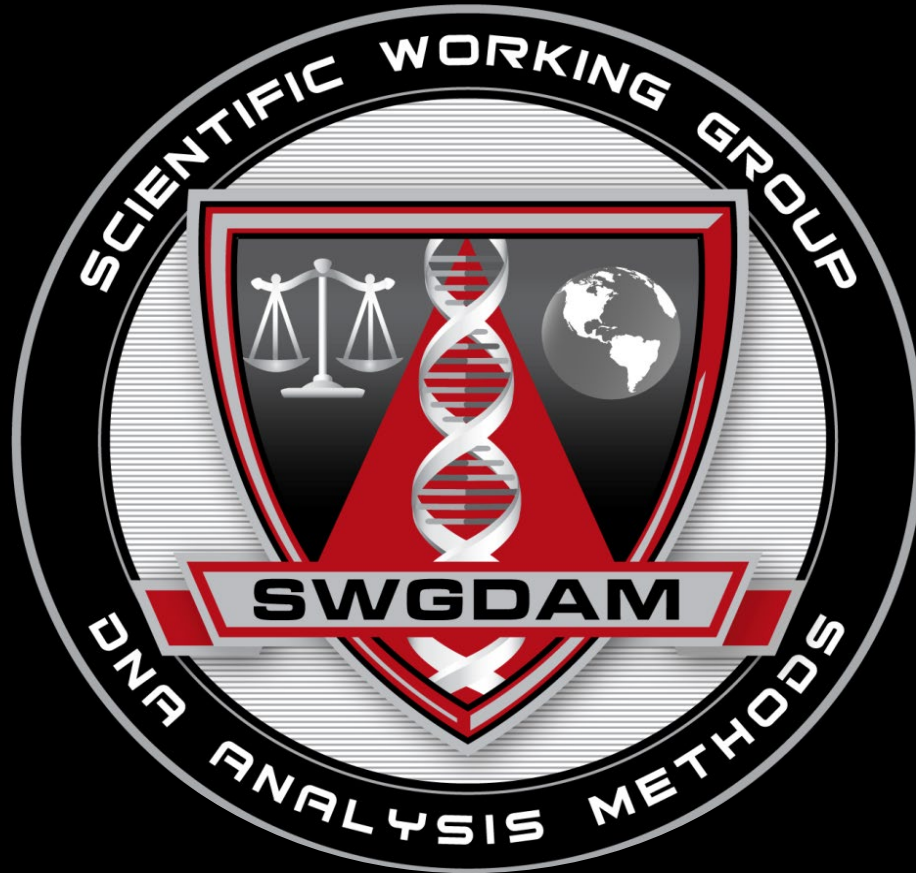
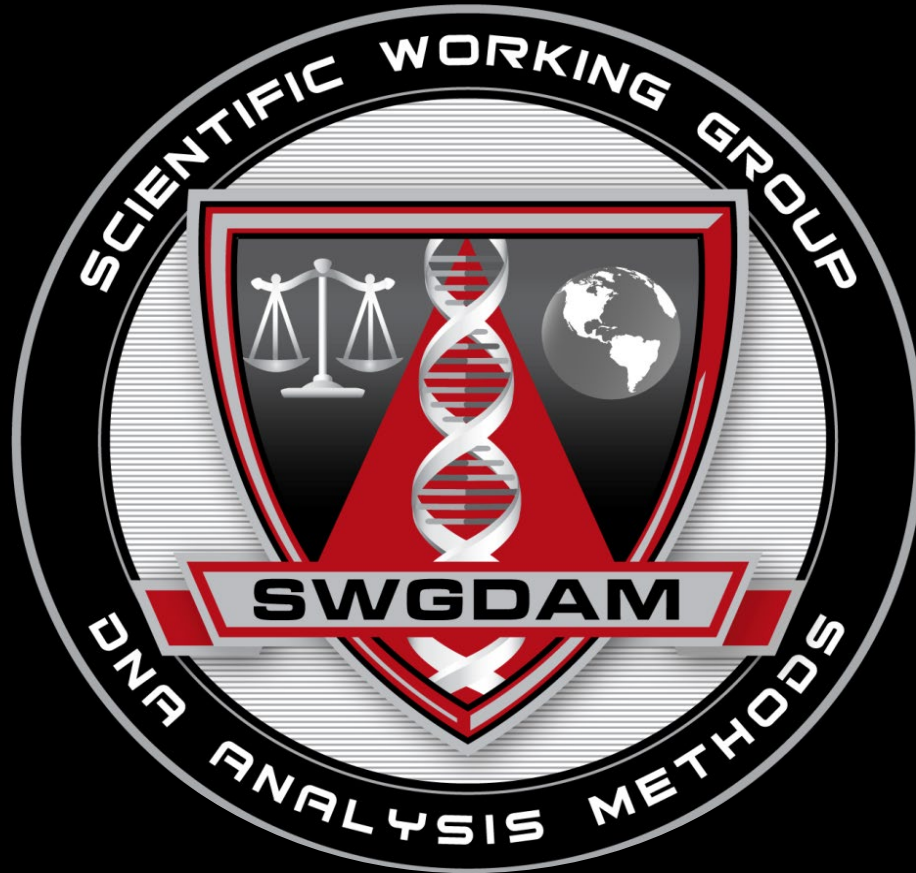


January 2025 Regular Meeting



Combined Committee
Presentations

January 2025



**Laboratory Operations
Committee**

Committee Goals/Objectives

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

Committee Tasks/Accomplishments

- **SWGDM Validation Guidelines for DNA Analysis Methods: Overview Document**
 - Committee worked to adjudicate second round of SWGDAM Body comments
 - Document approved by the SWGDAM Body in December
 - Pending publication with initial modules

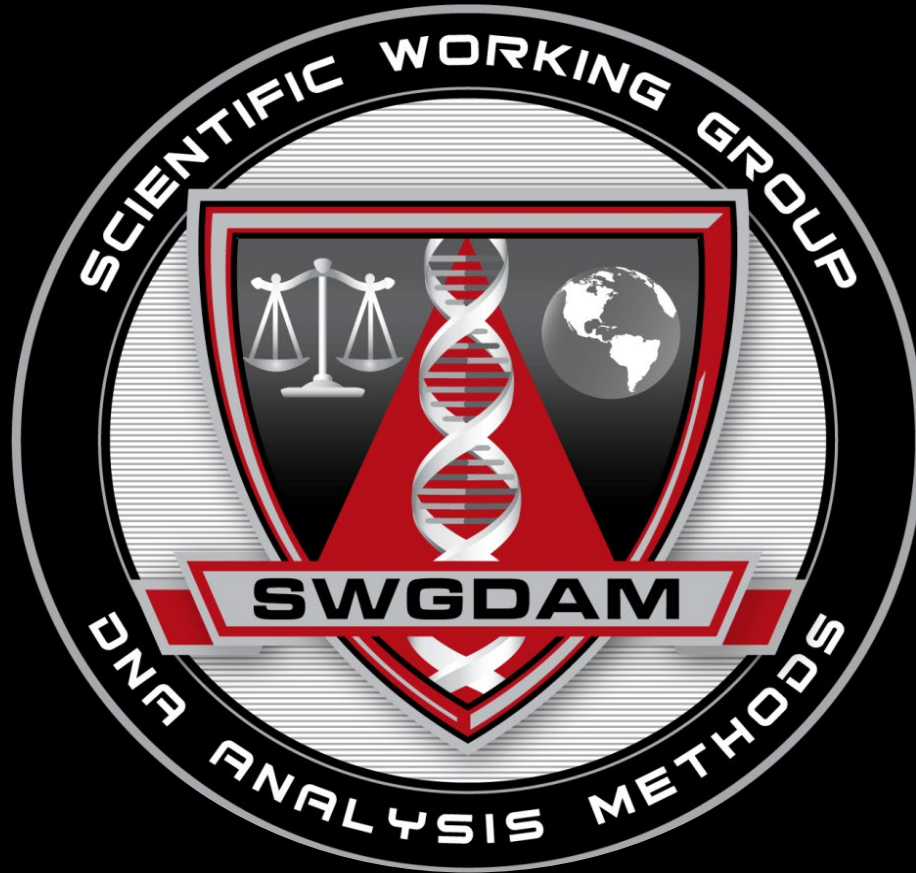
Committee Tasks/Accomplishments

- **Autosomal Multiplex Kit Internal Validation Module**
 - Completed adjudication of second round of SWGDAM Body comments
 - Preparation of document for Executive Board finalization
- Working with the Rapid DNA Committee on:
 - **Modified Rapid DNA Analysis Internal Validation Module for Forensic Samples**
 - **Modified Rapid DNA Internal Validation Module for Database, Known, or Casework Reference Samples Module**

Committee Pending/Outstanding Issues

- **Internal Validation of Fully Continuous Probabilistic Genotyping Systems Module**
 - Currently out for public comment – due back mid-February
- **Internal Validation of Real-Time PCR DNA Quantitation Systems Module**
 - Will go out for SWGDAM Body comment after this meeting
- **Internal Validation for NGS Kit Module**
 - Worked on previously with NGS committee, will revisit the module soon
- **Guidelines for STR Enhanced Detection Methods**
 - Will evaluate once our initial validation modules have moved through

January 2025



**Autosomal STR Interpretation
Committee Update**

Committee/Working Group Goals/Objectives

- Review and revise as needed the **Interpretation Guidelines for Autosomal STR Typing**
- Current objective is to draft guidelines for interpreting probabilistic genotyping data using electrophoresis-based data

Committee/Working Group Tasks/Accomplishments of Mtg

- **SWGDM Interpretation Guidelines for using Probabilistic Genotyping with Autosomal STR Results**
 - All public comments were adjudicated and final changes made
 - Document is with the Executive Board
 - Ready for final SWGDAM body review and approval

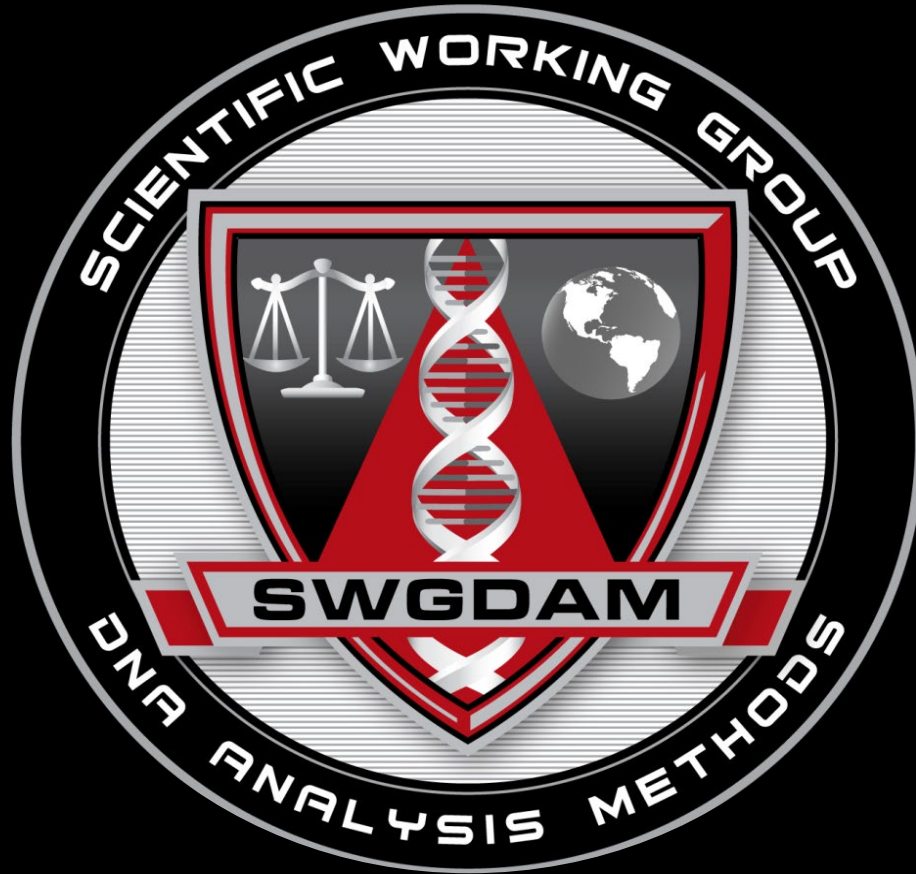
Committee/Working Group Tasks/Accomplishments of Mtg

- The Committee has nominated and voted in a new Chair
- A new SME will be joining us for future work

Committee Pending/Outstanding Issues

- Assist where needed with the Probabilistic Genotyping ad-hoc Working Group
- Once the PG document is published, this committee will assess any gaps through SWGDAM FAQs
- Supplemental Information document
 - More examples for labs on application of the guidelines
 - Cross-references to the 3 PG documents (Validation, Interpretation, and Reporting)
- Evaluative Reporting guidance to be considered for other levels of the hierarchy

January 2025



CODIS Committee

Committee Goals/Objectives

Objectives:

- To identify, evaluate and research issues relating to the use of CODIS in federal, state, and local forensic laboratories
 - If in the course of the review of such issues, the CODIS committee determines that revisions to the FBI Director's Quality Assurance Standards for Forensic DNA Testing Laboratories and Convicted Offender DNA Databasing Laboratories are needed, the committee shall recommend such changes to the Chair of SWGDAM for consideration by SWGDAM.
 - If the CODIS committee is presented with issues relating to the operation of CODIS, such as software functionality and performance, the committee shall forward such issues and their findings/recommendations through the SWGDAM chair to the Chief of the CODIS Unit.
 - The CODIS committee will review issues requested by the NDIS Procedures Board through the SWGDAM chair and will provide their findings and recommendations through the SWGDAM chair to the Board.

Committee Tasks/Accomplishments of Meeting

- Committee Meetings held in September, November and December
- Offender DNA Sample Retention Discussion
- Surveys sent out regarding offender sample retention
- Data is being compiled to present a white paper to SWGDAM

Committee Tasks/Accomplishments of Meeting

- CODIS Administrators Handbook
 - 2025 Updates considered
- Database Discussions:
 - STACS
 - Instrumentation
 - CE instruments
 - 3730
 - New Promega Spectrum
 - Thermofisher SeqStudio Flex Series Genetic Analyzer
 - Robotics instrumentation

Committee Pending/Outstanding Issues

- Offender DNA Sample Retention Discussion
 - A response to be presented to FBI Databasing Lab
 - Consideration document to be developed and presented to State Administrators
- Discussion to be held at May State Administrator meeting regarding Familiar Searching document and 20 loci

Committee Tasks/Accomplishments of Meeting

- Probabilistic Genotyping Software Guidance for CODIS entry to be developed
- PG tools are currently aiding in 134 labs in deconvolution
 - How are you determining what is entered into CODIS?
 - How are you addressing review of matches, especially matches to multiple profiles?
 - How are you reporting these matches?

January 2025



QA Committee

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 of Meeting

- Review and adjudicate SWGDAM comments on QAS Guidance Document (Stds 1-17)
 - 156 Comments
 - 126 Editorial (Grammar, punctuation, formatting, typo, incorrect cross-reference, Rapid Guidance not deleted)
 - 29 Technical
 - Completed all but those pending the effective date of standards and a final editorial review.
 - Edit Made: 89
 - Modified Edit Made: 36
 - No Edit Made: 26
 - Editorial check/correction to be done: 5

QA Committee

Tasks/Accomplishments of Meeting

- Reviewed the Audit Document Introduction and Instructions for Audit Team pages.
 - Started revisions to the Instructions to include both Audit Team and Lab
 - Good discussions on recent audit experiences
 - Shared observations about QAS Audits conducted with assessments
 - # of auditors, days at lab
- Started brainstorming “Future QAS Survey”
 - What to ask?
 - How to structure the questions?
 - How to disseminate?

QA Committee

Pending/Outstanding Issues

- Awaiting FBI Director approval of Standards
- Finalize QAS Guidance document revisions
- Complete Excel based Audit Documents
- Create a survey in preparation for the next big QAS revision (QAS2030?)
 - Allow users to identify "pain points" and areas in need of update/improvement or deletion due to redundancy with ISO/accreditation standards.



January 2025



**Likelihood Ratio
Committee**

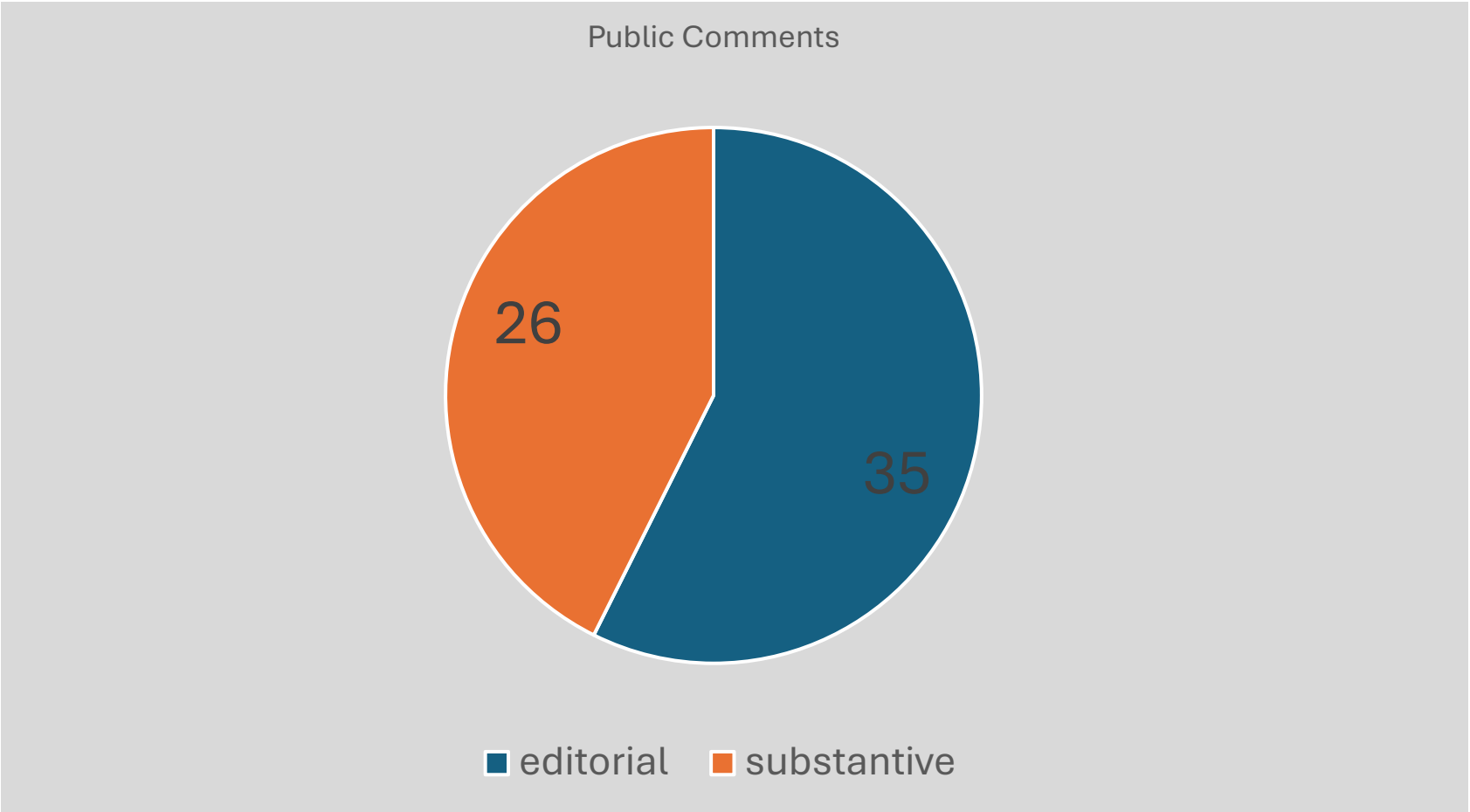
LR Committee Goals/Objectives

- The Committee of Detail was tasked with reviewing and updating 2017 SWGDAM Recommendations for Genotyping Results Reported as Likelihood Ratios



**RECOMMENDATIONS
OF THE
SWGDAM AD HOC WORKING GROUP ON
GENOTYPING RESULTS REPORTED AS LIKELIHOOD RATIOS**

LR Committee Pending/Outstanding Issues



LR Committee

Pending/Outstanding Issues

- Public Comments have been adjudicated
- Document returned to the EB for approval to submit for SWGDAM body to vote on publishing
- Thanks to all committee members for their dedication and commitment

January 2025



**Lineage Marker
Committee**

LM Committee Goals/Objectives

- Update 2017 Contamination Prevention and Detection Guidelines for Forensic DNA Laboratories
 - Add provisions around NGS
 - Questions about separation of Qs/Ks at CE
 - Pre-2009 samples lacking RBs
 - Robotics

LM Committee

Tasks/Accomplishments of Meeting

- Interpretation Guidelines for Mitochondrial DNA Analysis by Forensic DNA Testing Laboratories and Supplemental Information document approved and effective on September 9, 2024
- January Meeting:
 - Met Monday and Wednesday to review/edit
 - Two new SMEs added

LM Committee

Pending/Outstanding Issues

- Working on contamination document updates
- Trying to identify additional people for the Lineage Marker Committee, particularly those with mtDNA experience

January 2025



Rapid DNA Committee

Rapid DNA Committee

Goals & Objectives

- Rapid DNA Booking Station implementation
- Possible path to Rapid DNA and crime scene samples and CODIS
 - Changes to QAS
 - Guidance
- Missing Persons/Body ID and Rapid DNA

Rapid Committee/Working Group Tasks/Accomplishments

- Weekly Web meetings July – December 2024
 - Prepared Guidance Document for SWGDAM comment
 - Prepared draft Rapid committee recommendations regarding modified Rapid DNA validation guidance for Laboratory Operations Committee

Rapid Committee Pending Activities

- Booking Station
 - Continue monitoring Booking Standards for any future changes
- Forensic Rapid DNA Programs
 - Continue planning for crime scene evidence application and CODIS

Rapid Committee Future Meetings

- Return to bi-weekly Teams meetings after Guidance document approval
- Continue collaboration with Laboratory Operations Committee

January 2025



NGS Committee

NGS Committee

Goals/Objectives

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

Tasks

- NGS revisions to existing SWGDAM Interpretation Guidelines
- Review and, as necessary, recommend NGS revisions to the FBI's Quality Assurance Standards (QAS)
- Generate and review forensic NGS data and make regular reports to SWGDAM

NGS Committee

Tasks/Accomplishments

- We welcomed two new members
- Co-chair role transferred
- We became aware that AABB is accrediting laboratories for SNP/IGG testing and revising their 2024 (16th ed.) standards. We are investigating the proposed changes to the standards and how they might relate to NGS committee objectives
- We identified SNP Kinship statistics as a topic of growing relevance in the field and one that the committee would like to explore further
 - Requested vendor presentations from software developers/vendors to describe software currently available or in development that produces a reportable kinship statistic (i.e., LR)

NGS Committee

Tasks/Accomplishments

- Presentations from developers on reportable kinship statistics using SNPs
 - Eight invitations
 - Two developers didn't have software of interest
 - One developer declined and directed us to manuscripts in review
 - Five presentations
 - One didn't address kinship
 - Four others were informative and helpful
 - Committee is compiling the information and determining how we want to proceed

NGS Committee

Pending/Outstanding Issues

- AABB relationship testing standards
 - Will review current standards prior to February meeting to see if NGS Committee would like to comment
 - Our understanding is that the public comment period is soon
- Revisit 2022/2023 draft NGS validation guidelines that were written in collaboration with LabOps
 - To be reviewed and coordinated with LabOps