Introduction to the American Academy of Forensic Sciences Standards Board
Background Leading to the ASB

- 2009 National Research Council report - *Strengthening Forensic Science in the United States: A Path Forward*
- February 4, 2014 announcement to National Commission on Forensic Science (NCFS) of Organization of Scientific Area Committees for Forensic Science (OSAC) launch
- January 2015 - first OSAC Subcommittee Meetings occurred.
AAFS – Standards Board (ASB)

- AAFS establishes Standards Developing Organization (SDO)
- Wholly owned subsidiary of AAFS
- Established and staffed – 2015/2016
- Accredited by the American National Standards Institute (ANSI) – 2016
- Partially funded by a grant through the Laura and John Arnold Foundation
- Consists of Consensus Bodies (CB), a Board of Directors, and Staff
ASB Board of Directors and Staff

- Appointed by AAFS Board of Directors from AAFS membership
- Directors serve 3 years
- Current Chair: Lucy A. Davis
- Directors include:
  - Jennifer Limoges
  - Lindsey Thomas
  - Julie Howe
- Greg Berg
  - Linton Mohammed
  - Kenneth Aschheim

- Staff:
  - Teresa Ambrosius, Secretariat
  - Linda Wilson, Technical Coordinator
  - Mary McKiel, ANSI and ISO Consultant
Mission and Objectives of the ASB

**Mission:** to provide accessible highest quality science based consensus forensic standards

**Objectives:**
- Forensic Standards accessible to the criminal justice and legal community
- Provide education and training on standards
- Provide training on implementation of ASB standards
- Independent, sustainable fiscally responsible entity
- Develop and provide ANS standards
- Foster collaboration and participation: AAFS, constituents, and other SDOs
- Participation in international forensic standards
Active Consensus Bodies

Currently have 12 Active Consensus Bodies:

- Anthropology
- Bloodstain Pattern Analysis
- Disaster Victim Identification
- DNA
- Dogs and Sensors
- Firearms and Toolmarks
- Footwear and Tire
- Forensic Document Examination
- Friction Ridge
- Medicolegal Death Investigation
- Toxicology
- Wildlife Forensics
ASB Consensus Body: Membership

- 7 to 25 members
- Administered by the Secretariat with the Officers (Chair, Vice-Chair, and Secretary) selected directly by the Consensus Body
- Open to all materially interested and affected individuals, companies, and organizations
- Applications reviewed, and members appointed by the Academy Standards Board
- Membership balance and interest categories conform to ANSI Essential Requirements for balance, lack of dominance, due process
- Over 300 industry volunteers on ASB Consensus Bodies and Working Groups
ASB CB Selection Process

ASB reviews applications and approves membership based upon:

• Need for active participation by each interest category
• Potential for achieving or maintaining balance and non-dominance
• Applicant’s expressed interest and willingness to participate
• Qualifications of representatives identified by the applicant organization, company, or government agency, and
• Qualifications of members who are considered subject matter expert
ASB Interest Categories

Eight interest categories:

- Academia
- Consumer Groups
- General Interest
- Laboratories and/or Testing Facilities
- Producers
- Subject Matter Experts
- User/Government
- User/Industry
ASB Consensus Body: Functions

- Creating and approving by consensus Forensic Standards, Best Practice Recommendations, and Technical Reports
- Considering comments, views, and objections to ballots and resolving all negative comments received in connection with the development of documents
- Responding to requests for interpretations of Forensic Standards published by the ASB
- Consensus body meetings are open to the public. All meetings are posted on the public calendar which can be found on the Consensus Bodies page of the ASB website.
Working Groups

• Working subsets of CBs
• Work on document or issue assigned by CB
• Develop draft documents to be considered and voted upon by the full CB
• Meetings do not have to be open
• No specific limitation on number of participants
• Participants do not need to be members of the CB
• CB members may participate in Working Groups
• Working Group members are approved by CB and WG Chair
Document Development

- ASB has a strong collaborative relationship with the Organization of Scientific Area Committees (OSAC) for Forensic Science.
- Most documents start with a draft developed within OSAC.
- Documents may also be created within ASB or submitted from other sources.
- The ASB CB is ultimately responsible for the content of the document.
- All ASB Standards and Best Practice Recommendations are put through the ANSI process to become American National Standards.
What OSAC Really Does

- The OSAC is a collaborative body of more than 550 forensic science practitioners and other experts who represent all levels of the government, academia and industry.
- Establishing OSAC to strengthen the nation’s use of forensic science by supporting the development and promulgation of forensic science consensus documentary standards and guidelines.
- OSAC evaluates existing standards published by SDOs for placement on the OSAC Registry AND
- OSAC introduces draft documents into existing SDOs for formal development – drafts go through SDO’s consensus process
- SDO publishes the new or revised standard
- OSAC evaluates if standard meets OSAC technical & process requirements
- OSAC approves standard for placement on the OSAC Registry

NOTE: OSAC does not publish Standards
What is ANSI?

- As the voice of the U.S. standards and conformity assessment system, the American National Standards Institute (ANSI) empowers its members and constituents to strengthen the U.S. marketplace position in the global economy while helping to assure the safety and health of consumers and the protection of the environment.
- The Institute oversees the creation, promulgation and use of thousands of norms and guidelines that directly impact businesses in nearly every sector: from acoustical devices to construction equipment, from dairy and livestock production to energy distribution, and many more. ANSI is also actively engaged in accreditation - assessing the competence of organizations determining conformance to standards.
- Mission—To enhance both the global competitiveness of U.S. business and the U.S. quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems, and safeguarding their integrity.
- Founded—October 19, 1918
What is ANSI?

- ANSI facilitates the development of American National Standards (ANS) by accrediting the procedures of standards developing organizations (SDOs). Accreditation by ANSI signifies that the procedures used by the standards body in connection with the development of American National Standards meet the Institute’s essential requirements for openness, balance, consensus and due process.

- The National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law 104-113) and its implementation directive, Office of Management and Budget Circular A-119, direct federal agencies to utilize voluntary consensus standards where feasible and to participate as appropriate in voluntary consensus standards development activities. Standards developed in accordance with ANSI’s accreditation requirements satisfy obligations incumbent on federal agencies to use or adopt voluntary consensus standards.

- In order to maintain ANSI accreditation, standards developers are required to consistently adhere to a set of requirements or procedures that govern the consensus development process. These requirements are set forth in a document known as the ANSI Essential Requirements: Due process requirements for American National Standards (www.ansi.org/essentialrequirements).

- Due process is the key to ensuring that ANSs are developed in an environment that is equitable, accessible and responsive to the requirements of various stakeholders. The open and fair ANS process ensures that all interested and affected parties have an opportunity to participate in a standard’s development. It also serves and protects the public interest since standards developers accredited by ANSI must meet the Institute’s essential requirements and other due process safeguards.
Why American National Standards?

• All ASB Standards and Best Practice Recommendations are put through the ANSI process to become American National Standards
• Provides for due process based on openness, balance, and consensus
• All interested and affected parties can participate
• Recognized world-wide
• Protects the public interest
• Often adopted into regulations
ANS Key Steps

Can be accessed and downloaded from ANSI at:

https://www.ansi.org/standards_activities/domestic_programs/anskeysteps
Types of Documents

- **Standard (Std)**
  Document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, requirements, guidelines, or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.

- **Best Practice Recommendation (BPR)**
  A best practice is a method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior to those achieved by other means or because it has become a commonly preferred way of doing things, e.g., a preferred way of complying with legal or ethical requirements.

- **Technical Report (TR)**
  A TR differs from a standard in that it does not set requirements, it is an explanatory or informational document. A TR may be used to describe the scientific and operational underpinnings of a standard, or to explore industry areas that are still undergoing research, or be a terms and definitions document.
ASB Document Process follows ANSI accredited procedures.

- New Work Proposal (NWP) submitted to, and approved by consensus body
- NWP approved by ASB to ensure alignment with overall mission of the organization, then submitted to ANSI
- Consensus Body (CB) develops document with support of Working Groups (WG)
- Document given public review and voted on by CB members
- Consensus body or working group review all comments
- If no unresolved negative comments, document forwarded to ANSI for approval as an ANS
- Document publicly available on ASB website (www.asbstandardsboard.org)
Academy Standards Board (ASB) Document Preparation Process

Proposed New Work Submitted by External Source

Submission to ASB

Consensus Body Review

Secretariat Review

Work approved by ASB Board

Notification to ANSI of Start of a Project

Consensus Body Develops Document (Reviews Existing Document for Possible Revision)

Secretariat Review of Process and Submission For Public Notification

Public Notification and Comments Period Concurrent with Committee Balloting

Ballot Passed?

Any Comments Received?

YES

NO

Consensus Body Revises / Reviews Document to address comments

Consensus Body Reviews and responds to comments

Document Revision Needed?

YES

NO

Consensus Body Passes Revision?

YES

NO

Process Ends without Approval of Document

American National Standard

Available for OSAC Consideration

Available On The Open Market for Free

ANSI Process Review

Approved As ANSI

NO

YES

Any Comments Received?

Consensus Body Revises / Reviews Document to address comments

Document Revision Needed?

Five Year Review Cycle

Proposed New Work Submitted by Existing ASB Consensus Group

NO

YES

Document revised for reballot/re-circulation

Not available for consideration

Available for OSAC Consideration

Available On The Open Market for Free
ASB New Work Proposal

- Requires ASB board approval prior to Consensus Body work
- Reviewed by the CB, and the ASB, then submitted to ANSI for publication in *Standards Action* for 30 day notification of proposed action
- If no objections or changes, ASB work commences
- Form is available on the [Documents and Forms section of the ASB website](#).
PINS to ANSI

- Scope from NWP approved by CB and ASB submitted to ANSI on PINS Form.
- From the *ANSI Essential Requirements: Due process requirements for American National Standards*

  **Project Initiation Notification (PINS)**

  At the initiation of a project to develop or revise an American National Standard, notification shall be transmitted to ANSI using the Project Initiation Notification System (PINS) form, or its equivalent, for announcement in *Standards Action*. Comments received in connection with a PINS announcement shall be handled in accordance with these procedures.

  A statement shall be submitted and published as part of the PINS announcement that shall include:

  (a) an explanation of the need for the project, including, if it is the case, a statement of intent to submit the standard for consideration as an ISO, IEC or ISO/IEC JTC-1 standard; and

  (b) identification of the stakeholders (e.g., telecom, consumer, medical, environmental, etc.) likely to be directly impacted by the standard.

  If the response to sub-section (b) changes substantively as the standard is developed, a revised PINS shall be submitted and published.
ASB Manual for Standards, Best Practice Recommendations, and Technical Reports

- Used by the working group to prepare the draft document to be presented to the consensus body
- The purpose is to ensure consistency in format, and to maximize usability of the documents
- Developed to provide guidance for preparing documents that will be published by the Academy Standards Board (ASB) and submitted to the American National Standards Institute (ANSI)
- PDF can be downloaded from Documents & Forms site
- Each standard (S), technical report (TR) and best practice recommendation (BPR) prepared for approval by consensus bodies of the ASB shall conform to this manual
Ballot and Public Comment

- Essential part of the standards development process
- Documents and comment template are available on the ASB website.
- 45 day period for public comment
- 30 day ballot to consensus body runs concurrently with public comment period
- Each CB member votes: Yes; Yes with comment; No with comment; Abstain with comment
- ASB procedures require approval by a two-thirds majority, excluding abstentions to publish a document
Comment Resolution and Publication

- Working Group resolves comments from CB Ballot and Public Comments – All comments given same consideration
- WG presents proposed resolutions to comments to CB for approval
- If document had substantial and/or technical changes based on comments, document goes for re-circulation (new comments can only be made on revised sections)
- Once process has been completed (as many re-circulations as necessary) ballot results, comment resolutions, and proof of outreach are submitted to ANSI for final approval to publish as an American National Standard (ANS)
International Standards

• **ISO – The International Organization for Standardization** is one of the major international standards developing bodies. ISO standards, technical reports, guidance, best practices and other documents are adopted by governments, industries and organizations world-wide.

• ISO membership is composed of the national standards bodies of countries around the world. ANSI is the U.S. national standards body and is this country’s member to ISO.

• ISO documents are developed through Technical Committees (TCs) composed of volunteers from member bodies.

• The U.S. participates in the work of ISO through ANSI accredited Technical Advisory Groups (TAGs). A TAG is formed for each ISO TC where there is sufficient U.S. interest.
ASB and ISO Forensic Standards

- ISO Technical Committee 272 develops international standards for forensic sciences.
- ASB participates in the ANSI U.S. TAG for ISO TC 272, providing language and comments on documents progressing from working drafts to committee drafts to the final drafts that are balloted across all ISO members.
- To date, ISO TC 272 has completed the following documents:
  - ISO 18385: Minimizing the risk of human DNA contamination in products used to collect, store, and analyze biologic material for forensic purposes—Requirements (prior to ASB involvement)
ISO Work in Progress

- ASB solicits comments from ASB Consensus Bodies and provides that input as part of U.S. TAG comments to the TC 272 process and negotiations.

- The following documents are currently under development in TC 272.
  - 20964 Specification for consumables used in forensic process – requirements for product manufacturing and kit assembly
  - 21043-3 Examination and Analysis
  - 21043-4 Interpretation
  - 21043-5 Reporting
Current Status of ASB

- Over 100 New Work Proposals submitted
- Over 30 posted for public comment
- 14 Standards/Best Practice Recommendations and 2 Technical Reports published
ASB Published Documents

ASB Published Documents (con’t)

ASB Published Documents (con’t)

Questions?

Send any additional questions to:

asb@aafs.org

Updated ASB website:

www.asbstandardsboard.org

Join our LinkedIn page:

AAFS Standards Board (ASB)