



Quarterly Forensic DNAResource Report October 2011

Special Interest Feature

Rapid DNA testing technology is positioning to become part of the booking process

During the August 2011 International Society for Forensic Genetics (ISFG) conference in Vienna, the United States Federal Bureau of Investigation (FBI) released details about its vision to have arrestee DNA samples tested not by scientists in crime labs, but by law enforcement officers at police booking stations. During the briefing, the FBI described how this developing, all-in-one, simple-to-use technology will allow law enforcement to go from buccal swab to DNA profile in approximately one hour.

Testing arrestee samples at booking and comparing the profiles instantly to local, state and national databases will provide undeniable benefits to law enforcement. Rather than sending the DNA profile to the lab for analysis – a process that can take days, or even months – the DNA will be processed immediately while the offender continues the booking process. In theory, the DNA profile will be obtained and searched against the DNA databases long before the arrestee is ready for bail or other release scenarios. If the arrestee's DNA profile is matched to an unsolved case, law enforcement will know before the offender is released into the community.

This technology for this rapid DNA analysis is likely to be available soon. However, it is also likely that it will be several years before use of the technology is widely accepted and used in the United States. Several issues must first be addressed including matters such as equipment validation, standards, training, and access to CODIS. During the Vienna ISFG briefing, the FBI described the next steps and said that deployment could range from five to seven years.

In addition to the technical and standards issues that must be managed, implementation of rapid DNA testing will also be impacted by the legal challenges to arrestee DNA testing, a matter which is already being appealed to the US Supreme Court. If arrestee testing is found unconstitutional, collection of DNA at booking will cease, and with it the rapid DNA program.

The FBI has outlined a blueprint on how rapid DNA testing of reference samples at booking could move forward in the United States. What we do not know is how or when rapid DNA testing technology may be deployed in other countries once available. Countries with centralized governments and less standards-driven and litigious criminal justice systems could deploy this technology much sooner.

Implementation of rapid DNA testing at booking is certain to benefit law enforcement in the United States and throughout the world. Not knowing that the person just booked into police custody has previously left DNA behind at a crime scene is a problem that DNA testing at booking will solve.

International Developments

Victim advocacy pushes Brazil closer to the DNA database finish line

Brazil is one of the world's most populous countries and also lays claim to one of the highest crime rates. In 2003, Brazil reported over 51,000 homicides. Given these statistics, logic would suggest that Brazil should have moved quickly to establish an offender DNA database. However, in 2006, legislation to collect DNA from criminal offenders did not gain enough support from the Brazilian Congress and failed to pass.

Since this failed effort, the Brazilian Federal Police along with other government leaders have been working to reposition the legislation. The Federal Police have been making steady progress, and are now aided by a group of victim advocates who traveled to the Brazilian Capital (Brasilia) this past summer to add a personal element to the debate.

The victim advocates have a tragic and compelling story to tell. They are the surviving family members of the Marcos Trigueros serial murder case from Belo Horizonte. These families became strong advocates of DNA database legislation when they discovered that four of the five murder victims could have been spared if the Brazilian Congress would have passed the 2006 legislation. If the legislation had passed, Marcos Trigueros' DNA would have been collected when he was released from prison for a previous violent offense. His DNA would have matched the first crime scene and he would have been taken out of the community; thus sparing the lives of three of those five victims.

Motivated to ensure that other families don't have to live through the same tragedy, the victims' families held a press conference in July to urge the Brazilian Congress to pass the new DNA database legislation sponsored by Senator Ciro Nogueira.

The Brazilian Congress took notice of the families' message. Just weeks after their visit, the Brazilian Senate passed the DNA database legislation and it is now being negotiated in the House.

It seems likely that the persistence of the Brazilian Federal Police and the added advocacy of the families will finally clear the path for DNA database legislation to become law in Brazil.



United States Developments

Legislative Update

New Laws

The majority of State Legislative sessions have ended for 2011, with two additional states (New Jersey and Illinois) enacting laws to collect DNA from certain felony arrestees. There are now 25 states with such laws. Most states have opted for an expungement process that is initiated by the arrestee, and for collection at booking. The Pennsylvania Senate Judiciary Committee recently approved (unanimously) an arrestee bill (SB 775). The bill will move on for review in the fiscal committee where legislators will consider how to pay for the increased testing. To see a state-by-state chart of DNA database laws, please use [this link](#).

Addressing Backlogs

The State of Texas has followed Illinois' lead in attempting to answer the question of how many rape kits are still sitting in police evidence room. The new Texas law also comes with a mandate for submitting and testing ALL rape kits (including acquaintance cases). However, much of the Texas law is to be implemented only upon sufficient future funding, and it remains to be seen if this additional money will materialize. California also considered, but rejected a similar law, opting instead for a pilot project where all rape kits will be accepted for a handful of counties which have the lowest closure rate on rape cases. The results of this effort will undoubtedly be studied for possible future legislation and/or agency initiatives. The Illinois report on how that state law will increase to the backlog and resources needed to complete analysis can be found [here](#).

Legal Update

Legal challenges to the constitutionality of requiring DNA collection upon continue. Currently, the most precedential ruling is *US v. Mitchell* in which the 3rd Circuit Court of Appeals has upheld the federal law. The ruling is being appealed to the United States Supreme Court, which is likely to make a determination on whether or not to consider the case on or before January 2012. The 9th Circuit Court of Appeals recently dismissed as moot the case of *US v. Pool* which was similar to Mitchell - the arrestee has already pled guilty to a felony. A similar challenge in the 2nd Circuit Court of Appeals (*US v. Thomas*) has also been dismissed. The 9th Circuit will now turn to the case of *Haskell v. Brown*, which is a challenge to the California law on arrestee databasing (*Prop 69* from 2004). Also in California, the case of *People v. Buza* (another challenge to California's state law) has been appealed to the California State Supreme Court. It is likely that there will be some division in opinions in these cases as they move forward, which virtually guarantees an eventual review by the United States Supreme Court. For a tracking list of legal challenges to arrestee DNA laws, please see [this page](#).

Backlog / Funding

Federal grants for the FY 2011 DNA Backlog Reduction program have been released. These annual grants assist crime labs with the resources needed to continue work on reducing backlog and increasing capacity for

DNA analysis. A list of the funding awards can be found at this [DNA.gov site](#). To date, funding for FY 2012 looks very positive as both the House and Senate have proposed no cuts to the DNA program for next year (based on the FY 2011 figures). The FY 2012 committee report also includes language seeking assurances that DNA backlog elimination is the goal of the majority of funding awarded.

Local public labs in Michigan (Oakland County) and California (City of Glendale) will begin DNA analysis programs, and a private lab in Arkansas has opened its doors (Arkansas Genomics). Budget cuts in South Carolina are contributing to a growing backlog at the state lab, and a temporary loss of accreditation at the Connecticut state lab has led to growing backlogs and the lab's removal from CODIS. Media attention to these matters have highlighted the need for continued and support of forensic DNA programs.

Other News of Note

In Rhode Island, a partial match in rape case to a female offender on the DNA database led investigators to identify the woman's brother as the previously unknown attacker of an elderly woman. He has been charged and is being held without bail (see [full article](#)). Pressure continues to mount throughout the country for states to follow more aggressive familial search policies, such as those used in California or Colorado, with Virginia recently agreeing to establish a new policy. However, at this time most laboratories rely on the more restrictive FBI guidelines for release of moderate stringency partial matches without delving into actual familial searches of the DNA database. For more information see the [Policy section](#) of the DNAResource website, as well as the [Denver DA's website](#) for familial searching issues.