science progress

DNA Confidential

State Law Enforcement Policies for Genetic Databases Lack Transparency

By Natalie Ram October 2009

In 2005, Mitch Morrissey, the district attorney in Denver, Colorado, approached the FBI about authorizing states to share information with one another regarding partial DNA matches uncovered in searches of the Combined DNA Index System. CODIS, which includes genetic information collected by all fifty states, the District of Columbia, and the federal government, has long permitted and encouraged states to share information where a database search reveals an exact match between a crime scene sample and an offender sample—indicating that the individual whose DNA matches is likely the perpetrator of a given crime.

A partial match is different. A "partial" match in this context refers to two genetic profiles—one derived from a crime scene sample and the other from CODIS—that share some, but not all, of the thirteen core DNA loci that comprise a CODIS profile. Each locus is a point along an individual's DNA where scientists look for identifying variants in the genes that make up our genetic code. Each DNA locus in a CODIS profile is made up of two alleles, one inherited from each genetic parent.

This kind of match excludes the offender whose CODIS profile provides the match because that individual's DNA is demonstrably different from the crime scene sample. But a partial match can implicate an offender's close genetic relatives as possible perpetrators of a crime because they, like the crime scene sample, share some but not all of the examined loci with the individual whose CODIS profile provided the partial match. In effect, reporting partial matches implicitly incorporates offenders' close genetic relatives into existing offender databases, even though these relatives have never been convicted of, or arrested for, an offense qualifying them for database inclusion.

The FBI's CODIS director first refused Morrissey's 2005 request. But when Morrissey approached the director of the FBI directly, the bureau modified its stance. Under an interim policy issued in July 2006, states are permitted in some instances to release identification information to other states where partial matches are found. The FBI's interim policy left it up to each state to decide whether it would report to intra-state investigators any partial matches that might turn up in the course of ordinary database searches and, moreover, whether it would deliberately search for such matches.

Since the FBI released its interim policy, states have taken a number of approaches to the issue of partial matches. In April 2008, California's Attorney General issued a well-publicized memo-

randum providing not only for the reporting of partial matches, but also for the deliberate search for such matches. In general, states distinguish between these two practices, identifying the former as partial match reporting, and the latter as familial searching. Shortly thereafter, in May 2008, Maryland enacted a statute prohibiting "search[es] of the statewide DNA data base for the purpose of identification of an offender in connection with a crime for which the offender may be a biological relative of the individual from whom the DNA sample was acquired."2

Most states, however, have refrained from prescribing rules governing partial match reporting or familial searching in statute, regulation, or well-publicized memoranda. This report represents the first effort to catalog in a comprehensive manner state policies and practices regarding partial match reporting and familial searching.

States that permit partial match reporting or familial searching through written or unwritten laboratory practices undermine efforts to bring these issues into the open. Laboratory policies are hardly known outside the laboratory walls, and so public knowledge about these practices, much less public oversight, is severely hampered. Such policies also lessen the impetus for officials favoring familial identification practices to enact policies authorizing such practices by more public means because many of the benefits of partial match data are already accessible without the need to risk opposing public influences. Although written lab policies are better than unwritten ones, neither is as transparent a means for making policy as the public deserves.

Transparency for search policies

In the face of this transparency gap, there are a number of bodies that could act, issuing some recommended and some mandatory guidance. The FBI's CODIS Unit, for example, manages the CODIS program and the National DNA Index System component of CODIS.3 In this capacity, the FBI may promulgate binding regulations and guidance authorizing or proscribing certain uses of relevant databases. The interim policy discussed above represents the FBI's current approach, but the FBI could insist in a new policy document that states make their practices regarding familial identification practices publicly known by means of statutory or formal regulatory instruments, or even that states simply not release familial identification information discovered through CODIS searching. The FBI may be limited, however, in its ability to regulate intra-state practices, especially where those practices include methods of analysis beyond CODIS searching—as where states test regions of DNA not among the thirteen core CODIS loci. Moreover, states are likely to view a federal mandate that they undertake particular legislative or executive action as an encroachment on state sovereignty and federalism values.

Here, recommendations and guidelines from the Scientific Working Group on DNA Analysis Methods may serve a guiding function. SWGDAM is a group of forensic scientists under the guidance of the FBI that, among other things, serves as a general liaison between the FBI and the forensic DNA community. This body has already issued one set of recommendations, identifying circumstances under which it deems partial match reporting or familial matching ethically acceptable.4 It should go further to recommend, at the very least, that states make their policies in this arena explicit and easily publicly accessible.

Disparate state policies

The results of the original research conducted for this report reveal a startling lack of transparency in rulemaking. Of the thirty-two responding states that have some policy or practice regarding partial match reporting or familial searching, at least 12 have left these policies unwritten. Most of these states have left unwritten a practice not to conduct targeted familial searches or not to turn over partial match information more broadly. In one sense, we might be unsurprised that such non-practices would remain unwritten. Institutions generally codify policies for the things they prescribe rather than the things they proscribe. Trying to dream up all of things we might do with DNA and then prohibiting most of these might well be an unending exercise.

But states have sometimes been proactive in their regulation of DNA databases to specify not only types of analysis that may be completed, but also types of analysis that may not. As described above, Maryland has codified by statute a prohibition on familial searches. Utah and Rhode Island also include explicit statutory prohibitions on analysis that could predict genetic disease or predisposition to illness.⁵ The failure to address in writing deliberate decisions not to conduct familial searches or disseminate partial match information constitutes a failure of transparency, making it extremely difficult for outside observers—and perhaps even laboratory personnel—to know what exactly the state's policy is.

Nor is inattention to the issue of partial match reporting and familial searching always the reason that policies are unwritten. In New Mexico, for instance, an unwritten policy not to knowingly report a partial/familial hit was voted and accepted by the state's DNA Identification System Oversight Committee. This committee is not merely advisory; it wields rulemaking authority. Its partial match reporting policy contains specific, though unwritten, language—prohibiting the knowing reporting of partial match information for familial identification purposes. And the committee chair stated that this policy will remain in place unless and until there is a change in state law either by legislative enactment or court decision clearly authorizing disclosure of familialidentifying information. Yet it seems that the policy is deliberately unwritten.

Moreover, at least four states without written policies have nonetheless reported partial match information to investigators in the past. Most broadly, in North Carolina, while DNA reports note only exact matches—hence a partial match would be designated a non-match—analysts may nonetheless informally discuss partial matches with investigators. In South Carolina, a moderatestringency candidate match that may indicate a familial relationship between a crime scene sample and an offender profile will trigger additional investigation, and possibly reporting. Two other states, Louisiana and Montana, acknowledged that their labs had turned partial match information over to investigators at least once in the past, but both emphasized the rarity of this occurrence.

These practices indicate that a not-insignificant amount of policymaking surrounding identification of possible family relationships in state forensic DNA databases occurs in a fashion that is nearly impenetrable to public oversight. Unwritten practices of reporting partial match information are particularly disconcerting, considering the genetic privacy interests of individuals who, absent their genetic similarities to individuals properly in the database, would not be identifiable through any database search.

States that have formalized policies in writing, however, are hardly fonts of transparency either. Only two of the sixteen states that confirmed that they have written policies have codified these policies in documents easily accessible to the general public. Again, Maryland has addressed

familial searching by means of legislation, and expressly prohibited the practice. California, meanwhile, issued a well-publicized memorandum by the state attorney general that authorizes, under limited circumstances, both partial match reporting and familial searching. The remaining 14 states reporting written policies have memorialized these policies in internal laboratory manuals that are not easily accessible (if accessible at all) to the general public. Ten of these lab manual-based policies permit at least partial match reporting, of which one, Nebraska, reports that it conducts familial searches on a case-by-case basis as well.

Policies placed in internal laboratory manuals are often nearly as inaccessible to the general public as unwritten policies. Indeed, in some instances, state labs were unwilling to share copies of the relevant written policies absent a formal request lodged under the state's freedom of information act. One state, which was otherwise forthcoming and informative, declined to release a copy of the relevant policy on grounds that the lab documents are subject to outside copyright. Another state, in declining to participate in this survey, expressed concern that *any* information might become publicly known regarding practices and analyses conducted in the state laboratory. Of course, several states, including Florida, Nebraska, Oregon, Washington, and Wyoming, helpfully excerpted the relevant written state policies in their lab manuals.

In some cases, states in the process of developing policies in this arena have no plans for public engagement in the process. North Dakota reported that it is currently developing a policy to govern both familial searching and partial match reporting. This policy, when written, will appear in the state laboratory's standard operating procedures/procedure manual, but with no opportunity for public comment or participation. In Colorado, where a familial searching policy is under development, there has been no consideration as to whether this policy might be published by the state Attorney General (as in California) or the Department of Safety, in addition to appearing in the bureau's procedures manual.

But to their credit, other states presently developing policies have taken different, more public-oriented approaches. New York has regulations that appear to authorize familial searching. At present, the New York Commission on Forensic Science is in the process of drafting regulations that will govern whether and how partial match reporting or familial matching will be conducted. These draft regulations were discussed this September at a commission meeting that was <u>streamed online</u>, and any resulting regulations will be available for public comment prior to codification.

West Virginia is taking the most public route to regulating partial match information. In March 2009, a member of the West Virginia House of Representatives introduced legislation that would permit at least partial match reporting. This bill died in committee, and representatives from the West Virginia State Police are working with legislators to introduce similar legislation in the next session. It is tempting to speculate that the failure of the prior partial matching bill indicates that, when exposed to public opinion and debate, partial match reporting and familial searching generate sufficient discomfort and concern so as to make such practices unacceptable. That the only relevant statute on the books is Maryland's prohibition of familial searches certainly supports such an interpretation. But the realities of the legislative process indicate that bills fail for all sorts of reasons, and so we should hesitate to draw substantive conclusions about public opinion from non-enactment.

Several states that, by written or unwritten policy, do not report partial match information—and, as a corollary, also do not perform familial searches—have also indicated that they will await definitive, public authorization for such practices before adopting them. Rhode Island reported,

for instance, that its policy not to release anything less definitive than an exact match will remain in place until the attorney general or legislature instructs otherwise. Nevada indicated that it would not alter its current non-reporting policy unless meetings with the public to gauge and address concerns regarding genetic privacy were undertaken first. New Mexico, as described above, affirmed that its policy not to reveal familial information knowingly will remain in place unless and until there is a change in state law by either legislative or judicial action. Vermont reported that it would not provide partial match information pursuant to the FBI's interim policy absent additional input from the legal channels in the state. Michigan, meanwhile, is waiting to see what the FBI will do in terms of both national policy and software tools available for analysis. And Minnesota, despite permitting release of partial match information, recognized in a January 2009 report to the legislature that familial identification raises serious concerns about genetic privacy, and called for the legislature to address such practices through legislation. The state legislature has thus far failed to do so.

The experiences of Maryland, New York, West Virginia teach that public engagement is not incompatible with policymaking in this arena, and state laboratories calling for public consideration of familial identification practices indicate that there is a felt need for public involvement in such policymaking. Indeed, public involvement, along with transparency and accountability in this arena, are vitally important. Every state in the union created its DNA database by means of legislation, and many have expanded by legislative amendment the range of persons subject to inclusion. Partial match reporting and familial searching implicitly expand the range of persons that may be identified through existing databases. Although DNA profiles are often described as genetic "fingerprints," partial match practices take advantage of the ways in which DNA is utterly unlike a fingerprint—genetic relatives have similar genetic features in predictable ways, and so family members can sometimes be inculpated through partial matches with the DNA of their offender relatives. As with previous expansions of DNA forensic databases, this new expansion should be similarly subjected to public scrutiny and oversight through the legislative process.

Whether we would oppose or support the substance of Maryland's enacted statute or West Virginia's draft legislation, we should applaud their process.

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Endnotes

- 1 Memorandum from Edmund G. Brown, Jr., Att'y Gen. of Cal. to All Cal. Law Enforcement Agencies and District Att'ys Offices, DNA Partial Match (Crime Scene DNA Profile to Offender) Policy (Apr. 25, 2008), available at http://ag.ca.gov/cms_attachments/press/pdfs/n1548_08-bfs-01.pdf.
- 2 MD Code, Public Safety, § 2-506(d).
- 3 Fed. Bureau of Investigation, CODIS, http://www.fbi.gov/hq/lab/html/codis1.htm (last visited Oct. 1, 2009)
- 4 See Ted Staples, Chair, Scientific Working Group on DNA Analysis Methods, Address at the Genetic Info, Working Group (June 24, 2008), available at www ipad.state.mn.us/docs/geninfo17.pdf (setting forth SWGDAM's recommendations regarding familial identification practices). SWGDAM recommended that familial identification information be disclosed only where, inter alia, identification involved single-source samples only; investigators searched local databases before larger, more general ones; a match was obtained for a substantial number of core loci (as many as possible); additional testing (Y-STR, mtDNA) was performed and confirmed a possible familial link; and tests for expected match ratio and expected kinship ratio were performed and confirmed a possible familial link. Staples, supra at 33.
- 5 R.I. Stat. 12-1.5-10(5) (DNA samples may never be used for purposes of obtaining info about "physical characteristics, traits or dispositions for disease"); Utah Code Ann. § 53-10-406 (bureau must "ensure that the DNA identification system does not provide information allowing prediction of genetic disease or predisposition to illness").

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