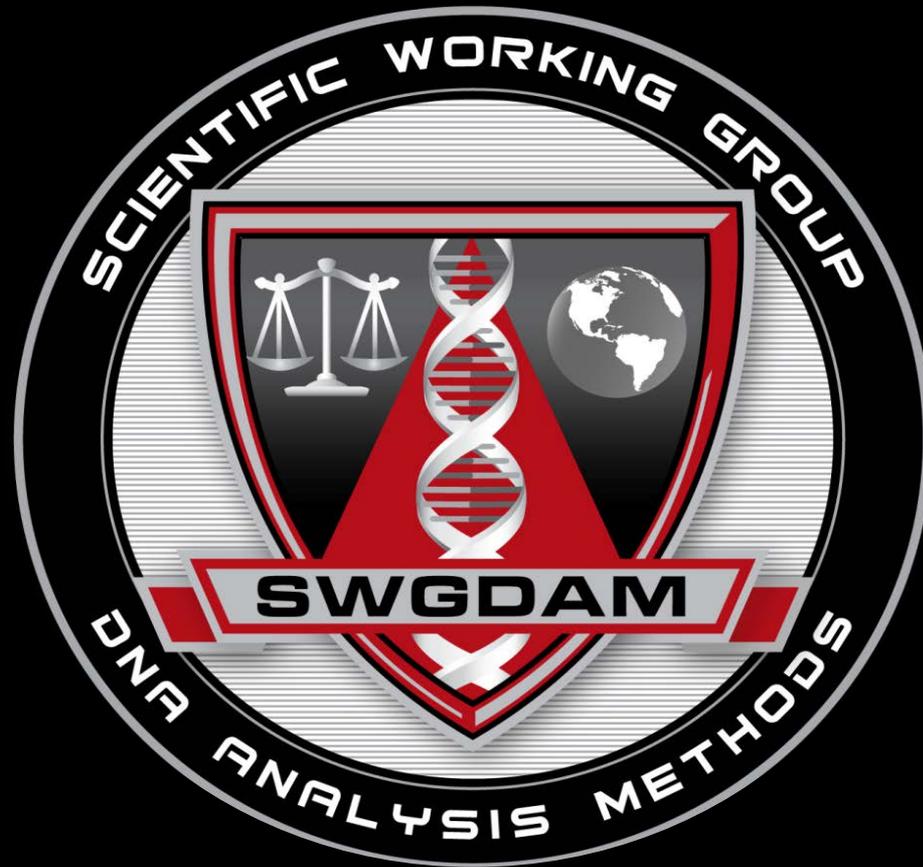


CODIS Meeting, November 2015



SWGDM Chair Report



Table of Contents

- About Us
- Meetings
- Recent Business
- Committee Actions
- SWGDAM.org
- The Future
- Committee Updates



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.



Organization

- Chair: Tony Onorato
- Vice Chair: Russell Vossbrink
- Members are technical leaders, CODIS Administrators, or like scientists from local, state and federal crime laboratories
 - 24 Regular Members
 - 3 year membership term(s)
- Meet twice a year in January and July
- Invited Guests may be invited to meetings
 - Invited Guests have full participatory/voting privileges in Committee and Committee of the Whole Sessions
 - Invited Guests cannot cast votes when the SWGDAM Membership takes up documents for final approval (SWGDAM Bylaws, Section II.D)



SWG DAM Membership

- Angelo Della Manna
- Thomas Callaghan
- Chris Carney
- Ann Marie Gross
- Bruce Heidebrecht
- Brian Hoey
- Deedra Hughes
- Elizabeth Johnson
- Susannah Kehl
- George Li
- Eugene Lien
- Beth Ann Marne
- Amy McGuckian
- Jeff Nye
- Tamyra Moretti
- Steven Myers
- Tony Onorato
- John Planz
- Juliet Rolando
- Taylor Scott
- Gary Sims
- Joel Sutton
- John Tonkyn
- Russell Vossbrink



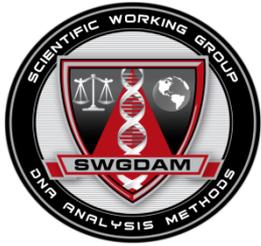
Membership Changes

- SWGDAM would like to thank the following individuals for their many years of dedicated service as they take on new roles that sadly require that they step away from SWGDAM.
 - Tina Delgado – Former SWGDAM Member, Now Chief of the FBI’s Biometric Analysis Section
 - Phil Kinsey – Former SWGDAM Vice Chair, Now Laboratory Director of the Montana State Crime Laboratory
 - Eric Pokorak – Former Executive Board Member, Now Chief of the FBI’s Scientific Analysis Section
 - Jennifer Wendel – Former SWGDAM Vice Chair, Now a FBI Unit Chief at FBI HQ in the Criminal Division
- SWGDAM would like to congratulate Tina, Eric, Phil, and Jenn and applauds the wisdom displayed by the agencies that made these judicious appointments.



FBI Membership

- In accordance with the SWGDAM Bylaws (II.C.3), the FBI has recommended the following new individuals to the SWGDAM Chair for Regular Membership.
 - Thomas Callaghan – Senior Level Scientist for the FBI’s Biometric Analysis Section
 - Juliet Rolando – Chief of the FBI’s DNA Casework Unit
- SWGDAM would like to congratulate Tom and Jules on their appointments.
- Together with SWGDAM Chair Tony Onorato (FBI Appointment), Susannah Kehl (FBI Appointment), and Tamyra Moretti (SWGDAM Membership Committee Appointment), the FBI has reached its SWGDAM membership limit.



SWGDM Guests

- 13 new guests were invited to participate in the July 2015 regular SWGDAM Meeting. SWGDAM would like to thank the following individuals and their respective agencies for their willingness to support its efforts:
 - Dwight Adams, University of Central Oklahoma - Presenter
 - Jo Bright, Institute of Environmental Science and Research, New Zealand, - Y-STR Committee
 - David Coffman, Florida Department of Law Enforcement – Presenter, ASCLD/LAB Representative
 - Craig Carroll, RCMP – CODIS Committee
 - Kathleen Corrado, Onondaga County Health Department – ASCLD-LAB Representative
 - Ken Konzak, Cal DOJ, Retired – Presenter
 - Jason Kokoszka, Alabama Department of Forensic Science - Presenter
 - Minh Nguyen, NIJ – Presenter
 - Darrell Oubre, FBI, CODIS Committee
 - Elizabeth Morris, Austin Police Department – QA
 - Margaret (Peg) Schwartz, Vermont Forensic Laboratory – QA Committee
 - Duncan Taylor, Forensic Science South Australia – Y-STR Committee
 - Tim Zolandz, FBI – Autosomal STR Committee



Committees

- Autosomal STR
- CODIS
- Enhanced Detection Methods and Interpretation (EDMI)
- Next Generation Sequencing Working Group
- Rapid DNA (R-DNA)
- Sexual Assault Kit Evidence Processing Working Group (New 2015)
- Quality Assurance (QA)
- Y-STR



Meetings



Recent Meetings

- Three SWGDAM Meetings to be held in 2015
 - January 13-15, 2015
 - July 14-16, 2015
 - November 16, 2015 (Annual CODIS Meeting)
- Three SWGDAM Meetings to be held in 2016
 - January 12-14, 2016
 - July 12-14, 2016
 - TBD (Annual CODIS Meeting)



January 2015 Meeting

- Held at the Hilton Garden Inn in Fredericksburg, VA on January 13-15, 2015.
- 58 participants with 5 international, 20 domestic federal, and 33 domestic state and local attendees.
- The Technical Session focused on Rapid-DNA Analysis and High-Throughput Sequencing with speakers from the FBI, NIST, Duke University, and CalDOJ.



Technical Session

- NGS Technology – Jodi Irwin
- Probabilistic Genotyping – Michael Coble
- Rapid-DNA – Thomas Callaghan
- Sequence-Based Search Strategies and Nomenclature – Peter Vallone
- CODIS Sequence-based Search Strategies – Douglas Hares
- Statutes Governing Genetic Privacy – Dawn Herkenham
- Handling Sensitive Data and Building Public Trust – Sara Katsanis
- Establishing the Record for Scientific Evidence in the Courtroom – Enid Camps



January 2015 Meeting

- The SWGDAM Membership and SWGDAM Executive Board voted to approve and issue the *SWGDM Guidelines for the Collection and Examination of Biological Evidence*.



July 2015 Meeting

- Held at the Hilton Garden Inn in Fredericksburg, VA on July 14-16, 2015.
- 63 participants with 8 international, 22 domestic federal, and 33 domestic state and local attendees.
- The Technical Session focused on the history of SWGDAM and the FBI National Quality Assurance Standards (QAS) with speakers from the UCO, FDLE, and the FBI.
- SWGDAM would like to thank Dr. Phil Kinsey of the Montana State Crime Laboratory for this many years of dedicated service as a member and past Vice Chair.



Technical Session

- Present at the Start: Research and Casework Reflections on the Beginning of FBI Forensic DNA Testing – Dwight Adams
- A Brief History of Forensic DNA Science – Thomas Callaghan
- The History of TWGDAM/SWGDAM – Ken Konzak
- The Legacy of the DNA Identification Act of 1994 – Dawn Herkenham
- The Evolution of the FBI National Quality Assurance Standards – Douglas Hares
- Reviewing the QAS: Lessons learned by a Chair Emeritus – David Coffman
- Reviewing the QAS 2015-2016: The Plan Moving Forward – Jocelyn Carlson



Technical Session

- The idea for this topic arose from an invitation from NIJ for a SWGDAM representative to sit on its Sexual Assault Forensic Evidence Reporting Act of 2013 (SAFER) Steering Committee.
- The first meeting of this Steering Committee was held March 5-6, 2014 and was attended by the SWGDAM Chair Tony Onorato.
- A committee of forensic DNA scientists is being assembled to create a best-practices chapter on the processing of sexual assault kit (SAK) evidence in the laboratory.
- This chapter will be a part of a larger comprehensive SAK-related best-practices publication covering the entire life cycle of SAK evidence from collection to adjudication.



January 2016 Meeting

- To be held in Fredericksburg, VA on January 12-14, 2016.
- The Technical Session to be focused on Committee of the Whole discussions of selected standards of the FBI National Quality Assurance Standards (QAS).
- Other topics may include a discussion of the joint initiative between ENFSI and the ICMP to implement the DNA Exclusion Database (EDB) and a review of the legal implications and strategies for the use of massive parallel sequencing.



Recent Business



Serology Guidelines

- The SWGDAM Executive Board approved the draft SWGDAM *Guidelines for the Collection and Serological Examination of Biological Evidence* for forwarding to the SWGDAM Membership at its November 3, 2014 teleconference.
- The SWGDAM Membership approved the *Guidelines for the Collection and Serological Examination of Biological Evidence* via electronic vote ending November 14, 2014.
- The SWGDAM Executive Board approved the *Guidelines for the Collection and Serological Examination of Biological Evidence* for public comment via electronic vote ending December 4, 2014.
- The approved *Guidelines for the Collection and Serological Examination of Biological Evidence* were posted on SWGDAM.org on December 8, 2014 for public comment.
- The public comments received for the *Guidelines for the Collection and Serological Examination of Biological Evidence* were collected, acknowledged, and forwarded to the Quality Assurance Committee for its consideration on January 8, 2014.
- The SWGDAM Membership and SWGDAM Executive Board voted to approve and issue the SWGDAM *Guidelines for the Collection and Examination of Biological Evidence* at the January 2015 SWGDAM Regular Meeting.
- The SWGDAM *Guidelines for the Collection and Examination of Biological Evidence* were published on SWGDAM.org on January 21, 2015.



Probabilistic Genotyping Guidelines

- The SWGDAM Chair announced the completion of the draft *SWGDM Guidelines for the Validation of Probabilistic Genotyping Systems* by the Probabilistic Genotyping Working Group and the start of the 30 day technical review period at the January 2015 SWGDAM Regular Meeting on January 14, 2015 (V.C.3).
- The SWGDAM Executive Board approved the draft *SWGDM Guidelines for the Validation of Probabilistic Genotyping Systems* for public comment via electronic vote ending March 17, 2015.
- The approved draft *SWGDM Guidelines for the Validation of Probabilistic Genotyping Systems* were posted on SWGDAM.org on May 18, 2015 for public comment.
- The public comments received for the *SWGDM Guidelines for the Validation of Probabilistic Genotyping Systems* were collected, acknowledged, and forwarded to the Probabilistic Genotyping Working Group for its consideration on April 18, 2015.
- The SWGDAM Executive Board voted to approve and issue the *SWGDM Guidelines for the Validation of Probabilistic Genotyping Systems* via electronic vote on June 12, 2015.
- The *SWGDM Guidelines for the Validation of Probabilistic Genotyping Systems* were published on SWGDAM.org on June 15, 2015.



Executive Board

- The SWGDAM Executive Board (EB) held a teleconference on November 2, 2015.
- The EB currently has a standing teleconference scheduled for the first Monday of the month at 3 pm ET.
- Committee Chairs routinely provide updates to the EB at the monthly teleconferences.
- The Chair and Vice Chair would like to thank all of the SWGDAM EB Members and Committee Chairs for continually making the time for these critical assemblies.



International Participation

- July 2015: 66 participants with 7 international, 21 domestic federal, and 38 domestic state and local attendees.
- January 2015: 58 participants with 5 international, 20 domestic federal, and 33 domestic state and local attendees.
- July 2014: 64 participants with 6 international, 25 domestic federal, and 33 domestic state and local attendees.
- January 2014: 57 participants with 1 international, 27 domestic federal, and 29 domestic state and local attendees.
- This increase in international and state/local participation is the result of an attempt on the part of the SWGDAM Executive Board to broaden the diversity within SWGDAM.



ASCLD/LAB

- As directed by the SWGDAM Body at the July 2014 meeting, the SWGDAM Executive Board prepared a SWGDAM response to ASCLD/LAB’s clarification relating to accreditation requirement 5.10.1 from ISO/IEC 17025:2005 and 5.10.3.5 from the 2011 ASCLD/LAB-*International* Supplemental Requirements for Testing Laboratories.
 - This response was approved by the EB and provided to ASCLD/LAB in a letter dated September 3, 2014.
- ASCLD/LAB has identified the Scientific Working Group on DNA Analysis Methods as an “Interested Party” with a direct interest in ASCLD/LAB’s ongoing efforts to ensure and improve the quality of forensic science testing.
 - SWGDAM received an invitation to participate as an ASCLD/LAB Interested Party in a letter dated August 12, 2014.
 - On behalf of SWGDAM, the SWGDAM Chair accepted this invitation in a letter dated August 15, 2014.
- ASCLD/LAB invited SWGDAM to participate in a discussion being held by the ASCLD/LAB Board of Directors on the subject of interpreting/reporting mixtures.
 - This discussion was in response to assessment teams having documented findings and concerns in various laboratories regarding the analysis/reporting of DNA mixture and the documented validations on which those reported conclusions were based.
 - Tamyra Moretti represented SWGDAM at this discussion held at the January 2015 ASCLD/LAB Board of Directors meeting in Raleigh, North Carolina.



ASCLD/LAB

- ASCLD/LAB invited SWGDAM to comment on its revised clarification for the reporting of positive associations and its position statement/interpretation related to mixtures (accreditation requirement 5.10.1 from ISO/IEC 17025:2005 and 5.10.3.5 from the 2011 ASCLD/LAB-*International* Supplemental Requirements for Testing Laboratories).
 - The SWGDAM Executive Board reviewed these statements and discussed SWGDAM's response at its May 4, 2015 teleconference.
 - Based on this discussion, the SWGDAM EB prepared a letter in response to ASCLD/LAB dated May 18, 2015.
 - The SWGDAM Chair forwarded this letter to ASCLD/LAB via e-mail on May 18, 2015.



SAK/SANE Activities

- Sexual Assault Nurse Examiner (SANE) Development and Operation Guide Planning Committee
 - The SWGDAM Chair was contacted by the US Department of Justice, Office of Justice Programs, and requested to serve as an Office for Victims of Crime Training and Technical Assistance Center (OVC TTAC) Consultant.
 - The OVC is organizing a diverse group of subject matter experts to revise and enhance the *SANE Development and Operation Guide* to assist nurses and other community leaders in developing, strengthening, and sustaining SANE programs.
 - The SANE Development and Operation Guide Planning Committee held an orientation teleconference on June 15, 2015
 - The Committee held its first in-person meeting in Fairfax, VA on July 13-14, 2015.
 - The Committee plans to hold 5 to 6 additional distance meetings between April and November 2015.

- The SWGDAM Sexual Assault Kit Evidence Processing Working Group.
 - Held an in-person meeting as a part of NIJ's SAFER Working Group Meeting in New Orleans, LA on March 9-12, 2015.
 - Continues to hold regular teleconferences.



Committee Actions



NGS Working Group

- SWGDAM has empanelled a Working Group on Next Generation Sequencing (NGSWG)
 - The members of this WG include: Chair John Tonkyn, Co-Chair Jack Ballantyne (IG), Thomas Callaghan (IG), Seth Faith (IG), Katherine Gettings (IG), Debbie Glidewell (IG), Bill Hudlow (IG), Jodi Irwin (IG), Charla Marshall (IG), and John Planz
 - The NGSWG has been tasked to identify, evaluate, and research issues related to the forensic applications of NGS.
 - This WG will meet during regularly scheduled SWGDAM Meetings.
 - As with SWGDAM's approach to R-DNA, it is likely that the NGSWG will be elevated to Committee status as its work in this area progresses.



PG Working Group

- SWGDAM empanelled a Working Group on Probabilistic Genotyping (PG WG)
 - The members of this WG included: Chair Tim Zolandz (IG), Co-Chair Michael Coble (IG), Brian Hoey, Tamyra Moretti (IG), Joel Sutton, Steven Myers, and Gary Sims.
 - SWGDAM Vice Chair Russ Vossbrink and Executive Secretary Dawn Herkenham also participated on this WG.
 - The PGWG was tasked preparing guidelines for the validation of probabilistic genotyping software.
 - This WG was convened as a traditional SWGDAM WG and worked within the narrow focus of this tasking for only the time necessary to complete this work and met in-person outside of the regularly scheduled SWGDAM meetings and via webinars.
- The Probabilistic Genotyping Working Group has completed its tasking and has been dissolved in accordance with the SWGDAM Bylaws (Section V.C.6)



SAK Evidence Processing Working Group

- SWGDAM has empanelled a Working Group on Sexual Assault Kit Evidence Processing (SAK WG)
 - The members of this WG include: Chair Amber Carr (IG), Jennifer Coursey (IG), Brenda Danosky (IG), Tina Delgado, Neil Fernandopulle (IG), Eugene Lien, Beth Ann Marne, Jeffery Nye, Lutz Roewer (IG), Ray Wickenheiser (IG), and Lisa Schiermeier-Wood (IG).
 - SWGDAM Vice Chair Russell Vossbrink and SWGDAM Executive Secretary Dawn Herkenham will also participate on this WG.
 - The SAK WG has been tasked with developing best practices for the testing of sexual assault kit evidence in the forensic laboratory.
 - This WG has been convened as a traditional SWGDAM WG and will work within the narrow focus of this tasking for only the time necessary to complete this work and will generally meet outside of regularly scheduled SWGDAM meetings generally via webinars.



Website

SWGAM.org

www.swgdam.org

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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 SWGDAM, 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.



Upcoming Meetings

SWGDM Regular Meeting
July 14-16, 2015
[Agenda](#)

Past Meetings

SWGDM Regular Meeting
January 13 - 15, 2015
SWGDM January 2015 Semi-Annual

3:46 PM 7/6/2015

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Scientific Working Group on DNA Analysis Methods (SWGDM)

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ByLaws of the Scientific Working Group on DNA Analysis Methods (SWGDM)

The Scientific Working Group on DNA Analysis Methods (SWGDM), formerly the Technical Working Group on DNA Analysis Methods, has adopted the following bylaws:

I. Responsibilities of SWGDAM

- A. SWGDAM shall recommend revisions, as needed, to the FBI Director for the Quality Assurance Standards for Forensic DNA Testing Laboratories and the Quality Assurance Standards for DNA Databasing Laboratories.
- B. SWGDAM shall serve as a forum to discuss, share, and evaluate forensic biology methods, protocols, training, and research to enhance forensic biology services.
- C. When necessary, SWGDAM shall recommend and conduct research to develop and/or validate forensic biology methods.

II. Membership, Terms, and Vacancies

- A. The membership of SWGDAM shall consist of an Executive Board and regular members. The term "member" shall be used to describe the Executive Board and regular members.
- B. The Executive Board shall consist of the Chairman, Vice-Chairman, Executive Secretary, and five members. Either the Chairman or the vice-Chairman shall be a representative of the FBI. All members of the Executive Board shall have voting privileges, except the Executive Secretary.
 - 1. The Chairman shall be appointed by the FBI Director.
 - 2. The Vice-Chairman shall be appointed by the Chairman.
- 3. The Executive Secretary shall be appointed by the Chairman.
- 4. Executive Board member selection
 - a. The Chairman will nominate seven regular members to be placed on an election ballot. The nominations will not include more than two FBI regular members.
 - b. By vote, the membership will select five of the nominated individuals. The Chairman will vote in the event of a tie.
 - c. The Executive Secretary and a two-member panel appointed by the Chairman will count the ballots and report the results to the Chairman. The Executive Secretary will record the results of the election in the meeting notes.
 - d. A vacancy in the Executive Board will be filled by selection of the individual receiving the next highest number of votes. In the event that a vacancy occurs in the Executive Board and all the individuals on the original ballot have

3:47 PM 7/6/2015

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SWGDM Members

SWGDM Chair	Christopher Carney Florida Department of Law Enforcement
Anthony Onorato FBI Laboratory	Ann Marie Gross Minnesota Bureau of Criminal Apprehension
SWGDM Vice-Chair	Bruce Heidebrecht Maryland State Police
Russell Vossbrink	Deedra Hughes Mississippi Crime Laboratory
SWGDM Executive Board	Elizabeth Johnson United States Army Criminal Investigation Laboratory
Brian Hoey Missouri State Highway Patrol Crime Laboratory	George Li Virginia Department of Forensic Science
Amy McGuckian Palm Beach Sheriff's Office	Eugene Lien NYC Office of the Chief Medical Examiner
Angelo Della Manna Alabama Department of Forensic Sciences	Beth Ann Marne Pennsylvania State Police
Gary Sims California Department of Justice	Steven Myers California Department of Justice
SWGDM Executive Secretary	Jeffery Nye Michigan State Police
Dawn Herkenham Leidos	

3:49 PM 7/6/2015

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Scientific Working Group on DNA Analysis Methods (SWGDM)

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SWGDM Committees

Please click [here](#) for a current listing of SWGDAM Committee participants.

In accordance with the SWGDAM Bylaws, Section V, the SWGDAM membership is organized into Committees that concentrate on different substantive areas of forensic DNA analysis. Over the years, SWGDAM has had several standing Committees in subject areas such as Quality Assurance and CODIS and has convened other targeted Committees as needed to discuss specific topics that have arisen within the DNA community. All SWGDAM Committees are empanelled and assigned specific objectives by the SWGDAM Chair and any Committee work adopted by SWGDAM is shared via SWGDAM.org. Current SWGDAM Committees include:



Autosomal STR Committee

The Autosomal STR (A-STR) Committee has been tasked to identify, evaluate, and research issues related to the SWGDAM Interpretation Guidelines for Autosomal STR Typing for Forensic DNA Testing Laboratories. The chair of this Committee is Joel Sutton of USACIL/DFSC.

Tasks

- The A-STR Committee will review and, as necessary, recommend revisions to the SWGDAM Interpretation Guidelines for Autosomal STR Typing for Forensic DNA Testing Laboratories.
- The A-STR Committee will review and, as necessary, recommend revisions to the FBI's Quality Assurance Standards (QAS) for the interpretation of autosomal DNA typing data by forensic DNA testing laboratories.
- The A-STR Committee will review and, as necessary, recommend revisions to the NDIS Operational Procedures Manual for the interpretation of DNA records and will provide its recommendations to the NDIS Procedures Board.

CODIS Committee

This CODIS Committee has been tasked to identify, evaluate, and research issues relating to the use of the Combined DNA Index System (CODIS) in federal, state, and local forensic laboratories. The chair of this Committee is Douglas Hares of the FBI

3:51 PM 7/6/2015

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SWGDM MEETINGS

In accordance with the SWGDAM Bylaws, Section VI, the SWGDAM membership meets at least twice a year or as the Chairman directs. Historically, SWGDAM has held two regular meetings a year and in recent years has attempted to hold a public meeting as a part of an existing national meeting. The manner in which SWGDAM has captured the activities of its meetings has varied over time, however, SWGDAM meetings for which summary information is currently available is provided below, generally as either meeting notes or summary presentations and is organized by year.

2015 SWGDM January 2015 Semi-Annual Report SWGDM Update for ENFSI April 2015	2011 SWGDM July 2011 Semi-Annual Report SWGDM 2011 Public Meeting
2014 SWGDM July 2014 Semi-Annual Report SWGDM January 2014 Semi-Annual Report SWGDM Update for ENFSI April 2014 SWGDM Update for the CODIS Meeting November 2014	2010 SWGDM July 2010 Semi-Annual Report SWGDM 2010 Public Meeting
2013 SWGDM July 2013 Semi-Annual Report SWGDM January 2013 Semi-Annual Report	2009 SWGDM 2009 Public Meeting
	2008 SWGDM 2008 Public Meeting

3:54 PM 7/6/2015

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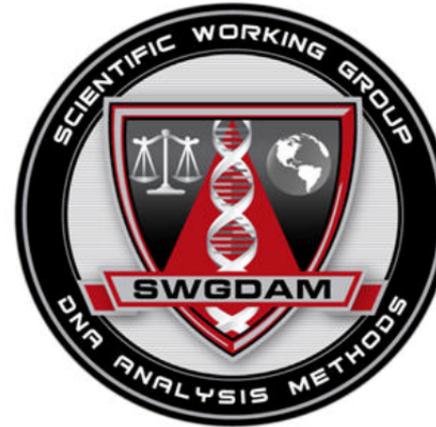
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History of SWGDAM

The predecessor group of SWGDAM, the Technical Working Group on DNA Analysis Methods (TWGDAM), held their first meeting in November 1988, as forensic DNA technology was introduced in the United States. This first meeting was hosted by the FBI Laboratory and included 31 scientists representing 16 forensic laboratories in the United States and Canada. This first meeting was designed to bring together those scientists who were engaged in validating this new technology to share protocols and establish guidelines, where appropriate. A subcommittee was formed to work on suggested guidelines for laboratories conducting restriction fragment length polymorphism (RFLP) DNA analysis. These guidelines were published in the April-July 1989 issue of the Crime Laboratory Digest (see Vol. 16, No. 2, pages 40-59; see also Crime Laboratory Digest Vol. 18, No. 2, April 1991).

TWGDAM continued to provide a level of direction to the forensic DNA community by issuing guidelines for a DNA proficiency testing program and later for the newer DNA technology of polymerase chain reaction (PCR). See Guidelines for a Proficiency Testing Program for DNA Restriction Fragment Length Polymorphism Analysis, Crime Laboratory Digest, Vol. 17, No. 3, pages 59-64, (July 1990); Guidelines for a Quality Assurance Program for DNA Analysis, Crime Laboratory Digest, Vol. 18, No. 2, (April 1991). Additional revisions were adopted in



SWGDM Today

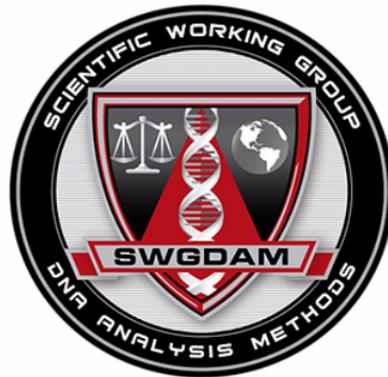
SWGDM is governed by formal bylaws that describe our responsibilities, membership, Executive Board, Committees, Meetings, and Conduct of Business. The Chairman of SWGDAM is selected and serves at the pleasure of the Director of the FBI's Laboratory Division. SWGDAM members are appointed by the Chairman based upon recommendations from a Nominating Committee and representation is sought from Federal, State and Local forensic DNA laboratories and the



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Scientific Working Group on DNA Analysis Methods (SWGDM)

HOME ABOUT US PUBLICATIONS **PUBLIC COMMENTS** CONTACT



PUBLIC COMMENTS PAGE

In accordance with the SWGDAM Bylaws (Section V.C.5), SWGDAM will make any new or revised guidance or standard document(s) available for public comment for a minimum of 30 days. Generally, SWGDAM attempts to review its guidance documents within 5 years of their issuance and is usually actively revising at least one of its guidance documents at any given time. SWGDAM strongly encourages the forensic DNA community or other interested group to comment on the SWGDAM documents currently in this stage of development.

Upon receipt, these comments will be forwarded to the appropriate SWGDAM Committee for consideration and may be incorporated into the final document considered for approval by the SWGDAM Membership. Alternately, SWGDAM may publish a response to a specific suggestion or recommendation on its FAQ Page for general information purposes. SWGDAM will make all reasonable efforts to advise the forensic DNA community of those documents currently available for public comment.

SWGDM strongly encourages all interested parties to regularly monitor SWGDAM.org for the guidance document(s) or standard document(s) currently available for public comment. Please use the contact portal below for providing comments on the SWGDAM document(s) available for public comment.

SWGDM Documents Available for Public Comment

No SWGDAM documents are currently available for public comment.

For all questions regarding SWGDAM, and membership, please contact SWGDAM Chairman, Mr. Tony Onorato at Anthony.Onorato@ic.fbi.gov.

If you have any comments on existing SWGDAM guidance

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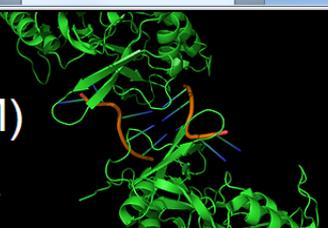
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HOME ABOUT US PUBLICATIONS PUBLIC COMMENTS CONTACT



FREQUENTLY ASKED QUESTIONS



On occasion, SWGDAM will use this page to post responses to frequently asked questions from the forensic DNA community or other interested parties for the purposes of general information. The intent of this page is not for it to be a comprehensive list of answers to all of the inquiries SWGDAM receives, but rather a collection of those inquiries that SWGDAM recognizes to be of interest to a broad spectrum of forensic DNA science practitioners and/or consumers.

SWGDM recognizes that not all inquiries will be amenable to the short answer format of this page and will continue to use its members, meetings, SWGDAM.org, and conference updates to collect and disseminate information.

Please note that some questions have been edited for brevity, clarity, and/or to remove specific identifying information. Text contains within [] indicates information added by SWGDAM.

SWGDM Guidelines

QUESTION: What are guidelines and how should they be used?

SWGDM Response: Guidelines recommended by SWGDAM are intended to provide additional guidance to the DNA community on current relevant topics. These guidance documents are simply that and should not be viewed or treated as requirements or minimum standards for forensic DNA laboratories. SWGDAM will update guidelines as needed to ensure that such guidance is in accord with the available scientific information and best practices at that time.

QUESTION: Within many of the SWGDAM guidelines the statement is made that these guidelines are not intended to be used retroactively. What is the intent of this "retroactive" statement?

SWGDM Response: SWGDAM includes a "retroactive" statement with the intent that the revised guidance be applied prospectively and not retroactively. With the underlying assumption that work (validation, training, analysis, interpretation) performed prior to the issuance of the revisions was appropriate and scientifically valid, revision of the applicable guidelines is not intended to invalidate or call into question the previous work.

4:00 PM 7/6/2015

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Scientific Working Group on DNA Analysis Methods (SWGDM)

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General Inquiry

For all questions regarding SWGDAM, please contact SWGDAM Chairman, Mr. Anthony J. Onorato via email at Anthony.Onorato@ic.fbi.gov.

If you have any questions regarding the website, please complete the form, and we will get back to you within 48 hours.

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Email

Subject

Message

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Biology/DNA SAC Relationship



The OSAC Question

What plans exist to transition SWGDAM from its current home in the FBI to the new Organization of Scientific Area Committees (OSAC)?

SWGDAM Response: Due to the unique statutory relationship between SWGDAM and the FBI with regard to the FBI Director's Quality Assurance Standards (QAS) for DNA Testing Laboratories, NIST and the FBI have agreed that SWGDAM will remain operationally with the FBI at this time. The FBI also feels strongly that the business activities of the SWGDAM Committees are critical for the operation of CODIS and plans to continue to manage the SWGDAM Committees to ensure not only that the QAS are revised in an efficient manner, but also that the National DNA Index System (NDIS) Procedures are timely and appropriate for the current or emerging technologies which are used by NDIS-participating laboratories nationwide. (See SWGDAM.org, FAQ Page)



Business as Usual

- SWGDAM will continue to be funded and managed by the FBI.
- Emerging forensic technologies such as Rapid-DNA testing (R-DNA) and Next Generation Sequencing (NGS) are quickly becoming a reality, so the FBI will ensure through SWGDAM that topics such as nomenclature and genetic privacy can be made fully compatible with the CODIS system.
- SWGDAM will continue its business as usual to include all of its committee and working groups in accordance with the SWGDAM Bylaws.
- The FBI and NIST will continue to work together to evaluate the funding and management role for SWGDAM as the OSAC structure matures and develops a stable process for operation.



Business as Usual

- SWGDAM membership will remain as described in the SWGDAM Bylaws. Data on current SWGDAM membership is available at SWGDM.org.
- SWGDAM has encouraged its members and invited guests to participate in the OSAC process.



OSAC Interactions

- Dr. George Herrin, Chair of the Biology/DNA SAC attended the January 2015 SWGDAM Regular Meeting.
- In collaboration with the Biology/DNA Scientific Area Committee (SAC), SWGDAM has established an OSAC Representative.
 - This representative will be considered a SWGDAM Invited Guest and, in accordance with the SWGDAM Bylaws, will have voting privileges for routine SWGDAM committee business (however, not for final votes on SWGDAM work products).
 - Dr. John Butler of NIST is currently SWGDAM's OSAC Representative.
- The Biology/DNA SAC representative is invited to present at the Update Session of SWGDAM Regular Meetings to provide information or receive feedback from the SWGDAM membership.



OSAC Interactions

- All draft SWGDAM documents will be submitted for review and comment to the Biology/DNA SAC and all approved SWGDAM guidelines and standards will be provided to the OSAC.
- SWGDAM will continue to review its current business process for drafting and approving its work product which are formally captured in its Bylaws and, to the extent possible, incorporate elements of the review process designated for the SACs.



Committee Work



Committees

- Autosomal STR Interpretation
- CODIS
- Enhanced Detection Methods and Interpretation (EDMI)
- Next Generation Sequencing Working Group (New 2014)
- Rapid DNA
- Sexual Assault Kit Evidence Processing Working Group (New 2015)
- Quality Assurance (QA)
- Y-STR



Autosomal STR Interpretation



Autosomal STR Committee Goals/Objectives

- Review and revise as needed the SWGDAM Autosomal STR Interpretation Guidelines



Autosomal STR Committee Tasks/Accomplishments

- Held two webinars (Mar 11 and Jun 9) since last meeting
- **Discussed two current ASCLD/LAB topics**
 - Mixture Validation
 - Qualitative versus Quantitative reporting statements with positive associations
- **Continued revising 2010 guidelines**
 - Currently over 80 pages
 - Still have some polishing work to perform



ASCLD/LAB Discussion

- SWGDAM Executive Board corresponded with ASCLD/LAB
- ASCLD/LAB has revised wording on mixture validation
- The Committee reviewed the new wording and had some additional suggestions based on current SWGDAM guidance
- ASCLD/LAB will review suggestions



Current Template for Guidelines

- Background
- Visual Summary (layout)
- Core Elements
- Individual Sections – detailed guidelines with examples to illustrate important concepts
 - The table of contents provides hyperlinks to these individual sections
 - Reader can select topic of interest w/o having to peruse through the entire document
- Glossary and References at the end



Guidelines Sections

- Section 1 – Interpretation of DNA Typing Results
- Section 2 – Mixture Interpretation Overview and Strategies
- Section 3 – Comparison of References and Statistical Weight of Probative Inclusions
- Section 4a – RMP
- Section 4b – LR
- Section 4c – CPE/CPI



Future Committee Meetings

Meetings scheduled to continue to work on document for:

1. August 10

2. September 15



Goals

- After the meeting in September, the goal is to provide the Executive Board (EB) a finalized guidelines draft document
- Subject to EB approval, the draft could be distributed to SWGDAM for review and comment before the January 2016 meeting
- January 2016 meeting – the Committee will present the document to SWGDAM body prior to public review comment period



CODIS



CODIS Committee

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.



CODIS Committee

Tasks/objectives accomplished:

- Elected new Chair
- Reviewed/suggested revisions of QAS for Database Laboratories
- Discussed Automated Hit Counting
- Discussed Moderate Match Estimation thresholds
- Reviewed/suggested revisions for contamination document
- Follow-up meetings to further QAS for Database labs and Automated Hit Counting



Enhanced Detection Methods



EDM Committee Tasks

- Create a SWGDAM guidance document containing guidelines for contamination prevention/management in forensic DNA testing laboratories.
- Review and recommend revisions to the SWGDAM Guidelines for STR Enhanced DNA Detection Methods.
- Review and recommend revisions to the FBI's Quality Assurance Standards (QAS) for the use of DNA typing data generated using Low Copy Number (LCN) analysis by forensic DNA testing laboratories.
- Review and recommend revisions to the NDIS Operational Procedures Manual for the interpretation of DNA records and provide recommendations to the NDIS Procedures Board.



Contamination Prevention

- January 2015
 - Brainstormed about the contamination paper
 - Since January 2015, created rough draft
 - Scope: From evidence examination to profile generation.
 - Emphasize that contamination cannot be eliminated, but can be characterized and managed. As methodologies become more sensitive, minute contaminants can be detected.



Content

- July 2015
- Revisions of draft
- Previous sections: introduction, definition, detection and identification of contamination, prevention/management of contamination, interpretation of contaminated profiles, contamination investigation, and definitions
- Review of UK Forensic Science Regulator document for guidance



Considerations

- Revised sections: introduction, process & lab design, contamination prevention, contamination detection, and management of contamination incidents
- Document will include:
 - Types of contamination: case to case, lab staff to case, reagent/consumable to case, non-lab staff to case
 - Central DNA database for recognized contaminant profiles
 - Collection of elimination samples from investigators



Considerations

- Test everything in the most sensitive assay that the reagent will be used in to see if contamination is detected.



Next steps

- Assignments to Committee members made
- Provide to all SWGDAM members by early fall
- Open for public comment in November-December
- Vote during January 2016 meeting



Next Generation Sequencing Working Group



Tasks

- The NGS Working Group will monitor the development of NGS and its potential forensic applications and considerations such as nomenclature standardization for CODIS use and make regular reports to the SWGDAM membership.
- The NGS Working Group will generate and review performance data using forensic applications of NGS and make regular reports to the SWGDAM membership.
- The NGS Working Group will review and, if necessary, recommend revisions to the FBI's Quality Assurance Standards (QAS) for the use of DNA typing data generated using NGS analysis by forensic DNA testing laboratories.
- The NGS Working Group will review and, if necessary, recommend revisions to the NDIS Operational Procedures Manual for the interpretation of DNA records generated by NGS and will provide its recommendations to the NDIS Procedures Board via the SWGDAM Chair.



Activity

- Discussed results and validation status in member labs
- Reviewed QAS in light of NGS
 - Will provide “Rapid Addendum” – type document to QA Committee
- Future activity will be development of guidance document (validation, controls, interpretation)
- Concerns
 - Genetic privacy
 - CODIS
 - Legal restrictions on databasing beyond core loci
 - Nomenclature
 - Searching



Quality Assurance



Committee Goals/Objectives

- Review and evaluate QAS revision suggestions from SWGDAM
- Identify Standards with minimum/no revisions needed
- Identify Standards that will require more discussion and revision
- Review most common findings from QAS audits from 2009-2014



Committee

Tasks/Accomplishments of Mtg

- Completed Review of SWGDAM Comments
 - Follow-up necessary for some comments
 - Topics of discussion
 - TL Delegation of responsibilities
 - Committee opinion: Delegation can be done under the current standards
 - Committee opinion: Ultimate authority should remain with a single TL.
 - » Adding ATL to Standards may imply authority
 - TL Education
 - Committee opinion: Allowing for lower education requirement with an increased experience requirement will not be incorporated.
 - » Discussion is that historical recommendation was a PhD. Masters was a compromise.



Committee

Tasks/Accomplishments of Mtg

- Identified Standards with minimal to no revisions
 - Standard 1 – Scope
 - Standard 3 – Quality Assurance Program
 - Standard 6 – Facilities
 - Standard 7 – Evidence Control
 - Standard 14 – Corrective Action
 - Standard 16 – Safety



Committee

Tasks/Accomplishments of Mtg

- Identified Standards that will require additional conversation and revision
 - Standard 5
 - Do Analysts need Statistical education requirement?
 - Standard 9
 - Use of controls on database sample plates?
 - Prior evaluation of critical reagents necessary for DB?
 - Expiration dates when not assigned?



Committee

Tasks/Accomplishments of Mtg

- Identified Standards that will require additional conversation and revision
 - Standard 13
 - Semiannual vs Annual?
 - Reword description of methodology/technology/test kit/platform. Requirements of manual vs automated
 - Does every PT need to be “to the full extent”?
 - Do rarely used procedures (ex. manual “back-up” procedures) need to be done each year or use the “ASCLD/LAB model” of within an accreditation cycle?
 - Standard 17
 - Will not be deleted. Will be reviewed for rewording.
 - On-site visits
 - Would the use of “designated FBI employee” be beneficial?
 - Prior approval Standard
 - Add some alternative clause for “with TL/NDIS Custodian approval”?



Committee

Pending/Outstanding Issues

SWGDM Feedback requested:

1. Proficiency Testing Questions

- Annual/Semiannual
- Robotic/Manual
- “To the full extent”

2. Is the annual SRM requirement still needed?

Given history of testing and controls used in regular testing and validation

3. Should TL and/or CODIS Admin maintain active participation in casework/DB?

Therefore eliciting PT requirements



Committee

Pending/Outstanding Issues

- Review the Most Common/Overtured Audit findings
- Begin revision of Standards
 - Monthly/Bi-weekly Web Meetings
 - August 19, 2015 10am EST
- Addressing Database Standards
 - “LCDM” to CODIS Committee
(Logical Chunks for Database Massaging)



Committee

Pending/Outstanding Issues

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Rapid DNA



Committee Activities/Tasks

- Focus on instrument expert systems
- Data review
- CJIS/CODIS updates
- Arizona experience
- UK experience



Instrument Manufacturers

- NetBio / GE
- IntegenX
- Each was provided with questions from the committee and allotted 25 minutes for a prepared presentation.
- Approximately 30 minutes for questions
- Meeting summaries will be prepared and posted
- May include additional questions and answers



NIST R-DNA Maturity Assessment Results

Rapid DNA Instrument Platforms	Number of Participating Labs	Total Instruments	Samples Attempted	Core CODIS Success (Rapid DNA Analysis)	Core CODIS Success (Modified Rapid DNA Analysis)
2	7	11	280	76.1%	80.0%



Expert System Validation

- Recommendation: No change to existing validation requirements
- Based on:
 - Manufacturers' information
 - Committee's review of data
 - Experience with ES validation



FBI Updates

- Tom Callaghan reviewed the booking station data and information flow
 - Interconnectivity and message exchanges
 - Potential changes to information housed at each level
 - Development of CODIS prototype



Arizona's Experiences

- Russell Vossbrink provided an overview of the use of rapid instruments
 - Crime scene samples by police agencies
 - Arrestee samples in the laboratory
- Samples tested by laboratory-trained officers
 - Profiles do not go to CODIS
 - Portion sent for laboratory testing and potential CODIS entry



UK Update

- On going evaluation project
 - Policy
 - Public confidence
 - Instrument evaluations
 - Proof of concept and pilot projects
 - Examining logistic and implementation issues



Y STR



Committee Goals/Objectives

- Primary goal is to supplement the Y-STR Guidelines (2014) to address indistinguishable mixtures & evidential minor contributor



Committee

Tasks/Accomplishments of Mtg

- Status of the committee's Y-Mix tool for mixture analysis was discussed
 - Alpha testing completed
 - Theta and drop-out probability will be added before any additional testing
- Data presented on a model for determining major contributor
 - Members to provide mixture data for testing
- Progress on Guidelines update



Committee

Pending/Outstanding Issues

- More developmental work on Y-Mix and testing
- Major contributor model also in development



Contact Us

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