

Scientific Working Group on DNA Analysis Methods (SWGDM) January 2022 Report

January 11-13, 2022

Virtual Meeting

I. Agenda:

Please see Attachment 1.

II. Meeting Synopsis:

Tuesday, January 11, 2022

The SWGDAM Chair, Mr. Anthony Onorato, acknowledged Ms. Tiffany Thoren from the Federal Bureau of Investigation's (FBI) CODIS Unit for her assistance with the virtual meeting.

TECHNICAL SESSION

The Chair introduced the keynote speaker, Dr. Ray Wickenheiser, Laboratory Director of the New York State Police Forensic Investigation Center. Dr. Wickenheiser mentioned the ASCLD comment on the NIST Draft Report and their invitation for NIST to view the available data on-site at the laboratories subject to a non-disclosure agreement and defined criteria for such evaluation and review. He described the mission of forensic science as maximizing the value of evidence.

Mr. Justin Presant (Assistant United States Attorney) and Ms. Lauren Lu (Michigan State Police) presented on their experiences in the case of *U.S. v. Gissantaner*. Mr. Presant was the prosecutor in the *Gissantaner* case and he explained that the laboratory work was performed in 2016, although the case was not concluded until 2021. He reviewed the following issues addressed by the courts: source code, peer review, standards and error rate, general acceptance, and likelihood ratios. Ms. Lu reviewed the following issues that were covered in the case: reliability, independent assessment, factor space coverage, and likelihood ratios.

Ms. Melissa Mourges with the Manhattan District Attorney's Office provided a legal update from the New York perspective. She noted that New York has a Forensic Science Commission and DNA Subcommittee and is a *Frye* jurisdiction although Federal District

Court is a *Daubert* jurisdiction. Ms. Mourges explained that there have been motions in her jurisdiction to exclude the DNA evidence citing to the draft NIST Report.

Ms. Enid Camps with the California Department of Justice presented a Legal Update on California. Ms. Camps reviewed the *Kelly* standard of admissibility in California as well as the various stages of a case and how to address issues at each stage. Ms. Camps noted the *Davis* case currently pending in California.

Ms. Dawn Herkenham with ECS provided an update on pending Federal legislation and probabilistic genotyping cases, including *State v. Watkins* and *State v. Hudson*. Ms. Herkenham also reviewed relevant reports.

Ms. Audra Bartels with the Federal Bureau of Investigation (FBI), Office of General Counsel presented on responding to motions. Ms. Bartels reviewed the following issues: peer review, error rate and general acceptance.

Mr. Ted Hunt, Special Counsel to the Science and Technology Branch of the FBI presented on Mixture Interpretation. Mr. Hunt reviewed the Federal Rules of Evidence and relevant cases on expert testimony, hypotheticals, likelihood ratios, verbal scales, validation and scientific standards.

There was discussion following the presentations.

Wednesday, January 12, 2022

UPDATE SESSION

The following Committees and Working Groups provided updates to the attendees: Autosomal, CODIS, Investigative Genetic Genealogy, Laboratory Operations, Next Generation Sequencing, Quality Assurance, and Rapid DNA. Dr. Douglas Hares is now Chair of the Rapid DNA Committee. See <https://www.swgdam.org/committees> (bottom of page) for Committee/Working Group update slides.

ROUND TABLE

The Round Table for the January meeting included presentations on the following topics: validation of probabilistic genotyping systems, factor space, foundational validity and likelihood ratios. The presentations were followed by discussion.

Thursday, January 13, 2022

TECHNICAL REVIEW SESSION

Ms. Dixie Peters, Chair of the SWGDAM Lineage Marker Committee provided an update on the Committee's activities. She noted that changes were coming for YHRD in the coming weeks and explained those changes relating to discrete Laplace for U.S. subpopulations. Ms. Peters reviewed the revisions to the YSTR Supplemental Information document in FAQs 17 and 19 as a result of the public comment. Additionally, Ms. Peters explained the YHRD notice for U.S. laboratories and responded to questions.

UPDATE SESSION

Mr. Carl Soberalski representing the Organization of Scientific Area Committees (OSAC), provided an update on the Biology/DNA SAC. He reviewed the new leadership at the Human Forensic Committee. Mr. Soberalski noted the OSAC and ASB documents open for public comments as well as the standards currently in review. In response to an inquiry, he noted that it was important to work on vocabulary so that the same terms are used consistently.

ROUND TABLE DISCUSSION CONTINUED

Dr. Michael Coble at the University of North Texas Health Science Center continued Wednesday's discussion on probabilistic genotyping systems.

UPDATE SESSION

Ms. Andrea Borchardt presented an update for the Bureau of Justice Assistance and their forensic suite of programs. Ms. Borchardt described the following grant programs and their status: Coverdell, CEBR, Prosecuting Cold Cases using DNA, SAFE-ITR, Post-conviction DNA Testing, Strengthening ME/Coroner Systems, and SAKI Testing. She also provided updates on BJA's National Training and Technical Assistance Center, their Forensic Training and Technical Assistance Program and Forensic Unit Outreach. Ms. Borchardt explained for the Coverdell grant program, that the funds cannot be used for forensic genetic genealogy or personal education.

Dr. Peter Vallone with the National Institute of Standards and Technology (NIST) provided an update on NIST activities. He noted that the Expert Working Group on Human Factors in Forensic DNA Interpretation has completed a draft and they have a survey for DNA Technical Leaders that was approved by the Office of Management and Budget. With respect to the draft NISTIR 8351 Report, Dr. Vallone noted that the authors

are reviewing the public comments and indicated in response to an inquiry that they are still looking at the question of whether additional data will be considered. Dr. Katherine Gettings provided an update on the following NIST activities: SRM 2391d; Kintelligence data; published software overview for sequencing data; multi-dimensional evaluation of the NIST 1032 samples; population data in NIST PDR; collaboration with the SWGDAM NGS Committee; ISFG DNA Commission on STR Sequence Nomenclature; and AAFS Workshop and Main Session presentations. Dr. Gettings also noted that the GRC on Forensic Analysis of Human DNA will be in June. Dr. Gettings also acknowledged the loss of their valued colleague, Margaret Kline.

Ms. Tracey Johnson with the Office of Investigative and Forensic Sciences at the National Institute of Justice (NIJ) presented an update on NIJ activities. Ms. Johnson provided an update on the Forensic Science Public Labs Program and Forensic Science R&D Program. She highlighted several awards, including an FBI-NIJ Interagency agreement for evaluation/testing of the Rapid DNA enhancements described in the Letter to the Editor of FSI: Genetics. Ms. Johnson explained that there are TWGs for each of the discipline areas and those meet to put together recommendations for research and development needs.

III. Attendees:

Please see Attachment 2.

IV. Next Meeting:

The next meeting will be held July 19-21, 2022.



SCIENTIFIC WORKING GROUP

DNA ANALYSIS METHODS

SWGDM VIRTUAL REGULAR MEETING

AGENDA

Monday, January 10, 2022

COMMITTEE BREAKOUT SESSIONS

Tuesday, January 11, 2022

12:00 PM – 7:00 PM

KEYNOTE SESSION: AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS (ASCLD)

Dr. Ray Wickenheiser, Director, New York State Police

TECHNICAL SESSION: DNA MIXTURE INTERPRETATION

US vs. Gissantaner: Lessons Learned

Lauren Lu, Michigan State Police and AUSA Justin Presant

Legal Update: New York

ADA Melissa Mourges, Manhattan District Attorney's Office

Legal Update: California

Enid Camps, Deputy Attorney General for California

Recent Admissibility Challenges

Dawn Herkenham, SWGDAM Executive Secretary

Responding to Motions

Audra Bartels, Office of General Counsel, FBI

Navigating the Future

Ted Hunt, Special Counsel, Science and Technology Branch, FBI

Question and Answer Panel – Group

Chair Anthony J. Onorato

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SCIENTIFIC WORKING GROUP

DNA ANALYSIS METHODS

Wednesday, January 12, 2022

12:00 PM – 7:00 PM

COMMITTEE/WORKING GROUP UPDATE SESSION

ROUND TABLE SESSION: PROBABILISTIC GENOTYPING

Technical Presentations/Moderated Discussion

Thursday, January 13, 2022

12:00 PM – 7:00 PM

TECHNICAL SESSION: YHRD UPDATE

BUSINESS SESSION

Review of the proposed revisions to the SWGDAM Interpretation Guidelines for Y-Chromosome STR Typing by Forensic DNA Laboratories and the new Supplemental Information for the SWGDAM Interpretation Guidelines for Y-Chromosome STR Typing by Forensic DNA Laboratories – Lineage Marker Committee

ROUND TABLE SESSION: PROBABILISTIC GENOTYPING

PARTNER AGENCY UPDATE SESSION

Biology/DNA Scientific Area Committee
Bureau of Justice Assistance
National Institute of Standards and Technology
National Institute of Justice

ADJOURNMENT

Attachment 2 - Attendees

**SWGDM January 2022 Virtual Meeting
January 11-13, 2022
Attendees**

SWGDM Chair
Anthony Onorato

SWGDM Vice Chair
Russell Vossbrink

SWGDM Executive Secretary
Dawn Herkenham

SWGDM Attendees

Chris Askew
Jack Ballantyne
Suzanne Barritt-Ross
Audra Bartels
Tiffany Bazazzadegan
Todd Bille
Andrea Borchardt
Thomas Callaghan
Enid Camps
Jocelyn Carlson
Chris Carney
Amber Carr
Dorothy Catella
Michael Coble
Jerrilyn Conway
James Corcoran
Jennifer Coursey
Brenda Danosky
Angelo Della Manna
Neil Fernandopulle
Connie Fisher
Russell Gettig
Katherine Gettings
Ann Marie Gross
Lisa Grossweiler
Jessica Hanna
Douglas Hares
Brian Harmon

Bruce Heidebrecht
Joseph Hof
Bill Hudlow
Deedra Hughes
Ted Hunt
Jodi Irwin
Jessica James
Elizabeth Johnson
Tracey Johnson
Kristy Kadash
Marla Kaplan
Susannah Kehl
Debbie Kennedy
Ben Knoch
Jason Kokoszka
Brandon Letts
George Li
Eugene Lien
Lauren Lu
Beth Ann Marne
Charla Marshall
Justin Maxwell
Barbara McCarty
Amy McGuckian
Scott McWilliams
Gary Molina
Shawn Montpetit
Lilly Moreno
Tamyra Moretti
Melissa Mourges
Ashley Murray
Steven Myers
Vanessa Nelson
Mary Lou Nicholson
Sarah Noel
Jeff Nye
Darrel Oubre
Heather Parrish
Walther Parson
Dixie Peters
Justin Presant
Evelyn Ridgley

Lutz Roewer
Juliet Rolando
Erica Romsos
Lisa Schiermeier-Wood
Peter Schneider
Alyssandra Shaffer
Phillip Simmers
Rhalie Simmons
Christie Smith
Mark Smith
Michael Smith
Carl Sobieralski
Melissa Suddeth
Joel Sutton
Tiffany Thoren
Peter Vallone
Jeanette Wallin
Susan Welti
Ray Wickenheiser
Sascha Willuweit
Richard Wilson
Tiffany Vasquez
Timothy Zolandz