

**SYRACUSE SCIENCE & TECHNOLOGY  
LAW REPORTER**

---

VOLUME 22

SPRING 2010

ARTICLE 3, PAGE 53

---

**The Science of Identifying People by Their DNA, A Powerful Tool for  
Solving Crimes, Including Cold Cases From the Civil Rights Era**

Ju-Hyun Yoo\*

**INTRODUCTION**

Over fifty years ago, Emmett Till, a fourteen-year-old young black male, was found wrapped in barbed wire in a river in Mississippi.<sup>1</sup> No autopsy was ever conducted.<sup>2</sup> Two white men were arrested in 1955 for his murder, but were later acquitted because members of an all-white jury did not believe that the body found in the river was Emmett Till.<sup>3</sup> In 2004, the Federal Bureau of Investigation (“FBI”) finally reopened its investigation into the murder.<sup>4</sup> One of the first steps taken by the FBI was to exhume the body and perform a DNA analysis by comparing the extracted DNA to the DNA profiles of Emmett Till’s family members.<sup>5</sup> The

---

\* J.D. candidate, Syracuse University College of Law, expected 2010. The author would like to thank Professor Janis L. McDonald for her support and helpful comments in advising this note.

<sup>1</sup> *Autopsy Done, Emmett Till Is Reburied*, N.Y. TIMES, Jun. 5, 2004, <http://www.nytimes.com/2005/06/05/national/05till.html>; *Murder case of Emmett Till no longer buried*, THE SEATTLE TIMES, May 5, 2005, [http://seattletimes.nwsourc.com/html/nationworld/2002263382\\_exhume05.html](http://seattletimes.nwsourc.com/html/nationworld/2002263382_exhume05.html).

<sup>2</sup> *Id.*

<sup>3</sup> *People & Events: The Trial of J. W. Milam and Roy Bryant*, PUBLIC BROADCASTING SERVICE, [http://www.pbs.org/wgbh/amex/till/peopleevents/e\\_trial.html](http://www.pbs.org/wgbh/amex/till/peopleevents/e_trial.html).

<sup>4</sup> See sources cited *supra* note 1.

<sup>5</sup> *Id.*

analysis confirmed the body's identification as that of Emmett Till.<sup>6</sup> Although the two white men are now both dead, the DNA analysis and other evidence have indicated that there might have been other perpetrators who still remain alive.<sup>7</sup> The latest scientific tests, as shown in Emmett Till's case, have played a significant role in promoting justice by identifying leads to solve criminal cases.

In the United States, the collection and use of DNA, deoxyribonucleic acid, has greatly increased in criminal investigations over the last decade.<sup>8</sup> DNA forensics, the science of identifying people by their DNA, has become an indispensable criminal justice tool as it helps to identify criminals, victims' remains, and vindicate those who were wrongly convicted, including some awaiting execution.<sup>9</sup> Recent advancements in DNA technology, including the development of DNA database, have resulted in an increase of law enforcement's reliance on the use of DNA to solve all types of criminal cases, both old and recent.<sup>10</sup> Most importantly, DNA technology has become handy in making progress in the investigations of decades-old murder cases from the Civil Rights era, cases that everyone thought were closed.

The DNA databanks and the identifying profiles derived from them have had such a powerful and positive impact on the public by providing law enforcement authorities clues to solve crimes or make progress in their investigations, that there have been changes in laws such

---

<sup>6</sup> See sources cited *supra* note 1.

<sup>7</sup> *Id.*

<sup>8</sup> Dustin Hays, *The Science of DNA Forensics: Growing Pains and Ethical Challenges*, GENETICS & PUBLIC POLICY CENTER, May 4, 2007, [http://www.dnapolicy.org/policy.issue.php?action=detail&issuebrief\\_id=41](http://www.dnapolicy.org/policy.issue.php?action=detail&issuebrief_id=41).

<sup>9</sup> U.S. DEPARTMENT OF JUSTICE ADVANCING JUSTICE THROUGH DNA TECHNOLOGY (2008), <http://www.justice.gov/ag/dnapolicybooktoc.htm>.

<sup>10</sup> *Id.*

as legislation involving statutes of limitation.<sup>11</sup> These changes have benefitted cold cases, even those that are forty-year old.<sup>12</sup> Despite the positive contributions that the advancement of the DNA technology has been making to the general public, it has also raised significant questions involving ethical, social, and legal issues that mostly concern civil liberties.<sup>13</sup>

To better understand how the use of DNA and DNA databanks in criminal investigations have resulted in both positive and negative results, it is important to have a grasp of the history of the DNA technology, the development of DNA databases, which is discussed in the first part of this note. The discussion on the development of DNA technology covers the implementation of DNA databases both on Federal and state levels, with an emphasis on a recently developed DNA database in a Louisiana laboratory, which may likely be used as a model DNA database in other laboratories. Part II of this note examines the advantages of expanding DNA databases for criminal cases in general, with a focus on criminal cases from the Civil Rights era. Part II also discusses some of the issues raised by critics of expanding DNA databases.

---

<sup>11</sup> See Lauren O'Neil & Adam Fogarty, *The Impact of Daubert on Forensic Science*, 31 PEPP. L. REV. 323 (2004).

<sup>12</sup> See *Beckwith v. Anderson*, 89 F. Supp.2d 788 (Miss. 2000); see also Dustin Hays, *The Science of DNA Forensics: Growing Pains and Ethical Challenges*, GENETICS & PUBLIC POLICY CENTER, May 4, 2007, [http://www.dnapolicy.org/policy.issue.php?action=detail&issuebrief\\_id=41](http://www.dnapolicy.org/policy.issue.php?action=detail&issuebrief_id=41).

<sup>13</sup> *Id.*

## DISCUSSION

### I. BACKGROUND OF DNA DATABASES

#### 1. Development of DNA Databases on Federal Level

The FBI has only recently begun using DNA testing for criminal investigations.<sup>14</sup> The FBI Laboratory Division created a DNA testing lab in 1988 and added DNA testing to criminal investigations.<sup>15</sup> As soon as State crime laboratories started using DNA testing technology, the Department of Justice decided to link these laboratories to the federal system and to each other.<sup>16</sup> The U.S. Department of Justice, through FBI, eventually developed the Combined DNA Index System, CODIS, “a fully integrated law enforcement database that allows [national, state, and local] crime laboratories throughout the United States to exchange DNA information about criminals, suspects, and victims of crime.”<sup>17</sup>

Congress formally authorized CODIS for forensic analysis in 1994 by enacting the DNA Identification Act of 1994.<sup>18</sup> The Act authorized the FBI authority to establish a national DNA databank of (1) DNA identification records of persons convicted of crime, (2) analyses of DNA samples recovered from crime scenes, and (3) analyses of DNA samples recovered from

---

<sup>14</sup> Federal Bureau of Investigation, CODIS-NDIS Statistics, <http://www.fbi.gov/hq/lab/codis/clickmap.htm>.

<sup>15</sup> *Id.*; *People v. Pizarro*, 12 Cal. Rptr. 2d 436, 442 (Cal. Dist. Ct. App. 1992).

<sup>16</sup> *Id.*

<sup>17</sup> CODIS: Combined DNA Index System, *available at* <http://www.enotes.com/forensic-science/codis-combined-dna-index-system>.

<sup>18</sup> *See* 42 U.S.C § 14131 (1994).

unidentified human remains.<sup>19</sup> The Act also granted the FBI to set national standards for forensic DNA testing.<sup>20</sup> The established standard corresponds to “[thirteen] short DNA segments or short tandem repeats (STRs), which are regions of the genome that do not code for any traits but that, viewed in combination, provide a pattern unique to each individual.”<sup>21</sup>

When the government first introduced DNA for law enforcement purposes, the collection and retention of DNA samples were limited to sexual offenders since these people were likely to leave behind biological evidence.<sup>22</sup> In October 1998, CODIS was launched on a national level.<sup>23</sup> Then in October 2004, President George W. Bush signed a law, the “Justice For All Act” (P.L. 108-405), which further expanded the CODIS system by allowing the states to collect DNA from all federal felons and insert the profiles into the system so that other states could view them.<sup>24</sup> Pursuant to Title II and III of the bill, new grant programs were made available to train criminal justice and medical personnel in the use of DNA evidence and promote the use of DNA technology to identify missing individuals.<sup>25</sup>

---

<sup>19</sup> STATEMENT ON COMPLIANCE WITH LAWS AND REGULATIONS, OFFICE OF THE INSPECTOR GENERAL, AUDIT REPORT NO. 05-02 (2004), <http://www.justice.gov/oig/reports/OJP/a0502/laws.htm>.

<sup>20</sup> *Id.*

<sup>21</sup> *The FBI's Combined DNA Index System Program CODIS*, U.S. DEPARTMENT OF JUSTICE, (2000), available at [http://www.dna.gov/rawmedia\\_repository/7d77e285\\_f2c0\\_4098\\_8863\\_fe744ce72e3b](http://www.dna.gov/rawmedia_repository/7d77e285_f2c0_4098_8863_fe744ce72e3b).

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> *See* 18 U.S.C. § 3771 (2004).

<sup>25</sup> *Id.*

One year later, the government further enlarged the databanks by enacting another law, the DNA Fingerprinting Act of 2005, which authorized CODIS to include samples from any individual from whom collection was authorized under state law.<sup>26</sup> This Act of 2005 also authorized the collection of DNA from federal arrestees and from non-U.S. detainees to include them into the databases.”<sup>27</sup> This legislation basically gave the Attorney General broad discretion in approving DNA testing authority to any federal agency and thus led to a gradual expansion of DNA data banks.<sup>28</sup>

As of February 2009, all fifty states along with Puerto Rico, the U.S. Army, and the FBI now participate in CODIS.<sup>29</sup> The National DNA Index (NDIS) has a list of over 6,297,765 offender profiles and 237,199 forensic profiles.<sup>30</sup> CODIS so far has assisted in more than 76,200 investigations.<sup>31</sup> These numbers indicate that laws have dramatically expanded forensic DNA databases, which have played a tremendous role in solving all kinds of cases, including cold cases from the Civil Rights era that were once believed to be unsolvable.

## **2. Development of DNA Databases on State Level**

As previously mentioned, most states first began by inserting the DNA of sex offenders

---

<sup>26</sup> See DNA Fingerprint Act of 2005, Pub. No. L. 109-162, 119 Stat. 2960 (2005).

<sup>27</sup> *Id.*

<sup>28</sup> Tania Simoncelli & Sheldon Krimsky, *A New Era of DNA Collections: At What Cost to Civil Liberties?*, AMERICAN CONSTITUTION SOCIETY FOR LAW AND POLICY (2007), at 5, available at <http://www.councilforresponsiblegenetics.org/pageDocuments/PG6T8WPI4A.pdf>

<sup>29</sup> *Science and Technology in the Name of Justice, Part 2, FBI DNA Database Passes an Important Milestone*, FEDERAL BUREAU OF INVESTIGATION, Feb. 3, 2004, <http://www.fbi.gov/page2/feb04/codis020304.htm>

<sup>30</sup> See source cited *supra* note 14.

<sup>31</sup> *Id.*

into DNA databases so that they would increase protection of women and children from sexual attacks.<sup>32</sup> DNA submission of sex-offender records was not disputed since the general public viewed sexual assaults as unacceptable.<sup>33</sup> In 1994, a seven-year-old girl, Megan Kanka, was abducted, raped, and murdered by her neighbor, a convicted sex offender.<sup>34</sup> In response to Megan Kanka's shocking murder and the high number of repeat sex offenders, Congress along with all fifty states enacted laws requiring convicted sex offenders to submit DNA profiles.<sup>35</sup> This national agreement shows a movement towards the expansion of DNA databases.

Although a handful of states enacted DNA related laws before any federal legislation, a number of states had decided to expand DNA databases due to federal actions.<sup>36</sup> For instance, the DNA Fingerprinting Act provided to the states financial incentives to expand their DNA databanks.<sup>37</sup> Following the laws requiring the submission of DNA profiles from sex offenders, authorities also began demanding other individuals belonging to other categories of offenders to submit DNA profiles.<sup>38</sup> However, each state legislature independently determines whether DNA should be collected from arrestees or convicts.<sup>39</sup>

---

<sup>32</sup> *Smith v. Doe*, 538 U.S. 84, 89-90 (2003).

<sup>33</sup> D.H. Kaye & Michael E. Smith, *DNA Identification Databases: Legality, Legitimacy, and the Case for Population-Wide Coverage*, 2003 WIS. L. REV. 413, 415 (2003).

<sup>34</sup> *Smith*, 538 U.S. at 89-90.

<sup>35</sup> *Id.*; see also *Connecticut Dep't of Pub. Safety v. Doe*, 538 U.S. 1, 4 (2003).

<sup>36</sup> See source cited *supra* note 26.

<sup>37</sup> *Id.*

<sup>38</sup> Kaye & Smith, *supra* note 33, at 416.

<sup>39</sup> *Id.*

In January 2007, twenty-five states introduced legislative proposals to expand DNA collections to some categories of arrestees.<sup>40</sup> This demonstrated that more states were moving towards the expansion of databanks, since only nine states in 2006 and eight states in 2005 introduced these same proposals.<sup>41</sup> These results demonstrate that federal actions, such as the increase in federal grants, have had an impact in the initiation of DNA databanks expansion.<sup>42</sup>

Despite the opposition of the enforcement of DNA testing of “other groups” from certain civil libertarian groups, all but four states, Idaho, Nebraska, New Hampshire, and Pennsylvania, require convicted felons to submit DNA into the federal database CODIS as of February 2009.<sup>43</sup> In addition, twenty-eight states collect DNA from juvenile offenders, nine collect DNA from those convicted of certain misdemeanors, and fifteen from arrestees.<sup>44</sup> The fifteen states are Alaska, Arizona, California, Kansas, Louisiana, Maryland, Michigan, Minnesota, New Mexico, North Dakota, South Carolina, South Dakota, Tennessee, Texas, and Virginia.<sup>45</sup>

Some states have even started retaining DNA samples from people belonging to “suspects” groups.<sup>46</sup> For instance, California passed California’s Proposition 69, “the DNA

---

<sup>40</sup> Kaye & Smith, *supra* note 33, at 416; *see also* State v. Martin, 955 A.2d 1144, 1159 (Vt. 2008).

<sup>41</sup> *Id.*

<sup>42</sup> *Id.*; *see also* source cited *supra* note 26.

<sup>43</sup> *State Laws on DNA Data Banks Qualifying Offenses, Others Who Must Provide Sample*, National Conference of State Legislatures (Feb. 2009); *see also* Margot Sanger-Katz, *NH Rep: DNA Bill Needs Privacy Safeguard*, CONCORD MONITOR, Feb. 2. 2009, <http://www.correctionsone.com/news/1783453-NH-Rep-DNA-bill-needs-privacy-safeguards>.

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> Simoncelli & Krinsky, *supra* note 28, at 7; DNA Fingerprint, Unsolved Crime and Innocence Protection Act, CAL. PENAL CODE § 295 (2004).



Fingerprint, Unsolved Crime and Innocence Protection Act”, which has been authorizing the government since November 2004 to collect DNA samples and palm print impressions from suspects.<sup>47</sup> The purpose of this regulation was to retain the suspects’ samples up to two years so that they can be compared when necessary and searched against the forensic identification profiles, including DNA profiles, stored in the files of the Department of Justice DNA data banks or databases.<sup>48</sup>

**a. State of Louisiana**

A number of Civil Rights-era murder cases took place in the State of Louisiana and many of them still remain unsolved. The development of DNA technology, such as the expansion of DNA databanks, can represent an essential tool to law enforcement in finally obtaining some answers to solve cold cases such as the murders that took place during the Civil Rights era. This may be one of the reasons why Louisiana was one of the first states to enact legislation and to start collecting DNA samples from arrestees for databasing purposes.<sup>49</sup>

In support of DNA database expansion, the state of Louisiana passed a law in 2006, House Bill 1140 Act 227, which designated Louisiana State University’s Forensic Anthropology and Computer Enhancement Services (FACES) Laboratory as the “central repository for ‘all unidentified human remains information and all missing person data collected’ in Louisiana.”<sup>50</sup>

---

<sup>47</sup> See also sources cited *supra* note 46.

<sup>48</sup> *Id.* § III, art. 3(c)(2).

<sup>49</sup> LA. REV. STAT. § 15:609 (2004); see generally Louisiana State Police News Releases, <http://www.lsp.org/lspnewsr.nsf/>.

<sup>50</sup> Stanley Nelson, *Is Skull Found in Clayton Remains of JoeEd Edwards*, CONCORDIA SENTINEL, July 24, 2008, <http://www.concordiasentinel.com/news.php?id=2163>.

This legislation provides FACES Lab a significant yearly grant.<sup>51</sup> This grant allows the Lab to work towards their primary goal of compiling a comprehensive database of Louisiana's missing and unidentified human remains, including DNA, age, sex, race, ancestry, and all other identifying factors.<sup>52</sup>

For an effective compilation of information, the Lab works regularly with the Louisiana State Police Crime Lab, the North Louisiana Criminalistics Laboratory, coroners, and sheriff's offices, and uses an existing software package to gather all information on unidentified bodies and missing persons from state law enforcement by comparing data on unidentified remains to the data available on individuals who have been reported missing.<sup>53</sup>

The law passed in Louisiana in 2006 has given FACES Lab an opportunity to establish a DNA database that could be more complex than the existing CODIS.<sup>54</sup> As previously explained, CODIS is a database that contains DNA information about criminals, suspects, and victims of crimes inserted by crime laboratories throughout the United States.<sup>55</sup> However, the database operated by FACES Lab offers even more information than CODIS.<sup>56</sup> FACES Lab personnel have been given permission to collect available biological data and DNA samples from families

---

<sup>51</sup> Rob Anderson, *FACES Lab building Database of Missing Persons*, LSU TODAY, Nov. 5, 2004, <http://www.lsu.edu/lstoday/041105/>.

<sup>52</sup> *Id.*; see also H.B. 1140 Act 227, Reg. Sess. (La. 2006), available at <http://identifyla.lsu.edu/hb1140act227.pdf>

<sup>53</sup> *Id.*

<sup>54</sup> *Id.*

<sup>55</sup> *Id.*

<sup>56</sup> See sources cited *supra* notes 51-52.

of missing persons.<sup>57</sup> This means that FACES Lab may be able to create a more complex and effective Identification Data Analysis database than any other existing databases, because it will not only contain DNA information about criminals, suspects, victims of crimes, but also DNA information about certain families of victims.<sup>58</sup> This database will thus most likely increase successes in linking DNA in murder cases, including high-profile murder cases that were once believed to be unsolvable.

Due to this promising result in criminal investigations, even if Louisiana Law Enforcement and FACES Lab are currently compiling a database of missing and unidentified persons for the state of Louisiana only, there is a high possibility, as the director of FACES Lab predicts, that this unique identification data analysis project will soon become a model that can be used and shared with other agencies outside of Louisiana in the resolution of unidentified and missing persons case.<sup>59</sup> As a result, Louisiana may become the central location, where it will store and retrieve crucial information on hundreds of missing and unidentified persons on a local, regional, and state level.<sup>60</sup>

## **II. POSITIVE AND NEGATIVE RESULTS OF DNA DATABASE EXPANSION**

### **1. Advantages of DNA Database Expansion**

As previously stated, proponents of DNA database expansions argue that larger DNA databases help solve all types of crimes, including crimes from the Civil Rights era cold cases that were once believed to be unsolvable to more recently committed crimes, thereby stopping

---

<sup>57</sup> See sources cited *supra* notes 51-52.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

criminals before they can happen again.<sup>61</sup> For instance, the State of Virginia, which requires DNA profiles submission from all those arrested for violent felonies, claims to have solved hundreds of crimes by comparing profiles found in the arrestee database.<sup>62</sup> According to a study done in Chicago in 2005, at least “fifty-three murders and rapes could have been prevented if a DNA sample had been collected from all arrestees.”<sup>63</sup> This study, an example among others, indicates that the expansion of DNA database helps to solve and prevent crimes.

**a. Implications with the Statute of Limitation**

The advantages that result from the expansion of DNA databases have led to changes in statutes of limitation for cases related to criminal charges. In a criminal case, a statute of limitations is a rule that establishes a time limit for prosecuting a crime based on the date when the offense occurred.<sup>64</sup> The purpose of a statute of limitations in a criminal case is to guarantee “the prompt prosecution of criminal charges and thereby to spare the accused of the burden of having to defend against stale charges after memories may have faded or evidence is lost.”<sup>65</sup>

---

<sup>61</sup> See Human Genome Project Information, DNA Forensics (2009), [http://www.ornl.gov/sci/techresources/Human\\_Genome/elsi/forensics.shtml](http://www.ornl.gov/sci/techresources/Human_Genome/elsi/forensics.shtml).

<sup>62</sup> See DNA TESTING FOR LAW ENFORCEMENT: LEGISLATIVE ISSUES FOR CONGRESS, CRS REPORT FOR CONGRESS (2006), available at <http://www.house.gov/gallegly/issues/crime/crimedocs/RL32247.pdf>.

<sup>63</sup> Eileen Sullivan, *Feds to Collect DNA From Every Person They Arrest*, THE HUFFINGTON POST, Apr. 16, 2008, [http://www.huffingtonpost.com/2008/04/16/feds-to-collect-dna-from-\\_n\\_97100.html](http://www.huffingtonpost.com/2008/04/16/feds-to-collect-dna-from-_n_97100.html).

<sup>64</sup> See STATUTES OF LIMITATION IN FEDERAL CRIMINAL CASES: A SKETCH, CRS REPORT FOR CONGRESS RS 21221, ii (2007), available at <http://www.fas.org/sgp/crs/misc/RL31253.pdf>.

<sup>65</sup> See *id.*

A statute of limitations for federal crimes punishable by death does not exist.<sup>66</sup> States courts have also held that there is no statute of limitations for murder cases.<sup>67</sup> For instance in *Beckwith v. Anderson*, the court stated that “the Mississippi statute of limitations governing criminal charges does not impose a limitation period on the crime of murder.”<sup>68</sup> In Louisiana, there is also no statute of limitation for murder cases.<sup>69</sup>

According to the President’s DNA Initiative, advances in DNA technology and the creation of DNA databases are leading many criminal justice professionals to reevaluate time limits placed on the filing of criminal charges.<sup>70</sup> Many State legislatures have begun to extend the statutes of limitation because biological evidence can product reliable DNA analysis results even years after the commission of a crime.<sup>71</sup> Some states have eliminated the statutes of limitation for some crimes, in certain circumstances.<sup>72</sup>

These changes are essential for all crimes, but most certainly for cold cases from the Civil Rights era. As previously explained, the purpose of a statute of limitations in a criminal case is to guarantee “the prompt prosecution of criminal charges and thereby to spare the accused of the burden of having to defend against stale charges after memories may have faded or evidence

---

<sup>66</sup> See source cited *supra* note 64.

<sup>67</sup> *Beckwith v. Anderson*, 89 F. Supp.2d 788, 805 (Miss. 2000).

<sup>68</sup> *Id.*; MISS. CODE ANN. § 99-1-5 (2009).

<sup>69</sup> LA. CODE CRIM. PROC. ANN. art. 571 (2010).

<sup>70</sup> See generally Lauren O’Neil & Adam Fogarty, *The Impact of Daubert on Forensic Science*, 31 Pepp. L. Rev. 323 (2004); see also *Solving Cold Cases with DNA*, DNA INITIATIVE: ADVANCING CRIMINAL JUSTICE THROUGH DNA TECHNOLOGY, available at [http://www.dna.gov/funding/cold\\_case/](http://www.dna.gov/funding/cold_case/).

<sup>71</sup> *Id.*

<sup>72</sup> *Id.*

is lost.”<sup>73</sup> However, despite this purpose, it would be beneficial for law enforcement to present new evidence found by using DNA technology in the interest of true justice. For instance, as we saw in Emmett Till’s case, the FBI was able to exhume the body and retrieve a DNA sample to confirm that the body belonged to Emmett Till.<sup>74</sup> The statutes of limitation will likely be a critical issue if other perpetrators involved in the murder of Emmett Till were still alive today and later found by the FBI.<sup>75</sup>

**b. What could Louisiana Identification Data Analysis mean to the general public.**

Cold cases are usually among the most difficult and frustrating cases detectives face, especially if they involve racially motivated killings from the Civil Rights era. In order to identify deadly hate crimes that occurred before 1969 and that remained unsolved, many law enforcement agencies, prosecutors’ offices, and crime labs across the nation have launched programs to review old cases.<sup>76</sup> These programs, often called “cold case units,” have helped criminal justice officials to solve cases that have remained unsolved for years.<sup>77</sup> It was found that DNA evidence was “the linchpin” in solving most of these cases.<sup>78</sup>

For instance, in the 1963 murder case of Civil Rights activist Medgar Evers, DNA and other scientific evidence helped gain the 1994 conviction of White Supremacist Byron de La

---

<sup>73</sup> See source cited *supra* note 64, at 1.

<sup>74</sup> See *supra* note 1 and accompany text.

<sup>75</sup> *Id.*

<sup>76</sup> *Civil Rights: FBI Announces Partnership in Reviewing Cold Cases*, FEDERAL BUREAU OF INVESTIGATION, Feb. 27, 2007, available at <http://www.fbi.gov/page2/feb07/coldcase022707>.

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

Beckwith.<sup>79</sup> In 1991, the FBI exhumed Evers' body and removed bullet fragments, which were found to have come from the weapon used to kill Evers.<sup>80</sup>

Louisiana and several other states collect DNA profiles even from people arrested for misdemeanors, which has led and will hopefully lead to clues to solve all types of criminal cases, including those that occurred several decades ago.<sup>81</sup> For instance, LSU FACES lab is currently working to collect identification factors that could determine whether a human skull found in Clayton six years ago could be part of the remains of a black man who was reported missing in Concordia Parish, Louisiana, and presumed dead since July 12, 1964.<sup>82</sup> This case is one of many examples of a troubling unsolved murder case from the Civil Rights era.

FACES Lab forensic anthropologists are using the recently adopted Louisiana Identification Data Analysis to establish the identity of the discovered human skull.<sup>83</sup> Although this project will require time and effort, FACES Lab is hopeful because some family members of the man reported missing since 1964 still reside in Louisiana.<sup>84</sup> The family members may provide a sampling of DNA which could then be compared to the DNA extracted from the skull. This comparison may possibly lead to some clues and make progress in this unsolved case from the Civil Rights era.

---

<sup>79</sup> See *Beckwith v. Anderson*, 89 F. Supp.2d 788 (Miss. 2000).

<sup>80</sup> Charles Sheehan, *Body of Emmett Till Exhumed in Illinois*, CHI. TRIB., June 2, 2005, available at <http://www.truthout.org/article/body-emmett-till-exhumed-in-illinois>.

<sup>81</sup> See LA. REV. STAT. § 15:609 (2004).

<sup>82</sup> See source cited *supra* note 50.

<sup>83</sup> *Id.*

<sup>84</sup> *Id.*

If a database such as the Louisiana Identification Data Analysis were in place at an earlier time, crimes that are believed to have been committed by Ku Klux Klan members for racially motivated reasons may have been solved. Ku Klux Klan members are known to have committed numerous crimes in the South. It is also known that family members tend to join a Klan together. Thus, if other DNA databases, such as the one FACES Lab is currently developing, are created, there is a possibility for law enforcement to collect evidence that may result in positive outcomes.

Many crimes from the Civil Rights era still remain unsolved for numerous reasons. However, there may be something that we could do now. For example, we could maybe find some answers by expanding the newest technology, DNA databanks.

c. **The Impact of Emmett Till Unsolved Civil Rights Crime Bill on Forensic Science**

Following the passage of the DNA Identification Act of 1994 and the DNA Fingerprinting Act of 2005, “cold case units” have been able to gather biological evidence that may assist law enforcement authorities to solve crimes.<sup>85</sup> In addition to the legislation that permitted the expansion of DNA databanks, Congress in September 2008, enacted the Emmett Till Unsolved Civil Rights Crime Bill that would give the Justice Department more funding to investigate unsolved murders from the Civil Rights era.<sup>86</sup> The legislation was originally inspired from the case of Emmett Till.<sup>87</sup> The Bill provides \$13.5 million annually over ten years to assist the FBI and other relevant agencies to pursue investigating cases, mostly in the South.<sup>88</sup>

---

<sup>85</sup> See source cited *supra* note 76.

<sup>86</sup> Emmett Till Unsolved Civil Rights Crime Act of 2007, Pub. L. No. 110-344, 122 Stat. 3934 (2008), available at <http://www.govtrack.us/congress/billtext.xpd?bill=h110-923>.

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*



The federal funding for cold cases units had significantly decreased over the past years, but the enactment of the Emmett Till Bill will regenerate the funding for the investigation of cold cases, at least those that involve racially motivated killings.<sup>89</sup> Research shows that the federal grant funding for cold cases units totaled \$14.2 million in 2005; however, the funding only reached \$8.7 million in 2007.<sup>90</sup> For example, Louisiana was listed amongst the states receiving a fairly large sum of financial incentives from the federal government, but it only received from 2005 to 2008 a total of \$1,026,395 for cold case units.<sup>91</sup> Due to a lack of funding, law enforcement has not been able to use forensic science services effectively within these past years.<sup>92</sup> Nevertheless, with the passage of the Emmett Till Bill, they may now increase the use of DNA databanks and possibly solve more criminal cases, at least some of those that occurred during the Civil Rights era.

#### **d. Innocent Convicts**

There are cases where innocent people have been incarcerated for crimes they did not commit.<sup>93</sup> According to the Innocence Project, there have been 232 post-conviction exonerations

---

<sup>89</sup> See source cited *supra* note 86.

<sup>90</sup> *Solving Cold Cases with DNA*, DNA INITIATIVE: ADVANCING CRIMINAL JUSTICE THROUGH DNA TECHNOLOGY, available at [http://www.dna.gov/funding/cold\\_case/](http://www.dna.gov/funding/cold_case/).

<sup>91</sup> *Id.*

<sup>92</sup> See Lynn Sweet, *Emmett Till Civil Rights Bill Passed by Senate. Names After Chicago Youth Murdered in Mississippi in 1955*, CHICAGO SUN-TIMES, Sept. 24, 2008, [http://blogs.suntimes.com/sweet/2008/09/emmett\\_till\\_civil\\_rights\\_bill.html](http://blogs.suntimes.com/sweet/2008/09/emmett_till_civil_rights_bill.html).

<sup>93</sup> U.S. DEPARTMENT OF JUSTICE ADVANCING JUSTICE THROUGH DNA TECHNOLOGY (2008), <http://www.justice.gov/ag/dnapolicybooktoc.htm>.

by DNA testing nationwide in thirty-three states.<sup>94</sup> For instance, in Nebraska, six individuals were wrongfully convicted of murder and were then exonerated by DNA evidence.<sup>95</sup> If DNA samples could have been taken at the time of arrest, there is a high probability that these individuals could have been proven innocent and thus avoided incarceration and possible death penalty.

In the case of cold cases from the Civil Rights era, there may have been some innocent people who were incarcerated or charged for crimes they did not commit. With the use of DNA technology, law enforcement may be able to clarify some of these issues.

## **2. Issues Raised by the Expansion of DNA Databases**

Despite the positive outcomes that have resulted from the expansion of DNA and related databases, critics have argued that this expansion raises significant legal, ethical, and social issues, mostly related to privacy and civil liberties.<sup>96</sup>

### **a. Retention of DNA Samples by the Government**

Privacy interest issues may arise when the government collection of DNA sampling is used to create a DNA profile that is then kept in a database, and searched repeatedly without the individual's approval or knowledge.<sup>97</sup> DNA samples contain personal information such as family relationships, disease susceptibility, physical attributes, genetic mutations, ancestry, and,

---

<sup>94</sup> Five Pardoned in Nebraska, Innocence Project, <http://www.innocenceproject.org/Content/1806.php> (Jan. 26, 2009, 18:10 EST).

<sup>95</sup> *See State v. White*, 740 N.W.2d 801 (Neb. 2007).

<sup>96</sup> Human Genome Project Information, DNA Forensics (2009), [http://www.ornl.gov/sci/techresources/Human\\_Genome/elsi/forensics.shtml](http://www.ornl.gov/sci/techresources/Human_Genome/elsi/forensics.shtml).

<sup>97</sup> Dustin Hays & Sara Katsanis, *DNA, Forensics, and the Law*, GENETICS AND PUBLIC POLICY CENTER, July 24, 2007, [http://www.dnapolicy.org/policy.issue.php?action=detail&issuebrief\\_id=42](http://www.dnapolicy.org/policy.issue.php?action=detail&issuebrief_id=42).

in the future, perhaps predilection to certain behavioral traits such as propensity to antisocial behavior.<sup>98</sup> Police, forensic science services, and researchers would all have access to people's DNA without their consent through the database.<sup>99</sup>

The inclusion of the samples in a national databank is currently not permitted by CODIS.<sup>100</sup> However, most states are silent or unclear on this issue.<sup>101</sup> Several states actually require that specimens be maintained.<sup>102</sup> Only one state, Wisconsin, requires the offender specimens to be destroyed after profiling.<sup>103</sup>

Once an individual's DNA sample is added to the federal database, critics argue, that the person will be treated as a suspect "every time a match with a crime-scene specimen is sought—even though there is no reason to believe that the person committed the crime."<sup>104</sup> This type of incident could occur with innocent people. For instance, if an individual had a similar profile to the person who actually committed the crime or if the individual happened to be at the crime

---

<sup>98</sup> See source cited *supra* note 96.

<sup>99</sup> *Id.*

<sup>100</sup> Hays & Katsanis, *supra* note 97; see also, 42 U.S.C §§ 14131-32 (1994). This statement was accurate at the time this article was written. For updated statistics, visit <http://www.fbi.gov/hq/lab/codis/clickmap.htm>.

<sup>101</sup> *Id.*; see also source cited *supra* note 96. This statement was accurate at the time this article was written. For updated statistics, visit <http://www.fbi.gov/hq/lab/codis/clickmap.htm>.

<sup>102</sup> See *supra* notes 96-97, 100 and accompanying text.

<sup>103</sup> WIS. STAT. § 165.771(3).

<sup>104</sup> Rick Weiss, *Vast DNA Pits Policing v. Privacy*, WASH. POST, June 3, 2006, <http://www.washingtonpost.com/wp-dyn/content/article/2006/06/02/AR2006060201648.html>.

scene, the innocent would immediately be considered as “a suspect” because of the DNA sample retention policy.<sup>105</sup>

Critics claim that this retention of private information creates a possibility of privacy intrusion because genetic information can be easily found from DNA samples.<sup>106</sup> In their views, these databases are “starting to look more like a surveillance tool than a tool for criminal investigation.”<sup>107</sup> Critics treat this retention as an intrusion of personal privacy and a violation of civil liberties, acts that are prohibited by the U.S. Constitution.<sup>108</sup>

#### **b. Fourth Amendment**

The primary purpose of the Fourth Amendment of the Constitution is to prohibit the government from exercising unreasonable searches and from intruding into the personal lives of its citizens.<sup>109</sup> The Fourth Amendment ensures “the right of people to be secure in their persons . . . against unreasonable searches and seizures.”<sup>110</sup> A search is generally considered reasonable when it is supported by a warrant based on “probable cause”, defined as a reasonable belief that a crime has been committed by the individual whose person or property is searched or seized.<sup>111</sup>

According to numerous U.S. Supreme Court decisions, the U.S. Courts have traditionally considered the collection and analysis of an individual’s DNA to be an unreasonable “search” for

---

<sup>105</sup> See source cited *supra* note 96.

<sup>106</sup> *Id.*

<sup>107</sup> See source cited *supra* note 104.

<sup>108</sup> See source cited *supra* note 96.

<sup>109</sup> U.S. CONST. amend. IV.

<sup>110</sup> *Id.*

<sup>111</sup> Hays & Katsanis, *supra* note 97.

several reasons.<sup>112</sup> Among the reasons, one of them is bodily intrusion.<sup>113</sup> To collect a DNA sample, intrusion into the body is required, and this act is unreasonable.<sup>114</sup> Additionally, the “uniquely personalized nature” in the information contained in the DNA itself may constitute an unreasonable intrusion into the body.<sup>115</sup> The DNA sample contains sensitive and personal identification information.<sup>116</sup>

Despite these decisions, U.S. Courts have consistently supported “the operation of convicted-offender DNA databanks” for other reasons.<sup>117</sup> For instance, in *State v. Olivas*, the court stated that the government’s interest is one of “special needs, beyond the normal need for law enforcement.”<sup>118</sup> Moreover, in *Jones v. Murray*, the court stated that “with the person’s loss of liberty upon arrest comes the loss of at least some, if not all, rights to personal privacy otherwise protected by the Fourth Amendment.”<sup>119</sup> This statement in *Jones* means that when an individual is convicted, that individual immediately forfeits rights that he or she may otherwise

---

<sup>112</sup> See generally *Skinner v. Railway Labor Executives’ Ass’n*, 489 U.S. 602, 616 (1989); see also *United States v. Jacobsen*, 466 U.S. 109, 113 (1984).

<sup>113</sup> *Id.*

<sup>114</sup> *Id.*

<sup>115</sup> Simoncelli & Krinsky, *supra* note 28, at 4.

<sup>116</sup> *Id.*

<sup>117</sup> *Id.* at 3.

<sup>118</sup> *State v. Olivas*, 856 P.2d 1076, 1085, 1090 (Wash. 1993).

<sup>119</sup> *Jones v. Murray*, 962 F.2d 302, 306 (4th Cir. 1992); see also *Landry v. Att’y Gen.*, 709 N.E.2d 1085, 1092 (Mass. 1999).

have.<sup>120</sup> The *Jones* court reasoned that the DNA samples of convicted felons may be inserted into databanks because they have a diminished expectation of privacy.<sup>121</sup>

These court decisions indicate that the government may expand DNA and other related databases. Nevertheless, critics argue that some agencies and individuals that have access to databanks abuse their broad discretion.<sup>122</sup> Critics claim that there is thus a high possibility that the databases are not used for criminal investigations purposes, but rather for other purposes and are misused.<sup>123</sup> Although it may be true that criminal defendants are often expected to give up some of their rights when they are convicted of crimes and sentenced to prison, critics argue that this cannot justify the right for the government to unlimitedly expand DNA databanks that are likely to violate individual rights guaranteed by the U.S. Constitution.<sup>124</sup>

**c. Privacy – Family Searches**

Due to similar patterns of DNA sequences among close family members, law enforcement may be able to determine whether a family member has committed a crime by comparing the DNA evidence left behind with another family member's DNA.<sup>125</sup>

---

<sup>120</sup> *Jones*, 962 F.2d at 312.

<sup>121</sup> *See generally id.* at 306.

<sup>122</sup> *See, e.g.*, Editorial, *DNA Testing for All Convicts*, CHI. TRIB., Jan. 29, 2002 (where, in relevant parts, “Defendants give up plenty of rights when they’re convicted of crimes and sentenced to prison. Chief among them is freedom. They also lose much of their privacy. That’s why a new statewide proposal to require that all convicted felons be required to submit a DNA sample shouldn’t raise the hackles of civil libertarians or anyone else.”)

<sup>123</sup> *Id.*

<sup>124</sup> *Id.*

<sup>125</sup> Hays & Katsanis, *supra* note 97.

Some of the methods used for familial searching involve “generating a list of possible relatives of the owner of DNA collected at a crime scene by performing either a ‘low stringency’ profile search to look for ‘partial matches’ between crime scene evidence and offender profiles or by conducting a ‘rare allele’ search.”<sup>126</sup> Law enforcement officers are then able to locate close relatives and ask them for a voluntary DNA sample.<sup>127</sup>

If identified relatives refuse to provide a DNA sample, law enforcement may follow them and retrieve a discarded object, e.g., a coffee cup thrown away in a public trash receptacle, to compare the item’s DNA trace with the DNA profile obtained at the crime scene.<sup>128</sup> Police have successfully extracted a suspects’ DNA from articles such as discarded tissues, cigarette butts and envelopes.<sup>129</sup> Lower courts have held that there is “no reasonable expectation of privacy” in DNA that has been discarded.<sup>130</sup> Once an individual throws something in a garbage can, there is no reasonable expectation of privacy in that trash.<sup>131</sup>

Despite some courts’ holdings that there is “no reasonable expectation of privacy” in DNA that has been discarded, critics argue that “involuntarily” discarded DNA contains highly personal information that should not be used in these circumstances.<sup>132</sup> Critics also claim that it

---

<sup>126</sup> Simocelli & Krinsky, *supra* note 28, at 10.

<sup>127</sup> *Id.* at 11.

<sup>128</sup> See source cited *supra* note 96.

<sup>129</sup> *Id.*

<sup>130</sup> Commonwealth v. Ewing, 854 N.E.2d 993, 1001 (Mass. App. Ct. 2006).

<sup>131</sup> *Id.*; see also Hays & Katsanis, *supra* note 97.

<sup>132</sup> *Id.*; see also source cited *supra* note 96.

is unfair for the police to focus on these innocent people simply because of their familial ties.<sup>133</sup> This approach may reveal a genetic link between individuals who were not aware of their relationship with the suspect and lead to unexpected problems.<sup>134</sup> Even if this approach concerns some policy issues, proponents argue that these concerns outweigh the positive results, giving clues that could eventually help to solve crimes.<sup>135</sup>

**d. Race**

As previously stated, the FACES Lab and the Emmett Till Unsolved Civil Rights Crime Bill are working toward solving crimes using DNA and constructing a DNA database, which may be utilized to identify murders due to racism.<sup>136</sup> However, the use and expansion of DNA databases may bring contrary results. The Civil Rights movement of the 1960's decreased the significance of race and racial differences. But the newly developed DNA databases may actually deepen racial inequalities in the criminal justice system.<sup>137</sup> Also likely is the expansion of DNA databanks to bring back bad memories from the Civil Rights era.

In addition to the possibility of reopening wounds from the Civil Rights era, the expansion of DNA databanks may also increase the distrust of law enforcement by minorities.<sup>138</sup> Studies have shown that the "U.S. criminal justice system is fraught with racial disparities."<sup>139</sup>

---

<sup>133</sup> See *supra* notes 96, 130.

<sup>134</sup> See source cited *supra* note 96.

<sup>135</sup> *Id.*

<sup>136</sup> Anderson, *supra* note 51.

<sup>137</sup> See source cited *supra* note 96.

<sup>138</sup> *Id.*

<sup>139</sup> *Id.*



The studies have also demonstrated that non-whites are significantly more likely to be arrested than whites.<sup>140</sup> This means that a DNA database will contain a disproportionate number of minorities because of disparate arrest and conviction practices in the U.S.<sup>141</sup> Therefore, minorities will be more likely to be identified than whites upon comparing the profiles included in databases to the DNA evidence gathered from a crime scene.<sup>142</sup> Consequently, critics claim that the expansion and use of DNA databases will further deepen the racial inequalities in the criminal justice system.<sup>143</sup>

**e. Quality of Laboratories**

Forensic DNA and convicted DNA testing laboratories are required to comply with the National Quality Assurance Standards.<sup>144</sup> These standards were developed by the DNA Advisory Board (DAB) and issued by the Director of the FBI.<sup>145</sup>

Generally, courts consider DNA evidence to be reliable.<sup>146</sup> However, concerns about the accuracy and reliability of testing performed by some laboratories performing the forensic DNA analysis still exist.<sup>147</sup> Careless mistakes, sloppiness, or other errors that occur in laboratory

---

<sup>140</sup> See source cited *supra* note 96.

<sup>141</sup> *Id.*

<sup>142</sup> *Id.*

<sup>143</sup> *Id.*

<sup>144</sup> QUALITY ASSURANCE AUDIT FOR FORENSIC DNA AND CONVICTED OFFENDER DNA DATABASING LABORATORIES, FEDERAL BUREAU OF INVESTIGATION (2004), <http://www.fbi.gov/hq/lab/fsc/backissu/july2004/pdfs/seubert.pdf>

<sup>145</sup> *Id.*

<sup>146</sup> Hays & Katsanis, *supra* note 97.

<sup>147</sup> *Id.*

testing may result in injustice; for instance, an innocent person may be identified as the perpetrator.<sup>148</sup> If these errors were to occur in Civil Rights era cases, an innocent individual wrongfully convicted and his/her loved ones would face injustice, and the family members of the Civil Rights era victim would once again be wounded and would not find justice.

### CONCLUSION

Although critics of the expansion of DNA databases claim that biological samples and DNA data can be misused if they are not controlled by the government, research has shown that indeed it helps law enforcement to solve crimes. For its crime solving efficiency, many people would not fault its continued use by law enforcement.

DNA forensic technology can probably be considered as one of the law enforcement's most outstanding tools in crime-fighting history. As examined in the discussion section of this note, DNA has been a tremendous resource for solving crimes that were once believed to be unsolvable.

The privacy concerns associated with potential misuse of DNA information can be safely handled by laboratories. Allowing research in law enforcement databanks and expansion of these databanks will not only help the United States to solve all criminal cases, from current to decades old cases from the Civil Rights era, but will also help the nation to become a safer place to live.

---

<sup>148</sup> Hays & Katsanis, *supra* note 97.