

# If you're kin to a convict, his DNA could finger you

ED ANDRIESKI / THE ASSOCIATED PRESS



Denver District Attorney Mitch Morrissey displays a model of DNA. His office obtained a conviction in a car break-in case by using the familial-DNA technique, and he is a strong defender of its use. Critics complain the technique could subject innocent people to arrest or hours of interrogation.

DENVER - Police in at least two states are increasingly using a DNA crime-solving technique that some legal experts say amounts to guilt by association: If your brother, father, uncle or son has been in trouble with the law and is in a DNA database because of it, you, too, could fall under suspicion.

The technique is known as a "familial DNA" search. And in what is believed to be a precedent-setting case, Denver police used it to help catch the burglar who left a drop of blood on a passenger seat when he broke a car window and stole \$1.40 in change in 2008.

A growing number of law enforcement agencies nationwide are considering whether to adopt the technique, which scientists say holds great promise.

"How can we look a rape victim in the face and say, 'We could have prevented your rape if we had looked at this evidence?' " said Fredrick Bieber, a Harvard medical professor who co-wrote a research paper suggesting familial DNA searches could solve up to 40 percent more crimes in which DNA evidence is present.

The conventional way of using DNA to identify a criminal is to gather blood, semen or other genetic material at the scene and run it through a database of criminals to see if it yields an exact match. But that isn't helpful if the perpetrator is not in the database.

That is where a familial DNA search comes in. It entails looking through the database for a near-match - that is, for a close male relative of the perpetrator. Police can then use that information to zero in on whoever committed the crime.

The legality of such searches has not been tested in court, but it may be just a matter of time. Critics complain the technique could subject innocent people to arrest or hours of interrogation.

"It makes absolutely no sense," said Erin Murphy, a law professor at the University of California-Berkeley. "Other than the misfortune of having a relative that has gotten in trouble, there's no distinction in their likelihood of having committed a crime."

California and Colorado are the only states to expressly allow authorities to conduct familial DNA searches of its statewide databases. Maryland has banned the practice.

In Denver, District Attorney Mitch Morrissey pushed for the familial DNA search in the car break-in. The blood did not match anyone in the county's DNA database of 1,700 convicted felons. So authorities searched the database for a near-match and came up with the name of a convicted criminal. Investigators then narrowed their focus to the criminal's brother, Luis Jaimes-Tinajeros.

Jaimes-Tinajeros was arrested and pleaded guilty last September after a second DNA sample - obtained by court order - determined the blood was his. He is believed to be the first person convicted through this kind of database search in the U.S., Morrissey and other legal observers say.

Morrissey contends such searches are legal, and he has become one of the nation's leading proponents of the practice.

The technique involves a close examination of the Y chromosome - the male sex chromosome - in both the crime-scene DNA and the database samples.

The probability of a genetic link can be established with 90 percent confidence, Morrissey and Bieber said.

Because it relies on the Y chromosome, this technique cannot be used to arrest women. There is no equally reliable way of tracing suspects through the X chromosome, Morrissey said.

The use of familial DNA is not new to police work. It has been employed in high-profile cases in Britain for years, while police in the U.S. have used familial DNA in situations where they already had a suspect in mind and needed to confirm their suspicions.

The difference now is that U.S. authorities are conducting blind searches of databases for suspects unknown to police.

Posted in Science, The Arizona Star, on *Wednesday, February 10, 2010 12:00 am*