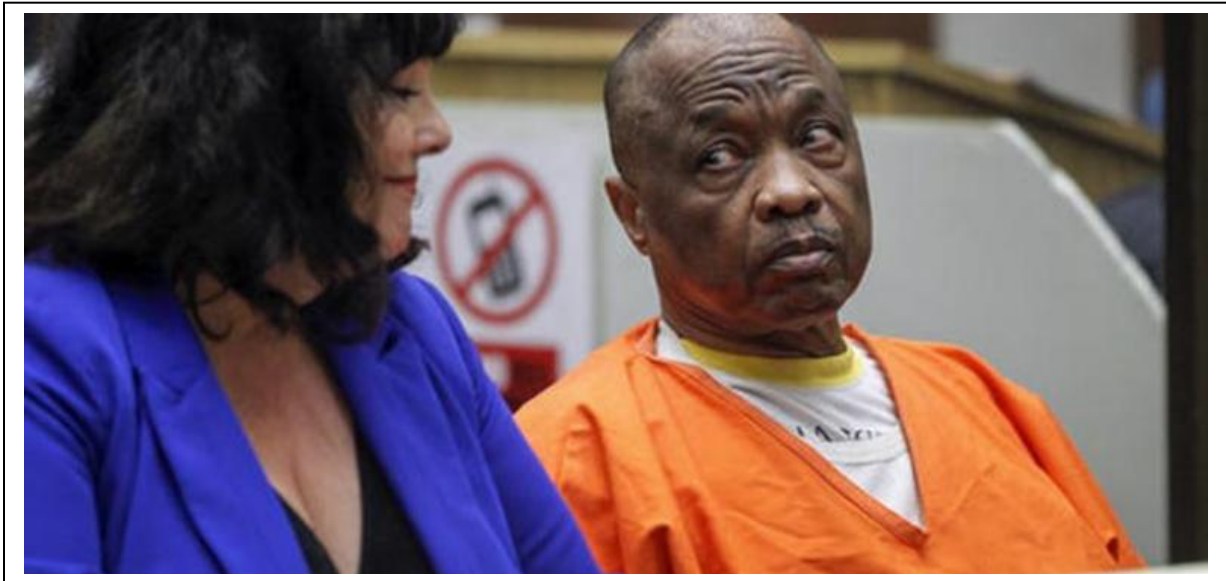




By Seth Augenstein, Senior Science Writer December 8, 2016



In this Feb. 6, 2015, file photo, Lonnie Franklin Jr., who has been dubbed the "Grim Sleeper" serial killer, looks back at his attorney, Louisa Pensanti, during a court hearing in Los Angeles. In May, 2016, Franklin was convicted of 10 counts of first-degree murder last month for crimes dating back more than 30 years. On Monday, June 6, 2016, jurors recommend the death penalty for Franklin for murdering nine women and a teenage girl. (AP Photo/Nick Ut)

Familial Searching, Used in 10 States and Counting, Solves the Unsolvable

The child rapist would break into homes to steal children from their Ohio families. He left DNA evidence, but his profile didn't show up in any of the local or national databases. But someone in his family was. And their shared DNA left a trail for investigators that led right to **Justin Christian, 29**, who is now behind bars.

The arrest was the product of familial searching (FS), a way of scanning the DNA profiles of unknown criminals at crime scenes, then using certain genetic markers to comb through CODIS and other databases to find male relatives. Once those male relatives are found, further detective work can establish the suspect – and then a definitive DNA sample can be compared against the unknown offender. Law-enforcement advocates have said it is a potentially-breakthrough investigative tool. Civil-liberties advocates say its use violates personal privacy – and could potentially buck the Fourth Amendment. Some high-profile arrests have been made, especially in California. So far, only 10 states have protocols in place to use the technique to search for the criminals behind unsolved crimes. But there are new calls to expand its use.

Ohio just started using familial searching less than a month ago, issuing protocols on Nov. 9 in how it was to be used. Within weeks, they had matched the DNA from the crime scene to a ladder Christian had touched.

“When I learned that a predator was breaking into homes to snatch children from their beds, I wanted to immediately launch this new testing in Ohio, which we had been studying and validating for some time,” said Mike DeWine, the state’s Attorney General. “This is a first for (the Bureau of Criminal Investigation) and a first for Ohio.”



Justin Christian

Ten states now have protocols in place to use FS. California, Colorado, Florida, Michigan, Texas, Utah, Virginia, Wisconsin, Wyoming, and now Ohio all have used the technique to produce arrests. A prosecutor in New York called for its use today, as well.

The process is designed to search with a targeted net, of sorts. Specialized software scans the existing databases looking for partial matches. That produces a group of potential candidates – and then that larger group is drastically reduced by a follow-up scan of the Y-STR, or male chromosome.

If the data is good, and the trail is true, a killer is caught.

The biggest breakthrough so far in the use of FS was the arrest of the serial killer known as the Grim Sleeper. Lonnie Franklin, Jr., 63, was found guilty this year of killing nine women and a teenage girl over a 22-year period. He was sentenced to death in August, and awaits execution.

Police detectives found him in 2010 when they ran a familial search – and found Franklin's son, who was part of the DNA database for an unrelated incident. Follow-up investigative work confirmed Franklin as a Sleeper suspect before cops posing as waiters at a restaurant collected eating utensils after Franklin discarded them. They were a match – and they had the Sleeper.

Marguerite Rizzo, the Deputy District Attorney in Los Angeles who worked the DNA parts of the case against Franklin, told *Forensic Magazine* in an interview that California has carefully moved forward to use the tool efficiently, legally – and intelligently.

"Our program appears to be so tightly controlled, that we're taking every step to guarantee the correct person will be identified and arrested," said Rizzo. "We don't take any of this lightly. We want everyone's privacy rights to be respected, and no short cuts to be taken."

Only the most serious crimes, with public-safety where all investigative leads have stalled, will be subject to FS, the prosecutor added.

"No one's going to start using this for the auto burglary that happened in your neighborhood," Rizzo added. "I think that's a very important distinction for the use of this technique."

Civil-rights groups have intermittently raised the alarm at the practice, which they contend could violate the Fourth Amendment or disproportionately scan through African-American populations in the database. For instance, the National Association of Criminal Defense Lawyers issued a terse statement in 2013 that they opposed the use of FS. But at the same time, they issued a policy recommendation that law enforcement institute protocols that avoid "DNA dragnets" and otherwise limit privacy intrusions to those in the database, or potential persons of interest.

But forensic experts say the tool could be a huge breakthrough – without violating anyone's Constitutional rights.

Rockne Harmon, retired prosecutor in the Alameda County District Attorney's Office and DNA expert, told *Forensic* that there's never been any encouragement from federal or bigger agencies to use FS.

But there are murderers at large which could be identified and caught – without invading the privacy of innocent people, he added.

"At what precise point are peoples' civil rights being violated?" said Harmon. "This investigative lead is a lot better than an anonymous phone call."

"Science is science," added Vernon Geberth, former NYPD homicide commander and author of the textbook Practical Homicide Investigation. "It doesn't have an agenda and should be allowed to identify violent and dangerous offenders."

More law enforcement agencies could be pushing for the use of the tool, as high-profile successes occur. The Queens District Attorney publicly asked the New York State Commission on Forensic Science to authorize the use of FS. The impetus was the still-unsolved case of Karina Vetrano, a 30-year-old woman who was beaten, sexually assaulted and strangled on Howard Beach in August. The crime remains unsolved – but a recent Newsday piece contends that a repeat offender with family in the criminal-justice system could be caught through FS.

"This tragic murder has been exhaustively investigated using every tool currently available, but it remains unsolved," said Richard A. Brown, the Queens DA, in his statement. "The killer remains at larger, the public

remains in danger, and the suffering of the victim's family is amplified by law enforcement inability to yet solve this most awful crime.

"I believe that familiar searching can be a powerful investigative tool in this case," Brown added.



Rizzo, who was a microbiologist before she became a prosecutor, has given high-profile talks to law enforcement in the months since the conviction and death sentence, including those at the International Symposium on Human Identification and the National Homicide Investigators' Association.

The proof of the technique's value is in its scientific accuracy, when appropriately employed, she said.

"As more jurisdictions see the value of it and are having success in identifying perpetrators of these heinous crimes, I think some of those jurisdictions that have been reticent to even look into it may say, 'You know what? It's time.' Just like we're seeing in Queens."

The abductions in Ohio appeared to spur the FS policy in Ohio, which had been in the works since 2012. The arrest of Christian last week – and the

pending trial against him – proved it was worth it, prosecutors said. “We had a child rapist who would break into homes to steal children,” said Timothy J. McGinty, a prosecutor in Cuyahoga County. “When all leads were exhausted, I called Mike DeWine. Familial DNA will only be used in the most serious crimes. Without it, this case would not be solved.”