





Committee Initial Goals & Objectives

- July SWGDAM Mtg:
 - FBI IGG Program Presentation to SWGDAM
 - Conduct IGG survey of SWGDAM
 - Open Discussion on IGG with SWGDAM
- Update/Refresh Overview of Investigative Genetic Genealogy document (Feb. 2020)
- Determine additional Goals and Objectives based on Survey(s): Guidance/Best Practices



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

- 77% (61/77) response to IGG Survey
- Anonymous responses so duplication of agencies info could not be addressed.
 Resulted in skewed metrics.
- Major "Takeaways" from Survey were possible.

QA Committee



July 2025



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 2025

- FBI Director approved 2025 Standards
- Finalized QAS Guidance Document
- Completed Excel based Audit Documents
- Helped Review QAS Auditor training modules for the CODIS U

 Drafted a survey in preparation for the next big QAS revision (QAS2030?)



QA Committee Pending/Outstanding Issues

- On Stand-by for QAS 2025 questions.
 - Will draft additional guidance, as needed
 - Audit Doc formatting/functionality questions
- Initiate the NEXT Round of QAS Revisions
 - Brainstorming has begun
 - Draft Survey developed
- Sub-committee identified to start revising the <u>SWGDAM Guidelines for the Collection and</u> Serological Examination of Biological Evidence
 - Lead by Co-Chair Christie Smith







Committee Goals/Objectives

- Update 2017 Contamination Prevention and Detection Guidelines for Forensic DNA Laboratories
 - NGS/Rapid
 - Questions about when to separate Qs/Ks
 - Pre-2009 samples lacking RBs
 - Robotics



Committee Tasks/Accomplishments of Mtg

- FAQs document created to immediately address questions in the community about separation of Ks and Qs
 - Questions in court about labs combining Ks and Qs and about intent of guideline 2.1.2:
 - "Separate processing (e.g., handling and prep for DNA extraction) in pre-PCR areas by case type. Reference samples should be processed separately from evidentiary items by area and/or time."
 - Sounds like intent in 2017 was separation of Ks and Qs throughout process, but advances in robotics and more widespread use have demonstrated that it is safe to combine at all steps after extraction setup, especially after a validation showing such.
- Identified and added 4 new SMEs to replace lost members (thanks to all who suggested people!)



Committee Pending/Outstanding Issues

- Working on contamination guideline document updates and hope to have them ready for review shortly.
- Approval of FAQ document needed for immediate publication.



Committee Goals/Objectives

- The Laboratory Operations Committee will review and, as necessary, recommend revisions to the:
 - SWGDAM Validation Guidelines for Forensic DNA Analysis Methods
 - SWGDAM Guidelines for the Validation of Probabilistic Genotyping Systems
 - SWGDAM Contamination Prevention and Detection Guidelines for Forensic DNA Laboratories
 - SWGDAM Recommendations for the Efficient DNA Processing of Sexual Assault Evidence Kits
 - SWGDAM Guidelines for the Collection and Serological Examination of Biological Evidence
 - SWGDAM Guidelines for STR Enhanced Detection Methods

Committee Tasks/Accomplishments

- SWGDAM Validation Guidelines for DNA Analysis Methods: Overview Document
 - Approved, Pending publication with initial modules
- Autosomal Multiplex Kit Internal Validation Module
 - Completed comment adjudication and submitted to EB
 - Pending EB and SWGDAM vote

Committee Tasks/Accomplishments

- Internal Validation of Fully Continuous Probabilistic Genotyping Systems Module
 - Wrapping up adjudication of public comments
 - Then back to EB and SWGDAM body for vote
- Internal Validation of Real-Time PCR DNA Quantitation Systems Module
 - Received SWGDAM body comments, starting adjudication
- Modified Rapid DNA Analysis Internal Validation Module for Forensic Samples
 - First version drafted with Rapid Committee
 - Submitted to EB

Committee Pending/Outstanding Issues

- Internal Validation for NGS Kit Module
 - Worked on previously with NGS committee, will revisit soon

- Guidelines for STR Enhanced Detection Methods
 - Will evaluate before January 2026 meeting



Committee/WG Goals/Objectives

- Review and revise as needed the Interpretation Guidelines for Autosomal STR Typing
 - Current objective is to consider updates to the 2017 Interpretation Guidelines

Committee/WG Tasks/Accomplishments of Mtg

- SWGDAM Interpretation Guidelines for the Use of PG with Autosomal STR Results
 - Published April 11, 2025

Future Work?

- Assist where needed with the PG ad-hoc WG
- Supplemental Information document
 - More examples for labs on applying the guidelines
 - Cross-reference the 3 PG documents (validation, interpretation, and reporting)
- Evaluative Reporting guidance at other levels of the hierarchy







Committee Goals & Objectives

Rapid DNA Booking Station implementation

Forensic Rapid DNA implementation



Committee/WG Tasks/Accomplishments

- Weekly Web meetings (January and February) switching to twice monthly meetings (March – June)
 - Final edits to Guidance Document (published March 2025)
 - Collaborated with Laboratory Operations Committee on DRAFT modified Rapid DNA validation guidelines document (forensic samples)



Committee Pending Activities

- Booking Station
 - Continue monitoring Booking Standards for any future changes
- Forensic Rapid DNA Programs
 - Monitor 2025 QAS Standard 18 and 19 implementation for forensic application and CODIS



Committee Future Meetings

 Keep twice monthly web meetings to discuss any challenges with Rapid DNA implementation







NGS Committee Goals/Objectives

Identify, evaluate, and research issues relating to the forensic applications of next generation sequencing.

Tasks

- Rework the NGS Validation Module to include all targeted approaches for ID or Kinship
- Evaluate and research SNP kinship statistics to potentially provide information and/or guidance to the field



Committee Tasks

- NGS Validation Module
 - Rework to include all sequencing technologies
 and concerns for targeted NGS for ID and kinship
 - Targeted Sequencing = PCR and Probe Capture approaches
 - Excludes whole genome sequencing
 - Including Kintelligence concerns, but focused on direct extended kinship and not IGG
 - Including mtDNA



Committee Tasks

- Reviewed the proposed edits to AABB's 17th edition of Standards for Relationship Testing Laboratories
 - Only looked at the changes related to SNP and non-traditional testing (cM)
 - An accreditation option for SNP/IGG labs
 - On Tuesday, Barbara Llewellyn and Marsha
 Deitz presented to the IGG and NGS committees



Committee Pending/Outstanding Issues

- SNP Kinship Statistics
 - LR calculations for SNP-to-SNP direct kinship
 - MP/UHR cases and/or for IGG confirmations with only distant relatives
 - In January, we heard from the creators of software programs for SNP kinship statistics. Potential tasks from that:
 - Respond to manufacturers with recommendations on what the statistic should address
 - Linkage
 - Mutations
 - Size of pedigree tested
 - Determine if more research comparing the different strategies is needed, or if we would like to produce information/guidance to the field on what is available and the limitations of each



CODIS Committee Goals/Objectives

- The CODIS Committee will discuss topics related to the use of CODIS by law enforcement laboratories conducting forensic DNA testing.
- The CODIS Committee will review issues relating to the operation of CODIS such as software functionality and performance.
- The CODIS Committee will review issues submitted by the NDIS Procedures Board or via QAS@fbi.gov and collaborate on the development of responses for the CODIS Unit of the FBI Laboratory.

Committee Tasks/Accomplishments of Mtg

- Committee Meetings March
- May State CODIS Administrator's Meeting
- FDDU Sample Retention Response

FDDU Sample Retention Response

- July 2024 SWGDAM FDDU Round Table Discussion
- SWGDAM Chair assigned task to CODIS Committee
- Provide input on following topics:
 - Database sample re-analysis
 - Database sample retention/disposal policies
 - Minimum retention age
- Conclusion

CODIS Committee Pending/Outstanding Issues

• Finalize revisions to CODIS Administrator's Handbook