

Scientific Working Group on DNA Analysis Methods (SWGDM) July 2020 Report

July 7 - 9, 2020

Virtual Meeting

I. Agenda:

Please see Attachment 1.

II. Meeting Synopsis:

Tuesday, July 7, 2020

The SWGDAM Chair, Anthony Onorato, introduced Ms. Tiffany Thoren from the Federal Bureau of Investigation' (FBI) CODIS Unit to explain the logistics of the virtual meeting. The Chair noted this was SWGDAM's first virtual meeting and reviewed the agenda for the general sessions on Tuesday and Thursday focusing on the review of final reports/documents and Wednesday for Committee meetings and/or review of documents. The Chair introduced four new invited guests: Jessica Hanna, Joseph Hof, Alyssandra Shaffer and Rhalie Simmons.

The Chair introduced Dr. Jason Bannan, the FBI's Forensic Science Research Training Center's Senior Scientist and specialist in microbiology and infectious diseases to provide a keynote presentation on COVID-19. Dr. Bannan reviewed the outbreak and the progression of the virus, including transmission and how the virus adapts to human transmission. In tracing the identification of the virus, Dr Bannan explained the positive antibody responses to the virus that the vaccine will be addressing and the status of therapies for the virus. Dr. Bannan participated in an extensive question and answer session following his keynote explaining the accuracy of current tests, comparison of COVID -19 to other illnesses, virus mutations, retention on surfaces, virus immunity, etc. On behalf of SWGDAM, the Chair acknowledged Dr. Bannan's outstanding and informative presentation and thanked him for making the time to speak with SWGDAM.

On behalf of the SWGDAM Rapid DNA Committee, Dr. Douglas Hares reviewed the timeline for the Rapid DNA Booking Standards' activities including SWGDAM's first look in January 2020, feedback from the booking station participants, official SWGDAM comment period, public comment period and the draft final report. Dr. Hares reviewed the comments, noting that some were addressed in a draft National Rapid DNA Booking

Operational Procedures Manual. Dr. Hares reviewed revisions to the Standards since the January SWGDAM meeting including, more detail on the State CODIS Agency added to the Introduction; references changed to Rapid DNA Booking System; clarifying the duties of the Rapid DNA Lead Operator; and defining terms specific for Rapid DNA. Following Dr. Hares' review of the Standards, a motion was made to accept and approve the *Standards for the Operation of Rapid DNA Booking Systems by Law Enforcement Booking Agencies*, as revised, for recommendation to the FBI Director. The motion was seconded and approved by SWGDAM members.

Ms. Jocelyn Carlson, Chair of the SWGDAM Quality Assurance Committee, presented the revisions made to the draft SWGDAM Training Guidelines. These revisions included: updating the Introduction to reference the module system; inclusion of LIMS; updating professional responsibility readings; merging of the fundamental and applied scientific knowledge sections; additions to required reading for module on analysis and interpretation; and updated recommended references. A motion was made to accept and approve the *SWGDM Training Guidelines*, as revised, for posting on the SWGDAM web site as an additional guidance document. The motion was seconded and approved by SWGDAM members.

Ms. Marla Kaplan, Chair of the Next Generation Body Fluid Identification Working Group, presented the *Report on Y-Screening of Sexual Assault Evidence Kits (SAEKs)*. Ms. Kaplan reviewed the revisions made to address comments received during the SWGDAM technical review including revision of defined terms; clarification of the percentages described in Figures and text; addition of more detail to the SAEK sampling section; and references to the Quality Assurance Standards. During a discussion of the revisions, there was a comment to further clarify what Y-screening is (in the context of whether it is meant to replace conventional serology). Additional comments on the Y-Screening Report were requested to be submitted for the final review on Thursday.

Wednesday, July 8, 2020

Committees and Working Groups held scheduled meetings.

Thursday, July 9, 2020

The Chair requested that Ms. Thoren review the meeting logistics and then welcomed the attendees.

The Chair introduced Ms. Tina Delgado, Chief of the FBI Laboratory's Biometric Analysis Section. On behalf of the FBI Laboratory, Ms. Delgado thanked the attendees for their work and efforts, especially with respect to the substantial revisions to the

Quality Assurance Standards which was a multi-year effort. Ms. Delgado acknowledged the Rapid DNA Standards, the SWGDAM Training Guidelines and the Y-Screening Report, under consideration at this meeting. Ms. Delgado recognized all the work that goes on by the Committees and Working Groups outside of the regular SWGDAM meetings. The Chair thanked Ms. Delgado for her full support of SWGDAM and its meetings.

The Chair reviewed the actions on the Rapid DNA Standards and SWGDAM Training Guidelines and congratulated the Rapid DNA and Quality Assurance Committees for their efforts on the two documents.

Ms. Marla Kaplan, Chair of the Next Generation Body Fluid Identification Working Group reviewed the one additional change that was made to the *Report on Y-Screening of Sexual Assault Evidence Kits (SAEKs)*: revision of the definition of direct-to-DNA Y screening. There was additional discussion of the definition and it was noted that the revised definition is for purposes of this document and in the context of reporting information from the survey of the laboratories. Following the discussion, there was a motion to accept and approve the SWGDAM *Report on Y-Screening of Sexual Assault Evidence Kits*, as revised, for forwarding to the SWGDAM Executive Board as a final report. The motion was seconded and approved by SWGDAM members.

The Chair introduced the Committee Update Session and requested that the Committee/Working Group Chairs provide an informal report of their current activities.

Dr. Thomas Callaghan, Chair of the Investigative Genetic Genealogy Working Group, noted that the Working Group has received their new taskings and are working on survey questions.

Dr. Jodi Irwin, Chair of the Next Generation Sequencing Committee, described that the Committee is working on a survey for current probabilistic genotyping developers to determine if they will be addressing sequence data and interpretation guidelines for SNPs.

Ms. Amber Carr, Vice Chair of the Laboratory Operations Committee, reported that their Committee is reviewing the validation guidelines and will use a module format for specific topics such as Rapid DNA and NGS.

Mr. Richard Wilson, Chair of the Rapid DNA Committee, stated that they are continuing their work on the Rapid DNA Booking Audit Document and Guidance which they expect to complete by the end of the calendar year.

Dr. Joel Sutton, Chair of the Autosomal Committee, reported that they continue to update the guidelines and the separate document addressing probabilistic genotyping.

Mr. Darrel Oubre, Chair of the CODIS Committee, noted that the Quality Assurance Standards went into effect on July 1st and that they are addressing questions relating to Standard 17 as well as new scenarios for the CODIS Administrator's Handbook.

Ms. Dixie Peters, Chair of the Lineage Marker Committee, reported that they are working on the YSTR and mtDNA guidelines with a current focus on the YSTR document.

Ms. Jocelyn Carlson, Chair of the Quality Assurance Committee, noted that the Training Guidelines were approved on Tuesday and that the Committee is working on questions referred by the CODIS Committee relating to Standard 17.

Ms. Marla Kaplan, Chair of the Next Generation Body Fluid Identification Working Group, thanked the SWGDAM membership for approval of the Report.

Ms. Amy McGuckian, Chair of the Forensic DNA Casework Expert System Working Group, reported that they have developed a draft document to obtain feedback from several laboratories.

In his concluding remarks, the Chair noted that the next SWGDAM meeting will be January 12-14, 2021 but that it is not yet determined if it will be in person or a virtual meeting. The Chair acknowledged the July 1st effective date for the revisions to the Quality Assurance Standards. The Chair also highlighted that there have been over 102,000 visits to the SWGDAM web site and thanked Cindy Stanley at the National Institute of Standards and Technology for all of her work maintaining the web site.


III. Attendees:

Please see Attachment 2.

IV. Next Meeting:

The next meeting will be held January 12-14, 2021.

Attachment 1 - Final Agenda



SCIENTIFIC WORKING GROUP DNA ANALYSIS METHODS

SWGDM VIRTUAL REGULAR MEETING AGENDA

July 7 - 9, 2020

Tuesday, July 7, 2020

COMMITTEE OF THE WHOLE SESSION

1:00 – 4:00 PM WELCOME

Keynote by Dr. Jason Bannan

Final review of the proposed *FBI Quality Assurance Standards for the Operation of Rapid DNA Systems by Law Enforcement Agencies in the Booking Environment* – Rapid DNA Committee

Final review of the proposed revisions to the *SWGDM Training Guidelines* – QA Committee

Final discussion of the new *SWGDM Report on Y-Screening of Sexual Assault Evidence Kits (SAEKs)* – Next Generation Body Fluid Identification Working Group

Wednesday, July 8, 2020

NO SCHEDULED SWGDM VIRTUAL REGULAR MEETING ACTIVITIES

Committees and Working Groups scheduled virtual breakout meetings as appropriate

Thursday, July 9, 2020

COMMITTEE OF THE WHOLE SESSION – FINAL REPORTS & UPDATES

1:00 – 4:00 PM Final review of the new *SWGDM Report on Y-Screening of Sexual Assault Evidence Kits (SAEKs)* – Next Generation Body Fluid Identification Working Group

Committee and Working Group Updates

ADJOURNMENT

Chair Anthony J. Onorato | Anthony.Onorato@ic.fbi.gov | SWGDM.org

Attachment 2 - Attendees

**SWGDM July 2020 Meeting
July 7 & 9, 2020
Attendees**

SWGDM Chair
Anthony Onorato

SWGDM Executive Board

Chris Carney
Eugene Lien
Amy McGuckian
Shawn Montpetit
Russell Vossbrink
Dawn Herkenham

SWGDM Attendees

Chris Askew
Jack Ballantyne
Jason Bannan
Suzanne Barritt-Ross
Todd Bille
Andrea Borchardt
Jennifer Breaux
Thomas Callaghan
Jocelyn Carlson
Amber Carr
Dorothy Catella
Michael Coble
Jerrilyn Conway
Jennifer Coursey
Brenda Danosky
Tina Delgado
Angelo Della Manna
Eric Duvall
Seth Faith
Neil Fernandopulle
Connie Fisher
Malia Fullerton
Russell Gettig
Katherine Butler Gettings
Ann Marie Gross
Lisa Grossweiler

Christi Guerrini
Jessica Hanna
Douglas Hares
Brian Harmon
Bruce Heidebrecht
Joseph Hof
Bill Hudlow
Deedra Hughes
Ted Hunt
Jodi Irwin
Jessica James
Elizabeth Johnson
Kristy Kadash
Marla Kaplan
Susannah Kehl
Jason Kokoszka
Brandon Letts
George Li
Lauren Lu
Beth Ann Marne
Charla Marshall
Justin Maxwell
Barbara McCarty
Scott McWilliams
Gary Molina
Ruth Montgomery
Lilly Moreno
Tamyra Moretti
Ashley Murray
Steven Myers
Vanessa Nelson
Mary Lou Nicholson
Sarah Noël
Jeff Nye
Darrel Oubre
Dixie Peters
John Planz
Evelyn Ridgley
Juliet Rolando
Erica Romsos
Kristin Sasinouski
Peter Schneider

Taylor Scott
Alyssandra Shaffer
Phillip Simmers
Rhalie Simmons
Christie Smith
Jenifer Smith
Mark Smith
Michael Smith
Carl Sobieralski
Melissa Suddeth
Joel Sutton
Peter Vallone
Jeanette Wallin
Bruce Weir
Susan Welti
Ray Wickenheiser
Sascha Willuweit
Richard Wilson
Timothy Zolanz