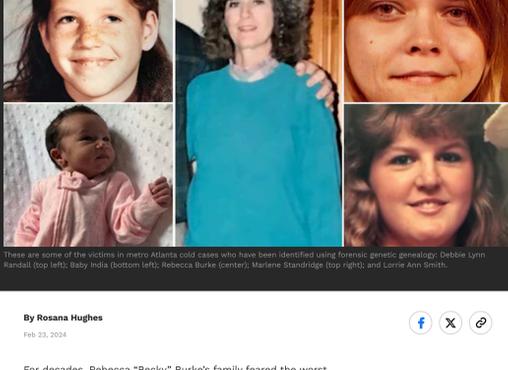


CRIME & PUBLIC SAFETY

Genetic genealogy providing invaluable assist in solving Georgia cold cases

Experts believe the latest investigative tool in criminal forensics is groundbreaking: 'I think that we are going to see backlogs of cold cases become extinct'



These are some of the victims in metro Atlanta cold cases who have been identified using forensic genetic genealogy: Debbie Lynn Randall (top left); Baby India (bottom left); Rebecca Burke (center); Marlene Standridge (top right); and Lorrie Ann Smith.

By Rosana Hughes

Feb 23, 2024



For decades, Rebecca "Becky" Burke's family feared the worst.

The Smyrna native had lost contact with many of them in the 1980s after falling deeper into substance abuse, sparked by prescription valium use as a teenager, her younger brother Mack Barnes said. But she'd occasionally call some of her siblings, if only to talk about her troubles.

That is until the calls abruptly stopped in the early '90s.

Years went by, and "we all collectively felt that she was dead," Barnes said.

Then, in 2023, their worst fears were confirmed. A group of researchers known as forensic genetic genealogists had linked DNA from the unidentified remains of a 52-year-old woman killed two decades ago in DeKalb County to one of Barnes' distant relatives.

The genetic genealogists had traced the family lineage to Barnes, and they needed his DNA to confirm Burke's identity.

It was a match.

"No one likes to know that one of their kin, especially very close family, has been murdered," Barnes, now 79, recently told The Atlanta Journal-Constitution as the anniversary of Burke's identification approached. "It wasn't totally unanticipated, but it's still a shock when you do hear it."

Investigators in Georgia and across the country have solved hundreds of cases that had little to no hope for closure by tapping into the vast web of genetic information housed in public genealogy databases.

The relatively new investigative technique emerged in 2018 when, after 42 years, it helped identify California's prolific "Golden State Killer." It has also played a role in solving at least five cold cases in metro Atlanta since 2018, including three in just the past year, and this appears to be just the beginning.

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"Golden State Killer" suspect tracked down using DNA on genealogy website, officials say

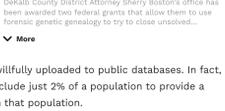
It's increasingly becoming a pivotal tool for detectives, helping families finally learn what happened to their loved ones who disappeared decades ago. Nameless victims are getting their identities back. And perpetrators, some of whom have hidden in plain sight, are being brought to justice.

It combines conventional detective work with genealogical research, similar to how one might try to trace their ancestry, by reverse-engineering the family tree. Investigators first upload the DNA profile of an unidentified person to public databases and then go back in time to find an ancestor before building the tree forward until that nameless person is found.

"Genealogy can play just one active role in (an investigation), meaning if we can connect that DNA to a family tree or a family line, then we know what threads to pull," said Sherry Boston, DeKalb County's district attorney. "Without that, it's like, not even a needle in a haystack, it's like a microscopic dot in a haystack."

Reverse engineering

While DNA has been used for decades to confirm or rule out suspects, forensic genetic genealogy is distinct in that it uses DNA to actively look for a subject, experts note. It doesn't have the same limitations as the Combined DNA Index System, or CODIS, which is designed to return a match to a specific individual based only on evidence collected from convicted offenders, crime scene evidence or missing persons.

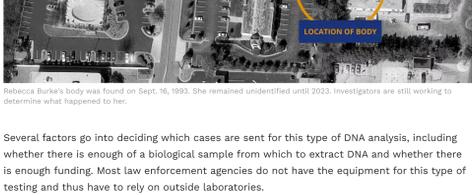


DeKalb County District Attorney Sherry Boston's office has been awarded two federal grants that allow them to use forensic genetic genealogy to try to close unsolved...

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It goes beyond that to find a match, no matter how distant, by scouring the millions of profiles willfully uploaded to public databases. In fact, researchers estimate that a database needs to include just 2% of a population to provide a third-cousin match to nearly any individual within that population.

It's become a last-ditch effort to generate leads after all other options have been exhausted and is crucial in cases like Burke's, when no missing person report was filed and no matches were found in CODIS.



Rebecca Burke's body was found on Sept. 16, 1993. She remained unidentified until 2023. Investigators are still working to determine what happened to her.

Several factors go into deciding which cases are sent for this type of DNA analysis, including whether there is enough of a biological sample from which to extract DNA and whether there is enough funding. Most law enforcement agencies do not have the equipment for this type of testing and thus have to rely on outside laboratories.

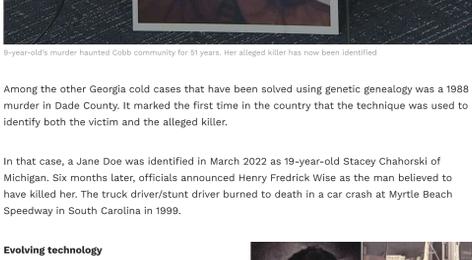
Once a DNA profile is built, investigators upload it to public databases and search for matches to start building the family tree in reverse. They follow the lineage until they find a common ancestor between the distant match and the unknown suspect or victim.

In Burke's case, that was a person with her grandmother's maiden name who didn't know anything about the Barneses — Burke's niece. The next step was to keep following the lineage until they found Burke's niece, who then connected them to her brother Mack Barnes.

At that point, traditional DNA testing was used to officially confirm the sibling relationship. That brought the family some closure, but detectives continue their search for her killer almost a year later.

VIDEO: DNA EVIDENCE HELPS SOLVE LOCAL COLD CASE

Debbie Randall's 1972 murder haunted a Cobb County community for years, but DNA technology helped identify her killer in 2023.



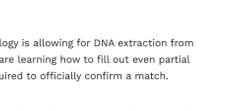
9-year-old's murder haunted Cobb community for 51 years. Her alleged killer has now been identified

Among the other Georgia cold cases that have been solved using genetic genealogy was a 1988 murder in Dade County. It marked the first time in the country that the technique was used to identify both the victim and the alleged killer.

In that case, a Jane Doe was identified in March 2022 as 19-year-old Stacey Chahorski of Michigan. Six months later, officials announced Henry Fredrick Wise as the man believed to have killed her. The truck driver/stunt driver burned to death in a car crash at Myrtle Beach Speedway in South Carolina in 1999.

Evolving technology

Using DNA to trace family ancestry has been utilized since Family Tree DNA launched its first test kit in 2000, according to the International Society of Genetic Genealogy. It gained widespread attention in the world of criminal forensics for the first time six years ago when a former California police officer, Joseph James DeAngelo, was identified as the "Golden State Killer."



Stacey Chahorski's body was found in Dade County in December 1988 but not identified until January 2022. Both she and her alleged killer, Henry Wise, were identified...

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However, not every case is a good candidate. Since the process of extracting DNA is destructive, investigators must be judicious with which cases are sent for testing because they have just one chance at generating a DNA profile if the biological sample is small.

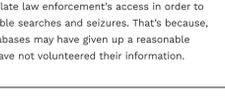
The good news is that constantly evolving technology is allowing for DNA extraction from smaller and smaller sample sizes, and scientists are learning how to fill out even partial profiles. This is why traditional DNA testing is required to officially confirm a match.

Today, even a minuscule amount of DNA from contaminated, degraded remains can lead to positive matches. One lab that has been contracted to help solve several Georgia cold cases, for example, has identified human remains that were burned or exploded, left in a sewage tank or at the bottom of lakes, and even some dating to the late 1800s. In one case, DNA from just 15 human cells collected 32 years ago led to the identification of a perpetrator.

"It's pretty amazing," said Kristen Mittelman, chief development officer for Othram, a private lab specializing in advanced forensic DNA testing and genetic genealogy research. "I think that we are going to see backlogs of cold cases become extinct."

Privacy concerns

Criticism over ethics and invasions of privacy are concerns that are deeply intertwined with the entire process of using genealogical databases to identify suspects.



James Deik, an investigator with the DeKalb County District Attorney's Office, speaks with a family member of a missing person during a "DNA Drive" in 2023. Families were invited...

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But critics warn that legislation is needed to regulate law enforcement's access in order to safeguard constitutional rights against unreasonable searches and seizures. That's because, while people who upload their DNA to public databases may have given up a reasonable expectation of privacy, the alleged perpetrators have not volunteered their information.

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For these Atlantans, genealogy helped them connect to their roots

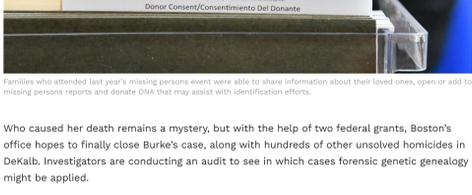
Proponents are aware of the concerns, and leaders in the field explain that it is in law enforcement's best interest not to betray the public's trust since the databases are only helpful when people submit DNA.

Closure for families

While in some cases it may be too late for an accused killer to face justice, having answers provides some peace of mind for families.

Burke's brother, who now lives in Florida, finally got his answer a year ago when investigators shared what they knew about his sister: She was found in 1993 behind a Fairfield Inn near Tucker and had apparently died from blunt-force trauma.

"For years, I've laid in the bed thinking of where she was," Barnes said.



Families who attended last year's missing persons event were able to share information about their loved ones, open or add to missing persons reports and donate DNA that may assist with identification efforts.

Who caused her death remains a mystery, but with the help of two federal grants, Boston's office hopes to finally close Burke's case, along with hundreds of other unsolved homicides in DeKalb. Investigators are conducting an audit to see in which cases forensic genetic genealogy might be applied.

This groundbreaking tool, once used exclusively for ancestry research, is unlocking cold case doors that seemed to have been sealed shut. And it's likely just the beginning, providing grieving families with long-awaited answers.

"Ms. Burke's loved ones no longer have to suffer through the agony of wondering where she might be and what may have happened to her," Boston said. "We hope to leverage this technology to give closure to other families experiencing that pain."

**The DeKalb County DA's office asks anyone who may have information about a cold case to call their tip line at 404-371-2444.**

Metro Atlanta's cold cases solved using forensic genetic genealogy

Several metro Atlanta cold cases have already been solved using forensic genetic genealogy, and many more are still pending as investigators work to trace their ancestry.

Debbie Lynn Randall, 1972

One of the more recent cases to be solved using forensic genetic genealogy is also one of the oldest: the 1972 rape and killing of 9-year-old Debbie Lynn Randall. She was abducted while going to a laundromat across the street from her Marietta home that January. Her body was found in a nearby wooded area 16 days later.

In September 2023, the Cobb County district attorney identified William B. Rose of Mableton as her killer, though it was too late for him to face justice. He took his own life in 1974, having never been on investigators' radar.

Baby India, 2019

In May 2023, Forsyth County officials announced they had identified the mother of a newborn who had been placed in a plastic bag and left in the woods along an isolated stretch of Daves Creek Road in June 2019. A family returning from a vacation heard her cries, which led them to her.

The child, nicknamed Baby India, survived. Her mother, Karima Jiwani, was found after genetic genealogy led investigators first to the father and then to Jiwani, who was charged with criminal attempt to commit murder.

Rebecca "Becky" Burke, 1993

In March 2023, DeKalb County officials identified a woman whose body was found in September 1993 in a wooded area just outside Tucker. They believe 52-year-old Rebecca "Becky" Burke likely died due to blunt-force trauma two weeks earlier. Her body appeared to have been intentionally concealed behind an electrical unit covered in pine straw and branches.

Detectives still need help learning what led to Burke's death and who might have been responsible. She was last known to have lived in Cobb County.

Lorinzo Novoa Williams, 1999

In 2020, Cobb officials identified 48-year-old Lorinzo Novoa Williams as a suspect in three rapes dating to 1999. DNA from rape kits did not return a match at the time, but re-testing and submitting the profile to GEDmatch ultimately led investigators to Williams, who had been living in El Dorado, Arkansas.

He was found dead from an apparent suicide a day after being questioned.

Lorrie Ann Smith, 1997

Fulton County police arrested Jerry Lee in 2018 after investigators used genealogy to link him to the 1997 killing of 28-year-old Lorrie Ann Smith. She had been shot several times in the back at her home on Stonewall Tell Road.

Lee was the first Georgia murder suspect to be identified using forensic genetic genealogy.

Marlene Standridge, 1982

In 2021, Gwinnett County police identified human remains found in unincorporated Stone Mountain in 1982 as 22-year-old Marlene Standridge, who was believed to have been kidnapped from Piedmont Park in the early 1970s while taking a stroll with her two children. The children were later found alone.

Detectives uncovered Standridge's identity when they matched her DNA to her daughter, Janis Adams. They consider '70s Brown was a likely suspect in Standridge's killing due to his similar offenses in the '70s. Willie was executed in November 2003 for a 1975 killing and has been tied to at least two others.

About the Author



Rosana Hughes is an award-winning bilingual (fluent in Spanish) journalist with a passion for explanatory public service journalism. She has been a reporter on the breaking news team since January 2022.

