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INTEREST OF AMICUS CURIAE¹

The Electronic Privacy Information Center is a public interest research center in Washington, D.C. that was established to focus public attention on emerging civil liberties issues and to protect privacy, the First Amendment, and other constitutional values. EPIC has participated as amicus curiae in numerous privacy cases, including most recently *Hiibel v. Sixth Judicial Circuit of Nevada*, 542 U.S. 177 (2004); *Doe v. Chao*, 540 U.S. 614 (2003); *Smith v. Doe*, 538 U.S. 84 (2003); *Department of Justice v. City of Chicago*, 537 U.S. 1229 (2003); *Watchtower Bible and Tract Society of N.Y., Inc. v. Village of Stratton*, 536 U.S. 150 (2002); *Reno v. Condon*, 528 U.S. 141 (2000); *Kohler v. Englade*, 365 F. Supp. 2d 751, *appeal docketed*, No. 05-30541 (5th Cir. May 25, 2005); *United States v. Kincade*, 379 F.3d 813 (9th Cir. 2004), *cert. denied* 544 U.S. 924 (2005); and *State v. Raines*, 857 A.2d 19 (Md. 2003).

In this case, the federal DNA Analysis Backlog Elimination Act of 2000, Pub. L. No. 06-546, codified as amended at 42 U.S.C. § 14135a (“the DNA Act”), compels the production of DNA samples from probationers in violation of the Fourth Amendment. DNA can reveal large amounts of personal information, and can potentially implicate members of an individual’s family. Therefore, the growing retention and use of this type of information raises

¹ This brief amicus curiae in support of the petition is submitted pursuant to Rule 37 of the Rules of this Court. Counsel for Petitioner and Respondent have consented to the filing of this brief. Counsel for Petitioner’s consent letter has been filed with the Clerk of the Court; Counsel for Respondent’s letter is anticipated. No counsel for a party authored this brief in whole or part, and no person or entity other than amicus curiae made a monetary contribution to the preparation or submission of this brief. Law school students participating in the EPIC Internet Public Interest Opportunities Program (IPIOP) Courtney Anne Barclay and Jay Tamboli assisted in the preparation of this brief.

serious privacy concerns. EPIC believes it is vital to understand the extent to which DNA retention and use implicates Fourth Amendment interests.

SUMMARY OF THE ARGUMENT

The compelled production of DNA samples from probationers unrelated to a particular criminal investigation violates the Fourth Amendment. Although commonly likened to a fingerprint, a pervasive law enforcement technique, a DNA sample can provide vast amounts of personal information not available from fingerprint analysis. DNA can provide:

insights into many intimate aspects of a person and their families including susceptibility to particular diseases, legitimacy of birth, and perhaps predispositions to certain behaviors and sexual orientation. This increases the potential for genetic discrimination by government, insurers, employers, schools, banks, and others.

Human Genome Project, Dep't of Energy, *DNA Forensics*.²

Even the limited profiles used in the national DNA database reveal much more information than a fingerprint. DNA profiles may also implicate an individual's family via familial searches. Moreover, the collection of DNA samples for a national DNA database raises the very real possibility that DNA samples collected at one point in time for one purpose will be used in the future for unrelated purposes.

²http://www.ornl.gov/sci/techresources/Human_Genome/elsi/forensics.shtml (last modified Jan. 12, 2004).

ARGUMENT

I. Overview of DNA Analysis and CODIS

There is currently an effort underway to expand DNA collection to all arrestees in the United States. Daniel J. Solove & Marc Rotenberg, *Information Privacy Law* 268 (2003). The FBI maintains a national DNA database known as the Combined DNA Indexing System (“CODIS”). The FBI Laboratory’s CODIS program allows federal, state, and local crime laboratories to collect, exchange and compare DNA profiles electronically. National Institute of Justice, U.S. Dep’t of Justice, *NIJ Special Report: Using DNA to Solve Cold Cases* 9 (2002) [hereinafter *Using DNA to Solve Cold Cases*].³ The FBI has selected short tandem repeat (“STR”) technology to generate profiles for CODIS. *Id.* at 6. STR technology is used to evaluate 13 specific regions, known as loci or markers, within DNA located in a cell’s nucleus. *DNA Forensics, supra*. The 13 STR loci are located within “junk DNA,” or DNA with no currently known function. Nat’l Comm’n for the Future of DNA Evidence, U.S. Dep’t of Justice, *The Future of Forensic DNA Testing: Predictions of the Research and Development Working Group* 10 (2000) [hereinafter *Future of Forensic DNA Testing*].⁴ The National Commission on the Future of DNA Evidence has stated that the 13 STR loci used to generate a CODIS profile “are not associated with specific, observable traits.” *Id.* at 35. However, an individual’s traits can be predicted based on the 13 STR loci. *Id.* at 35. For example, the differences between the loci are not evenly distributed throughout the population, and in fact there are different distributions in people of different races. *Id.* at 41. For example, the chance of finding the same allele at the same locus in two different Caucasian Americans ranges from about 3 percent to about 20 percent. *Id.* at 41.

³ <http://www.ncjrs.org/pdffiles1/nij/194197.pdf>.

⁴ available at <http://www.ncjrs.gov/pdffiles1/nij/183697.pdf>

The FBI has not required all 13 loci to be identical in order for a sample to be considered a match. Instead, they consider two profiles a match when there is better than a 99 percent chance that the person is the only person matching that profile in the relevant community, usually the United States. That is, if the statistics show that the matching part of the profile does not occur in any person in the United States with 99 percent certainty, and it has been shown that that part of the profile appears in two samples, the FBI considers it certain that the two samples came from the same person. *Id.* at 4, 58.

The FBI uses a formula for determining when two samples should be considered a match “to a reasonable degree of scientific certainty;” since the full strands of DNA are not compared, even a match at all 13 loci does not mean the strands of DNA are absolutely identical, and mutation and damage can lead to differences between DNA strands of the same person. The FBI assumes that allocation of alleles is independent at each locus, and that mating is randomly distributed; when there is suspicion that the samples to be compared came from the same subpopulation, a corrective factor is included to offset the higher likelihood of a false match. The chance of a match on each of the individual loci is known, and those probabilities for the matching loci are multiplied together. The product is then multiplied by 10 to compensate for possible uncertainties. This resulting probability must then be less than 1 in the US population. *Id.* at 58-59. Notably, this calculation allows a profile to be considered “unique” with as few as 7 loci.

DNA samples can become contaminated, and these contaminations can lead to inaccurate profiles for both suspect samples and crime-scene samples. *Using DNA to Solve Cold Cases, supra*, 34. Some samples may have been collected before DNA analysis was practical, and they could be stored in ways not designed to preserve the DNA. *Id.* at 34. Additionally, laboratory contamination is possible during the analysis. The amplification process also increases the chance that stray DNA may contaminate the sample. *Future of DNA*

Forensic Testing, supra, 42. Finally, errors can be introduced when the data is being entered into or read from the database. *Using DNA to Solve Cold Cases, supra*, 34. Because the FBI's formula, described above, contains several conservative measures, a false positive match at a single loci may not substantially lessen the likelihood that the samples came from the same person, but clearly the fewer actual matches there are, the less likely the samples are from the same person.

CODIS consists of three hierarchical tiers—local, state, and national—which operate in tandem as a nationally distributed database. *Using DNA to Solve Cold Cases, supra*, at 10. The National DNA Index System (“NDIS”) is the highest tier, and makes it possible for all laboratories participating in CODIS to access and compare DNA profiles from across the country. *Id.* The second tier is the State DNA Index System (“SDIS”). *Using DNA to Solve Cold Cases, supra*, at 10. The third tier is the Local DNA Index System (“LDIS”), where DNA profiles are entered into the system by participating forensic labs throughout the country. *Id.* The tiered nature of the system enables each state and local agency to operate its DNA database in compliance with state and local laws. *Id.* DNA profiles in CODIS are organized in two indices: the Forensic Index and the Offender Index. FBI, U.S. Dep't of Justice, *The FBI's Combined DNA Index System Program Brochure* (April 2000) [hereinafter *CODIS Brochure*].⁵ The Forensic Index contains DNA profiles culled from crime scene evidence. *Id.* The Offender Index contains DNA profiles of individuals collected under applicable federal, state, or local laws. *Id.* The Offender Index is where profiles collected from individuals under the DNA Act are maintained.

Matches made among various profiles in the Forensic Index can link crime scenes together, indicating the possibility of serial crimes. *Id.* Matches made between profiles stored in the Offender Index and the Forensic Index may also potentially link an individual's DNA profile to DNA found at

⁵ <http://www.fbi.gov/hq/lab/codis/brochure.pdf>

a crime scene, tentatively identifying the perpetrator of the crime. *Id.* When such a match occurs, DNA analysts at the labs responsible for entering the matching profiles work together to confirm or invalidate the match. *Id.* The purpose of CODIS is to identify those present at the scene of a crime. There are separate databases for victim DNA and perpetrator DNA. In 2000, the National Institute of Justice advised that in the future, DNA databanks would vastly expand to include DNA from the general public, further encroaching upon personal privacy:

Inevitably, there will be the increasing possibility of broadening the database to include the general public. There would be many advantages, such as identification of persons or body parts after accidents, or discover of kidnapped or lost people. At the same time, the risk to individual privacy would be enhanced and protection of anonymity would be harder.

Future of Forensic DNA Testing, supra, 35-36.

As of April 2006, CODIS contained 3,275,710 DNA profiles. FBI, U.S. Dep't of Justice, *FBI CODIS – National DNA Index System* (Jan. 2004).⁶ The number of profiles has grown rapidly from 210,000 profiles in April 2000. *CODIS Brochure, supra*. Of the nearly 3.3 million DNA profiles, 3,139,038 profiles are of convicted persons, and the remaining 136,672 DNA profiles are created from DNA evidence gathered from crime scenes, missing persons, relatives of missing persons, and unidentified remains. *FBI CODIS – National DNA Index System, supra*; FBI, U.S. Dep't of Justice, *Science and Technology in the Name of Justice, Part 2: FBI DNA Database Passes an Important Milestone* (Feb. 3, 2004) [hereinafter *FBI DNA Database Passes an Important*

⁶ <http://www.fbi.gov/hq/lab/codis/national.htm>

Milestone].⁷ CODIS connects the 175 crime labs and the DNA databases all 50 states, the U.S. Army, and the FBI. FBI, U.S. Dep't of Justice, *CODIS Participating States* (Apr. 2006);⁸ *FBI DNA Database Passes an Important Milestone*, *supra*. This increase in profiles is accompanied by an expansion the categories from whom DNA may be collected. The recent reauthorization of the Violence Against Women Act included a provision that allows for the collection of DNA from not only convicted offenders, but also from those merely arrested or detained. Violence Against Women Act § 1004, Pub. L. No. 109-162, codified at 42 U.S.C. § 14135a (2006). California, Kansas, Louisiana, and New Mexico have laws requiring that persons arrested for any felony provide DNA samples to be placed in the DNA database.⁹ Minnesota, Texas, and Virginia require samples from persons arrested or charged with particular felonies.¹⁰

II. DNA Contains Substantially More Information than a Fingerprint.

A. DNA Profiles Reveal an Individual's Personal Traits

The use of DNA profiles in law enforcement is sometimes likened to the use of traditional fingerprints because both a fingerprint and a DNA profile are compared with evidence collected from a crime scene to determine whether there are matching identifying features. *Using DNA to Solve Cold Cases*, 5. However, the information that can be obtained from a DNA sample is far more extensive than that from a fingerprint. DNA can provide information about a

⁷ <http://www.fbi.gov/page2/feb04/codis020304.htm>.

⁸ <http://www.fbi.gov/hq/lab/codis/partstates.htm>.

⁹ Cal. Penal Code § 296(a)(2)(C) (2006); H.B. 2554, 2006 Leg., 2006 Sess. (Kan. 2006); La. Rev. Stat. Ann. § 15:609 (2006); N.M. Stat. Ann. § 29-3-8.2 (2006).

¹⁰ Minn. Stat. Ann. § 299C.105 (2006); Tex. Gov't. Code Ann. § 411.1471 (2006); Va. Code Ann. § 19.2-310.2:1 (2006).

person's race, ethnicity, or even susceptibility to certain diseases. According to the Human Genome Project, coordinated by the Department of Energy and National Institutes of Health to map and study the entire human genetic sequence:

DNA profiles are different from fingerprints, which are useful only for identification. DNA can provide insights into many intimate aspects of a person and their families including susceptibility to particular diseases, legitimacy of birth, and perhaps predispositions to certain behaviors and sexual orientation. This increases the potential for genetic discrimination by government, insurers, employers, schools, banks, and others.

DNA Forensics, supra.

Furthermore, "there is a chance that a person's entire genome may be available—criminal or otherwise. Although the DNA used is considered 'junk DNA' . . . in the future this information may be found to reveal personal information such as susceptibilities to disease and certain behaviors." *Id.*

The report of a major, two-year inquiry by the Australian Law Reform Commission and the Australian Health Ethics Committee of the National Health and Medical Research Council likewise found that DNA profiles hold vastly more information than fingerprints:

Media and other accounts often suggest that DNA profiles are simply a modern form of fingerprint identification. In fact, DNA profiles differ from conventional fingerprints in several important respects. First, DNA holds vastly more information than fingerprints. A DNA profile can be used in establishing kinship relationships, and the

sample from which the profile was obtained may hold predictive health and other information of a sensitive nature. Second, as genetic information is shared with biological relatives, an individual's profile might indirectly implicate a relative in an offence. Third, while it can be difficult to obtain fingerprints of such quality as to be useful in an investigation, DNA can be amplified from tiny and aged samples, and may be recovered from almost any cell or tissue.

Austl. Law Reform Comm'n, *Essentially Yours: The Protection of Human Genetic Information in Australia* (2003).¹¹

The DNA profiles entered into the CODIS database can also reveal the likelihood that an individual is of a particular race. *Future of Forensic DNA Testing, supra*, 35, 39-42. Studies have revealed that the likelihood of a match between a Caucasian American sample and a random Caucasian American in a database is 45 times more likely than a match between the sample and a random African American. *Id.* at 60.

These correlations highlight privacy considerations not implicated by fingerprints, since it now seems more likely that the DNA profiles may, in fact, represent functional genetic material. The "junk DNA" sections that were selected for CODIS purposes are called "junk" only because their function is unknown. Until recently, DNA's main purpose was thought to be providing instructions for the creation of proteins. W. Wayt Gibbs, *The Unseen Genome: Gems among the Junk*, *Scientific American*, November 2003. This "coding" DNA was believed to be the operative part of DNA, and the amount of coding DNA was thought to correlate with the

¹¹ available at <http://www.austlii.edu.au/au/other/alrc/publications/reports/96/> (last visited June 29, 2006).

complexity of the organism. New research is finding, however, that this correlation was misplaced. *Id.* "Noncoding DNA" is the "junk" DNA that is used for forensic DNA analysis. However, researchers are finding that, far from being evolutionary junk, it does have a function. For instance, researchers have identified sets of non-coding sequences that are likely to be implicated in genetic diseases. Adam Woolfe et al., *Highly Conserved Non-Coding Sequences Are Associated with Vertebrate Development*, 3 PLoS Biology 116, 128 (2005).¹² It is important to note also that these research results have been published within the last 5-10 years, and research is proceeding rapidly. CODIS could easily be a database of meaningful genetic traits, even if those traits are not currently known.

B. DNA Profiles Implicate the Family of Profiled Individuals

Not only can a DNA profile reveal information about an individual, it can, unlike a fingerprint, implicate members of an individual's family. "With 13 STR loci it is quite likely that a search of a database will identify a person who is a relative of the person contributing the evidence sample." *Future of Forensic DNA Testing, supra*, at 35. Profile matches occur between individuals with sibling and parent-child relationships. *Id.* at 35. Other close familial relationships can result in a profile match, though with less certainty. *Id.* at 35, 65-67. Such matches can result in situations in which individuals may be investigated by law enforcement merely for having a relative whose DNA was collected at a crime scene. This problem is likely to encourage the expansion of DNA profiles to include additional markers: "In addition to database development, a variety of genetic markers will find special applications in cases requiring information on family

¹² available at <http://biology.plosjournals.org/perlserv?request=get-document&doi=10.1371/journal.pbio.0030007> (last visited June 29, 2006).

lineage, difficult samples, and investigative problems.” *Id.* at 34.

Familial searches are gaining viability in both theory and fact. “When crime scene samples do not match anyone in a search of forensic databases, the application of indirect methods could identify individuals in the database who are close relatives of the potential suspects.” Frederick R. Bieber *et al.*, *Finding Criminals Through DNA of Their Relatives*, 312 *Science* 1315-16 (2006).¹³ Boston police have applied these methods, using partial matches with individuals in the database to focus the investigation on that person’s parents, siblings, or children. Gareth Cook, *Near match of DNA could lead police to more suspects*, *Boston Globe*, May 12, 2006, *Metro*, at A1.¹⁴

This new use, although not yet widespread, dramatically affects the privacy of the family of anyone whose DNA is collected and profiled for law enforcement databases. This essentially “shifts the genetic surveillance from the individual to the family.” Bieber, *Finding Criminals Through DNA of Their Relatives*, *supra* 1316. Some states allow for database searching based on fewer loci than normally required for a forensics search based on “scientific reasons.” These scientific reasons include the apparent presence of mixtures, sample degradation, limited sample availability, or the possible involvement of relatives. Seth Axelrad, Am. Soc’y of Law, Med. & Ethics, *State Regulations on Low Stringency / Familial Searches of DNA Databases 1* (2004).¹⁵

The potential for identifying family members using these familial searching methods places innocent people under “lifetime genetic surveillance.” Bieber, *supra*, 1316. Not only

¹³ *available at* http://www.bioforensics.com/conference06/Familial_Searches/Bieber_Science.pdf (last visited June 29, 2006).

¹⁴ *available at* http://www.boston.com/news/science/articles/2006/05/12/near_match_of_dna_could_lead_police_to_more_suspects.

¹⁵ http://www.aslme.org/dna_04/reports/axelrad1.pdf

does this implicate the privacy concerns of millions of innocent people, but the surveillance would also be strongly defined against race lines. The searches imposed on close, familial matches would therefore be defined by racial and social inequities.

III. Raw Samples are Retained Beyond the Need for Profiling

The fact that DNA samples can be used for purposes unrelated to identification also raises the significant problem that the samples will be sought by others for purposes unrelated to the initial collection. In 2000, a working group of the National Institute of Justice submitted a report that outlined some of the group's concerns about DNA collection, storage, and analysis. *Future of Forensic DNA Testing, supra*. In this report, the authors cautioned that although "the majority of States now have sample storage policies," "[a]t present, there is no clear overall policy as to what happens to the DNA sample after profiles are added to the database." *Id.* at 36. In reality, "[c]ollected samples are stored, and many state laws do not require the destruction of a DNA record or sample after a conviction has been overturned." *DNA Forensics, supra*. According to the National Institute of Justice:

It can be argued that saving the DNA permits retesting and inclusion of additional loci, particularly newly discovered ones. This would be much more efficient than searching out the person, who may not even be living. On the other side, it is argued that the profiles are recorded and that this information is all that is needed, not the DNA itself. Furthermore, those fearful of invasion of privacy are concerned lest the DNA become available to unauthorized parties or otherwise

be used in ways that would disclose information that ought to remain confidential.

Future of Forensic DNA Testing, supra, at 36.

More than a decade ago, the National Academy of Sciences recommended that samples be destroyed “promptly” after analysis. Comm. on DNA Tech. in Forensic Science of the Nat’l Acad. of Science, *DNA Technology in Forensic Science* 122 (Nat’l Acad. Press 1992). The Academy stated that “retention of DNA samples creates an opportunity for misuses—i.e., for later testing to determine personal information. In general, the committee discourages the retention of DNA samples.” *Id.* at 122. The Academy stressed that “investigation of DNA samples or stored information for the purpose of obtaining medical information or discerning other traits should be prohibited, and violations should be punishable by law.” *Id.* at 116.

These privacy concerns have led some states to create limited protections for the samples. Only Wisconsin statutorily requires that samples be destroyed after the completion of the DNA analysis. Seth Axelrad, American Society of Law, Medicine & Ethics, *Survey of State DNA Database Statutes* 5 (2005) (citing Wis. Stat. Ann. § 165.77 (2005)).¹⁶ California and Idaho provide that unused samples can be disposed if certain privacy precautions are taken, but do not require disposal. *Id.* at 5. (citing Cal. Penal Code § 299.7 (2005) and Idaho Code Ann. § 19-5516 (2005)).

Several other countries have also taken steps to reduce the risk of subsequent misuse of DNA samples.¹⁷ For example, under Australian law, crime victims, witnesses to a crime, and anyone who volunteers DNA for police use may limit the use of their DNA for certain purposes and request

¹⁶ http://www.aslme.org/dna_04/grid/guide.pdf.

¹⁷ Legal protection for DNA samples varies widely around the world. See generally EPIC, *Privacy and Human Rights 2003: An International Survey of Privacy Laws and Developments* (2003) [hereinafter *Privacy and Human Rights*].

that it be destroyed. W. Austl. Police Serv., *Sample Destruction*.¹⁸ A crime suspect may also request destruction of his sample after a not guilty verdict or within two years of its acquisition if no charge is brought. A requester need only make his request in writing to the designated person in charge of request. New Zealand, Germany, Sweden, Denmark and the Netherlands currently require samples to be destroyed after the profile has been created. G. Gardiner, *DNA Profiling: Information Paper No 22/01*, 16 (2002). As one expert panel concluded:

The Inquiry confirms its preliminary view that the balance should be tipped in favour of physical destruction of forensic material and information obtained from it, in order to maintain information security and public confidence in the use of DNA profiling for criminal investigations. However, in relation to profiles, where there is no capacity for further testing, it would be sufficient protection for these to be permanently and irreversibly de-identified. It should be noted in this context that coded data should not be considered 'de-identified' because coding, by its very nature, is reversible.

Austl. Nat'l Health and Med. Research Council, *National Statement on Ethical Conduct in Research Involving Humans* [15.8], [16.13], (1999).¹⁹

In contrast, the U.S. Department of Justice is seeking to impose broad retention requirements absent federal authority. The FBI quality assurance standards for laboratories participating in CODIS state: "Where possible,

¹⁸ available at <http://www.police.wa.gov.au/AboutUs/AboutUs.asp?DestructionDNA> (last visited June 2, 2006).

¹⁹ available at www.austlii.edu.au/au/other/alrc/publications/reports/96/41_Criminal_Investigations.doc.rtf.

the laboratory shall retain or return a portion of the evidence sample or extract.” See FBI, U.S. Dep’t of Justice, *Standards for Forensic DNA Testing Labs*.²⁰ Thereby, specimens may be stored indefinitely in case a profile is challenged or testing technology improves. Additionally, the recent renewal of the Violence Against Women Act, signed into law Jan. 5, 2006, authorized permanent retention of certain DNA samples. Violence Against Women Act § 1004, codified at 42 U.S.C. § 14135a (2006).

Likewise, some states provide for permanent retention or set minimums. *Survey of State DNA Database Statutes, supra*, 5 (citing Neb. Rev. Stat. § 29-4105). For example, Arizona requires that biological samples be maintained for at least 35 years. *Id.* at 5 (citing Ariz. Rev. Stat. § 13-610).

The vast amount of information contained within a raw tissue or blood sample, beyond the identifiers available in a DNA profile, amplify the privacy risks faced by those whose samples are retained. According to the National Institute of Justice:

[T]he loci now used for forensic identification and likely to be used in the future are not individually indicative of any external appearance. But a search for markers associated with specific traits will ultimately reveal them. Some laboratories are actively searching for such marker genes. For example, determining that a DNA sample was left by a person with red hair, dark skin pigment, straight hair baldness, or color blindness may be practical soon, if not already.

Future of Forensic DNA Testing, supra, at 61. "Genetic markers for eye, hair, and skin color, for color-blindness, for

²⁰ <http://www.fbi.gov/hq/lab/codis/forensic.htm> (last visited June 2, 2006).

baldness, and for less common traits such as albinism will soon be discovered, if they have not been already. We can expect the number [of identified genetic markers] to increase rapidly." *Id.* at 35. The executive administration's goal of "maximiz[ing] the use of the forensic sciences in the criminal justice system" encourages this precise type of research. *Advancing Justice through the Use of DNA Technology*, Statement of the White House (Mar. 2003).²¹

IV. Profiles may be Used for Non-Law Enforcement Purposes

Some states explicitly prohibit the use of DNA profiles for purposes other than law enforcement. Other states prohibit specific uses of the information, such as obtaining information on physical traits and predisposition to certain medical conditions. *Survey of State DNA Database Statutes, supra*, 6. However, some states explicitly permit limited use of the DNA profiles or samples for medical research, academic or research purposes, or creating a statistical database. Thirteen states allow their DNA databases to be used for "other humanitarian purposes" and thirty-four states expressly allow the creation of a population statistical database - a database which allows for the analysis and interpretation of DNA profiles, albeit anonymous profiles. *Id.* at 7.

It is also conceivable that soon, if not already, scientists will request access to CODIS in what would serve as a preexisting goldmine of DNA data for their research. With access to such information, the scientists will argue the potential benefit to humanity in studying gene patterns among those persons with a propensity for criminal activity. The National Institute of Justice clearly foresaw this situation:

²¹ *available at*
http://www.whitehouse.gov/infocus/justice/dna_initiative-crime.html.

As [CODIS] enlarges and if it is broadened to include persons convicted of a larger variety of crimes, it might be possible that statistical studies of the databases could reveal useful information. Inventive researchers may glean useful information of as statistical sort. At the same time, there would need to be protection against misuse or use by unauthorized persons.

Future of Forensic DNA Testing, supra, at 36. Nor is this simply speculation. In the United Kingdom, a national forensic DNA database has been opened to requests for access from researchers. Christopher H. Asplen, American Society of Law, Medicine, & Ethics, *The Non-Forensic use of Biological Samples Taken for Forensic Purposes: An International Perspective*.²²

CONCLUSION

Compelling DNA profiles from probationers subjects them to exposure of a vast amount of personal information beyond an identifying mark. This information may be stored indefinitely, and implicates not only the individual, but family members as well. The samples can also be searched for non-law enforcement purposes, increasing the exposure and loss of privacy. For these reasons, amicus curiae respectfully requests that a Writ of Certiorari issue to review the judgment of the U.S. Court of Appeals for the District of Columbia Circuit.

Dated: June 30, 2006

Respectfully submitted,

MARC ROTENBERG

²² http://www.aslme.org/dna_04/spec_reports/asplen_non_forensic.pdf (last visited Jun. 28, 2006).

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