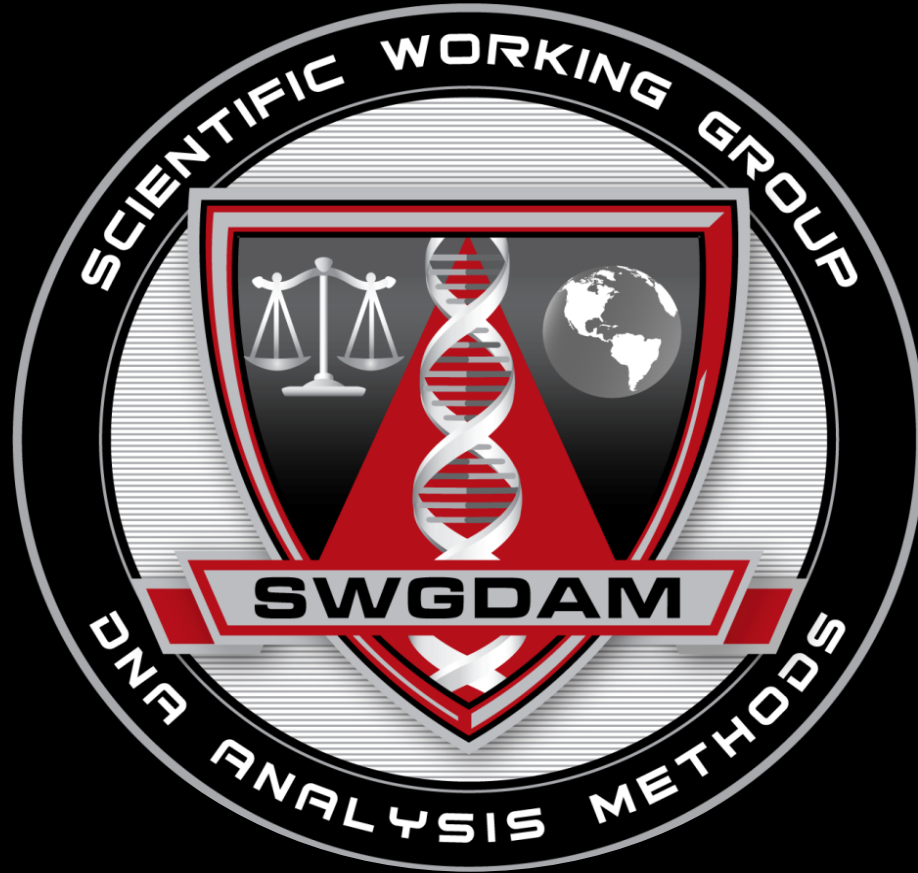


SWGDM Meeting, January 2020



Chair Report



On-site Contacts

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- Agenda
- About Us
- Meetings
- Recent Business
- Committee Work
- SWGDAM.org
- Future Business



Introductions



New Participants

- 7 new participants have been invited to the January 2020 SWGDAM Regular Meeting. SWGDAM would like to welcome the following individuals and thank their respective home agencies for their willingness to support our efforts:
 - Lauren Lu, Michigan State Police – Laboratory Operations Committee
 - Sarah Noel, Laboratoire de sciences judiciaires et de médecine légale, Ministry of Public Safety (Quebec) – Autosomal STR Committee
 - Erica Romsos, National Institute of Standards and Technology – Body Fluid identification Working Group
 - Alyson Saadi, Louisiana State Police – Quality Assurance Committee
 - Anne Marie Schubert, Sacramento County District Attorney's Office – Committee of Correspondence on Forensic Genealogy
 - Phillip Simmer, Louisiana State Police – Rapid-DNA Pilot
 - Carl Sobieralski, Indiana State Police – Organization of Scientific Area Committees (OSAC) Liaison



New Members

- 4 new members have been appointed by the SWGDAM Chair following their recommendation by the Membership Committee (Section II.C.31). Congratulations to:
 - Marla Kaplan – Oregon State Police
 - Charla Marshall – Armed Forces DNA Identification Laboratory
 - Justin Maxwell – Colorado Bureau of Investigation
 - Ruth Montgomery – Missouri State Highway Patrol
- SWGDAM would like to thank the home agencies of these individuals for their continued support of its critical work.



Membership Update

- SWGDAM would like to thank **Dr. John Tonkyn** for his over 15 years of dedicated service and wish him well as he moves from the California Department of Justice to the International Commission on Missing Persons.
- John, congratulations on your new role and SWGDAM wishes nothing but the best for you and your family.



Invited Guest Update

- SWGDM would like to thank Meg Aceves of the California Department of Justice for her work on behalf of SWGDAM.
 - “I really appreciate the opportunity to have worked with so many brilliant minds to elevate our profession.”



Agenda



January 2020 Meeting

- 102 invitations had been extended to 8 international, 35 domestic federal, and 59 domestic state and local invitees.
- The Casework Expert System Working Group, Committee of Correspondence on Forensic Genealogy, and Rapid-DNA Committee will meet on Monday, January 6th prior to the start of the SWGDAM Regular Meeting.
- The meeting will include a Committee of the Whole Sessions to review the proposed *FBI Quality Assurance Standards for the Operation of Rapid DNA Systems by Law Enforcement Agencies in the Booking Environment*.
- The Technical Session will be held on Tuesday to discuss both Rapid-DNA Technology and Investigative Genetic Genealogy.
- A full day of Committee Breakout Sessions will be held on Wednesday.
- The Roundtable Session will be held Wednesday evening and Update Sessions on Thursday.



About Us



Responsibilities

- Recommend revisions, as necessary, to the *Quality Assurance Standards for Forensic DNA Testing Laboratories* and the *Quality Assurance Standards for DNA Databasing Laboratories*.
- Serve as a forum to discuss, share, and evaluate forensic biology methods, protocols, training, and research to enhance forensic biology services.
- Recommend and conduct research to develop and/or validate forensic biology methods (Section I).



Organization

- Chair: Anthony J. Onorato, FBI Laboratory
- Vice Chair: Russell Vossbrink, Arizona DPS
- Executive Board: Chris Carney, Eugene Lien, Amy McGuckian, Shawn Montpetit, and vacant
- Executive Secretary: Dawn Herkenham
- Members are technical leaders, CODIS Administrators, or forensic scientists from local, state and federal crime laboratories
 - 35 Regular Members
 - 3 year membership term(s)
- Two regular meetings per year in January and July
- Invited Guests participate in meetings
 - Invited Guests have full participatory/voting privileges in Committee and Committee of the Whole Sessions
 - Invited Guests do not vote when the SWGDAM Membership considers documents for final approval (SWGDM Bylaws, Section II.D)



SWGDA Members

- Suzie Barritt-Ross
- Angelo Della Manna
- Thomas Callaghan
- Chris Carney
- Russell Gettig
- Ann Marie Gross
- Bruce Heidebrecht
- Deedra Hughes
- Elizabeth Johnson
- Kristine Kadash
- Marla Kaplan
- Susannah Kehl
- Jason Kokoszka
- Eugene Lien
- Beth Ann Marne
- Amy McGuckian
- Scott McWilliams
- Jeff Nye
- Charla Marshall
- Justin Maxwell
- Gary Molina
- Ruth Montgomery
- Shawn Montpetit
- Tamyra Moretti
- Steven Myers
- Anthony Onorato
- John Planz
- Dixie Peters
- Juliet Rolando
- Lisa Schiermeier-Wood
- Christie Smith
- Jenifer Smith
- Melissa Suddeth
- Joel Sutton
- Russell Vossbrink



Past Participation

- July 2019: 81 participants with 4 international, 29 domestic federal, and 48 domestic state and local attendees.
- January 2019: Meeting cancelled due to U.S. Federal Government shutdown.
- July 2018: 73 participants with 6 international, 27 domestic federal, and 40 domestic state and local attendees.
- January 2018: 72 participants with 4 international, 30 domestic federal, and 38 domestic state and local attendees.
- July 2017: 66 participants with 3 international, 26 domestic federal, and 37 domestic state and local attendees.

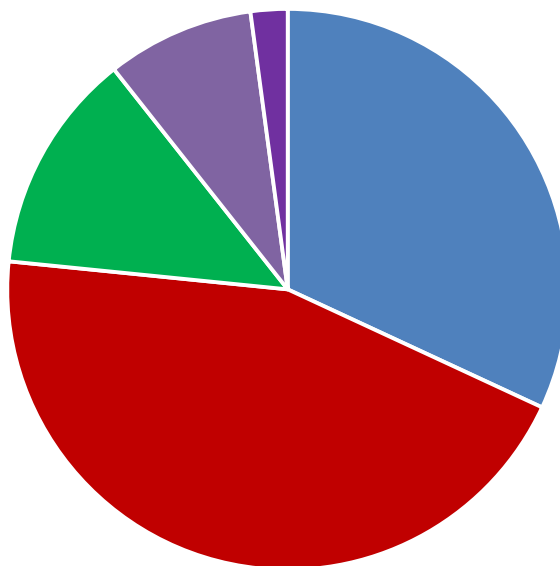


2018 Survey

SWGDM Participant Agency Affiliation

Type of Organization	Federal	State	Local	Academia	Other
	15	21	6	4	1 – Not-for-profit

Type of Organization



■ Federal ■ State ■ Local ■ Academia ■ Other

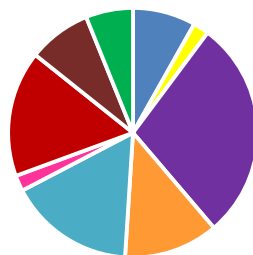


2018 Survey

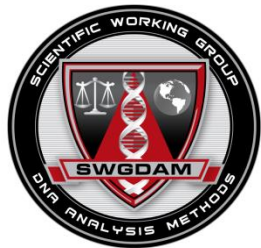
SWGDM Participant Current Job Title

Current Job Title	Laboratory Director	Quality Manager	Technical Leader	CODIS Administrator	Forensic Scientist/Analyst	Professor	Other
	4	1	14	6	8	1	8– Supervisor 4 – Program Manager 3 – Associate Director 1 – Research Leader 1-Associate Professor 1-Unit Chief 1-Auditor

Current Job Title



■ Laboratory Director ■ Quality Manager ■ Technical Leader ■ CODIS Administrator ■ Forensic Scientist
 ■ Professor ■ Supervisor ■ Program Manager ■ Associate Director ■ Other

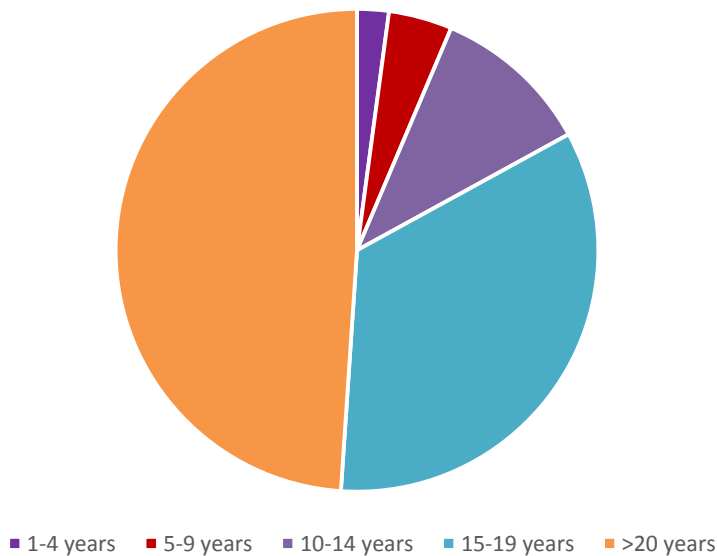


2018 Survey

SWGDM Participant DNA Laboratory Experience

Years of experience at a laboratory conducting forensic DNA testing	None	1-4 years	5-9 years	10-14 years	15-19 years	> 20 years
		1	2	5	16	23

Years of Experience conducting forensic DNA testing



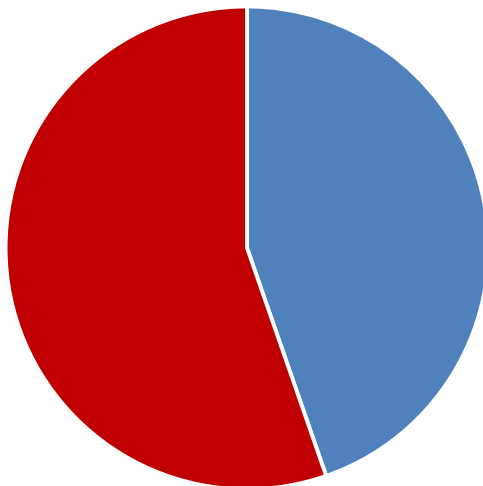


2018 Survey

SWGAM Participant DNA Qualification Status

Currently qualified to conduct forensic DNA casework	Yes	No
	21	26

Currently qualified to conduct forensic DNA casework



■ Yes ■ No

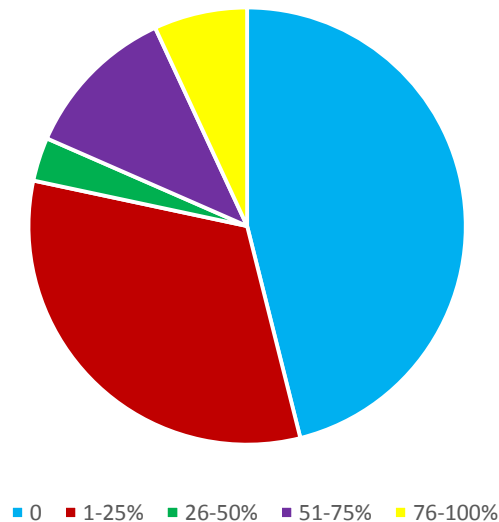


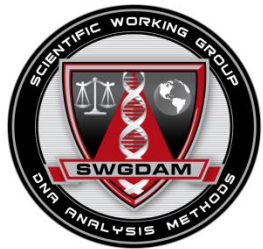
2018 Survey

SWGDA Participant Percent Casework

% of time spent performing casework (testing, preparing reports, reviews, etc.)	0%	1-25%	26-50%	50-75%	76-100%
	20	14	4	5	3

% of time spent performing casework (testing, preparing report, reviews, etc)



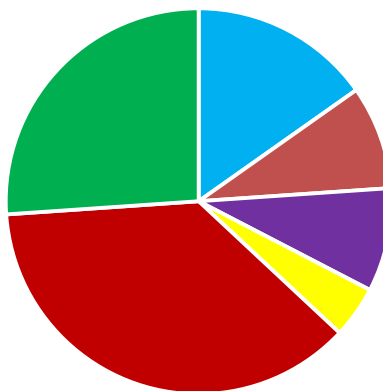


2018 Survey

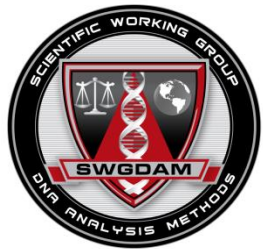
SWGAM Participant Experience by Technique

Years of experience in	Less than 1 year	1-4 years	5-9 years	10-14 years	15-19 years	>20 years
Biological screening	7	4	4	2	17	12
Nuclear DNA	1	1	4	8	12	18
Y-STRs	15	7	2	7	5	1
mtDNA	35	2	4	1	2	3
NGS	38	5	3			

Years of Experience in Biological Screening

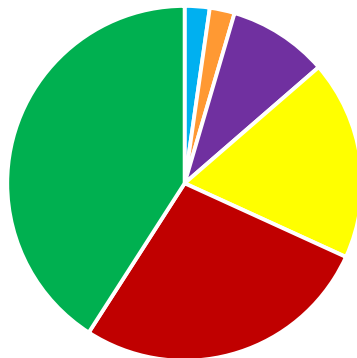


■ Less than 1 year ■ 1-4 years ■ 5-9 years ■ 10-14 years ■ 15-19 years ■ >20 years



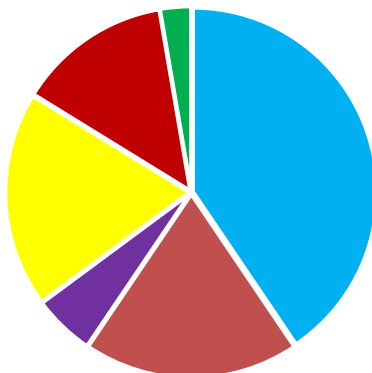
2018 Survey

Years of Experience in Nuclear DNA



■ Less than 1 year ■ 1-4 years ■ 5-9 years ■ 10-14 years ■ 15-19 years ■ >20 years

Years of Experience in Y-STRs

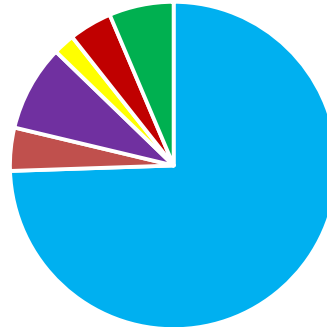


■ Less than 1 year ■ 1-4 years ■ 5-9 years ■ 10-14 years ■ 15-19 years ■ >20 years



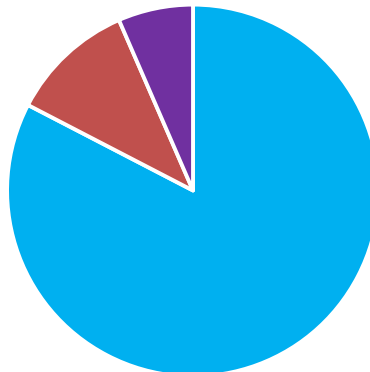
2018 Survey

Years of Experience in MtDNA



■ Less than 1 year ■ 1-4 years ■ 5-9 years ■ 10-14 years ■ 15-19 years ■ >20 years

Years of Experience in NGS



■ Less than 1 year ■ 1-4 years ■ 5-9 years



Standing Committees

- Autosomal STR Interpretation
- CODIS
- Laboratory Operations
- Lineage Marker
- Next Generation Sequencing
- Quality Assurance
- Rapid DNA



Working Groups

- Body Fluid Identification Working Group
- Forensic DNA Expert System Working Group



Joint Collaborations

- Joint NIJ/SWGDM DNA Efficiency Improvement Group
- Joint OSAC/SWGDM DNA Process Mapping Group



Committee of Correspondence

- Forensic Genetic Genealogy
 - Representatives from SWGDAM, the European Network of Forensic Science Institutes (ENFSI), the Organization of Scientific Area Committees (OSAC) Biology/DNA Scientific Area Committee (Biology/DNA-SAC), and other experts in Forensic Genealogy
 - Drafting an overview of Investigative Genetic Genealogy
 - Delivered a Technical Session on the topic of Forensic Genealogy as a part of the July 9-11, 2019 Regular SWGDAM Meeting.
 - Recommend what, if any, future work SWGDAM should undertake on Forensic Genealogy.



Meetings



Future Meetings

- Two 2020 Regular SWGDAM Meetings
 - January 7-9, 2020
 - July 7-9, 2020
 - SWGDAM Update: November, 2020 (FBI National Technical Leader Summit)
- Two 2021 Regular SWGDAM Meetings
 - January 12-14, 2021
 - July 13-15, 2021
 - SWGDAM Update: November, 2021 (FBI National Technical Leader Summit)



Past Meeting - Nov 2019

- The new 2020 FBI Quality Assurance Standards were reviewed with the DNA Technical Leaders and other attendees at the SWGDAM Update.
- As necessary, future SWGDAM Updates will be structured similarly to solicit input from DNA Technical Leaders into SWGDAM guidance documents under development.
- The SWGDAM EB continues to emphasize community outreach opportunities such as these to increase information exchange and transparency.



Past Meeting - July 2019

- Held in Woodbridge, VA on July 9-11, 2019.
- 81 participants with 4 international, 29 domestic federal, and 48 domestic state and local attendees.
- The Casework Expert System Working Group, Committee of Correspondence on Forensic Genealogy, and Rapid-DNA Pilot Group met in special sessions prior to the start of the Regular Meeting.
- The meeting included Committee of the Whole Sessions to approve the new QAS Audit Guide and to review the OSAC/SWGDM DNA Process Map.
- A Technical Session was held to discuss Forensic Genetic Genealogy and to receive a report from the Committee of Correspondence on Forensic Genealogy.
- A full day of Committee Breakout Sessions was held.
- Update and Roundtable Sessions were held.



New Participants

- 13 new participants were invited to the July 2019 SWGDAM Regular Meeting. SWGDAM would like to welcome the following individuals and thank their respective home agencies for their willingness to support our efforts:
 - Blaine Bettinger, The Genetic Genealogist, LLC – Committee of Correspondence on Forensic Genealogy
 - Andrea Borchardt, National Institute of Justice – NIJ Liaison
 - Dorothy Catella, Oakland County (MI) Sheriff's Office – QA Committee
 - Eric Duvall, Denver Police Department – Casework Expert System Working Group
 - Malia Fullerton, University of Washington – Committee of Correspondence on Forensic Genealogy
 - Christi Guerrini, Baylor College of Medicine – Committee of Correspondence on Forensic Genealogy
 - Jessica Hanna, Kansas City Police Department Crime Laboratory – Casework Expert System Working Group
 - Vanessa Nelson, Texas Department of Public Safety – Autosomal STR Committee
 - Lori Napolitano, Florida Department of Law Enforcement – Committee of Correspondence on Forensic Genealogy
 - Chris Piwonka, Texas Department of Public Safety – Rapid-DNA Pilot
 - Peter Schneider, Institute of Legal Medicine Cologne – Committee of Correspondence on Forensic Genealogy
 - Susan Welti, Washington DC Department of Forensic Sciences – NGS Working Group
 - Janaki Vaidyanathan, LA State Police – Rapid-DNA Pilot



Past Meeting - Jan 2019

- MEETING CANCELLED due to a United States Federal Government shutdown that interrupted Fiscal Year 2019 FBI funding.
- 88 invitations had been extended to 7 international, 34 domestic federal, and 47 domestic state and local invitees.
- The meeting was scheduled to have included Committee of the Whole Sessions
 - To receive reports by the NGS Working Group on the Next Generation Sequencing-specific (NGS) additions to the *SWGDM Interpretation Guidelines for Mitochondrial DNA Analysis by Forensic DNA Testing Laboratories* and the *Addendum to the SWGDAM Interpretation Guidelines for Autosomal STR Typing by Forensic DNA Testing Laboratories performing Next Generation Sequencing*.
 - To receive the report by the QA Committee on the QAS Audit Guide that will supplement the proposed revisions to the 2011 FBI Forensic DNA Quality Assurance Standards (QAS) and 2011 Databasing QAS Audit Documents.
- The Technical Session was to have discussed Forensic Genetic Genealogy.
- A full day of Committee Breakout Sessions were to have been held as well as Update and Roundtable Sessions.



Past Meeting - July 2018

- Held in Woodbridge, VA on July 10-12, 2018.
- 73 participants with 6 international, 27 domestic federal, and 40 domestic state and local attendees.
- Both the QA Committee and Next Generation Working Group met in special sessions prior to the start of the Regular Meeting.
- The meeting included Committee of the Whole Sessions to develop the QAS Audit Guide that will supplement the proposed revisions to the 2011 FBI Forensic DNA Quality Assurance Standards (QAS) and 2011 Databasing QAS Audit Documents.
- A Technical Session was held to discuss Lineage Marker Testing and the proposed revisions to the *SWGDM Interpretation Guidelines for Y-Chromosome STR Testing*.
- A full day of Committee Breakout Sessions was held.
- Update and Roundtable Sessions were held.



Recent Business



Outreach

- QA Committee Chair Jocelyn Carlson reviewed the new 2020 FBI Quality Assurance Standards 2020 FBI Quality Assurance Standards with the DNA Technical Leaders and other attendees at the SWGDAM Update at the FBI DNA Technical Leader Summit held in conjunction with the 2019 CODIS Meeting in Norman, OK (November 2019).
- QA Committee Chair Jocelyn Carlson presented on “*The Next QAS: An Overview of Revisions to the DNA Quality Assurance Standards*” at the Southwestern Association of Forensic Science in Austin, TX (October 2019).
- QA Committee members Jocelyn Carlson, Kristine Kadash, Eugene Lien, and Amy McGuckian presented a workshop entitled “*The Revised FBI Quality Assurance Standards for Forensic DNA Typing and Forensic Databasing Laboratories – What’s Changed?*” at the International Symposium on Human Identification (ISHI) in Palm Springs, CA (September 2019).
- Kristine Kadash presented on the activities of SWGDAM at a Thermo Fisher Scientific Forensic Genetics – HID Roadshow 2019 in Denver, CO (September 2019).



Outreach

- QA Committee Chair Jocelyn Carlson has engaged with the FBI's CODIS Unit to assist the development of the Quality Assurance Standard (QAS) Auditor Computer Based Training (CBT).
- Douglas Hares provided a SWGDAM Update at the European Network of Forensic Science Institutes' (ENFSI) annual meeting (April 2019).
- SWGDAM Vice Chair Russell Vossbrink continued to participate on the monthly conference call of the Biology/DNA Subject Area Committee (SAC) of the Organization of Scientific Area Committees (OSAC).
- SWGDAM forwarded its proposed changes to the 2011 Forensic and Databasing Quality Assurance Standards (QAS) together with their corresponding QAS Audit Documents to the FBI for its consideration and approval (March 2019).
- SWGDAM forwarded its proposed Standards for the Operation of Rapid DNA Systems by Law Enforcement Agencies in the Booking Environment to the FBI for use in its upcoming pilot study (March 2019).



Body Fluid Identification Working Group

- SWGDAM has empaneled a Body Fluid ID Working Group.
- This working group has been tasked to review 1) the current state of forensic serological testing, 2) the next generation of body fluid testing technology, 3) the potential operational value of conventional and future serological testing, 4) the potential integration of both current and future laboratory workflows, and 5) the use of screening techniques to streamline general workflows.
- Participants include: Marla Kaplan (Chair), Jason Kokoszka (Vice Chair), Lilly Moreno, Gary Shutler, Evelyn Ridgley, Ray Wickenheiser, Melissa Suddeth, Neil Fernandopulle, Russell Vossbrink, and Mary Lou Nicholson.



Joint NIJ/SWGDAM Working Group

- The National Institute of Justice's (NIJ) Office of Investigative and Forensic Sciences has invited SWGDAM to collaborate to form a DNA Efficiency Improvement Working Group (DEI WG) to develop best practices for the enhancement of DNA laboratory efficiency.
- The DEI WG was populated using nominations solicited from SWGDAM participating and NIJ DNA Capacity Enhancement and Backlog Reduction funded agencies and will meet using a combination of remote and in-person meetings over the course of 12-18 months.
- The Working Group is composed of subcommittees targeting the high-leverage areas of Laboratory Operations, Training and Hiring, Reporting and Data Management, Case Intake Lifecycle, and New Technologies and Change Management.
- NIJ will provide the funding for all non-federal government participants.
- SWGDAM Participants include: Jeanette Wallin, Kristin Sasinouski, Eugene Lien, Joanie Brocato, Juliet Rolando, Melissa Suddeth, Amber Carr, Tamyra Moretti, Lisa Schiermeier-Wood, Brenda Danosky, Lilly Moreno, Russell Vossbrink, and Evelyn Ridgley.
- The Working Group has held meetings on March 11-13, 2019 and August 14-16, 2019 in Washington, DC and has scheduled its next meeting for January 22-24, 2020 in Washington, DC.



Forensic DNA Casework Expert System Working Group

- SWGDAM has empaneled a Forensic DNA Casework Expert System Working Group.
- This working group has been tasked to evaluate the feasibility of using allele calling software tools as Expert Systems (as defined in the NDIS Operational Procedures) for interpreting forensic casework samples in ways similar to or different from the manner in which these tools are already used DNA databasing laboratories.
- The WG will essentially serve as an extension to the 2005 SWGDAM Expert System Committee that recommended the current NDIS Expert System requirements.
- Any resulting SWGDAM guideline document will likely be cited in the NDIS Operational Procedures as a compliance requirement for the submission of evaluations of forensic casework expert systems to the FBI for NDIS approval.
- Participants include: Amy McGuckian (Chair), Darrel Oubre (Vice Chair), Chris Carney, James Corcoran, Eric Duvall, Jessica Hannah, Brian Harmon, and Marla Kaplan.



QAS Revision Timeline

- SWGDAM approved its proposed changes to the *Quality Assurance Standards for Forensic DNA Typing Laboratories* at its January 2018 Regular Meeting and the *Quality Assurance Standards for DNA Databasing Laboratories* via electronic vote on June 1, 2018.
 - These draft QAS documents are posted on the Home Page of SWGDAM.org.
 - Both documents were forwarded to the FBI Director for review and approval on March 25, 2019.
- SWGDAM aligned the QAS Audit Documents with their respective proposed revised QAS and the SWGDAM Executive Board approved them via electronic vote on February 14, 2019.
 - These draft QAS audit documents are posted on the Home Page of SWGDAM.org.
 - Both documents were forwarded to the FBI Director for review and approval on March 25, 2019.
 - The FBI Director approved both documents on May 20, 2019.
- SWGDAM drafted a QAS Guidance document which was sent out for review and was approved by the membership at the July 2019 SWGDAM Meeting.
 - This document contains the explanatory information historically contained in the QAS Audit Documents.
 - SWGDAM will update this document annually based on feedback from users, the NDIS Custodian, and Chair of the NDIS Audit Review Panel.
- **The FBI has coordinated with SWGDAM for a July 1, 2020 effective date to provide laboratories maximum time to implement any new measures necessary for compliance.**



Biology/DNA SAC Interactions



Biology/DNA Scientific Area Committee

- Carl Sobieralski of the Indiana State Police Laboratory is the new Biology/DNA Scientific Area Committee's (SAC) SWGDAM Liaison.
 - In this critical liaison role, Carl will be invited to all SWGDAM Regular Meetings and participate in all SWGDAM activities to include circulating among SWGDAM's committees and working groups during Committee Breakout Sessions.
- The SWGDAM Vice Chair continues to have a standing invitation to participate in the monthly teleconferences held by the Biology/DNA SAC as well as to attend regularly scheduled OSAC meetings to represent SWGDAM.
 - SWGDAM Vice Chair Russell Vossbrink participated on the August 23rd, September 19th, and November 15th Biology/DNA SAC Teleconferences.



Biology/DNA Scientific Area Committee

- The SWGDAM EB has granted the Biology/DNA Scientific Area Committee (SAC) Interested Party status to comment on SWGDAM draft documents during the SWGDAM Membership Technical Review period required by the SWGDAM Bylaws(V.C.3).
- SWGDAM will provide all guidance documents for review and comment to the Biology/DNA SAC during the required 30 day SWGDAM Body Technical Review period and comments made by individual OSAC reviewers will be submitted, compiled, and adjudicated together with individual SWGDAM member comments.



Joint OSAC/SWGDM Process Mapping Working Group

- The Organization of Scientific Area Committees for Forensic Science (OSAC) and SWGDAM are collaborating on a combined DNA Process Mapping Project.
- This working group will establish a process map detailing the specific steps executed during the casework DNA analysis process from sample intake through reporting.
- It is anticipated that the WG's product will benefit the current and future activities of groups such as the OSAC, SWGDAM, NIJ's DNA Efficiency Improvement Working Group, and NIST's future Human Factors Working Group on DNA Mixture Interpretation to continually improve the delivery of forensic DNA analysis services.
- OSAC/SWGDM DNA Process Mapping Sessions were held on November 28-30, 2018 and May 1-3, 2019. A third session is being considered scheduled for calendar year 2020.
- SWGDAM participants included: Amber Carr, Ann Marie Gross, Eugene Lien, Melissa Suddeth, and Jeanette Walin.



Committee Work



Committees

- Autosomal STR Interpretation
- CODIS
- Laboratory Operations
- Lineage Marker
- Next Generation Sequencing Working Group
- Quality Assurance
- Rapid-DNA



Working Groups

- Body Fluid Identification
- Forensic DNA Casework Expert System



Committee Updates



Autosomal STR



Committee

Members & Invited Guests

Members

- **Joel Sutton** (Chair)
- **Bruce Heidebrecht** (Vice-chair)
- Shawn Montpetit (EB)
- Tamyra Moretti
- Russell Gettig

Invited Guests

- Jerrilyn Conway
- Neil Fernandopulle
- Taylor Scott
- Jennifer Breaux
- Mike Smith
- Kristin Sasinouski
- Vanessa Nelson



Committee Goals/Objectives

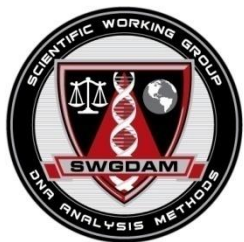
- Review and revise as needed the SWGDAM Autosomal STR Interpretation Guidelines
- Current objective is to incorporate guidelines for interpreting probabilistic genotyping data



Committee

Tasks/Accomplishments of Mtg

- We had two conference calls ahead of this meeting to discuss revisions
 - 21 March 2019
 - 16 May 2019
- Decision points
 - This will be a stand-alone document, specific to PG
 - Reference the current document where needed



Committee

Tasks/Accomplishments of Mtg

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Scientific Working Group on DNA
Analysis Methods
Interpretation Guidelines for
Autosomal STR Typing with
Probabilistic Genotyping
by Forensic DNA Testing Laboratories



Committee

Tasks/Accomplishments of Mtg

- “This document provides guidelines for the interpretation of DNA typing results from short tandem repeats (STR) with probabilistic genotyping using electrophoresis-based data.”
- “Laboratories currently using binary methods should refer to the current SWGDAM Interpretation Guidelines.”



Committee

Tasks/Accomplishments of Mtg

- Section 1 – mostly done and will be a summary of what labs need to assess prior to running samples through the PG tool
 - Will reference the current SWGDAM guidelines for much of this information
- Sections 2-4 have been assigned to groups to begin drafting guidance
 - Include guidance for using Prob Gen with CODIS applications
- Glossary will be completed at the end
- References and suggested readings will also be updated to include current publications on Prob Gen



Committee

Pending/Outstanding Issues

- The Committee plans to have two conference calls (September and November) to continue working on the revisions ahead of the January 2020 meeting.



Contact Info

- Contact information for Committee
 - **Joel Sutton** (Chair) joel.d.sutton2.civ@mail.mil
 - **Bruce Heidebrecht** (Vice-chair)
Bruce.Heidebrecht@maryland.gov



CODIS



Committee Members & Invited Guests

- Chair: Darrel Oubre
- Co-Chair: Deedra Hughes
- Members:
Deedra Hughes, Angelo Della Manna, Scott McWilliams,
John Tonkyn
- Invited Guests:
Jessica James, Justin Maxwell, Ashley Murray, Juls
Rolando
- Visitors: N/A
- Next Meeting date: Jan 2020



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

- Review/Discuss/Propose revisions for Standard 17 Audit Guide
- Discuss implementation of Rapid
 - Rapid QAS update
 - Populating LEA ORI into CODIS (short and long term strategies)
 - Casework metadata entry barriers
- Ongoing
 - CODIS Committee will be reviewing the draft QAS training for Std 17 scenarios and CODIS related standards, including creation of scenario exercises/questions
 - Drafting scenarios for the CODIS Admin Handbook re:
 - Dispositioning of MP matches
 - Dispositioning of Forensic Targeted matches



CODIS Committee Contact Info

Committee Chair:

Darrel Oubre

703-632-8315

djoubre@fbi.gov

Committee Co-Chair:

Deedra Hughes

601-420-9000

dhughes@mcl.ms.gov



Laboratory Operations



Committee

Members & Invited Guests

- Lisa Schiermeier-Wood, VA Division of Forensic Science, Chair and Amber Carr (IG), FBI Laboratory, is Vice Chair
- Members
 - Meg Aceves (IG)
 - Todd Bille (IG)
 - Jennifer Coursey (IG)
 - Brenda Danosky (IG)
 - Jason Kokoszka
 - Lilly Moreno (IG)
 - Jeff Nye
 - Melissa Suddeth
 - Peter Vallone (IG)
 - Ray Wickenheiser (IG)



Committee Goals/Objectives

- Objectives
 - To identify, evaluate, and research issues related to the efficient generation of high-quality DNA testing data by forensic laboratories in compliance with all FBI National QAS and NDIS Operational Procedure requirements.
 - To review and, as necessary, recommend revisions to the 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 Validation of Probabilistic Genotyping Systems, SWGDAM Guidelines for the Collection and Serological Examination of Biological Evidence, SWGDAM Guidelines for STR Enhanced Detection Methods, and SWGDAM Validation Guidelines for Forensic DNA Analysis Methods.
 - To review and, as necessary, recommend revisions to the FBI's Quality Assurance Standards (QAS) and/or NDIS Operational Procedures Manual for the consideration of SWGDAM.



Committee

Tasks/Accomplishments of Mtg

- Revisions to the 2016 SWGDAM Validation Guidelines for Forensic DNA Analysis Methods are underway.
 - Technology-specific guidelines have been moved to the appropriate Modules.
 - A general parent document has been drafted.
- Validation guidelines for the following technologies have been drafted:
 - STR megaplexes
 - Rapid DNA
 - Next Generation Sequencing



Committee

Pending/Outstanding Issues

- Revisions and module drafts to the 2016 SWGDAM Validation Guidelines for Forensic DNA Analysis Methods are undergoing review and feedback within the Lab Ops Committee and across other applicable SWGDAM committees.
- Feedback is being sought from stakeholders about the concept of inter-laboratory validation sharing.
 - Due to limited resources, some laboratories have expressed desire to adopt another laboratory's validation (e.g., a county lab adopting a state lab's validation and resulting protocols) for more timely implementation.



Contact Info

- Lisa Schiermeier-Wood, Chair
 - Lisa.Schiermeier-Wood@dfs.virginia.gov



Lineage Marker



LM Committee

Members and Invited Guests

Members and Invited Guests in attendance at July 2019 Committee meeting:

- Present

- Chris Askew
- Suzie Barritt-Ross
- Michael Coble
- Connie Fisher
- Ann Gross
- Marla Kaplan
- Brandon Letts
- Barbara McCarty
- Steven Myers
- Dixie Peters
- Jeanette Wallin
- Sascha Willuweit
- Tim Zolandz

- Absent

- Mary Lou Nicholson
- Lutz Roewer
- Bruce Weir



LM Committee Goals

- Committee goals/objectives
 - Update 2014 Y-STR Interpretation Guidelines
 - Projected to complete in 2020
 - Update 2019 MtDNA Interpretation Guidelines (post NGS-specific revisions)
 - Projected to complete in 2020



Committee

Tasks/Accomplishments of Mtg

- YHRD Mixture tool presentation by Sascha
- Continued refining Y-STR IG and FAQ revisions:
 - No recommendations for match probabilities
 - Theta values for MP on profiles with more than 22 loci is missing a practical publication
 - Condensing IG into a list of recommendations and all other content move to FAQ
- Designated a subset of Committee members to begin work on mtDNA IG updates



Committee

Tasks/Accomplishments of Mtg

- Designated a subset of Committee members to begin work on mtDNA IG updates:
 - Ann, Brandon, Connie, Barbara, Suzie, Chris, Dixie
- Designated a subset of Committee members to continue work on Y-STR IG updates:
 - Jeanette, Tim, Mike, Steven, Marla, Mary Lou, Sascha, Bruce, Lutz, Ann, Dixie



Committee

Pending/Outstanding Issues

- Y-STR IG revisions:
 - Committee to provide feedback on current revisions and FAQ
 - Designated members to incorporate revisions
 - Continue to have WebEx meetings to refine the IG
- YHRD updates on RL search process:
 - Not moving forward
- MtDNA IG to be split into two documents: IG and FAQ (similar to Y-STR format)

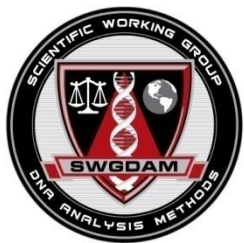


Contact Info

- Contact information for Committee
 - Dixie Peters, Chair
 - Dixie.peters@unthsc.edu
 - Ann Gross, Co-Chair
 - ann.gross@state.mn.us



Next Generation Sequencing



Next Generation Sequencing Tasks/Accomplishments of Mtg

- Reviewed the status of the NGS validations and implementations of the operational labs represented in the Committee
- Based on the above, identified and prioritized issues and/or gaps that could potentially be addressed by the Committee:
 - Topics that can be addressed directly:
 - SNP interpretation guidelines
 - Topics that likely require outside input/involvement:
 - Sequence DB size and statistics, to include marker associations (statisticians)
 - PG software for sequence data (software developers)
 - X-STR databases and statistics (statisticians and X-STR experts)
- Reviewed the Lab Ops draft NGS Validation Guidelines



Next Generation Sequencing Pending/Outstanding Issues

- Continue to work with Lab Ops on the NGS Validation Guidelines Addendum
 - Finalize detailed examples of percentage-based and fixed read count analytical and stochastic thresholds. These examples will be given to Lab Ops Committee for incorporation in the NGS validation guidelines.
- Discuss the task list with the EB to identify and prioritize next steps



Contact Info

- Jodi Irwin, Chair
 - jairwin@fbi.gov
- Katherine Gettings, Vice Chair
 - katherine.gettings@nist.gov



Quality Assurance



QA Committee

Members and Invited Guests

- Jocelyn Carlson (IG) - QA Committee Chair
- Beth Ann Marne – Co-Chair
- Members
 - Kristy Kadash
 - Eugene Lien
 - Amy McGuckian
 - Christie Smith
- Invited Guests
 - Dorothy Catella
 - Clark Jaw



Committee Goals/Objectives

- Complete Quality Assurance Standards (QAS) Revision Package:
 - Quality Assurance Standards (Databasing & Forensic)
 - QAS Audit Documents (Databasing & Forensic)
 - QAS Guidance Document
 - Comparison of 2020 Revisions to Current Standards



Document Anthology

**Forensic
Standards**

**Database
Standards**

**QAS
Guidance
Document**

**Forensic
Audit Document
(Checklist)**

**Database
Audit Document
(Checklist)**



QA

Tasks/Accomplishments of Mtg

- Presented final revisions to the QAS Guidance Document and reviewed outstanding comments
 - Membership and Invited Guest technical review period completed in January 2019
 - Received comments and resumed weekly teleconferences to adjudicate the substantive comments



QA

Pending/Outstanding Issues

- Consult during development of QAS Auditor training
- Pilot QAS Instructor Led Training (ILT)



QA

Contact Info

- Jocelyn Carlson, Chair
 - jrcarlson@fbi.gov



Rapid DNA



Committee Members & Invited Guests

- Richard E. Wilson, Chair
- Douglas Hares
- Tom Callaghan
- George Li
- Gary Molina (Chris Piwonka)
- Brian Harmon
- Elizabeth Johnson
- Ruth Montgomery
- Chris Carney
- Lisa Grossweiler
- Joanie Brocato/Janaki Vaidyanathan/Philip Simmers
- Mark Smith



Committee Goals/Objectives

Goal: To identify, evaluate, and research issues relating to the analysis interpretation, and reporting of R-DNA testing data both in the laboratory and the booking environment.

Objectives:

The Rapid DNA Committee will discuss topics related to the use of R-DNA by law enforcement agencies both within and outside the laboratory.

The Rapid DNA Committee will review issues relating to the use of R-DNA technology such as instrument performance, legislative considerations, and pilot testing of software functionality and performance as requested by the FBI Laboratory.

The R-DNA Committee will review and, as necessary, recommend revisions to the FBI's Quality Assurance Standards (QAS) and/or NDIS Operational Procedures Manual for the consideration of SWGDAM.



Committee Accomplishments

- Working Meeting on Monday
 - Rapid DNA Pilot States
- Continue Rapid DNA Pilot Discussions
- Several Technical Updates from NIST and the FBI



Committee Accomplishments

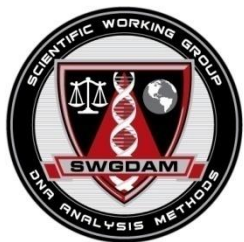
- NIST Rapid DNA Maturity Assessment Update
- FBI Rapid DNA Update
- FBI Rapid DNA Validation Document Discussion
- Rapid DNA Pilot Update
- Recommendations for Rapid DNA Implementation
- Rapid DNA Crime Scene Task Force Update
 - Technology Advancement Task Group
 - Non-CODIS/Courtroom Considerations Task Group
- QAS Audit Document Discussion
- Election of Co-Chair



Committee

Pending/Outstanding Issues

- Document Review
 - Recommendations for States Considering Rapid DNA
 - Validation Guidance Document
- Election of a co-chair



Rapid Booking Standards DRAFT 2020 Timeline

SWGDM

January 6 – 9, 2020

- Monday - Rapid Pilot Meeting
 - Lessons learned
- Tuesday - ½ day Rapid DNA Update to include Booking Standards

Submission of Booking Standards for SWGDAM 30 day comment

30 day public comment period

SWGDM

July 7 – 9, 2020

- Presentation of Booking Standards to SWGDAM Body for potential vote

January

February

March

April

May

June

July

2020

Rapid Committee finalization of Booking Standards incorporating lessons learned from Pilot

Rapid Committee addresses SWGDAM comments

Rapid Committee addresses public comments, final document sent to SWGDAM prior to July meeting

SWGDM approved Booking Standards submitted to FBI Director for approval



Contact Info

Richard E. Wilson

CODIS Unit, FBI Laboratory

703-632-8302

rewilson@fbi.gov



Working Group Updates



Body Fluid Identification



Committee Members & Invited Guests

- Marla Kaplan (chair) and Jason Kokoszka (vice-chair)
- Committee Members:
 - Brenda Danosky
 - Evelyn Ridgely
 - Gary Shuler
 - Lily Moreno
 - Mary Lou Nicholson
 - Melissa Suddeth
 - Neil Fernandopulle
 - Ray Wickenheiser
 - Russell Vossbrink



Committee Goals/Objectives

- #1 - Investigate various direct-to-DNA workflows in use for the analysis of Sexual Assault Forensic Evidence kits
- #2 - Discuss the future of forensic serological methods and prepare a resource that laboratories can use to strategically plan for the incorporation of NGBFID techniques into their workflows



Committee

Tasks/Accomplishments of Mtg

- Questionnaire on Y-screening methods distributed to TLs via CODIS Unit list. Over 100 respondents.
- Drafted a Y-Screening/QAS crossover FAQ for the SWGDAM website.



Committee

Pending/Outstanding Issues

- Data from survey needs to be analyzed and summarized.
 - Aim is to provide a resource from which laboratories looking to adopt direct-to-DNA analysis can pull ideas that are fit for use in their own laboratory.
 - Document will also address how Y-screening workflows and the personnel who perform them fit into the QAS requirements.



Committee

Pending/Outstanding Issues

- Investigation into next generation body-fluid ID techniques is on hold pending direct-to-DNA document and commercial availability of NGBFID products



Contact Info

- Marla Kaplan
mkaplan@osp.oregon.gov
- Jason Kokoszka
jason.kokoszka@adfs.alabama.gov



Forensic DNA Casework Expert Systems



Committee Members & Invited Guests

- Members and Invited Guests in attendance at Committee meeting
 - Amy McGuckian, Chair
 - Tamyra Moretti, Co-Chair
 - Chris Carney
 - James Corcoran
 - Eric Duvall
 - Jessica Hanna
 - Brian Harmon
 - Marla Kaplan
 - Darrel Oubre
 - Taylor Scott



Committee Goals/Objectives

- Develop validation guidelines for the use and implementation of expert systems available for use on casework samples.

Recommendations for:

- Quality issues/settings
- Number of samples
- Pitfalls/considerations for configuring the expert system
- Testing and calibration requirements for established settings/parameters



Committee Tasks/Accomplishments

- Worked on developing validation criteria for settings and parameters:
 - Quality issues to evaluate
 - Sample number
- Discussion with NDIS Custodian on history of expert system use for reference samples. Brainstorming workflow considerations for validation plan and implementation
- Plan of action:
 - Develop and test proposed validation parameters on data sets.
 - Identified need for additional volunteers (labs) to assist with testing out recommended parameters
 - Present data and proposed validation setting parameters to SWGDAM body for feed back/ additional considerations January 2020 meeting.



Committee

Pending/Outstanding Issues

- Acquire volunteers to assist committee with testing proposed validation parameters
- Finish identifying and drafting validation parameters
- Test proposed parameters (data)
- Draft additional guidance for implementation
- Following completion of validation guidelines propose recommendations to NDIS Board and QA Committee for revisions to NDIS Operational Procedures and QAS.



Contact Info

- Contact information for Committee

Amy McGuckian, Chair

mcguckiana@pbso.org

Tamyra Moretti, Co-chair

tmoretti@fbi.gov



Future Business



Rapid DNA Testing

- SWGDAM nominated participants for ASCLD's *ad hoc* Task Force on Rapid DNA which consists of 3 subcommittees.
 - The goal of the committee is to develop policies and best practices that can serve as a template for jurisdictions to enable quicker, more uniform and more effective implementation.
 - Law Enforcement External – Tom Callaghan (Member)
 - Crime Lab Internal – George Li (Invited Guest)
 - Mass Disaster/Victim ID – Patty Aagaard (FBI representative)
- SWGDAM has published a Position Statement on Rapid DNA Analysis which is available on SWGDAM.org on the Publications Page.
- Will propose a 3rd Quality Assurance Standard (QAS) document for R-DNA testing in non-laboratory settings for consideration by the FBI Director.
 - The draft *Standards for the Operation of Rapid DNA Systems* by Law Enforcement Agencies in the Booking Environment only for pilot testing were approved by the SWGDAM Executive Board via electronic ballot on February 25, 2019.
The draft *Standards for the Operation of Rapid DNA Systems By Law Enforcement Agencies in the Booking Environment* to be used only for pilot testing were approved by the SWGDAM Executive Board via electronic ballot on February 25, 2019.



QAS Revision Timeline

- SWGDAM approved its proposed changes to the *Quality Assurance Standards for Forensic DNA Typing Laboratories* at its January 2018 Regular Meeting and the *Quality Assurance Standards for DNA Databasing Laboratories* via electronic vote on June 1, 2018.
 - These draft QAS documents are posted on the Home Page of SWGDAM.org.
 - Both documents were forwarded to the FBI Director for review and approval on March 25, 2019.
- SWGDAM aligned the QAS Audit Documents with their respective proposed revised QAS standards and the SWGDAM Executive Board approved them via electronic vote on February 14, 2019.
 - These draft QAS audit documents are posted on the Home Page of SWGDAM.org.
 - Both documents were forwarded to the FBI Director for review and approval on March 25, 2019.
 - The FBI Director approved both documents on May 20, 2019.
- SWGDAM drafted a QAS Guidance document which was sent out for review and was approved by the membership at the July 2019 SWGDAM Meeting.
 - This document contains the explanatory information historically contained in the QAS Audit Documents.
 - SWGDAM will update this document annually based on feedback from users, the NDIS Custodian, and Chair of the NDIS Audit Review Panel.
- **The FBI has coordinated with SWGDAM for a July 2020 effective date to provide laboratories maximum time to implement any new measures necessary for compliance.**



Contextual Bias Working Group

- The SWGDAM Chair requested that the Laboratory Operations Committee discuss the topic of contextual bias in forensic DNA testing and advise the SWGDAM Executive Board (EB) on what, if any, potential action SWGDAM should take on this topic.
 - The Committee held a discussion regarding contextual bias during its first teleconference and recommended that SWGDAM act to discuss this topic advising that "Because this is such a broad topic and applies to all forensic disciplines, ...SWGDM issue a Communication recommending standard practices to avoid contextual bias specifically for DNA casework."
- Based on this recommendation, the SWGDAM EB endorsed the formation of a Contextual Bias Working Group at its May 2017 teleconference.
- The convening of this Working Group as been tabled by the SWGDAM Chair until SWGDAM has completed it work related to proposed changes to the 2011 FBI Quality Assurance Standards (QAS).



Familial Searching

- *Recommendations from the SWGDAM Ad Hoc Working Group on Familial Searching (2013)*
 - **Recommendation 1.4:**Once the additional CODIS core loci are implemented, the Working Group recommends that these issues be reconsidered. Meanwhile, the data accompanying these recommendations may provide guidance to states considering routine familial searching based upon the kinship LRs.
- The 2017-2020 SWGDAM Executive Board continues to discuss reconsideration of the 2013 recommendations now that the expanded CODIS core loci have been implemented.
- As a member of the FBI's NDIS Procedures Board, the SWGDAM Chair continues to liaison with the FBI and NDIS Board regarding convening a SWGDAM Working Group to reexamine this topic.

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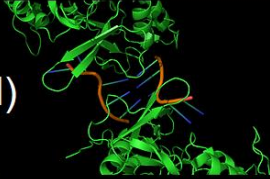
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Scientific Working Group on DNA Analysis Methods (SWGDM)


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SWGDM Mission Statement

The Scientific Working Group on DNA Analysis Methods, known as SWGDM, serves as a forum to discuss, share, and evaluate forensic biology methods, protocols, training, and research to enhance forensic biology services as well as provide recommendations to the FBI Director on quality assurance standards for forensic DNA analysis.



About SWGDM

SWGDM is currently comprised of dedicated forensic scientists from


Upcoming Meetings

SWGDM Regular Meeting
January 7-9, 2020
[Agenda](#)

SWGDM Regular Meeting
July 7 - 9, 2020

Past Meetings

SWGDM Regular Meeting
July 9-11, 2019



9:02 AM

12/23/2019



www.swgdam.org

- Home Page
 - About SWGDAM
 - Includes links to SWGDAM participation surveys
 - Includes links to SWGDAM history information
 - Updates
 - Upcoming and Past Meetings
 - Redirects to About Us, Publications, Public Comments, and Links Pages
- About SWGDAM Redirect
 - Bylaws Page
 - Committees Page
 - Includes a link to current SWGDAM Committee participants
 - Includes a link to current SWGDAM Committee activities
 - Members Page



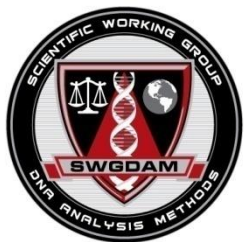
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- Publications Redirect
 - SWGDAM Documents, SWGDAM Communications, Quality Assurance Standards Documents, and Miscellaneous Communications
 - Meetings Page
 - Includes links to Semi-annual Reports and Chair Reports by year
- Public Comments Redirect
 - Serves as the public comment portal
 - FAQ Page
- Contact Redirect
 - Serves as the general inquiry portal
 - Links Page
 - Government agencies
 - Organizations
 - Other Scientific Working Groups (SWG)
 - SWGDAM content webinars, etc.



www.swgdam.org

- SWGDAM continues to receive suggestions regarding the functionality and performance of SWGDAM.org.
- The site is currently maintained with no formally obligated funding by NIST using existing IT resources and staff for whom the website is an ancillary task. All website submissions are reviewed, but implementation of individual suggestions must be balanced against the realities of these constraints.
- The 2017-2020 SWGDAM Executive Board continues to review SWGDAM's current communication strategies and discuss the feasibility of potential improvements and new outreach opportunities.



Contact Us

SWGDM.org

