Version 1

Effective Date: 11/25/2019

Procedure for Familial Search Requests

- 1.0 Purpose Familial searches may identify a potential familial relationship between an offender or arrestee and a putative perpetrator. 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 8.0 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, and evidentiary profiles. 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 evidentiary DNA profile using the CODIS software.
- 5.1.3 When a DNA profile from crime scene evidence is searched against the database, a match occurs if the DNA profiles are essentially the same. If the crime scene profile 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 DNA profile from the crime scene evidence. The named

Effective Date: 11/25/2019

individual(s) is **NOT** the source of the DNA profile obtained from the crime scene evidence.

- **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** A negative familial search does not mean that the putative perpetrator or the unidentified human remains does not have a relative in the North Carolina State DNA Database.

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 chief law enforcement officer 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 currently resides in CODIS at the national level and has been searched against the national and other state databases with no investigative leads.
 - **5.2.3.2** The DNA profile is from a biological male (X,Y).
 - **5.2.3.3** YSTR testing has been or can be performed in the case. If no evidence remains for testing, the request for familial DNA searching will be denied.
 - **5.2.3.4** The DNA profile is from 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).

Version 1

Effective Date: 11/25/2019

5.2.3.5 The DNA profile contains at minimum the 13 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, state CODIS Administrator or designee, and the Forensic Scientist Manager or designee of the Forensic Biology section.
- **5.3.2** The FSC shall meet quarterly 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, if circumstances show a connection to the State of North Carolina such as, but not limited to, an interstate forensic hit.
- **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 officer, the agency's chief law enforcement officer and the assigned District Attorney to discuss the results of the search upon request.
- **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:

Effective Date: 11/25/2019

- 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.
- 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.
- 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.
- The quantity of names appearing on some familial based searches can potentially be several hundred and prohibits the laboratory from testing all candidates.
- The evidentiary DNA profile 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).
- The evidentiary or human remains sample shall be identified as male and shall have a Y-STR profile generated prior to the Familial Search.
- A consistent Y-STR profile between the evidentiary item and the offender or arrestee does not confirm relatedness between the offender or arrestee and the perpetrator. As in a traditional CODIS match, the information given is only an investigative lead and must be treated as such and nothing more.
- 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.

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

Version 1

Effective Date: 11/25/2019

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

Revision History		
Effective Date	Version Number	Reason
11/25/2019	1	Original Document