

Familial Search Policy and Procedures

Table of Contents

1	Introduction	2
2	Limitations.....	3
3	Case Selection	3
4	Frequency of Familial Searches.....	4
5	Selection of Offenders to test for a Genetic Genealogy Investigation	4
6	Confidentiality.....	5
7	Documentation	5
8	Reporting Results	5
8	Annual Reporting	6
9	<i>Other</i>	6
	MEMORANDUM OF UNDERSTANDING	7

1 Introduction

Familial Searching

Familial searching is a way of extending the utility of the offender DNA database to create investigative leads for cases of violent crimes or other qualifying offenses, by utilizing the similarities between the DNA profiles of related individuals. A familial search does not identify the individual whose DNA matches the evidence DNA profile, however it may be useful in identifying a first generation male relative to the evidence DNA profile. This evidence DNA profile is foreign to the victim and is presumed to be the suspect's DNA profile.

For example, a DNA profile is developed from blood evidence left at a homicide scene and a search of the evidence profile in the CODIS database does not result in a match. However, searching for DNA profiles that are similar to, but not an exact match, may identify possible first-degree male relatives to the evidence (father, son, brother). The list of potential relatives to the evidence DNA profile can then be narrowed by performing Y-STR DNA testing and comparing the Y-STR results to those obtained from the evidence. Further narrowing of the pool may be possible by reviewing demographic data, criminal history, and residential locations and so on. The pool may be narrowed to zero, one, two, or more potential relatives to the evidence DNA profile. The individuals whose name(s) are provided to the law enforcement agency are not the source of the evidence DNA profile in the case, but only a possible relative to the evidence DNA profile.

Genetic Genealogy (GG)

GG uses autosomal DNA single nucleotide polymorphisms (SNPs) to determine how closely two individuals are related. Matches in genetic genealogy databases are used to build family trees. Common ancestors across multiple family trees of the matches lead to descendancy research, which is used to search for descendants who were born at a time that is consistent with the subject's estimated age range. This type of research may lead to a single name, a family group or to a surname. Genetic Genealogy is not conducted at the BCI, but BCI may use the provided information to conduct DNA analysis of specific database samples for furtherance of an investigation upon request of a Law Enforcement Agency. Y-STR analysis would be performed on specific database samples that may be paternally related to the crime scene sample and compared to the Y-STR profile developed from this sample as a result of a GG investigation.

It is critical any lead identified through Y-STR testing (familial or GG) must result in additional investigation by law enforcement. It must be determined whether the individual has close family members that may have had the opportunity to commit the crime. If a potential suspect is identified, that suspect's DNA sample must be collected and submitted to the laboratory for a comparison to the evidence DNA profile using autosomal testing. This does not have to be a direct sample, but may be a secondary sample from the individual, such as, a cigarette butt, drinking glass, etc.

2 Limitations

Familial Searching:

It is essential to understand the nature of the familial relationship profile. This investigative lead is subject to a number of limitations:

- A familial search may only be successful if a first-degree relative of the evidence DNA profile is in the database. A “first-degree relative” is a sibling, a parent, or a child, but not an uncle or cousin.
- This type of search only works for males, and will be utilized if both the evidence DNA profile and the potential relatives are males.
- The “kinship index” used to produce the list of potential relatives is based on a statistical calculation involving shared alleles and allele frequency. This list could result in thousands of potential relatives, which would prohibit the laboratory from testing the entire list. The results list is prioritized, and may only be successful if the potential relative is prioritized high enough on this list to be selected for additional Y-STR testing.
- The potential relatives to the individual whose name is released may not be identifiable through a law enforcement records search.
- Y-STR profiles can be shared by a significant number of males in a given community. A consistent Y-STR profile between a potential relative and the evidence DNA profile does not confirm relatedness. This information shall only be considered as an investigative lead and shall be treated as an investigative lead by all parties involved.
- Due to the age of some of the database samples, a complete Y-STR profile may not be developed. When no additional Y-STR testing can be performed to show a familial link, this name may not appear on the final candidate list.

Genetic Genealogy:

GG limitations include identifying potential relatives based on the family tree and or names provided by law enforcement. A potential relative to the crime scene sample may go undetected, due to this individual having a different last name (adopted by step father) or alias used for the offender’s collection.

3 Case Selection

Familial Search at BCI:

A familial case selection begins with a conversation between BCI and the law enforcement agency or prosecutor’s office. Either the agency or BCI may initiate the conversation.

Case type:

A qualifying case must demonstrate the occurrence of a crime that is:

- Violent, causing serious injury or death; or which demonstrates a continuing threat of imminent and serious harm to one or more members of the community; and
- Not solvable by traditional methods of criminal investigation and all other investigative leads must have been exhausted. An exception to these criteria may be made by the BCI Superintendent for a matter of extreme public safety.

~~Familial searching will be limited to the most serious unsolved crimes or serial cases with a public safety component.~~

Evidence profile:

The evidence DNA profile must have the following qualities:

- A complete thirteen CODIS core locus autosomal DNA profile (partial DNA typing results may be considered on a case by case basis);
- A single source or fully deduced single source DNA profile in CODIS;
- A DNA profile that was developed by an accredited laboratory;
- A DNA profile that is currently in CODIS and has been searched at NDIS and SDIS;
- A 15-locus Y-STR profile; and
- The DNA profile must be associated with a crime committed in Ohio.

Application and MOU:

A written application should be completed to include the law enforcement agency's contact information (see Appendix A); case facts; and a statement of how the case meets the selection criteria. The Laboratory Director, along with the administration, will determine which cases are searched and in what order once a *complete application has been received and found to meet all the requirements for a familial search. Once a case has been selected to be searched the within the next 3 months, a memorandum of understanding(MOU) will executed for the familial search and is to be signed by all law enforcement agencies involved. This MOU requires the law enforcement agency to follow up on any investigative leads provided. The parties involved must understand the limitations of the familial testing and the privacy requirements regarding any name released to the agencies (see Appendix B). BCI may request a meeting with the Law Enforcement Agencies that are to sign the MOU. Once an MOU is received a familial search may be initiated.*

4 Frequency of Familial Searches

If no matching Y-STR profile is identified to the evidence, the search is considered complete. The negative results are reported to the agency. *An additional request may be made after 12 months or if there is an extenuating circumstance. BCI reserves the right to deny a request due to lack of resources or request payment by the laboratory.*

5 Selection of Offenders to test for a Genetic Genealogy Investigation

BCI will help further an investigation for a case that has been sent for Genetic Genealogy, if an agency submits a written request using the Genetic Genealogy Request form. A statement must be included that all reasonable investigative efforts have been made and the case has significant public safety issue or is a major crime. The statement shall also include the specific evidence sample, a case summary, confirmation the agency agrees to further investigate if identifying information is released to the agency. The agency must provide an autosomal and Y-STR electropherogram (A 15-locus Y-STR profile) and a completed Y-STR form. The genealogy report and possible family tree shall also be included.

Selection of offenders for the furtherance of a GG search will start with a query of database sample for those individuals from the genealogy report and or family tree. If a broader search is needed, a surname search may be done and the list will be minimized based on the age, region, and possible relationship

(paternal) to the crime scene profile. BCI will work with the LEA and PO to narrow the list to no more than 10 offenders. These names with their BCI number will be added to the form.

6 Confidentiality

Because familial searching or a lead for GG does not *generate* a direct association between the evidence DNA profile and the offender, it is of the utmost importance to safeguard information obtained because of the search. The results of the familial search and subsequent Y-STR testing for familial or GG investigation will be released only on a need to know basis. Only law enforcement personnel who have a direct involvement in the investigation of the case shall be permitted to have this information. Such staff shall receive training and a copy of this policy and procedures document.

Access to DNA records is governed by both state and federal statutes. Any violation of these statutes and/or the dissemination restrictions set forth in this section will constitute a breach of this agreement and a violation of the FBI Standards in the NDIS Operating Manual, subject to criminal penalties, for which BCI may investigate.

Dissemination and use of all DNA records must be limited to law enforcement agencies for the administration of criminal justice.

7 Documentation

A Laboratory Information Management System (LIMS) number will be assigned to the case to be searched. The case type will be **FAM** for familial search/GG Y testing. A case conversation entry will be added to the original BCI case (if available) indicating the familial search case number.

Throughout the process of conducting a familial search at BCI, the following requirements for documentation will be met and kept in the case file or electronically in LIMS:

- An approved application and MOU from submitting law enforcement agency and/or prosecutor.
- List of potential relatives resulting from the familial search. This would be the raw .txt file from the familial software.
- Batch information, including data review, and electropherogram of the matching Y-STR profile(s).
- A copy of the administrative letter sent if no potential relative is identified as having a matching Y-STR profile, if applicable.
- A copy of the investigative lead letter sent to the agency, if applicable.
- Copy of the Criminal Intelligence Unit (CIU) reports, if applicable.

8 Reporting Results

Names of potential relatives on the list shall not be released prior to having Y-STR testing performed by the laboratory. Only those potential relatives whose Y-STR profile is consistent with that of the evidence Y-STR profile will be considered for release.

All communications regarding a positive or negative familial search result will be in writing.

Negative Result

When no investigative lead is identified, a letter will be sent notifying the requesting agency of the negative search result.

Positive Result

If a potential investigative lead is determined based on a Y-STR result, the thumbprint captured when the DNA sample was collected for the database will be verified and the CODIS qualifying offense will be checked. If Y-STR profiles are consistent, BCI reserves the right to review non-DNA information in order to identify additional evidence showing relatedness, if available.

The Criminal Intelligence Unit (CIU) may initiate a background investigation on the potential relative (with the consistent Y-STR) to determine their first-degree relatives. The first-degree relatives will be compared to the case facts to determine if they may be excluded based on age at the time of the crime, location of residence, or any other known factors.

As necessary, once the CIU has completed the background check of the potential relative and their first-degree relatives, the names will be released by BCI to the requesting agency by means of a phone call or an in-person meeting. At the time the name(s) are released, BCI and the requesting agency shall discuss the limitations of the investigative lead, precautions to be taken, appropriate communications about the lead, and so forth. BCI will be available to answer questions as the investigation progresses.

8 Annual Reporting

At the end of each calendar year, a summary will be provided to the BCI superintendent regarding the number of familial searches performed. This data will also include a summary of the positive and negative results and possible prosecution if a suspect is arrested as a result of the familial search.

9 Other

Requests may be made on a case-by-case basis if it is for furtherance of a criminal investigation to have Y-STRs performed on an offender sample for comparison to evidence sample with Y-STRs or to confirm parental lineage. These requests must be received in writing from a law enforcement government laboratory and the criminal investigation is a major crime involving a sexual assault, kidnapping, homicide or terrorism related case. BCI reserves the right to deny a request due to lack of resources or request payment by the laboratory.

MEMORANDUM OF UNDERSTANDING

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (“MOU”) is hereby established between the Bureau of Criminal Investigation, Office of the Ohio Attorney General (“BCI”) and the following agency or agencies: _____ (“Investigative Agency”) and/or

_____ (“Prosecuting Agency”) regarding their request that BCI conduct a familial search of its State DNA Index System (“SDIS”).

This MOU also ensures that the information received from BCI is used appropriately by the Investigative Agency and the Prosecuting Agency, within the requirements of the Ohio Revised Code, the Ohio Administrative Code, and U.S. Federal Laws and Regulations. All parties agree as follows:

Section 1. Purpose

The purpose of this MOU is to document the request for a familial DNA search, and appropriate additional testing and inquiry, as requested by the Investigative and/or Prosecuting Agencies. This MOU lists and describes the actions, authority and limitations of the Parties in performing their mutual responsibilities pertaining to this search. The purpose of this MOU is to set forth terms and conditions under which a familial DNA search may be conducted by BCI. Entry into This MOU is a prerequisite to pursuing the development of an investigative lead by means of a familial search. This search is to be conducted in connection with Investigative Agency case number _____. The evidence DNA profile with this case that has been uploaded to SDIS is identified as laboratory ORI _____ and CODIS Specimen Identification Number _____.

Section 2. General Responsibilities

A. The Investigative Agency agrees to the following:

1. Pursuant to R.C. 109.573(G)(2), the Investigative Agency and its representative named below are authorized and privileged to obtain information contained in the DNA database that identifies an individual person.
2. The crime at issue is serious and has critical public safety implications.
3. The crime is unsolved.
4. If the crime is solved while BCI is engaged in its familial search, the Investigative Agency will notify BCI within twenty-four (24) hours and this MOU will be terminated.
5. The Investigative Agency has pursued all other reasonable and viable investigative leads, including DNA profile comparison(s) to suspect reference samples, with negative results.
6. The Investigative Agency has consulted with the Prosecuting Agency and the Crime Laboratory and all agencies agree that requesting a familial search is an appropriate and necessary step in the development of investigative leads.

7. The Investigative Agency will provide BCI with a written summary of all available case information. The summary should include, but is not limited to:
 - Subject physical description (height, weight, hair color, eye color, tattoos, accent or any other identifying information)
 - Age
 - Ethnicity
 - Modus operandi
 - Type, time and location of the crime(s)
 - Weapon(s) used
 - Victim demographics (physical description, location of work, home and areas frequented)
 - Vehicle(s) and/or transportation used
 - Existing laboratory reports
 - A list of excluded subjects along with the basis for exclusion
 - Any potentially related crimes

 8. The Investigative Agency will provide a contact person for any questions BCI may have. The Investigative Agency's contact person for this case shall be:
[Name]
[Rank or Title, Agency Name]
[Phone number(s)]
[e-mail]

 9. If provided with a familial search investigative lead by BCI, the Investigative Agency will work with a BCI to take all reasonable steps to pursue and complete the investigation and submit it to the Prosecuting Agency for filing consideration in a timely manner.

 10. If provided with the name of an offender as the result of the process described herein, the Investigative Agency will, following its further investigation, provide BCI with laboratory reports indicating whether the relative(s) of the named offender matched the evidence DNA profile.

 11. Representatives of the Investigative Agency agree to meet with BCI in person or phone prior to release of the name.
- B. The Crime Laboratory (if not a BCI laboratory) agrees to the following:
1. The Crime Laboratory will provide the DNA testing laboratory reports related to the case referenced and, if requested by BCI, the associated bench notes.
 2. The Crime laboratory will verify the evidence DNA profile is a single-source or deduced single source, complete 13-core locus DNA profile of the evidence DNA profile.
 3. The Crime Laboratory must verify that the evidence DNA profile is in the SDIS forensic unknown index. No hit to an offender has resulted from routine searches.
 4. The Crime Laboratory will present BCI with a minimum 15-locus Y-STR profile of the evidence DNA profile before a familial search may be performed.
 5. If an investigative lead is developed, the laboratory agrees to work an acceptable secondary standard and/or known sample from a potential suspect developed

because of the familial search. A report for this testing will be issued no more than 30 days upon submission to the crime laboratory.

6. If the crime is less than a year old and poses an imminent public safety threat, the laboratory will expedite the analysis of any secondary standard and/or known sample from a potential suspect. A report for this testing will be issued no more than 7 days after submission to the crime laboratory.
7. The crime laboratory agrees to provide BCI with the DNA report referencing the secondary standard and/or known sample of a suspect in comparison with the evidence DNA profile.
8. Representatives of the Crime Laboratory agree to meet with BCI in person or phone prior to release of the name.

C. The Prosecuting Agency agrees to the following:

1. Pursuant to R.C. 109.573(G)(2), the Prosecuting Agency and its representative named below are authorized and privileged to obtain information on the named potential relative developed as a result of a familial search.
2. The Prosecuting Agency agrees to meet with the Investigative Agency and BCI in person or phone prior to release of the name of the offender(s).
3. The Prosecuting Agency agrees to utilize their best efforts to prosecute any offenses that may be supportable if a suspect is identified and sufficient evidence is obtained.

D. BCI agrees to the following:

1. BCI will conduct a familial search of its DNA database using statistical formulae designed to evaluate the likelihood of kinship between the evidence DNA profile and offenders.
2. Based on these statistical evaluations, BCI will conduct Y-STR DNA testing of a prioritized and manageable group of potential relatives most likely to be related to the source of the evidence DNA profile. If no potential relative Y-STR profile is concordant with the Y-STR profile from the evidence DNA profile, no name may be released.
3. If an investigative lead is determined based on a Y-STR result, the CODIS Laboratory Manager will inform the Laboratory Director and Superintendent. The Criminal Intelligence Unit of BCI will initiate a background investigation on the potential relative to determine their first-degree relatives. The first-degree relatives will be compared to the case facts to determine if they may be excluded based on age at the time of the crime, location of residence, or other factors.
4. After reviewing all available information, BCI will release the name of the potential relative of the evidence DNA profile to the following parties: Crime Laboratory and the Investigative and Prosecuting Agencies.
5. If no Y-profile is concordant with the Y-STR profile from the evidence DNA profile, the search is complete and the negative results will be reported in an administrative letter to the Investigative Agency. The case may be search again twelve (12) months later upon request of the Investigative Agency.

Section 3. Restrictions on Dissemination and Use of Information

It is understood by all parties that access to DNA records (includes the DNA profile and personally identifiable information relating to the donor) is governed by both state and federal statutes. Any violation of these statutes and/or the dissemination restrictions set forth in this section will constitute a default for which BCI may investigate. The requesting agency shall limit physical access to the location where this information may be stored, and will share or distribute the information pertaining to and resulting from this request and MOU only to those who have been determined to have a need to know, as determined by the signatories to this MOU. Only law enforcement personnel who have a direct involvement in the investigation of the case shall be permitted to have this information. Such staff shall receive training and a copy of the policy and procedure document. The obligations for confidentiality created by this MOU shall survive any breach, termination or natural conclusion of the case.

Dissemination and use of all DNA records must be limited to law enforcement agencies for the administration of criminal justice.

No party to this MOU shall knowingly disclose any DNA record received from BCI pursuant to this MOU to any person or agency except as authorized by BCI in writing, or otherwise use that DNA record for a purpose that is not authorized herein.

Section 4. Effective Date and Termination

This MOU becomes effective as of the day and year of the last signature below. Any party may terminate this MOU for any reason after providing three (3) days written notice to all parties. Upon a breach of the responsibilities described in this agreement, any party may immediately terminate the agreement. Any information disclosed pursuant to this agreement shall remain confidential.

Section 5. Change or Modification

This MOU constitutes the entire agreement between all parties. Any changes or modifications shall be made in writing, and signed by the parties. Changes or modifications are effective upon the date of approval by both parties.

Section 6. Liability

Each party to this MOU shall be responsible for its own acts and omissions and those of its officers, employees, and agents. No party to this MOU shall be responsible for the acts or omissions of entities not a party to this MOU.

Section 7. Notices, Correspondence, or other Communications

Except as otherwise provided in this MOU, any notices, correspondence, or other communications related to this MOU shall be in writing and be personally delivered, sent by standard U.S. Mail, commercial express deliver, or facsimile.

Section 8. Definitions

As used in this MOU:

Familial search - Familial searching is a way of extending the utility of the offender DNA database to create investigative leads for cases of violent crimes or other qualifying offenses, by utilizing the similarities between the DNA profiles of related individuals. A familial search does not identify the individual whose DNA matches the evidence DNA profile, however it may be useful in identifying a first generation male relative to the evidence DNA profile. This evidence DNA profile is foreign to the victim and is presumed to be the suspect's DNA profile.

Appropriate additional testing and inquiry - based on the familial search results, Y-STR DNA testing will be performed on a prioritized and manageable group of potential relatives most likely to be related to the evidence DNA profile.

Inquiry - If an investigative lead is determined based on a Y-STR DNA, the Criminal Intelligence Unit of BCI will initiate a background investigation on the named potential relative to determine their potential first-degree relatives.

SDIS – State DNA Index System

DNA Record - Is the DNA profile and personally identifiable information relating to the donor, such as name, date or birth, criminal history number, etc.,

All parties to this MOU understand and agree to each of its provisions.

I certify that I am a duly authorized representative of the entity indicated below, and have the authority to sign this MOU on behalf of my agency and obligate it accordingly.

FOR THE INVESTIGATIVE AGENCY:

Signature

Date

Name: _____

Title: _____

Agency: _____

FOR THE CRIME LABORATORY:

Signature

Date

Name: _____

Title: _____

Agency: _____

FOR THE PROSECUTING AGENCY:

Signature

Date

Name: _____

Title: _____

Agency: _____

FOR THE BUREAU OF CRIMINAL INVESTIGATION

Signature

Date

Name: _____

Title: _____

Agency: _____