WHERE ARE WE WITH OSAC: AN IAI PERSPECTIVE

U.S. Department of Commerce

Steven Johnson

Senior Vice President, West Virginia Operations
Ideal Innovations, Inc.
Past President, the IAI (2014-2015)

Chair

Forensic Science Standards Board (FSSB)
Organization of Scientific Area Committees (OSAC)

International Association for Identification
2018 Educational Conference
San Antonio, Texas

Who Are the Members?

OSAC Members

- +550 Members
  - *Professional Societies*
  - *Researchers and Academics*
  - *Private sector*
- Expertise
  - *25 specific forensic disciplines*
  - *General expertise in scientific research, measurement science, statistics, law, and policy*
- *~75 OSAC Members are members of the IAI*

FSSB Members

- 20 Members
  - *SAC and Resource Chairs*
  - *Professional Societies*
  - *Researchers and Academics*
- New members in 2017
  - *Dr. Dave Fowler, NAME Rep*
  - *Melissa Gische, Physics SAC Chair*
  - *Ray Wickenheiser, ASCLD Rep*
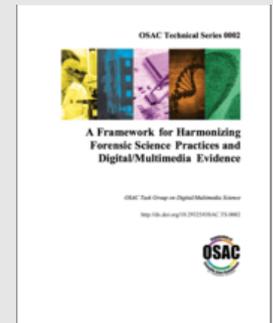- Departures:
  - *Dr. Sylvester "Jim" Gates*

ALL VOLUNTEERS

What Does the FSSB Do?

- Forensic Science Standards Board (FSSB) oversees the Scientific Area Committees and Subcommittees

- Establishes governance rules and policies to ensure the development of quality standards

- Encourages standards use in the provision of forensic science services

- Administers overall operation of the organization

- Approves standards for inclusion on the OSAC Registry

- Engages in all efforts related to forensic science standards

- Informs the forensic science community of research needs and gaps

What has been done?

- Established an OSAC Technical Publication Series
  - *Valuable information gathered as part of the standards development process*
    - Foundational
    - Framework
    - Guidance
    - Standards gaps
  - *OSAC.TS.0002 -- A Framework for Harmonizing Forensic Science Practices and Digital/Multimedia Evidence (DMSAC)*

- Launched Standards Bulletin October 2017
  - *Updates stakeholders about standards in process with SDOs and OSAC Registry*

- Revised current Organizational Priorities guidance for our OSAC members, which describes how OSAC works within the Forensic Science Community

Where to next?

- Creation of a Foundations Task Group

  – *Attempting to balance the importance of each subcommittee by having them articulate their understanding of the fundamental analysis questions as they apply to the specific discipline – will ultimately intersect with the roadmapping strategy (see below)*

- Standardization Roadmaps

  – *Roadmapping allows the subcommittees to navigate the complexities of standardization management.*

  – *This strategy will allow OSAC to provide a "state of standardization" on a discipline by discipline basis.*

- Implementation Task Group

  – *Initiated by past Chair, Jeremy Triplett in the summer of 2017, the Implementation Task Group collaborated to identify potential stakeholders, anticipate potential barriers to implementation of OSAC developed standards and engage in processes that would assist those stakeholders in adopting said standards.*

Implementation Strategy

- Developed a draft OSAC Registry Implementation Plan; finalized in Spring 2018

- Opened the draft document for comment in May; received limited comments

- Created a high level summary chart

- FSSB to prioritize tasks and begin outreach this Fall

Where to next?

- **OLSS update**
  - *The OLSS met for the second time last fall with the intent to identify communication gaps between the SAC, SCs and FSSB.*
  - *OLSS will meet again this September with the intention of making the process a "forward looking" enterprise and not a focus on "what could have been" – more a focus on "where we need to go".*

- **Lexicon update**
  - *Lexicon was released for public review in March*
  - *Response has been mixed but generally favorable*
  - *There is still significant need for sourcing of many of the terms and definition*
  - *Lexicon has been "back-burnered" with the emphasis on getting the Roadmaps in place and Implementation document vetted to the forensic science community and other stakeholders*

- **Creation of an Code of Ethics Task Group**
  - *Concerns over the actions of OSAC members and the potential for a negative impact on the organization has led to the creation of this TG assigned to craft a code of professional responsibility for OSAC leadership and members*

Registry Approvals

The OSAC Registry is a collection of endorsed forensic science standards.

- Currently there are 11 standards on the OSAC Registry

- Currently there are 4 standards in the approval process

- 200+ standards projects on the Horizon

- Available at OSAC website, through SDO's portals
  - *ASTM*
  - *ADA*

- Partnering with SDOs
  - *ADA, ASB, ANSI (NIST/ITL), ASTM, ISO, NFPA*

Research & Development

- 103 identified research and development gaps

- **EVERY SAC** has identified a research need in their discipline
  - *13 OSAC-identified R&D needs were referenced in NIJ's 2017 Forensic Science R&D Solicitation*
  - *OSAC R&D needs are currently being supported by NIJ R&D awards, especially in the Footwear/Tire discipline*

- Established Interdisciplinary Projects across the disciplines

- Identify particular strengths and weaknesses - of all disciplines - so that we may chart an effective path forward

Lexicon

- Identified and collected existing terminology related to forensic science

    - All Scientific Area Subcommittees, SACs and the QIC, identified over 4K terms and their associated definitions

    – *Terms and definitions come from a variety of sources*

        - Standards, discipline specific glossaries and dictionaries, SWG documents, and OSAC subcommittee generated or modified

- Created a database application to include all terms identified

    – *Lexicon can be browsed and searched by discipline and/or keyword*

    – *Sources for these terms are complete as possible; some remain as "Source Being Verified"*

    – *OSAC Preferred Terms are identified by a ⭐ when consensus has been reached on a definition*

Accessing the Lexicon

Challenges:

- Conclusion Scales in the Pattern and Face Disciplines
- Terminology
  - *not all disciplines agree on same definition for many terms*
  - *Why the OSAC preferred terms are important*
- Quantifying "Significant Differences" in Trace Disciplines
- Addressing for whom the Standards should be written
- Good Enough vs. Perfect
  - *"living documents"*
- Uncertainty in Qualitative Identifications
- The way ahead (OSAC 2.0)

We Still Have Work To Do

- ■ Within OSAC

  - – *Registry Approvals*

    - ■ Continued improvement of the Registry Approval Process within OSAC

    - ■ Revised Technical Merit Worksheet and Guidance

    - ■ Quarterly FSSB reviews/approvals during in-person meetings

  - – *Included the Resource Committees and Statistics Task Group as part of the FSSB*

  - – *Instituted an annual OSAC Leadership Strategy Sessions with OSAC members to seek 360° feedback*

- ■ Outside OSAC

- – *Continue to work alongside our partners, e.g., Federal offices, SDOs practitioners, and other stakeholders*

- – *Promote the adoption and implementation of OSAC Standards to forensic service providers, associations, criminal justice system, and Federal, state, and local offices.*

What Are OSAC's Highest Priorities?

- Decrease the number of R&D Gaps

- Increase the number of Technical Publications made available to our stakeholders

- Expand Interdisciplinary Projects across the disciplines

- Publish a Foundations Report - a state-of-the-discipline document that describes each discipline's current training, equipment use, methods, processes, measurements, traceability, reporting, potential for bias

How Can You Help?
Work with Us.

- Apply to work with OSAC as an affiliate or member

- Subscribe to our communications
  - *Newsletter*
  - *Standards Bulletin*
  - *Email Blasts*

- Promote use of the Standards on the OSAC Registry

- Find an OSAC member. Let's talk. (ribbons on)

FOR MORE INFO:

Google "OSAC FORENSICS"

Email: forensics@nist.gov
www.nist.gov/osac
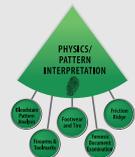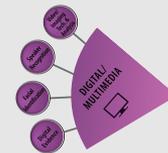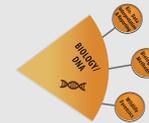
Who Makes Up OSAC?

Board and Committees

- Forensic Science Standards Board (FSSB)

- 3 Resource Committees
  - *Legal*
  - *Human Factors*
  - *Quality Infrastructure*

- Statistics Task Group
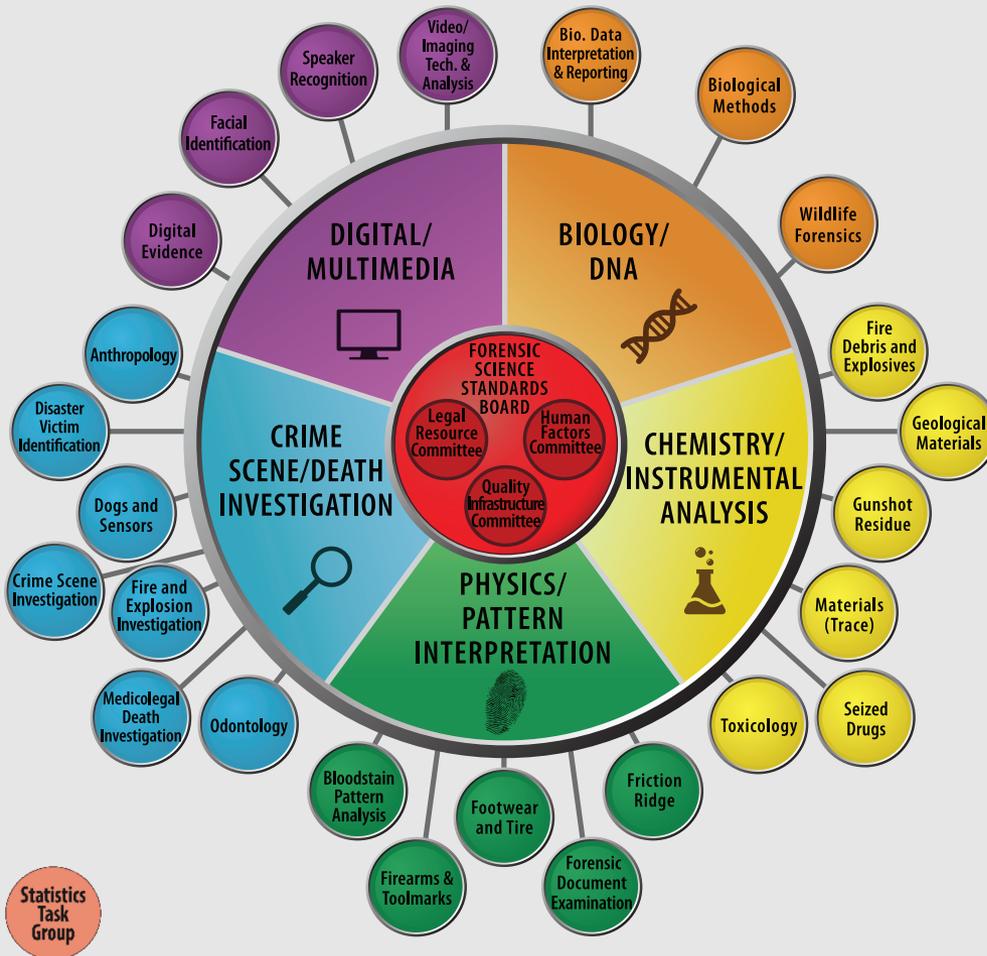 - *Statistician and/or Measurement Scientist appointed to each SAC*

Scientific Area Committees (SACS)

- *5 SACs*

- *25 SAC Subcommittees*

- Biology/DNA
  - *3 Subcommittees*

- Chemistry/Instrumental Analysis
  - *6 Subcommittees*

- Crime Scene/Death Investigation
  - *7 Subcommittees*

- Digital/Multimedia
  - *4 Subcommittees*

- Physics/Pattern Interpretation
  - *5 Subcommittees*

Composition

2/8/2018 Status
+550 members
325 affiliates

Employer Classification
Federal: 23%
State: 21%
Local: 19%
Academic: 17%
Private: 16%
FFRDC: 4%

Job Classification
Practitioner: 56%
Researcher: 17%
Educator: 10%
Other: 10%
Attorney: 2%
QA Manager: 2%
R&D Tech: 2%
Judge: 1%