

Illinois Forensic Science Commission- FIGG Subcommittee

Meeting Minutes

January 28, 2025, 10:00 a.m. meeting

- I. Call to order
Cris Hughes, subcommittee chairperson, called the meeting to order.

- II. Roll-call
The following people were present:
 1. Ponni Arunkumar, FS Commission Member, subcommittee member
 2. Claire Dragovich, FS Commission Member, subcommittee member
 3. Jodi Hoos, FS Commission Member, subcommittee member
 4. Cris Hughes, FS Commission Member, subcommittee chairperson
 5. Jeanne Richeal, FS Commission Member, subcommittee member
 6. Amy Watroba, Executive Director-Forensic Science Commission
 7. Robin Woolery, Director Designee, subcommittee member
 8. Joanna Johnson, Indiana State Police Laboratory
 9. Sarah Ware, Kane County
 10. Heather Wright, Illinois State Police Crime Laboratory-Joliet

- III. Approval of Minutes from Meeting on November 4, 2024
 1. The minutes from the November 4, 2024 meeting were unanimously approved.

- IV. Discussion Topics- Presentation from Joanna Johnson, Forensic Biology Supervisor, Indiana State Police Laboratory
 1. Joanna Johnson presented to the subcommittee regarding Indiana State Police Laboratory's (ISPL) process of on-boarding FIGG in-house in the agency. Ms. Johnson explained how ISPL was able to start assisting law enforcement agencies with outsourcing FIGG at around the same time the Golden State Killer (GSK) was identified in 2019. At that time, ISPL retained DNA subitems and DNA extracts from evidence. They assisted with re-extraction, re-quantification, and final confirmatory comparisons at no charge to the agencies. Because of this, agencies contacted ISPL about using FIGG around the time the GSK was identified. ISPL initially acted as intermediary between the law enforcement agencies and the chosen outsourced company to answer scientific questions about the quality of the profile and shipped extracts directly to the outsourcing company with agency approval and confirmation that payment was made to the outsourcing company. ISPL also helped law enforcement agencies complete the forms required to send samples to

outsourcing labs. ISPL maintained chain of custody documentation for items sent out and issued reports documenting that samples were sent out from ISPL for SNP testing. Personnel from ISPL sometimes sat in on conversations between the law enforcement agencies and the outsourcing labs. ISPL also helped law enforcement agencies decipher the varying reports from outsourcing labs to assist the agencies in deciding how to move forward. They maintained a list of companies/resources for FIGG (testing and genealogy), but did not recommend any company over another.

2. Around this same time, ISPL also was approached by a group of local volunteer genealogists that offered to do *pro bono* work on 3 test cases. ISPL started with unidentified human remains (UHR) cases for this pilot project because there are fewer privacy issues involved in UHR cases and the cases are less likely than criminal investigations to result in court proceedings. They selected internal Indiana State Police cases so they could get funding to outsource the SNP testing needed for the cases. Ms. Johnson indicated that ISPL learned a lot about the SNP development and genealogy aspects of FIGG from these cases. They also learned a lot about working with individuals who are not familiar with working on law enforcement cases. Ms. Johnson and the ISPL CODIS administrator started genealogy training to learn how to do it themselves.
3. During the COVID pandemic, analysts at ISPL were completing some work from home (i.e. writing reports). ISPL decided to have analysts review violent cases that might qualify for FIGG. The analysts reviewed DNA profiles in these cases and created a list of approximately 300 cases that could potentially benefit from FIGG.
4. The idea of eventually doing FIGG in-house also stemmed from the idea that ISPL eventually could start doing FIGG on current cases (as opposed to older “cold” cases) once investigative leads were exhausted and could prioritize cases involving active violent criminals. ISPL saw the value of the tool (FIGG), when they had assisted with approximately 40 cases from other agencies and observed a greater than 50 percent success rate at identifying investigative leads using FIGG. ISPL knew that most law enforcement agencies in Indiana could not afford the cost of outsourcing cases for FIGG, so providing FIGG in-house would also allow ISPL to provide FIGG services for all agencies across the state.
5. ISPL also favored an in-house approach to FIGG for quality reasons. While they do not anticipate at this time that testimony about FIGG would be needed for court proceedings, they recognized that this could change in the future depending on how case law related to FIGG develops. They identified issues

related to the possibility of future court testimony, including: whether analysts from outsourcing labs have experience testifying, determining who would pay for any testimony from outsourcing companies' experts, and what would happen if an outsourcing company closed.

6. ISPL felt that bringing the FIGG process in-house would allow them to have more control and make sure that FIGG is done in accordance with national recommendations and guidelines for best practices. Additionally, different companies handled testing and reporting differently which sometimes caused confusion. Ms. Johnson also observed that cases which are not resolved immediately have ongoing needs which could be met if the records were in-house. Law enforcement also has access to tools that private genealogists do not and the genealogy aspect of FIGG therefore can be quicker when genealogists can work with law enforcement as part of an investigative team. Ms. Johnson also observed that there currently are no national guidelines for determining whether a genealogist is qualified to work on law enforcement cases. Many genealogists have decades of experience and many are newer to genealogy, having started working on it as a hobby or having completed an educational program related to FIGG.
7. Ms. Johnson explained that the building of the in-house program really took off about a year ago when the Superintendent of the Indiana State Police was open to hearing proposals for why the lab wanted funding to offer FIGG within the ISPL. The funding for the FIGG Team was approved by the Superintendent and the Governor and the Team includes: a Unit Supervisor, 5 DNA analysts (one position currently vacant until program is fully on-line), and a professional genealogist. Ms. Johnson serves as the Unit Supervisor and is also being trained on the SNP and genetic genealogy aspects of FIGG. The DNA analysts will do the SNP profile development and some tree development. They hired a professional genealogist with 20 + years of experience because they felt it was important to have someone with experience on site to assist those more newly-trained on genetic genealogy to help break through brick walls. Ms. Johnson noted that other agencies are utilizing different in-house models for genealogy by doing genealogy on the investigations side of the house (like the FBI) and others are using DNA analysts for the genealogy work. ISPL opted to have everything under the umbrella of the lab.
8. Ms. Woolery asked whether the ISPL FIGG Team plans to do everything from testing through genealogy and then turn cases back over to the submitting agencies. Ms. Johnson responded that they are fully on-line with the genealogy now and they are currently validating ForenSeq™ Kintelligence kit on the MiSeq FGx™ so they can do the FIGG process in-house all the way through. Ms.

Johnson explained that ISPL will do SNP testing in-house if the sample is from a single source. They are hoping to secure funding to outsource for Whole Genome Sequencing (WGS) of samples involving simple mixtures and samples where the in-house testing with Kintelligence doesn't provide good match results to see if WGS leads to better match results. By bringing Kintelligence in-house, they hope to address cases that are "low hanging fruit" from a testing perspective and then have funding available for the more complicated cases (such as mixtures and cases where better matches are needed).

9. Ms. Johnson noted that they have discussions with law enforcement agencies before they accept any case and make sure the agency understands the entire process of FIGG, including needing final confirmatory analysis with a standard before any arrests occur. The ISPL also screens cases to make sure that the case meets the terms of service for any databases used and aligns with the DOJ guidelines. They want to make sure that agencies understand the full FIGG process.
10. Ms. Johnson provided some details about how the FIGG Unit will operate and what steps they took to train team members. The 4 DNA analysts in the FIGG Unit (including Ms. Johnson) will be qualified to do SNP testing. The 4 DNA analysts (including Ms. Johnson) are also completing the University of New Haven program on genetic genealogy and hope to be finished this Spring. They hired a professional genealogist with 20 + years of experience in July 2024. Ms. Johnson observed that they had several experienced candidates for the genetic genealogy side of the team. Because the genealogist hired had no forensic experience, they created training to get them up to speed on what it is like to work on criminal cases. They provided the genealogist with forensics training on topics including QA/QS, forensic biology, FIGG law/ethics, court testimony, and they conducted a mock trial.
11. While training the genealogist, they worked on developing items such as informed consent paperwork for voluntary target testing and submission paperwork. They outsourced 4 cases for SNP profile development, and the genealogist is now working on those cases. Ms. Johnson shared that the genealogist was successful in identifying a person of interest in one case after approximately 7 days of genealogy work. Confirmatory testing in that case is currently in progress. They are finishing the validation of Kintelligence hopefully in the next month and are developing internal SOPs. The goal is to be fully on-line with FIGG by the end of the Spring. They have a list of cases that are waiting to be worked. FIGG casework (outsourced SNP profiles) went on-line on December 20, 2024.

12. ISPL plans to work on both criminal violent crimes and UHR cases by request. Most of the starting cases are from ISP's internal cold case detectives team. In the future they plan to accept cases from any Indiana law enforcement agency. Once they are fully on-line, they plan to tour the state and educate law enforcement agencies about what cases might be suitable for FIGG and how to request FIGG from ISPL in suitable cases. The lab system in Indiana is structured such that ISPL provides lab services for all counties except Marion County, where Indianapolis is located. Marion County has its own lab.
13. Ms. Watroba asked if ISPL envisions a time in the future when FIGG will become part of the regular lab workflow whenever they have an eligible crime with a CODIS profile/no hit, and all investigative leads have been exhausted. Ms. Johnson responded that the lab director of forensic analysis sees that in the future. She expounded that they need to see what the FIGG workflow looks like, specifically how many cases they can work with the size of the team and the funding provided. They are not sure what to expect yet. For example, they are not sure if it is realistic to expect that each DNA analyst could work 12 cases a year (3 cases per quarter). The output will likely be case-dependent. Once they have a better idea of throughput then she could see tracking active cases or reminding investigators about the FIGG option once investigative leads have been exhausted, such as in cases involving violent crimes that present a current threat to public safety. Ms. Watroba asked if they thought about how to handle post-conviction requests for FIGG. Ms. Johnson responded that they will be handled in the same way they handle post-conviction requests for DNA testing now and that they will accept suitable cases if requested by a prosecutor's office or by court order.
14. Dr. Hughes asked if they are expanding beyond investigations that have a criminal component for UHR cases, such as cases where the manner of death is undetermined. Ms. Johnson indicated that they were, except for "Baby Doe" cases because the terms of service for the databases require a showing of homicide for "Baby Doe" cases. The non-"Baby Doe" UHR cases they work at ISPL can be undetermined cause of death. She noted that the DOJ interim guidelines for FIGG only apply to criminal cases. The database terms of service still need to be followed for cases that are not criminal.
15. Dr. Hughes inquired about determining the suitability of extracts for SNP testing in general and specific to Kintelligence. Ms. Johnson explained that when they get calls from law enforcement the investigator often does not understand that FIGG cannot be done in every case with remaining extract, such as when there is no CODIS profile or when there is a 3 or 4-person mixture. Their review of cases is often very general to see if there is extract or

sample remaining, if it is a single source profile, and if it looks like there is enough remaining DNA for SNP testing. They also check to see if the crime being investigated qualifies under DOJ guidelines and database terms of service. Dr. Hughes asked if they were considering SNP arrays and Ms. Johnson said she does not foresee them doing SNP arrays but rather skipping right to WGS or other targeted sequencing depending on the characteristics of the sample (degradation, bacterial contamination, etc). Unlike UNT, ISPL is not planning to go on-line in-house with various technologies.

16. Dr. Hughes asked if Ms. Johnson could go into more detail about the funding of the FIGG Team. Ms. Johnson noted that some federal grant funds could not be used for FIGG, but she heard that this limitation might be changing. She shared that she did not originally anticipate the need for additional funding since they already had some of the equipment needed for SNP testing which they were using on UHR cases and she felt they could purchase the supplies needed to do the SNP testing on a small scale. However, once conversations about the possibility of bringing FIGG in-house were held with the Superintendent and the Governor, the project grew in scale and funding was allocated to create new positions for the individuals in the FIGG Unit. They then backfilled the positions of existing lab personnel that were assigned to the FIGG Unit. She also identified possible needs for additional funding to purchase a second instrument and to create a designated lab space for the FIGG Team. There was a recent administration change which may impact future funding. They have enough resources to be a fully effective program, but she hopes for additional funding in the future.
17. Ms. Watroba asked what interaction they have with prosecutors. Ms. Johnson responded that they discuss prosecutor involvement during the initial meeting with law enforcement and that they have a case acknowledgment form that law enforcement agencies must complete which includes the fact that the law enforcement agency has had conversations with prosecutors regarding whether the case will be pursued if a person of interest is identified. She said that originally they used more of an MOU similar to other agencies but then moved to a case acknowledgment form on the advice of their legal department. She reiterated that the lab also has verbal discussions to make sure the agencies understand all steps including where prosecutor fits into the FIGG process.
18. After Ms. Johnson's presentation, the subcommittee members discussed some takeaways from the information provided. DD Woolery noted that Indiana is a smaller state but acknowledged the really good work they have done to bring FIGG in-house. Ms. Watroba commented favorably on their ability to backfill

the regular lab positions so quickly. She also commented that while other agencies have housed the genealogy aspect of FIGG in their investigation division that Ms. Johnson's presentation provided food for thought on possible advantages to having genealogy on the lab side of an agency, such as longevity, continuity, and investment in training. Ms. Dragovich observed that it might be costly to train individuals on DNA and genealogy and questioned whether the cost of bringing FIGG in-house might be more than outsourcing, depending on how many cases they can work in a year. Dr. Hughes observed that the bottleneck with most FIGG cases seems to be the genealogy aspect of the investigation and wondered how much time you dedicate to the genealogy aspect of a case before moving on to another case. It was noted that there are other agencies and organizations that will assist with genealogy such as the FBI. Ms. Watroba raised the question of whether private outsourcing companies are continually checking uploaded profiles for updates after the initial genealogy is done and does not generate a lead and whether they charge agencies additional fees for more work on open cases. Ms. Dragovich commented that ISPL may need to decide how many hours they dedicate to an initial search to help manage their workflow.

V. Old Business

None.

VI. New Business

The subcommittee discussed possible speakers for the next meeting. Ms. Richeal has been in contact with someone from Michigan. They are willing to speak to the subcommittee and they are working through the approval process on their end. Ms. Watroba will conduct a Doodle Poll based on the next speaker's availability.

VII. Public Comment

There were no public comments.

VIII. Meeting Schedule

The next meeting will be scheduled via Doodle Poll and will be held via Web Ex.

IX. Adjournment

The meeting was adjourned at approximately 11:05 a.m.