SWGDAM Regular Meeting
Combined Committee Presentations

Dr. Douglas Hares
SWGDAM Chair

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SWGDAM Vice-Chair

July 2026

Rapid DNA Committee

July 2026

Committee Goals & Objectives

- Rapid DNA Booking Station implementation
- Forensic Rapid DNA implementation

Committee/WG Tasks/Accomplishments

- Weekly web meetings February - July
  - Recommendations of Booking Station enhancements to the NDIS Board
    - DISC Definition
    - Requirements for first SDIS/NDIS Search of Rapid DNA enrolled arrestee from Booking Station

Committee/WG Tasks/Accomplishments

- Review of Booking Standards and Booking Procedures
  - Published in August 2020
  - 2 states online and 2 more very close within the Rapid Committee
  - Recommended updates will be sent to the CODIS Unit once review is completed

Committee Pending Activities

- Booking Station
  - Continue Booking Standards and Booking Procedure review
- Forensic Rapid DNA Programs
  - Monitor 2025 QAS Standard 18 and 19 implementation for forensic application and CODIS

Committee
Future Meetings

- Keep monthly full committee meetings
  - Add subgroup meetings between full committee meetings

Quality Assurance Committee

July 2026

QA Committee Goals/Objectives

- The Quality Assurance (QA) Committee is a standing committee tasked to identify, evaluate, and research issues relating to monitoring and maintaining the quality of DNA testing results in forensic laboratories.
  - The QA Committee will review and, as necessary, recommend revisions to the FBI's Quality Assurance Standards (QAS)
  - Update QAS supporting documents: QAS Guidance and Audit Documents

QA Committee

Tasks/Accomplishments since Jan 2026

- Survey Monkey Data Review
  - 107 Responses
  - Data disseminated to committee members for digestion
- Started QAS203X revisions
  - Reorg to better align with ISO 17025
    - Might not be too drastic, but there will be changes
  - Consulting Survey Data
  - Considerations from ISO 21043

Optimistic **Timeline**

(from July 2025)

- July 2025 – Open Discussion with SWGDAM
- September 2025 – TL Survey
- January 2026 – Presentation of "Rough concepts" ← We are here
- July 2026 & January 2027 – Committee updates & targeted discussions
- July 2027 – Presentation of Draft revisions
- January 2028 – Adjudicate SWGDAM Comments
- July 2028 – Adjudicate Public Comments and complete revisions
- 2029 – FBI submission, Socializing revisions, CODISU work on training
- 2030 – Issuance

Optimistic **Timeline**

(REVISED from July 2025)

- July 2025 – Open Discussion with SWGDAM
- September 2025 – TL Survey
- July ~~January~~ 2026 – Presentation of "Rough concepts"
- ~~July 2026~~ January 2027 & July 2027 – Committee updates & targeted discussions
- January 2028 – Presentation of Drafts/SWGDAM Comment Period
- July 2028 ~~2027~~ – Presentation of Final Drafts/Send to Public Comment
- January 2029 ~~July 2028~~ – Adjudicate Public Comments and complete revisions
- 2029 – Socialize revisions, CODISU work on training, Finalize Guidance
- 2030 ~~2029~~ – FBI submission
- 2031 ~~2030~~ – Issuance

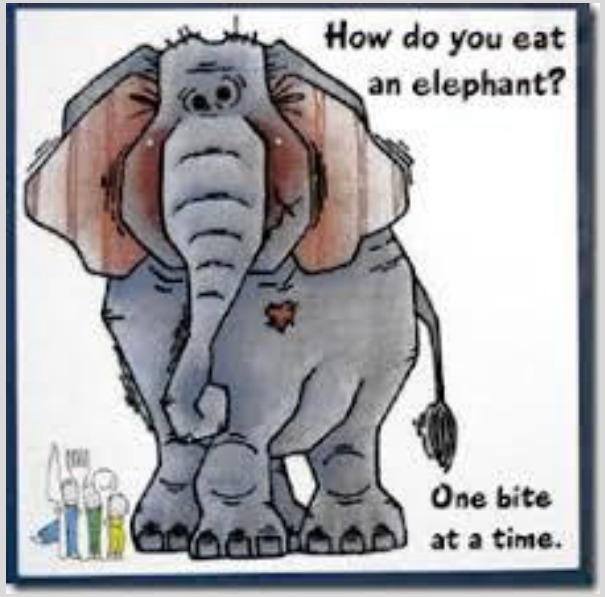
QA Committee

July 2026 Tasks/Accomplishments

- Productive In person Discussions!!
- Made progress on QAS Edits.
- QAS Topics Discussed/Aiming to incorporate:
  - Simplifying TL Responsibilities List
    - Allowing for additional TLs vs Requiring a Primary TL
  - TL Education
    - Trying again for Bachelors with additional experience
  - Validation Data Sharing
    - Multi-lab concept with core validation studies then Supplemental Studies at each lab location
  - Validation Audit Panel
    - Similar to Outsourcing OVP: If we allow for it, could it be built?
    - How COULD it work? Pilot during QAS revisions as a supplement to the External Auditor Teams?

QA Committee
Pending/Outstanding Issues

- Standing by for QAS2025 questions
- Keep working on QAS203X revisions!



Next Generation Sequencing Committee

July 2026

NGS Committee Goals/Objectives

- Identify, evaluate, and research issues relating to the forensic applications of next generation sequencing.
- Tasks:
- Draft a Technical Communication on SNP Kinship Approaches and Considerations
- Address comments from LabOps on NGS Validation Module

Committee Members & Invited Guests

- From January 2026- July 2026, we had committee meetings every month and a smaller group of 4 meet every 2 weeks

Committee Tasks/Accomplishments of Mtg

- A sub-set of the committee finished a working daft of the SNP Kinship Approaches and Considerations technical communication document in early July
- The document was given to the whole NGS committee ahead of the July in-person meeting
- We worked on the document this week and should have a draft that can be shared outside the committee soon

Document Preview/ Highlights

Draft Table of Contents

Table of Contents

Committee
Pending/Outstanding Issues

- Refined the NGS Validation Module document after LabOps provided comments
- Will provide that version to LabOps for next steps

Committee Tasks/Accomplishments of Mtg

- NGS will be looking into next tasks once these two documents are finalized
- Consolidate or updating exciting documents
- Consider QAS NGS additions for 203X version
- Mixture Interpretations

Lineage Marker Committee

July 2026

Tasks/Accomplishments of Mtg

- Completed our review and updates to the 2017 Contamination guidelines document after incorporating some minor wording to ensure that EDMI is captured.
- Added a supplementary document to address details such as processing evidentiary and reference samples together, decontamination methods (bleach, DNA degrading solvents, UV), contamination event reporting statement examples.

Tasks/Accomplishments of Mtg

- We presented the completed documents to the body in January.
- In February, we received the results of a detailed review of our FAQ document by the Editorial Board, and worked to address the comments.
- Simultaneously, based on the Editorial Board's review of the EDMI document, we agreed to take on the task of integrating some of the EDMI document into the Contamination document and to look at updating the EDMI document.
- We worked to better understand the EDMI document as it stands in 2026 and ensured that contamination concerns were captured.

Tasks/Accomplishments of Mtg

Introduction

The QAS defines contamination as the unintentional introduction of exogenous DNA into a sample or analytical control during DNA testing. While contamination of an item can occur prior to laboratory submission (e.g., first responders, evidence technicians, etc.), this document refers to contamination introduced at or after the start of a controlled forensic process. The start of a controlled forensic process should be defined by a laboratory. For example, this could be the arrival of the item at the laboratory, the moment a processor (analyst or technician) handles an item or another defined control point in the process. As human DNA is pervasive throughout the environment, contamination may not be completely avoided. In addition, the introduction of new DNA technologies and the improved sensitivity of DNA methodologies, including enhanced detection methods, may reveal low-level contamination or previously undetected contamination and can introduce additional interpretation challenges.

Refer to the QAS for standards that relate to contamination. In accordance with the QAS, accredited laboratories shall have procedures to minimize contamination, perform contamination assessments during validations and have policies for the detection and control of contamination.

Tasks/Accomplishments of Mtg

2.4.3 Face masks or shields

2.4.3.1 A disposable face mask should completely cover the mouth and nose.

2.4.3.2 A disposable or non-disposable face shield should completely cover the mouth, nose and eyes.

2.4.3.3 A face mask or shield should be dedicated to a specific activity and discarded after the activity is complete. If using a non-disposable face shield, the shield should be thoroughly decontaminated between uses with an appropriate cleaner.

2.4.3.4 If a face mask or shield is adjusted with a gloved hand, the glove should be changed or cleaned before proceeding to the next procedural step.

2.4.3.5 A physical barrier (e.g., sash of a dead-air or laminar flow hood) may replace or complement the use of face masks or shields.

2.4.4 A laboratory can utilize disposable hair and beard covers as an additional precaution against contamination of evidentiary items or DNA samples by laboratory personnel.

2.4.5 A laboratory can utilize shoe covers to prevent the transfer of DNA from employees in areas where Low Template or Low Copy DNA Analysis takes place.

Goals/Objectives

- Back in January, the question of whether the EDMI document is still relevant was raised.
- LMC said it is and that many of us use EDM.
- However, after much discussion, we are struggling with its relevance.
- We use the methods, of course, but should we continue to call them out as something unusual worthy of their own guidelines?
- We have a hard time deciding which are still EDMI. Could it be that with proper validation, many of them could just be commonplace?

Goals/Objectives

- EDMI:
  - Additional PCR amplification cycles greater than the Standard Method
  - Post-amplification purification or concentration
  - Reduced PCR reaction volume
  - Capillary Electrophoresis injection enhancement by increased voltage or time
  - Nested PCR
  - Increased DNA input during amplification
  - Reagent enhancements such as the addition of BSA, $MgCl_2$, or *Taq* Polymerase

Goals/Objectives

- **We propose sunsetting the document while issuing a sort of position statement on EDMI.**
- The position document, which LMC would write, would acknowledge that in the past, enhanced detection methods were something that could be considered out of the ordinary, but now, 12 years later, these methods are in many ways considered mainstream. Additionally, many kits and procedures now incorporate these methods and are considered proprietary information that the lab may not even fully be aware of. Due to these considerations, we don't believe that EDM require their own guidelines anymore, though when used, validation should clearly demonstrate their reliability.

Goals/Objectives

- This doesn't change the fact that **NDIS does not accept evidence profiles developed using Low Template/ Low Copy Number analysis**, and we would reiterate that, with the understanding that this will continue to be revaluated in the future.

Committee Pending/Outstanding Issues

- Where do we go with EDMI?
- Does the body feel that these methods are still unusual and potentially risky?
- Do we want to call them out in a document so that when they are used in a case, they are subject to increased attention in court?
- Might it be enough to say that they require extra consideration during validation?
- If so, the LMC will craft a statement.

Laboratory Operations Committee

July 2026

Committee Tasks/Accomplishments

- All four of these documents have been approved, committee time was spent adjudicating SWGDAM Editorial Board comments and aligning formatting
  - **SWGDAM Validation Guidelines for DNA Analysis Methods: Overview Document**
  - **Autosomal Multiplex Kit Internal Validation Module**
  - **Internal Validation of Fully Continuous Probabilistic Genotyping Systems Module**
  - **Modified Rapid DNA Analysis Internal Validation Module for Forensic Samples**

Committee Tasks/Accomplishments

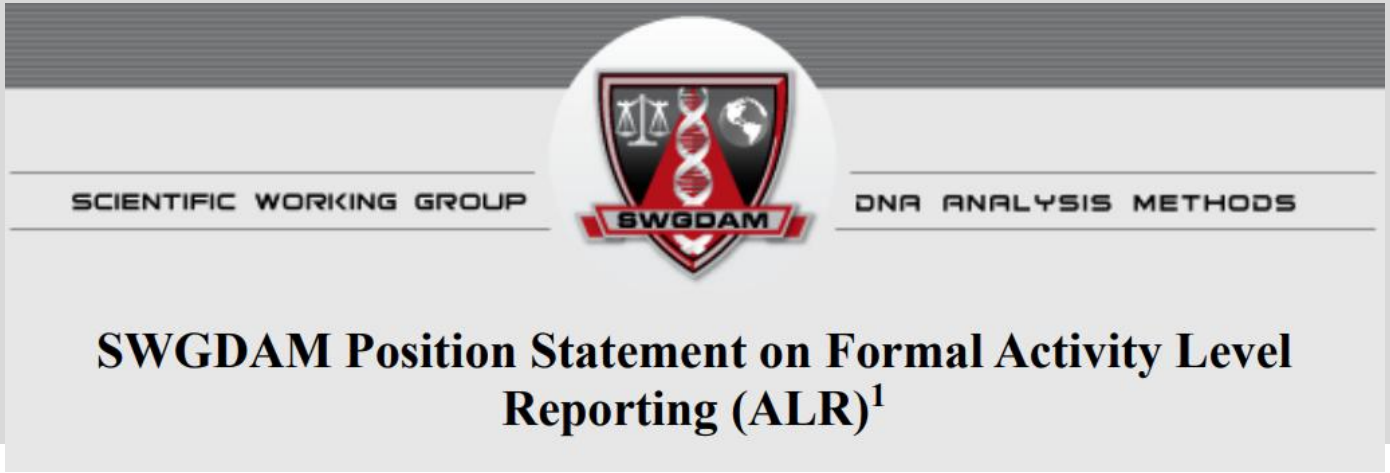
- Adjudicated public comments, will return to EB with aligned formatting to other modules:
  - **Internal Validation of Real-Time PCR DNA Quantitation Systems Module**

Autosomal STR Interpretation Committee

July 2026

Auto STR Committee Goals/Objectives

- Currently tasked with drafting a document with recommendations on answering activity level questions in court.



Auto STR Committee Tasks/Accomplishments

- Developed an outline
- Added some detail
- Our search for a middle option, after discussion with the SWGDAM body and our group, took us down some winding paths
- Started over with a new outline
- Started over with another new outline after mulling over it overnight

Draft Document Outline

Section 2 defines general concepts and limitations of DNA transfer, persistence, prevalence, and recovery (TPPR) testimony.

- Direct versus indirect transfer
- Highly variable with variables generally unknown
- Limitations of published research
- Factors that can affect TPPR

Draft Document Outline

Section 3 provides possible ways to answer to case-specific questions without providing expectations

- The analyst could provide examples of obvious scenarios and separately describe case specifics
- The analyst could provide the chain of events and TPPR factors that would need to occur for a scenario to produce the results obtained

Draft Document Outline

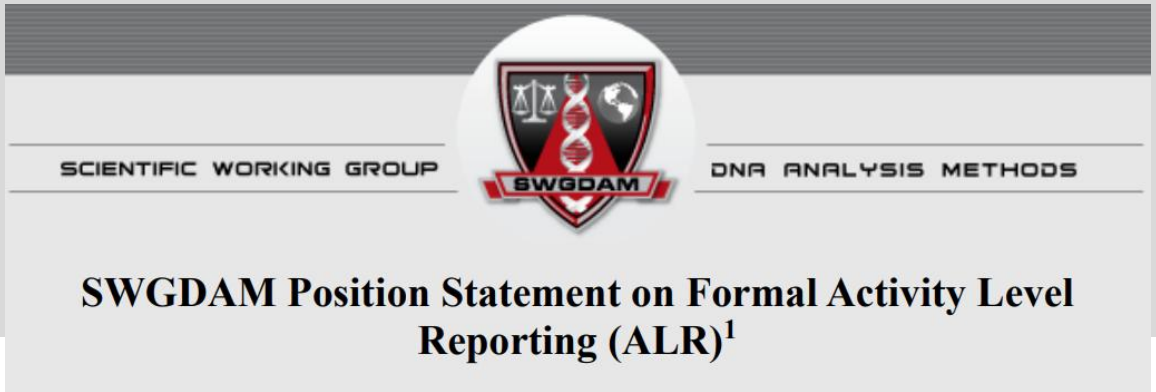
Section 4 provides possible ways to answer case-specific questions and providing expectations for obvious and not so obvious situations.

- The analyst could provide their expectations for the results given specific scenarios, including the case specific scenario
- It does not require a comparison to an alternate, but it could
- This approach may allow ranking scenarios or discussing them individually

Draft Document Outline

Section 5 will reiterate the position statement, re: formal activity level evaluations

- The formal approach isn't ready for US courts
- This section will be brief and refer back to the position statement



Draft Document Outline

Section 6 will be training requirements and a practical guide, re: formal activity level evaluations

- This section may be converted to an appendix
- This section might be longer but the most useful to the front-line analyst

IGG Committee

July 2026

IGG Committee

"Working Scope of Committee"

Provide IGG related information to the forensic DNA community of CODIS Laboratories, Commercial Laboratories that develop STR and mtDNA profiles for criminal investigations and UHR/MP cases, so informed decisions can be made by the Laboratories and the Law Enforcement Agencies they work with on IGG.

IGG Committee
IGG Survey of SWGDAM

- 41 of 61 responses are involved in IGG
- Type of Lab involvement in IGG
- Top 2 Responses:
  - #1 Case Identification
  - #2 Sample Prep for Outsourcing

IGG Committee
IGG Survey of SWGDAM

If your laboratory is not involved in IGG, what is preventing participation? (**select all that apply**): **20** Responses not involved in IGG

Top 3 Responses:

#1 Too many higher priorities

#2 Funding/Resources

#3 Existing Backlog

92 total Responses with 31 N/A.

IGG Committee

IGG Survey of SWGDAM

On which of the following topics would you be most interested in SWGDAM providing information? (**select all that apply**) **149 Total Responses**

#1. Advantages and limitations of the various kits/methods available for in-house SNP generation (e.g., Whole Genome Sequencing, Custom SNPs, Kintelligence)

#2. Establishing considerations/best practices for developing an IGG program

IGG Committee Documents

- Update/Refresh ***Overview of Investigative Genetic Genealogy*** document (Feb. 2020)

- Three Documents
  - 2025 SWGDAM Survey Resulted in 3 documents
    - ***Overview***
      - ***Ethical Issues*** (Appendix)
      - ***SNP Technology*** (Appendix)

IGG Committee
IGG Survey of SWGDAM

- ***Overview***:
  - What is IGG and how IGG works
  - **CODIS Requirement**
  - Genetic Genealogy Databases

IGG Committee
IGG Survey of SWGDAM

- ***SNP Technology***:
  - Define & Application: Array, WGS and Targeted Seq'g
  - Bioinformatics and Genotype Inference
  - Outsource SNP Considerations
    - Amount of DNA
    - Mixtures
    - Degradation

IGG Committee
IGG Survey of SWGDAM

- ***Ethical Issues***
  - Legal Privacy
  - Terms of Service (TOS)
  - Open vs Closed Databases
  - Reference Testing

CODIS Committee

July 2026

CODIS Committee Goals/Objectives

- Goals/objectives
  - Database Group Topics
  - CODIS Administrator Handbook
  - Ad-hoc topics
- Monthly Committee Meetings
  - Virtual - February, March 2026
  - In person - May 2026 – State CODIS Administrator's Meeting

CODIS Committee Tasks/Accomplishments of Mtg

- Database Group Topics
  - STACS – Hit tracking
  - Sample submission management
- Enhanced Detection Methods Discussion
  - Collaborated with Lineage Marker Committee to discuss sunsetting of the *Guidelines for STR Enhanced Detection Methods* Document

CODIS Committee Tasks/Accomplishments of Mtg

- QAS Outsourcing Issues
  - Understanding of QAS STD 17.3
  - Backlog reduction
- CODIS Administrator's Handbook
  - Deep dive review
  - Modernize
  - Updating eligibility scenarios

CODIS Committee Pending/Outstanding Issues

- QAS STD 17 - Outsourcing/Ownership Review
  - Education to CODIS community
  - Backlog assessment and future actions
- CODIS Administrator's Handbook