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## Procedure for Familial Search Requests

**1.0 Purpose** - Familial searches may identify a potential familial relationship between an offender or arrestee and a DNA profile of interest that is associated with a felonious crime. This policy serves as a guideline for evaluating and processing familial search requests received by the State Crime Laboratory (SCL) in cases where all other investigative leads have been exhausted.

**2.0 Scope** - This procedure applies to members of the Familial Search Committee as described further in this document.

**3.0 Definitions** – See Forensic Biology Section CODIS Definitions List

### 4.0 Equipment, Materials and Reagents

- CODIS Software (version 11.0 or newer)
- Forensic Advantage

### 5.0 Procedure

#### 5.1 Introduction

**5.1.1** The North Carolina State DNA Database was established in 1993 and consists of DNA profiles from convicted offenders, arrestees, evidentiary profiles, and unidentified human remains/missing persons samples. Advances in DNA technology can provide additional information as to whether DNA profiles may be from related individuals. The application known as familial searching, may result in the provision of investigative information to law enforcement officials in unsolved cases in which all other investigative leads have been exhausted.

**5.1.2** A familial search is a deliberate search of the North Carolina State DNA Database for the purpose of identifying close biological relatives (siblings, parent/offspring) of the DNA profile of interest using the CODIS software.

**5.1.3** When a DNA profile of interest is searched against the database, a match occurs if the DNA profiles are essentially the same. If the DNA profile of interest and an offender profile are not an exact match but may share enough similarities, it is possible that the source of the crime scene profile could have originated from a close relative of the offender. Familial searching uses DNA analysis and interpretation to provide additional information as to the likelihood that two individuals may be related. The information developed from the familial search and ultimately provided to law enforcement will be the name of an offender or arrestee in the North Carolina State DNA Database who may be related to the

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source of the DNA profile of interest . The named individual(s) is **NOT** the source of the DNA profile of interest.

- 5.1.4** It is imperative that investigating agencies understand that most individuals returned as candidates in a familial search will be unrelated to the offender. Only those offenders that meet an established likelihood threshold will continue on in the confirmation process. Only the personally identifiable information of an offender related to a confirmed familial search result shall be released to law enforcement.
- 5.1.5** The source of the DNA profile of interest may still have a relative in the North Carolina State DNA Database even if the familial search is negative.

## **5.2 Case Acceptance Requirements**

- 5.2.1** An acceptable case involves an active investigation of an unsolved violent crime against a person (homicide, felony sexual assault, or other violent felonious crime that has significant public safety concerns). Property crimes **will not** be considered for familial searching.
- 5.2.2** The Agency Head of the investigating agency and the District Attorney for the investigating jurisdiction shall submit a Familial Search Request. By signing, the requestor(s) are affirming that all current investigative leads have been exhausted and that any potential leads developed from the familial search will be fully investigated.
- 5.2.3** The familial search shall only be considered when the following conditions are met:
- 5.2.3.1** The DNA profile of interest currently resides in CODIS at the national level and has been searched against the national database with no investigative leads returned.
  - 5.2.3.2** If applicable, a search of the DNA profile of interest will be requested of other state databases. The search will move forward if no investigative leads are returned.
  - 5.2.3.3** The DNA profile of interest is from a biological male (X,Y).
  - 5.2.3.4** YSTR testing has been or can be performed in the case and results are obtained at a minimum of 6 YSTR loci. If no evidence remains for testing, the request for familial DNA searching will be denied.

**5.2.3.5** The DNA profile of interest is a single-source or deduced/major single source DNA profile from a mixture that does not contain any ambiguous alleles (i.e. obligate alleles or partial loci). Omission of an entire locus is allowed, as long as the minimum core loci requirement is met.

**5.2.3.6** The DNA profile of interest contains at minimum the 8 Original CODIS Core Loci.

### **5.3 Responsibilities of the Familial Search Committee**

- 5.3.1** The Familial Search Committee (FSC) consists of the SCL Director or designee, the SCL legal counsel or designee, State CODIS Administrator or designee, and the Forensic Scientist Manager or designee of the Forensic Biology Section.
- 5.3.2** The FSC shall meet as needed when requests are received to review any pending Familial Search Requests and necessary case documentation.
- 5.3.3** An out of state request may be considered on a case-by-case basis as resources allow, if circumstances show a connection to the State of North Carolina such as, but not limited to, an interstate forensic hit. A request may be considered from a CODIS-participating LDIS laboratory within the state of North Carolina.
- 5.3.4** A response will be provided to the requesting agency stating approval or denial of the Familial Search Request within 60 days of the FSC review.
- 5.3.5** Familial Searches will only be conducted in cases where an approval has been granted by the FSC.
- 5.3.6** Upon completion of a familial search, notification to law enforcement will be made based on the results of the familial search, subsequent STR/Y-STR analysis, and any other available non-DNA information.
- 5.3.7** Only the personally identifiable information relating to a “Confirmed Rank(s)” shall be released to law enforcement.
- 5.3.8** Once a case has a familial search performed that results in a negative search, the investigating agency may submit a subsequent Familial Search Request no sooner than 12 months from the date of the familial search notification report.
- 5.3.9** Following the release of any familial search report, the SCL will meet with the investigating agency to discuss the results of the search upon request.

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**6.0 Limitations** - Despite the possibility of success, it should be understood that familial searching has a low likelihood of success in practice. The following points must be made to agencies requesting information:

- 6.1** In order to ensure transparency and integrity, it is imperative that all agencies involved in the process communicate, work together and understand the limitations of the information the search provides.
- 6.2** These approaches should only be used where necessary, justifiable, and impartial, taking into account the impact of the sensitive ethical issues familial DNA searching can generate.
- 6.3** There is always the possibility that a relative of an offender is not known to the family. The fact that an offender has no known relatives on record does not preclude the possibility that there exists a relative unknown to the offender and/or public records.
- 6.4** The quantity of names appearing on some familial based searches can potentially be several hundred and prohibits the laboratory from testing all candidates.
- 6.5** For evidentiary searches, the unknown DNA profile of interest must be from an item of evidence having an unambiguous connection to the crime in question and a satisfactory level of confidence that the crime scene DNA profile is relevant to the perpetrator (example: sperm cell fraction from vaginal swab of a sexual assault victim). Evidence that is ambiguous to the crime in question will be cause for denial for executing a familial DNA search (example: cigarette butt found near but not at the crime scene).
- 6.6** For searches of a DNA profile of interest obtained from a child that resulted from or was the victim of a violent felonious crime, all reasonable investigative leads to determine the unknown parent(s) must be exhausted.
- 6.7** For searches of a DNA profile of interest obtained from unidentified human remains, the individual must have been the victim of a violent felonious crime and all reasonable investigative leads to determine the individual's identity must be exhausted.
- 6.8** The evidentiary, child, or unidentified human remains sample shall be identified as male and shall have a Y-STR profile generated prior to the Familial Search.
- 6.9** A consistent Y-STR profile between the DNA profile of interest and the offender or arrestee does not confirm relatedness between the sources of these profiles. As in a traditional CODIS match, the information given is only an investigative lead and must be treated as such and nothing more.
- 6.10** Agencies are responsible for following up on the investigational lead provided and for determining if any family member of the identified person may be the donor of the unknown DNA profile.

- 6.11** Investigating agencies shall contact the Forensic Biology or DNA Database Section with any possible leads in order to assist in determining the validity of a possible suspect(s). Some suspects developed by law enforcement from the familial DNA search may already have a sample in the CODIS database, and therefore may be excluded, saving time and resources on the part of the investigating agencies and/or laboratories involved.
- 6.12** If the possible suspect does not have a sample in the CODIS database, the agency is responsible for submitting a standard to the laboratory so that it may be compared to the original DNA profile of interest.

**7.0 Safety** – N/A

**8.0 References** –

California Department of Justice Division: Memorandum of Understanding Familial Searching Protocol, <https://oag.ca.gov/sites/all/files/agweb/pdfs/bfs/fsc-mou-06142011.pdf>

Oregon State Police Forensic Services Division. CODIS Operations Manual Section 11.0: Partial Matches in CODIS (State and National Level); effective date 5-1-2010

Texas Department of Public Safety Standard Operating Procedures CODIS Section: CO-04-03A, version 04 – Partial Matches and Familial Searches; effective date 2-16-2018, <https://txdpslabs.qualtraxcloud.com/ShowDocument.aspx?ID=43050> (pages 161-166).

Virginia Department of Forensic Science Forensic Biology Section Procedures Manual, Familial DNA Testing; issue date April 30, 2012, <https://www.dfs.virginia.gov/wp-content/uploads/2013/09/210-D1200-Forensic-Biology-Section-Procedures-Manual-Familial-DNA-Testing.pdf>

Virginia Department of Forensic Science: Policy Relating to Acceptance of Cases for Performance of Familial DNA Searching, <https://www.dfs.virginia.gov/laboratory-forensic-services/biology/familial-searches/>

<https://www.fbi.gov/services/laboratory/biometric-analysis/codis>

<https://snapshot.parabon-nanolabs.com/genealogy>

**9.0 Records** – N/A

**10.0 Attachments** – N/A

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<b>Revision History</b>		
Effective Date	Version Number	Reason
05/24/2024	3	5.2.3.1, 5.2.3.2 – update search request wording for other states; 5.2.3.4, 5.2.3.6 – update search requirements for profile composition; 5.3.3 – add LDIS within NC