 1.0 Introduction

The Organization of Scientific Committees for Forensic Science (OSAC) is an initiative by the National Institute of Standards and Technology (NIST) focused on strengthening forensic science in the United States by:

- Providing technical leadership that facilitates the development and promulgation of consensus-based documentary standards and guidelines for forensic science
- Promoting standards and guidelines that are fit-for-purpose and based on sound scientific principles
- Promoting the use of OSAC standards by accreditation and certification bodies

#### **OSAC** Core Principles:

All standards and guidelines approved for inclusion on the OSAC Registry must be developed by a process that follows these four core OSAC principles:

- Openness
- Balance
- Consensus
- Harmonization
- Establishing and maintaining working relationships with other similar organizations.

OSAC operates as a multi-level organization, consisting of five Scientific Area Committees (SACs) which report to the Forensic Science Standards Board (FSSB). Each of the five SACs oversees several discipline-specific subcommittees. In addition, three Resource Committees provide input and guidance to OSAC.

OSAC contains members and affiliates. Affiliates can participate in task groups and provide subject matter expertise but do not have the same voting rights as members. OSAC structure and membership include (as of February 2018):

- 550 members
- 324 affiliates
- 50 states represented
- 210 task groups
- 2535 applications to participate

#### OSAC Member Current Job Classification

Attorney: 2%Educator: 10%

Judge: 1%Other: 10%

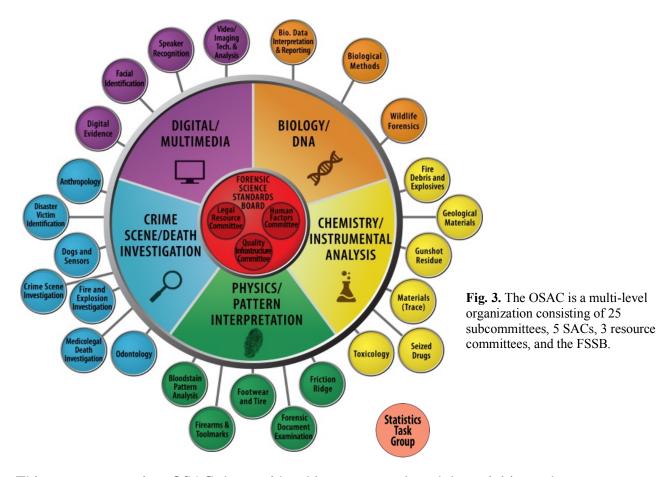
• Practitioner: 56%

• QA Manager: 2%

• R&D Tech: 2%

• Researcher: 17%

Visit <a href="https://www.nist.gov/topics/forensic-science/osac-organizational-structure">https://www.nist.gov/topics/forensic-science/osac-organizational-structure</a>, and see Fig. 3, to learn more about the OSAC structure, the FSSB, and the other committees.



This report summarizes OSAC short, mid and long-term goals and the activities and accomplishments from February 2017 to February 2018. OSAC strives to represent and address the needs of the entire stakeholder community. The audience for this report is broad:

- 550 OSAC members (as of February 2018)
- 324 OSAC affiliates (as of February 2018)
- Forensic science service providers
- Private sector manufacturers and service vendors supplying forensic science providers
- Accrediting bodies
- Certifying bodies
- Representatives of the criminal justice system
- Representatives of the legal system (judges, prosecution and defense)
- Professional forensic science organizations (including AAFS, AFTE, ASCLD, IAI, NAME and SOFT)
- Other professional scientific organizations
- Existing and historical Scientific Working Groups (SWGs)
- International and national standards organizations
- Federal, state, and local government agencies (including thousands of state and local law enforcement agencies)

- Federally funded research and development centers (FFRDCs)
- Academia
- Non-governmental organizations (NGOs)
- The National Institute of Standards and Technology (NIST)
- The U.S. Department of Justice (DOJ)
- The public.

#### 2.0 Accomplishments

#### 2.1 FSSB Appointments

OSAC has made great strides as an organization over the last year. The FSSB has made management improvements that allow for better functionality at all levels of OSAC as well as improved processes to review and vet standards and those documents destined to become standards published through standards developing organizations (SDOs). The FSSB is proud to have three new members whose qualifications add significantly to the scientific experience and expertise of the Board:



- Dr. David Fowler, Chief Medical Examiner, OCME, State of Maryland and NAME Representative
- Melissa Gische, FBI Physical Scientist/Forensic Examiner and Physics/Pattern Interpretation SAC Chair
- Robyn Ragsdale, Florida Department of Law Enforcement and Biology/DNA SAC Chair
- Ray Wickenheiser, NY State Police Crime Laboratory System Director and ASCLD Representative

Furthermore, a new FSSB Chair was appointed. Steve Johnson, IAI Representative, succeeded Jeremy Triplett, ASCLD Representative on October 1, 2017.

#### 2.2 FSSB Foundations Task Group Report

The FSSB is developing a foundational exercise for OSAC that will help capture the current state of each forensic science discipline to include considerations such as method validation, measurements, traceability, reporting, potential for bias, error rate calculations, and other considerations. The draft report is currently under production within OSAC.

#### 2.3 FSSB Implementation Task Group

The FSSB has prepared an OSAC Registry Implementation Plan for our forensic science partners. The Implementation Plan describes various pathways for OSAC to promote and encourage our partners and stakeholders to adopt and implement the approved standards listed on the OSAC Registry. Additionally, the Plan describes strategies within these pathways that OSAC and the FSSB may leverage to encourage support from forensic service providers, accreditation bodies, professional associations, criminal justice system, academia, and federal, state, and local agencies.

Implementation of forensic science standards requires a strategic plan to ensure standards listed on the OSAC Registry are put into practice across the entire forensic

### OSAC Registry Implementation Plan

Prepared for

The Organization of Scientific Area Committees for Forensic Science (OSA)

By Forensic Science Standards Board (FSSB)



science community. Currently, the use of forensic science standards is not required by law. The only exception is for forensic DNA laboratories that are held to the FBI Quality Assurance Standards (QAS) due to a statutory Congressional mandate by the DNA Identification Act of 1994. Therefore, there are few forensic-disciple specific documentary standards that can be used to audit laboratories. Individual laboratories such as the Kentucky State Police (KSP) and Georgia Bureau of Investigation (GBI) have elected to self-adopt standards on the OSAC Registry by incorporating them into their standard operating procedures (SOPs). For example, the KSP Drug Chemistry Section, following the ISO/IEC 17025 numbering scheme, has recently updated its SOPs to formally incorporate OSAC standards and guidelines.

The Implementation Plan is in its final internal OSAC review. Additionally, the FSSB Outreach and Communications Task Group is formulating a strategy for executing some of the pathways.

As OSAC adds additional standards and guidelines to the OSAC Registry, individual crime laboratories or sections within laboratories should consider adoption of these scientifically sound standard as KSP and GBI demonstrated. If crime laboratories decide to incorporate OSAC standards and guidelines into their SOPs, please let the OSAC know by emailing us at <a href="mailto:forensics@nist.gov">forensics@nist.gov</a>.



Fig. 4. Examples of OSAC Implementation Pathways Under Consideration by the FSSB.

#### 2.4 Standards Roadmaps, Analyses, and Discipline-Specific Process Maps

A number of subcommittees such as the Friction Ridge Subcommittee, Materials (Trace), and the Fire Debris & Explosives have developed strategic standards roadmaps that outline some or all of the following: research gaps, technical standards gaps, quality standards gaps, and other state-of-the-discipline information. It has enabled the subcommittees to better prioritize their approach to standards development and promotion.

In addition to those individual subcommittee activities, the FSSB has requested each subcommittee to develop a standardized roadmap to identify the key standards-related considerations and conditions affecting their forensic science discipline. By doing so, OSAC can provide a state of standardization on a discipline-by-discipline basis and provide clear priorities to OSAC units on standardization as each gap is assigned a priority level.

The standardized roadmap exercise is expected to wrap up at the conclusion of 2018 for publication in 2019.

### 2.5 Lexicon of Forensic Science Terminology

The forensic sciences encompass dozens of disciplines, each with its own history and vocabulary. To help facilitate clear communication across the many forensic disciplines, OSAC has created a Lexicon of Forensic Science Terminology.



The OSAC Lexicon Initiative started in 2016, when the FSSB tasked all OSAC units with identifying and collecting existing terminology related to their forensic science discipline. The end result is a consolidated, searchable lexicon organized by discipline. The terms and definitions come from the published literature, including documentary standards, specialized dictionaries, Scientific Working Group (SWG) documents, books, journal articles, and

technical reports. In addition, the OSAC subcommittees generated or modified many definitions.

Steve Johnson, FSSB Chair, noted that, "Our goal was to get the OSAC work product out for public consumption, but this is a living document. OSAC plans to add new terms, remove terms, consolidate duplicate entries, verify sources of non-verified terms, and reach consensus on more OSAC Preferred Terms."

Other terminology initiatives within OSAC include developing discipline-specific terminology standards designed for publication by SDOs. Two of these terminology standards are already available from the American Academy of Forensic Science Academy Standards Board (ASB).

OSAC will continue to refine the Lexicon and draft terminology standards for submission to SDOs. The release of this lexicon database for forensic sciences marks a milestone in the effort to help the many disciplines speak the same language.

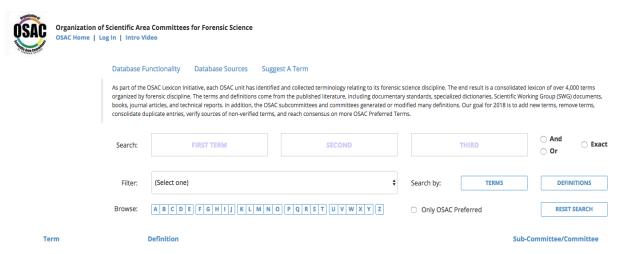


Fig. 5. OSAC Lexicon of Forensic Science Terminology

## 2.6 OSAC Leadership Strategy Session

The FSSB held the annual OSAC Leadership Strategy Session (OLSS) on September 28-29, 2017, to share current program perspectives that exist from each of the OSAC committees, investigate differences when perspectives varied, and strive to reach a shared vision of success for OSAC. The FSSB convened the five SAC chairs, four resource committee and statistics task group chairs, and each of the 25 subcommittee chairs. The meeting resulted in defining four focus areas where OSAC can build momentum capitalizing on our strengths.

The following program improvements were implemented or are in process based on the feedback received from OSAC members at this strategy session:



#### 1. Improve OSAC Processes

- O Developed new or streamlined existing OSAC processes to remove needless barriers and "invisible boxes" from the process maps.
- OSAC subcommittees are posting discipline-specific baseline documents, which are in various stages of development, on their webpages along with lists of the current standards under development or sent to an SDO.



#### 2. Culture

- The FSSB is still working to develop a strategy to best achieve timeliness, relevance, consensus, and quality in OSAC standards development and approval processes.
- Revised the current organizational priorities for consumption by the OSAC membership.



# 3. Perfect vs. Best Fit

OSAC has come to recognize that standards can never be perfect.
 Standards are living documents evolving through an iterative process.
 Standards undergo continuous improvement with each revision. The OSAC Registry will continue to evolve as new standards are added or improved.



#### 4. Prioritization

The FSSB is currently proceeding with the Roadmap Exercise, finalizing the OSAC Implementation Plan, and continuing work on the Foundational Documents to provide priorities for its SACs, resource committees, and subcommittees. OSAC can be more effective by spending more time on the most impactful activities. Prioritization identifies what those activities are.

OSAC will continue to improve standards across all forensic science disciplines. The organization aims to improve its processes, management and ways to work in partnership with the SDOs.



Fig. 6, 7, 8, 9. Members of the FSSB, SACs, and subcommittees at the OLSS Meeting in September 2017.

#### 3.0 OSAC Public Meetings, Public Relations, and Engagement

OSAC reports its activities to the public annually. The OSAC public meeting was held in Seattle, WA, on February 20, 2018 in conjunction with the American Academy of Forensic Sciences (AAFS) Annual Meeting. Committees discussed the standards on the OSAC Registry, work items handed over to the SDOs during the past year, and an overview of the other draft standards in progress. Some of the event's discussion points echoed last year's important themes such as the need to continually place focus on technical merit, and the need to consider the influence of bias on stated opinions and conclusions. Video recordings and slide decks of OSAC Scientific Area Committee presentations are available online at:

https://www.nist.gov/news-events/events/2018/02/what-osac-behind-scenes-look-join-us-aafs-2018



**Fig. 10.** Steven Johnson, Chair, FSSB, presenting at the OSAC public meeting at AAFS, 2018.



Fig. 11. Public meeting agenda.

The SACs provide public updates at other conferences relevant to their specific disciplines. OSAC Affairs staff and members also provided presentations at public meetings and conferences, including:



American Academy of Forensic Sciences (AAFS) Annual Meeting – Criminalistics and Jurisprudence Sections

American Bar Association (ABA) Annual Prescription for Criminal Justice Forensics Program

American Society of Crime Laboratory Directors (ASCLD)

Association of Firearm and Tool Mark Examiners (AFTE)



Association of Forensic Quality Assurance Managers (AFQAM)

First National Mexican Forensic Science Symposium

International Association for Identification (IAI)

International Crime Science Investigators Association (ICSIA)



Midwest Crime Laboratory Director's Meeting

National Forensic Science Symposium by National Association of Attorneys General (NAAG)

OSAC representatives have published web and journal articles related to the program to create awareness and share progress

## 4.0 OSAC Registry

The OSAC Registry is intended to serve as a trusted repository that lists high-quality standards to address discipline-specific requirements in forensic science. Most of the documents being developed within OSAC, in conjunction with SDOs, are standards documents which have the goal of being placed on the OSAC Registry. A standard or guideline that is posted on the OSAC Registry demonstrates that the methods it contains have been assessed to be sound by forensic science practitioners, academic researchers, measurement scientists, and statisticians through a consensus development process that allows participation and comment from all relevant stakeholders. Five standards were added to the OSAC Registry between February 2017 and February 2018:



- **ASTM E2548-11e1**: Standard Guide for Sampling Seized Drugs for Qualitative and Quantitative Analysis (Seized Drugs Subcommittee, April 3, 2017)
- **ISO/IEC 17020:2012**: Conformity Assessment—Requirements for the Operation of Various Types of Bodies Performing Inspection (Interdisciplinary Virtual Subcommittee, April 18, 2017)
- ANSI/NIST ITL-1: 2011 (Update 2013) Data Format for the Interchange of Fingerprint, Facial & Other Biometric Information (Interdisciplinary Virtual Subcommittee, July 13, 2017)
- **ASTM E2926-17**: Standard Test Method for Forensic Comparison of Glass Using Micro X-ray Fluorescence (μ-XRF) Spectrometry (Materials Trace Subcommittee, July 19, 2017)
- **NFPA 921:2017** Guide for Fire and Explosion Investigations (Fire and Explosion Investigation Subcommittee, November 1, 2017)

Many standards and guidelines exist that are not recommended and/or approved for the OSAC Registry. This does not necessarily mean that OSAC is invalidating their use. The absence of a standard or guideline on the OSAC Registry simply means that it has either not been recommended yet, or it might have met only some of the OSAC criteria.

The OSAC Registry is available at: <a href="https://www.nist.gov/topics/forensic-science/">https://www.nist.gov/topics/forensic-science/</a> organization-scientific-area-committees-osac/osac-registry/osac-approved, and public documents associated with the Registry Approval Process for approval onto the OSAC Registry can be found on the OSAC Registry Public Documents page: <a href="https://www.nist.gov/topics/organization-scientific-area-committees-forensic-science/public-documents">https://www.nist.gov/topics/organization-scientific-area-committees-forensic-science/public-documents</a>.

#### 4.1 OSAC Ongoing Standards Activities

The OSAC members are now focusing on over 200 different standards projects. These are currently moving through the two OSAC processes: the OSAC Working with an SDO Process and the OSAC Registry Approval Process. The first of these two processes entail OSAC committees or task groups submitting an idea, a partially drafted document, or a fully drafted document to an SDO for further modifications, balloting, and publishing. The second process focuses on elevating selected standards or guidelines to the OSAC Registry.

Throughout the year, various OSAC subcommittees submitted documents or document concepts to SDOs for further development, such as the Academy Standards Board (ASB), the American Dental Association (ADA), National Fire Protection Association (NFPA) and ASTM International. OSAC has submitted over 50 documents or concept submissions over this past year. Some examples of published standards include:

- ASB Technical Report 025, Crime Scene/Death Investigation Dogs and Sensors – Terms and Definitions, First Edition, 2017
- 2. ASB Technical Report 033, Terms and Definitions in Bloodstain Pattern Analysis, First Edition, 2017



- 3. ADA 1088-2017 Human Identification by Comparative Dental Analysis
- 4. NFPA 921:2017 Guide for Fire and Explosion Investigations
- 5. ASTM E2881-18 Standard Test Method for Extraction and Derivatization of Vegetable Oils and Fats from Fire Debris and Liquid Samples with Analysis by Gas Chromatography-Mass Spectrometry
- 6. ASTM E1610-18 Standard Guide for Forensic Paint Analysis and Comparison.

#### 4.2 Interdisciplinary Forensic Science Discussions and Projects

The wide spectrum of stakeholders and disciplines in OSAC offers an opportunity for interdisciplinary projects and dialogue to occur.

For example, the OSAC provides:

- Increased cross-discipline visibility and understanding of the commonalities and differences in the way forensic science practitioners perform work,
- Opportunities for forensic science disciplines to leverage each other's scientific successes,
- Routine access to insights and perspectives from all stakeholders (from both within and outside of the forensic science community),
- The ability to develop and promote standards implementation through a unified effort in the forensic science field, and to broaden the potential impact of these standards.

Several interdisciplinary OSAC projects are underway. These are led by "virtual subcommittees and task groups" that consist of members from multiple disciplines and committees. These interdisciplinary projects include:

- Training, Continuing Education and Professional Development Virtual Subcommittee is focusing on a new high-level training standard applicable to all forensic science practitioners,
- Conclusions Virtual Subcommittee is attempting to define standard terminology and usage for forensic examiners expressing source conclusions for publication in a scholarly journal or as an OSAC Technical Series publication,
- Statistics Task Group consists of statisticians who are members of various OSAC committees and subcommittees, who collaborate on specific statistics challenges related to the OSAC,
- *ACE Virtual Subcommittee* focuses on developing discipline-specific methodologies for applying the method known as ACE-V, (ACE-V is an acronym for the Analysis, Comparison, Evaluation and Verification methodology used by forensic science practitioners primarily when conducting feature comparisons.)
- 29 Word Terminology Task Group works to refine definitions for the terms that the Legal Resource Committee has identified as being most challenging because of varying interpretations of the meanings of the terms.

#### 5.0 OSAC 2.0

NIST and the Department of Justice (DOJ) formed OSAC in 2014 through a bilateral Memorandum of Understanding. OSAC was designed to be administered by NIST and created to strengthen the nation's use of forensic science by facilitating the development of technically sound forensic science standards and by promoting the adoption of those standards by the forensic science community. When OSAC was established, NIST and DOJ publicly stated that they expected the organization's structure to evolve over time and that OSAC would transition out of NIST to a different host organization within five to 10 years.

"Now that OSAC has been operating for three-plus years, it's time to assess the performance of the organization and look for opportunities for improvement," said Richard Cavanagh, director of the NIST Special Programs Office, which oversees OSAC operations. "Although the structure of OSAC may change, the goals remain the same, and NIST remains committed to OSAC's stability and scientific integrity."

An open call went out in August 2017 requesting feedback from the public on six areas for OSAC 2.0 that were developed by NIST in order to delineate a range of possible changes to the organization. The six target areas were:

- 1. Purpose
- 2. Oversight and Independence
- 3. Work Product and Aims
- 4. Structure
- 5. Participation
- 6. Funding

These concepts were offered to generate ideas and input and were not meant to be exhaustive. NIST is open to maintaining elements of the current OSAC structure, modifying the structure, and considering substantially different structures, including ideas received from the public comments concerning the six areas proposed.



Fig. 12. Federal Register Announcement

#### 6.0 Final Words

OSAC has made great strides to help achieve and develop technically valid and consensus-based standards and guidelines, spanning 25 forensic disciplines. With over 800 members and affiliates representing key stakeholder groups, including forensic scientists, laboratory managers, academic researchers, measurement scientists, statisticians, human factors experts, accreditation and standards development experts, attorneys, and judges, the organization will continue to find ways to improve how it operates and be transparent to the entire forensic science community.

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