

Forensic DNA technology to help law enforcement

solve more violent crimes



Introducing



MPKin FS
EDITION

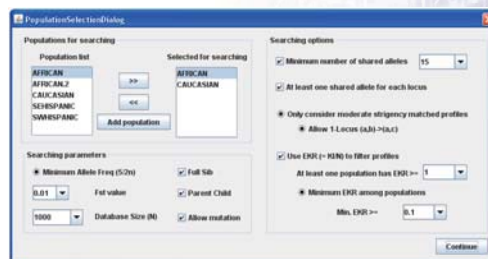
Overview

The UNT Health Science Center Institute of Applied Genetics has recently released new software to enable law enforcement agencies to develop additional investigative leads. DNA profiles obtained from forensic evidentiary samples are compared against DNA databases where no matches had been previously seen. This new software allows for a process known as **Familial Searching**. Familial Searching is based on the fundamental genetic principle that DNA profiles of people who are closely related are likely to contain similarities. Once a DNA profile is generated from evidence left at a crime scene, it can be searched against known profiles of convicted felons and arrestees to help identify potential relatives of the true donor of the evidence sample. Typically, familial searching enables associations of parent-child (e.g., father-son) or sib-sib (e.g., brother-brother) relationships. With this new software tool – **MPKin FS Edition™** – more investigative leads can be developed using forensic DNA technology and database searches. Police and detectives will have another powerful tool at their disposal for identifying suspects and potentially solving more violent crimes.

Key Features

This is the most comprehensive familial searching software on the market:

- Accepts a single source DNA profile and searches against a database using specified population **allele frequency data**
- Provides parent-child and full-sib **kinship analysis functions** with a novel algorithm
- Supports all current **familial searching strategies**
- **Ranks the offender profiles** with defined policies
- Facilitates familial searching and increases the **investigative lead success rate**





Key Benefits

- Facilitates familial searching and improves the investigative lead success rate
- Saves investigative time and other resources for law enforcement agencies
- Increases public safety and helps prevent future victims



Familial searching is an attempt to detect potential relatives of a forensic profile donor in any specified database



Marker	F	Opposite	Candidate	IBS	EMBd.PD	EMBd.FB	IBS.PD	IBS.FB
CSF1P0	112.12	112.12	2	1.79	1.99	2.00	3.03	
D13S317	113.13	112.13	1	4.20	3.41	3.98	2.24	
D16S059	112.12	112.12	2	1.79	1.95	2.79	3.81	
D18S05	115.15	114.15	1	3.74	3.05	3.48	2	
DU1S11	125.20	125.20	2	2.41	2.92	2.43	4.57	
D2S1398	114.14	114.14	2	2.63	2.7	2.67	3.4	
D4S018	110.10	110.10	2	11.22	10.86	11.8	11.05	2
D7S020	111.11	111.11	2	2.96	2.68	3.92	5.86	
D8S1178	110.10	110.10	2	2.18	2.55	3.03	6.1	
FGA	21.24	21.24	2	3.82	4.69	3.14	16.81	
TH01	8.8	8.8	2	2.69	3.44	2.98	11.62	
TP03	8.8	8.8	2	1.25	1.19	1.79	1.96	
YAC9	116.16	116.16	2	3.25	4.6	3.84	10.77	

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Contact Us

The software is currently available for licensing. Agencies interested in the software can contact the University of North Texas Health Science Center at:

817.735.5147 | techtransfer@unthsc.edu