Brave New World: The Use and Potential Misuse of DNA Technology in Immigration Law

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Introduction

Deoxyribonucleic acid (“DNA”) technology has revolutionized criminal law. In the pursuit of justice, wrongly convicted individuals are exonerated and long unsolved cases are solved with the use of this technology.\(^2\) Reports in the popular press and efforts such as The Innocence Project\(^3\) demonstrate the benefits of DNA evidence and other areas of the law, including family law, trusts and estates, and immigration now employ the technology. It is now so commonplace that individuals have replicas of their DNA as artwork, and commercial establishments offer at home tests.\(^4\)

The early proponents of the eugenics movement were concerned about the genetic

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1. Associate Professor of Law, St. John's University School of Law; J.D., 1989, Columbia University School of Law; M.A., 1979, New York University; B.A., 1975, Pace University.


3. The Innocence Project \url{http://www.innocenceproject.org} (last visited July 14, 2008). Founded by Barry Scheck, who is best known for his membership in O.J. Simpson's Dream Team, the goal of this sixteen-year-old organization is exonerating the wrongly convicted through the use of DNA evidence and other efforts to reform the criminal justice system. Its lobbying efforts have assisted in 43 states passing legislation granting access to DNA testing to prisoners seeking to prove their innocence.

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makeup of immigrants. Scientists argued that the improvement of the American stock required the exclusion of feeble-minded people. Despite the perceived neutrality of science, immigrants have not fared well. Eugenicists discouraged the immigration of certain less favored groups and played a significant role in immigration policy. Eugenics is described as the forerunner of genetics.

This article will provide a framework for the use of DNA evidence in the immigration context. Assume, for example, that a United States citizen father applies for his foreign-born child to join him in the United States as a lawful permanent resident, commonly referred to as a green card holder. If the father is unable to provide his child’s

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5 See JAMES D. WATSON & ANDREW BERG, DNA: THE SECRET OF LIFE, (Alfred A. Knopf, 2003) at 18 “by making conscious choices about… middle classes.” Galton, a British citizen, according to Watson, espoused “positive eugenics” encouraging genetically superior people to reproduce. On the other hand, the American focus was on eliminating bad genes, based on family studies of “degeneration” and “feeble-mindedness.” Id at 10.

6 PAUL SPICKARD, ALMOST ALL ALIENS: IMMIGRATION, RACE, AND COLONIALISM IN AMERICAN HISTORY AND IDENTITY, (Routledge 2007) at 271. [Hereinafter, Spickard, Almost All Aliens]. Spickard reports that in 1912, H.H. Goddard, a former schoolteacher and University of Southern California (U.S.C.) football coach convinced the authorities to allow him, and two assistants to test immigrants arriving at Ellis Island. “One assistant would scan the room for people who, to his eyes, looked stupid. They were pulled out of line and tested by the second assistant. If the test found them to be, in Goddard’s terminology, an “idiot,” an “imbecile,” or a “moron,” they were denied entry to the country. Goddard claimed that 40 percent of steerage passengers were “feeble-minded.” Id. A similar test was also used for assignment of soldiers in World War I. Carl Brigham, an army tester identified ethnic differences and claimed that “Alpine and Mediterranean “races” – that is, people of central and southern European origin – were ‘intellectually inferior to members of the Nordic race.’” Id. See also Rachel Silber, Eugenics, Family & Immigration Law in the 1920’s, 11 GEO. IMMIGR. L.J. 859, (1997).

7 CONGRESS OF THE UNITED STATES: COMMISSION ON IMMIGRATION AND REFUGEE POLICY, U.S. IMMIGRATION POLICY AND THE NATIONAL INTEREST. STAFF REPORT OF THE SELECT COMMISSION ON IMMIGRATION AND REFUGEE POLICY, Staff Report 161-216 (1981) (“The new immigrants were disliked and feared. They were considered culturally different and incapable of this country’s version of self-government, and not because of their backgrounds but because they were thought to be biologically and inherently inferior. Influential professors of history, sociology and eugenics taught that some races could never become what came to be called “100 percent American.”). In 1924 The National Origin Quota Act known as the Immigration Act of 1924; 43 Stat. 153 established a system which restricted immigration to 2% of the number of foreign-born persons for each nationality enumerated in the 1890 census. This system of favoring some nationalities over others remained essentially unchanged until 1965.

8 See supra note 5 WATSON & BERG, DNA at 17 - 25
birth certificate, or there is some irregularity or missing information in the petition,, the United States Immigration Service (“USIS”) may suggest DNA testing to prove the paternal relationship. Currently DNA tests are not required, but they may be considered as secondary documentation when primary documentation such as marriage licenses, birth certificates and adoption papers are not available. These tests are promoted as a means of thwarting fraud, but adoption of a wholesale policy of DNA testing poses a host of potential problems.

Using examples from disciplines where DNA evidence has been adopted – criminal, trusts and estates and family law – this article will propose a workable policy for the use of this technology in immigration cases.

I. The Goal of Family Reunification

As Dr. Alfred Williams Anthony, writing to Congress in 1926 on behalf of the Federal Counsel of Churches of Christ in America, stated, "The family is the first social unit. All good citizenship and all good government rest upon the integrity of the home." 

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9 Michael D. Cronin, then Acting Executive Associate Commissioner of the INS instituted USCIS policy concerning DNA testing in a July 2000 memorandum which allows field offices to “suggest” DNA testing when other forms of evidence have proved inconclusive. See Memorandum from Michael D. Cronin, Acting Ex. Assoc. Comm., Programs, HQADN, Guidance on Parentage Testing for Family-Based Immigrant Visa Petitions (July 24, 2000) reprinted in 77 Interpreter Releases 1096 (July 31, 2000) [Hereinafter Cronin July 2000 memorandum].

10 The Cronin July 2000 memorandum states that while 8 CFR 204.2(d)(2)(vi) allows directors to require Blood Group Antigen or Human Leukocyte Antigen (HLA) blood parentage tests, there is no similar statutory or regulatory authority allowing them to require DNA testing. See also Memorandum from Michael L. Aytes, Associate Director, Domestic Operations USCIS Re; Genetic Relationship Testing; Suggesting DNA Tests Revisions to the Adjudicators Field Manual (AFM) Chapter 21 (AFM Update AD07-25) (Mar. 19, 2008), available at http://www.uscis.gov/files/pressrelease/genetic_testing.pdf (citing Memorandum from Michael D. Cronin, Guidance on Parentage Testing for Family-Based Immigrant Visa Petitions (July 24, 2004)) 2008 WL 803412 (INS)

11 Immigration Of Relatives Of Citizens: Hearing Before the H. Comm. on Immigration and Naturalization, 69th Cong. 101 (1926) [hereinafter Immigration of Relatives] (letter from Dr. Alfred Williams Anthony, Federal Counsel of Churches of Christ in America, to Hon. Albert Johnson, Representative from the state of Washington and Chair, House Committee on Immigration and Naturalization (Feb. 1926)).
In America the family is fundamental, not only as a social unit, but as the bedrock of the nation.\(^\text{12}\) Since the passage of the Immigration and Nationality Act in 1952,\(^\text{13}\) one of the guiding principles in immigration law has been family reunification. The structure of the statute is illustrative: Immediate relatives of citizens have top priority.\(^\text{14}\) With no quotas, the spouses, children under 21, and parents of citizens who are over 21 (“beneficiaries”) can all join their citizen family members in the United States with minimum delay.\(^\text{15}\) The statute imposes a priority system related to the closeness of the family member to the United States citizen or lawful permanent resident.\(^\text{16}\) After immediate relatives, the family-based preference order is as follows: first preference allows unmarried sons and daughters\(^\text{17}\) to be sponsored by the United States citizen parents, the second preference category allows lawful permanent residents to sponsor their spouses and unmarried children and sons and daughters,\(^\text{18}\) the third preference permits married sons and


\(^{14}\) INA §201(b)(2)(A)(i) provides that the children, spouses and parents of a citizen of the United States will be defined as immediate relatives, and are not subject to numerical limitations imposed upon other family-sponsored immigrants.

\(^{15}\) Immediate relatives are not subject to a numerical limit of family-based visas issued each fiscal year, and to priority dates according to when the petition was filed, therefore this is a highly favored category. Austin T. Fragomen, Jr. and Steven C. Bell PLIREF-IMMIG s 3:1.1 Practising Law Institute, Immigration Fundamentals: A Guide to Law and Practice


\(^{17}\) 8 U.S.C. § 1101 (b)(1)(B) (year). The Immigration and Nationality Act defines a child as under 21 years of age and a son or daughter as over 21.

daughters to be sponsored by their United States citizen parents\textsuperscript{19} and the least favored group, the brothers and sisters of United States citizens\textsuperscript{20} may wait, sometimes ten years or more, to join their siblings.\textsuperscript{21}

Prior to the availability of DNA testing, the USCIS verified family relationship by government documents, school records or photographs or, when these were not available, affidavits from either family members or medical professionals.\textsuperscript{22} If none of these was available, the USCIS would deny the application.\textsuperscript{23} The advent of DNA testing offered hope for families who, because of events beyond their control, cannot retrieve the proofs required by the USCIS.

\section*{II. The Problem of DNA Use in Immigration}

\subsection*{A. Scientific Overview of DNA}


\textsuperscript{21} 1 Immigr. Law and Defense § 4:31 (2009) reports that according to the State Department Visa Office, as of January 1994, pending active and inactive preference system cases registered with U.S. consulates totaled 3,612,121. Family-based fourth preference cases where a United States citizen applies for his or her sibling account for about 45 percent of this total (over 1.6 million). As of January 1994, Mexico's family-based fourth preference registrants totaled 136,592, with 6,500 visas allocated and those born in the Philippines totaled 292,693, while 4,550 fourth-preference visas were allocated. For family-based fourth preference applicants from these two countries, the huge waiting lists mean a \textit{decade} or more of delay, rendering immigration in this category highly unlikely.

\textsuperscript{22} 8 C.F.R. § 103.2(b)(2)(i) and 204.2(d)(2)(v)(2009). To the USCIS, the unavailability of the birth certificate creates a presumption of ineligibility for the benefit, and although secondary evidence is acceptable, the credibility and authenticity of such evidence is closely scrutinized.

\textsuperscript{23} Immigration Procedures Handbook § 12:23 (2009) provides that processing is not routine if the documents establishing the relationship are not unambiguous. Suspicious documents will trigger an investigation which may include checking the authenticity of the supporting documents, required blood tests or “suggested” DNA testing. Refusal to take such a test will likely lead to denial of the petition.
Deoxyribonucleic acid is an organic polymer that exists in every cell of every organism. The substance is used to assemble and regulate all life forms. Each individual (except an identical twin) has unique DNA in the nucleus of every cell. Accordingly, DNA testing for identification purposes can be performed on semen, blood, hair and other tissues, including by cheek swab at home. Early forensic testing was called “restriction fragment length polymorphism” (RFLP) where an enzyme was used to break DNA into small pieces called “restriction fragments.” This technique analyzes differences within multiple samples and although it is still used, its utility is limited by the need for large amounts of non-degraded DNA, which is difficult to find outside of the human body. Polymerase Chain Reaction (PCR) or “molecular Xeroxing is an advanced technique that permits testing on small DNA samples, e.g. a blood spot the size

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24 Micah A. Luftig & Stephen Richey, *DNA and Forensic Science*, 35 NEW ENG. L. REV. 609 (2001). See also Lynch et al Truth Machine supra note 2 at 24. DNA is described as a double helix – a molecule with two twisting strands, with two identical copies of DNA in each cell. “As a carrier of genetic information, its key feature is the ordering of four chemical units called “bases” known as adenine (A), thymine (T), cytosine (C) and guanine (G). The two strands of DNA’s double helix are held together through the complementary pairing of base A on one strand with T on the other, and C on one strand with G on the other. This ‘complimentarity’ between pairs of bases explains the faithful replication of the DNA molecule (and genetic information) from one generation to the next.”

25 Luftig & Richey, supra note 20. at 611.

26 Lynch et al Truth Machine at 24. “Each human cell contains about two meters of DNA located in a compartment called the nucleus. Here it is tightly packaged into twenty-three pairs of chromosomes, each of which contains a single DNA molecule of, on average, roughly 150 million base pairs. The totality of nuclear of DNA in a cell – which in most people is virtually identical in every cell in the body – is popularly known as a ‘genome’.”

27 Identigene, *Identigene DNA Paternity Test Kit Store Sales Rocket Through the New Retail Paradigm for Genetic Testing*, May 11, 2009, http://www.businesswire.com/portal/site/google/?ndmViewId=news_view&newsId=20090511005212&newsLang=en (discussing the increase in use of over-the-counter DNA paternity test kits at local pharmacies. Identigene DNA Paternity Test Kits were allegedly the first kits sold over the counter since March 2008. These kits permit testing of DNA through a cheek swab collected in the privacy on one’s own home.)

28 Luftig & Richey, supra note 20 at 610. See also Lynch et al Truth Machine at 24–38 for a thorough discussion of DNA profiling techniques. Exposure to heat, humidity, light and the chemicals found at a crime scene leads to decay of DNA samples, making them unsuitable for RFLP analysis.
of a large pinhead.” This method uses an enzyme called a “polymerase” to produce millions of copies of the initial DNA sequence.

DNA testing, in the immigration context, is an emerging industry that the government, scientists and laboratories welcome. It is expected to become routine. When an applicant cannot provide documentary proof of the family relationship, the USCIS may suggest HLA or DNA testing through labs accredited by the American Association of Blood Banks (AABB), although under current policy they cannot require such testing of the applicant.

Lynch et al Truth Machine at 31. Luftig & Richey, supra note 20 at 610 describes this technique, invented by Kary Mullis in 1986 as revolutionizing “not only forensic DNA science, but all of molecular biology.” See also Cronin Memorandum supra note 6 at 4 (acknowledging rapid changes in parentage testing technology and recommending the PCR test through buccal (mouth or cheek cavity) swabs instead of drawing blood.

Id.

Press Release, DNA Diagnostics Center, DDC Lab Director Hosts Immigration Workshop at International DNA Symposium, (Oct. 18, 2007). A press release from the DNA Diagnostics Center (“DDC”) reporting on the pre-Symposium activities of the October 2007 18th International Symposium on Human Identification where a workshop entitled “Immigration DNA Profiling Issues” was sponsored to explore the application of DNA tests to prevent fraud in immigration cases. Representatives of the U.S. State Department, U.S. Department of Homeland Security, scientists and immigration experts gathered to discuss anticipated changes. Dr. Michael Baird of DDC stated “DNA testing for immigration is a rarity right now; however, DNA testing is expected to play an integral part in the immigration process in the near future.”

Alan R. Davis, Are You My Mother? The Scientific and Legal Validity of Conventional Blood Testing and DNA Fingerprinting to Establish Proof of Parentage in Immigration Cases, B.Y.U. L. Rev 129 at 132-3. HLA refers to the Human Leukocyte Antigen which plays a role in immune responses and is a tissue–typing test developed to determine if an organ transplant recipient will accept or reject the donated organ. Because HLA antigens are inherited, it is possible through a blood test to determine parentage, with a high degree of certainty. Mr. Davis worked on the case of Johnny A-Lo Hoang while clerking at the law firm of Steptoe & Johnson, argues for the use of DNA testing “The process is accurate, reliable and scientifically and legally valid; therefore, the State Department should encourage and facilitate the use of DNA fingerprinting to determine the parentage of naturalized United States citizens who are seeking visas for their families” at 146. Johnny, a Chinese refugee from Vietnam escaped with his uncle and younger brother to a refugee camp in Hong Kong. The uncle, to keep the family together, claimed Johnny as his son, and migrated to the United States. As an adult Johnny petitioned for his parents in China, but the petition was denied, until Johnny established the familial relationship with blood grouping and DNA tests.

See footnotes 5 and 7 supra. See also Memo, Aytes, Assoc. Dir. Domestic Operations, USCIS (Mar. 19, 2008) published on AILA InfoNet at Doc. No. 08032430. Accredited testers are available on the AABB website www.aabb.org. There are stringent guidelines to assure that the tests are accurate. The accredited
accuracy, the Department of Homeland Security (“DHS”) may be pressured to change the policy. France statutorily implemented the use of DNA testing in 2007, Switzerland since 2004 and several other European countries use DNA tests in family reunification cases. However, even if the policy remains the same, where testing is not required, but only suggested to “expedite” applications where there is insufficient evidence of a relationship, genetic identity will likely be viewed as paramount, a reflection of the real identity, and relationships forged by genetic connections as superior to those established by other unscientific means.

The New York Times reports that several families willingly submitted to DNA tests to prove paternity, only to discover that the citizen petitioner was not biologically related to the beneficiary. A poignant example is that of a U.S. citizen father, Mr. Owusu, who petitioned to bring his four sons from Ghana to the United States after his wife’s death. When DHS requested DNA testing to expedite the petition, the parties willingly complied. The father was heartbroken to discover that only the eldest of the boys was genetically related to him. His deceased wife had been unfaithful. Now he faces a Hobson’s choice: abandon his sons or face additional immigration hurdles. In his eyes, he is their father, and in a society structured by social, rather than genetic essentialism, this would be unquestioned and all his sons would be able to join him in the

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34 See generally Tera Rica Murdock, Whose Child is This: Genetic Analysis and Family Reunification Immigration in France, 41 VAND. J. TRANSNAT’L L. 1503, 1529-30 (stating that DNA testing for immigration purposes is used in Germany, Austria, Belgium, Denmark, Italy, Lithuania, Norway, the Netherlands, Britain and Sweden).


36 Id.
United States without unnecessary delay. Instead, his eldest son was the only one granted a visa.

If the use of DNA evidence were to become the norm, rather than the exception when other evidence is unavailable, it could have a devastating effect on the purported reunification goal of the Immigration and Nationality Act. By promoting the use of DNA evidence, social interests could become subservient to genetic interests. The beneficiaries could become mere genetic entities, whose biological relationship through their genes is paramount. The familial relationship forged by years of interaction, care and sacrifice, as in the example of Mr. Owusu, who was the father of all four of his sons – despite the DNA results – could be devastating to the family structure. In a legal regime where genetic essentialism reigns, Mr. Owusu’s three younger children are orphans, unless they can somehow discover the identities of their genetic fathers. They lose their immigration priority, and their father faces several hurdles. He could attempt to adopt his own children, under the laws of his former country, and then apply to the USCIS to bring them here.\(^{37}\) Ironically, if Mr. Owusu married a woman with a child who was under the age of 18, that stepson would be given immigration preference over his three sons.\(^{38}\)

\(^{37}\) The Immigration and Nationality Act allows parents to petition for adopted children to become permanent residents of the United States. 8 U.S.C. § 1101 (b)(1) (2008). Children adopted before age 16, having two years legal custody and residence with adopting parent. Naturally, this would add one additional layer of legal entanglement for people like Mr. Owusu. He would have to adopt his own child, under Ghanaian laws, before that child could join him in the United States. The social stigma, questions and expense that would arise in his local community when a father files to adopt a child born in wedlock and presumed to be the child of the father, would be daunting.

\(^{38}\) 8 U.S.C. § 1101 (b)(1)(B) (2008). The definition of a child under the Immigration and Nationality Act is an unmarried person, under 21 years of age and includes a step-child, even if he or she is not born in wedlock, as long as the child was under 18 at the time the step-parent relationship was created. See Palmer v. Reddy, 622 F.2d 463, 463-64 (9th Cir. 1980); see also In re McMillan, 17 I&N Dec. 605 (1981).
It is not surprising that the DHS would welcome the use of DNA in resolving difficult questions of proof. Immigration law is rife with the potential for fraud, and science offers the perception of certainty and neutrality. DNA testing has no political bias; it is value-free and seems to present the perfect solution for difficult questions where the potential for errors and fraud is rampant. It is understandable that federal officials would look to the certainty of genetic testing to verify that a citizen or permanent resident of the United States is biologically related to the overseas relative who is impatiently awaiting her green card. The use of this test is particularly helpful in developing and war-torn countries where the records that traditionally verify relationships – marriage and birth certificates – may be missing, or for a fee, can be forged. In some cases, the DNA test is a welcome relief, an opportunity to prove a relationship where no other proof exists. However, in other circumstances, the test reveals long-hidden,

39 In 1980 the United States instituted a Refugee Admissions Program based on family ties. Priority one and two cases have access to refugee programs including referral by the United Nations High Commissioner for Refugees (“UNHCR”), U.S. Embassy or qualified Non Governmental Organization (“NGO”). Priority three cases (“P-3”) are individuals seeking family reunification with certain legal residents in the United States. Reuniting refugees with their family members is a goal of this program, and in the chaos of the conditions that generate refugees, government issued identity documents are frequently unavailable. The Refugee Program offers an interesting case study. Coordination and management of the Refugee’s Admission’s Program occurs through the State Department’s Bureau of Population Refugees and Migration (“PRM”). Ninety five percent of the applications to the P-3 program have been African – mainly Somalis, Ethiopians and Liberians. In response to reports of fraud, DHS/USCIS and PRM tested a sample of refugee cases - approximately 3,000 refugees primarily Somalis and Ethiopians in Nairobi, Kenya and refugees in Ethiopia, Uganda, Ghana, Guinea, Gambia and Cote d’Ivoire. The subjects were family members applying for P-3, not applicants and anchor relatives in United States. BUREAU OF POPULATION, REFUGEES, AND MIGRATION. _Fraud in the Refugee Family Reunification (Priority Three) Program_, February 3, 2009, http://www.state.gov/g/ prm/rls/115891.htm

40 Swarns, _supra_ note 32. Mary K. Mount, a DNA testing expert for the A.A.B.B. — formerly known as the American Association of Blood Banks — estimates that about 75,000 of the 390,000 DNA cases that involved families in 2004 were immigration cases. Of those, she estimates, 15 percent to 20 percent do not produce a match.
shameful, secrets and cuts to the core identity of the bewildered and unsuspecting petitioner or beneficiary.\footnote{Id.}

There are alternatives for those who are disappointed when the genetic relationship reveals that the social relationship between the parties does not rest upon a firm genetic foundation. A citizen can adopt a child who is under 16 and bring him or her to the United States; the child will be granted automatic citizenship under the Child Citizenship Act of 2000.\footnote{Child Citizenship Act of 2000, Pub. L. No. 106-395, 114 Stat. 163 (2000).} Unfortunately, officials usually do not inform petitioners, even those not suspected of fraud, of alternative solutions.\footnote{Swarns, supra note 32.} The government’s growing reliance on DNA testing places a financial burden on immigrants, who frequently pay $450 or more to test parent and child.\footnote{Swarns, supra note 32.} Immigration officials could counter that the process serves the goal of the immigration statute because it helps to reunify families who lack necessary documents.

### III. Lessons from Criminal Law

Even in the criminal law context, where DNA forensics have been widely used since 1986,\footnote{See Chief Justice Thomas J. Moyer & Stephen P. Anway, Biotechnology and the Bar: A Response to the Growing Divide Between Science and the Legal Environment, 22 BERKELEY TECH. L.J. 671, 684 (2007) (discussing the history of DNA Forensics, Genetic Engineering and other complex scientific developments in the biotechnology field and the challenges to judges as gatekeepers to assess scientific evidence in the aftermath of Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993). The authors recommend the Advanced Science and Technology Adjudication Resource Center (“ASTAR”) as a resource for standardized training of judges in handling these complex high-tech cases).} and the Federal Bureau of Investigation (“FBI”) maintains databases of

\begin{enumerate}
\item[41] Id.
\item[43] Swarns, supra note 32.
\item[44] Swarns, supra note 32.
DNA from convicted state and federal criminals,\textsuperscript{46} convictions are not based exclusively on such evidence.\textsuperscript{47} Other evidence, including eyewitness testimony, confessions and alibi evidence are vital parts of the prosecution’s case. Prosecutors and defense attorneys both caution that DNA evidence may be given undue weight by a jury and trump other far more probative evidence.\textsuperscript{48} However, DNA use in the criminal context is very different from its use in civil law. In criminal law it plays an important role in convicting or exonerating individuals accused of crimes. In immigration law in particular, the use of

\begin{itemize}
\item In 1994, the federal government passed the DNA Identification Act, 42 U.S.C. §§ 14131-34 (1994), which authorized the FBI to establish the Combined DNA Index System Program (“CODIS”), database DNA samples from approximately 1.6 million convicted criminals, and has produced matches to identify suspects in many cases. All fifty states have legislation mandating that certain classes of criminals, e.g., convicted sex offenders, submit biological samples for testing. Although there have been challenges to involuntary extraction of blood for DNA testing based on the right against unlawful searches and seizures under the Fourth Amendment and the right against self-incrimination under the Fifth Amendment, appellate courts have rejected the former challenge on the ground that the governmental interest in preventing future crimes outweighs the prisoner’s lessened expectation of privacy.\textsuperscript{E.g.} Patterson v. State, 742 N.E.2d 4, 11 Ind. Ct. App. 2000. The Supreme Court has closed that door in finding that extraction of a blood sample and its chemical analysis do not constitute “testimonial or communicative” evidence, Schmerber v. California, 384 U.S. 760 (1966). In addition, defendants have argued that the involuntary extraction of genetic information violates the constitutional right to privacy. This argument is unlikely to be successful because the Supreme Court in \textit{Whalen v. Roe}, 429 U.S. 589 (1977), held that a governmental database containing the names and addresses of prescription drug users did not violate the Constitution. See Moyer & Anway \textit{supra}, note 43, at 702; See also Jason Borenstein, \textit{DNA in the Legal System: The Benefits Are Clear, The Problems Aren’t Always}, 3 CARDozo PUb. L. Pol’y & Ethics J. 847, 859 (2006); See also Michelle Hibbert, \textit{DNA Databanks: Law Enforcement’s Greatest Surveillance Tool?}, 34 WAKE FOREST L. Rev. 767 (1999) (expressing concern regarding the expanding use of DNA from the earliest cases involving sex offenders and violent felons to statutes requiring DNA collection from all individuals arrested and arguing for stricter quality control mechanisms and privacy protection in the wake of states adopting laws to construct DNA databanks without considering the social, individual and legal issues presented by the embrace of this new technology).

\item See Borenstein, \textit{supra} note 46 at 849. Professor Borenstein notes that DNA evidence must be assessed along with the probative value of other types of evidence, especially since in most felony cases, biological samples are not an integral part of the evidence presented to the court.

\item The availability of DNA evidence is such a daunting prospect that it has been used deceptively to elicit a confession from the defendant. \textit{State v. Chirokovskcic}, 860 A.2d 986 (N.J. Super. Ct. App. Div. 2004) (finding that a confession was not admissible where law enforcement fabricated a lab report showing that the defendant’s DNA was recovered at the crime scene.) See Borenstein, \textit{supra} note 39, at 853. Prof. Borenstein points out that there are no consistent standards for determining when DNA evidence should be admitted and how much weight should be given to such evidence, especially in the non-match context. Other potential problems identified by Borenstein include the standards for testing methods that will be acceptable in various state courts. On the other hand, should a defendant be exonerated merely because the DNA at the crime scene is a non-match?
\end{itemize}
DNA is helpful in proving or disproving paternity where other proofs are unavailable, but it should not be used to separate families where social familial ties exist.

**IV. Role of DNA in Trusts and Estates Law**

To approximate a decedent’s desires when he failed to execute a will, intestacy law permits family members to inherit a decedent’s estate. Though they differ somewhat from state to state, all intestacy statutes give priority to the decedent’s spouse and children. The problem is compounded in cases involving unwed fathers. New York’s Estates Powers and Trusts Law permits non-marital children to inherit if a DNA test administered during the decedent’s lifetime proves paternity. Prior law, which was based on English Common law, gave no rights of to a non-marital child. However, there was a gradual shift in attitude towards “illegitimate” or “bastard” children and the law no longer viewed its appropriate role as punitive – allowing these children to suffer for the acts of their parents. The next logical shift is one where the parent-child relationship is paramount. This shift is consistent with my recommendation in the

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49 REST 3d PROP-WDT § 2.2. “An intestate decedent's surviving spouse takes a share of the intestate estate as provided by statute. The exact share differs among the states. Not infrequently, the spouse takes the entire intestate estate if the decedent leaves no surviving descendants or parents and, in some states, if the decedent also leaves no other specified relative such as a descendant of a parent.... Under the Revised Uniform Probate Code, the surviving spouse takes either the entire intestate estate or a specified lump sum plus a specified percentage of the excess, if any, depending on what other relatives survive the decedent.”

50 Id.

51 EST. POWERS & TRUSTS 4-1.2(a)(2)(D).

52 See Megan Pendleton, Note, Intestate Inheritance Claims: Determining a Child’s Right to Inherit When Biological and Presumptive Paternity Overlap, 29 CARDOZO L. REV. 2823, 2828 (2008) . (Discussing the history of Lord Mansfield’s Rule and the view that a child born out of wedlock was the child of no one and therefore could not inherit).

53 Id.

54 See Pendleton supra note 52 at 2859 . Ms. Pendleton argues that “the threshold inquiry in establishing paternity for heirship purposes should be the existence and nature of the parent-child relationship. The UPA’s procedure for adjudicating paternity grants judges the discretion to determine whether genetic test
immigration context. The establishment of a bona fide parent-child relationship is paramount in my proposal – although the EPTL bases such a relationship on the genetic connection and my proposition suggests that when the genetic relationship cannot be established, the parent-child relationship should allow immigration benefits to accrue. Family Court statutes provide that DNA tests can be admitted into evidence to prove paternity. One of the rationales for allowing posthumous DNA testing in a case involving a child born out of wedlock is when the decedent had “openly and notoriously acknowledged the child as his own.”

In New York, a child born in the marriage is presumed to be legitimate; a non-marital child can inherit if he makes one of four proofs: 1) a paternity judgment from a court; 2) an acknowledgment signed by the putative father and filed in Albany; 3) DNA taken during the father’s life or 4) clear and convincing evidence of paternity coupled with open and notorious acknowledgment of paternity. In this fourth proof, once a child proves open and notorious acknowledgment, the courts have been allowing the use of DNA, whether pre- or post-mortem, to satisfy the clear and convincing evidence prong results should be permitted to rebut a presumption of paternity in order to establish biological paternity. Under this approach, paternity determinations are based on the nature of the parent-child relationship, rather than biology or presumptions alone. Legislatures should consider incorporating this discretionary approach in their intestacy statutes in order to promote an equitable system of intestate succession when presumptive and biological paternity conflict.” See also Ilene Sherwyn Cooper, Advances in DNA Techniques Present Opportunity to Amend EPTL to Permit Paternity Testing, 71 N.Y. St. B.J. 34 (1999).

55 ESt. POWERS & TRUSTS 4-1.2(a)(2)(D).
56 FAMILY COURT ACT § 532(a).
58 ESt. POWERS & TRUSTS § 4-1.2(a)(2)
of the test.\textsuperscript{59} In \textit{Matter of Poldrugovaz}, the court granted posthumous DNA testing
\begin{quote}
``when the applicant provides some evidence that the decedent openly and notoriously acknowledged the non-marital child as his own, and establishes that [the DNA test] is practicable and reasonable under the circumstances.''
\end{quote}\textsuperscript{60} In \textit{Potrugovaz}, the court clarified and lowered the evidentiary requirement it had specified in \textit{Matter of Davis} where it had required a showing of clear and convincing evidence of the decedent’s open and notorious acknowledgement of paternity.\textsuperscript{61} By lowering the standard of proof, especially when applied to a request for pretrial disclosure, the threshold question becomes some open and notorious acknowledgement of the child by the decedent in order to obtain posthumous genetic testing to establish paternity and the acknowledgement becomes more important\textsuperscript{62}.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{59} \textit{Id.}
\item \textsuperscript{60} \textit{Matter of Poldrugovaz}, 50 A.D.3d 117,118, 851 NYS.2d 254, 255 (2d Dep’t 2008) the Appellate Division, Second Department clarified its holding in \textit{Matter of Davis}. In light of Poldrugovaz, the Appellate Division remitted \textit{Matter of Davis} to the Surrogate’s Court. \textit{Matter of Davis}, 56 A.D.3d 553, 869 N.Y.S.2d 99 (2d Dep’t 2008).
\item \textsuperscript{61} \textit{Matter of Davis}, 27 A.D.3d 124, 812 N.Y.S.2d 543 (2d Dep’t 2006). Professor Margaret V. Turano in her commentary in McKinney’s Estates, Powers, and Trusts Law approves of the reasoning of the Appellate Division, Second Department as striking an appropriate balance in the objectives of this statute. “The Legislature wanted to protect nonmarital children but not to invite everyone on earth to offer their DNA for comparison with a decedent’s. When a petitioner can prove paternity by DNA that was gathered during a decedent’s lifetime, the balance holds. When the decedent widely acknowledged the child as his own, it is appropriate to use any DNA available (whether from blood or tissue and even if gathered posthumously), to make the proof required by subparagraph (A)(2)(C). Without open and notorious acknowledgement, however, to permit proof by posthumously-obtained DNA would be like inviting the whole hopeful world to jump into the fray.” \textit{Est. Powers & Trusts} § 4-1.2. The court in \textit{Matter of Poldrugovaz} cites with approval Professor Turano’s commentary. \textit{Matter of Poldrugovaz}, 50 A.D.3d 117,121, 851 NYS.2d 254, 258.
\item \textsuperscript{62} In \textit{Matter of Poldrugovaz}, \textit{supra} note 60 at the petitioner submitted: “the report of the medical examiner; her own affidavit attesting to, among other things, her resemblance to the decedent and a meeting she had with the decedent at which, she contends, the decedent acknowledged in the presence of another person that she was his child; individual photographs of the decedent and the petitioner which, she contends, evince their like familial features; and the affidavits of several other acquaintances of the decedent who attest that the decedent openly acknowledged that he was the petitioner’s father.” 27 A.D. 3d 117, 119. The court found this was sufficient evidence of open and notorious acknowledgement to warrant posthumous DNA testing.
\end{itemize}
\end{footnotesize}
In the case of *Le Fevre v. Sullivan*, the United States District Court for the Central District of California disregarded DNA test results conducted prior to the putative father’s death because under the Social Security Act an illegitimate child could be recognized as the child of the putative father only if the latter had acknowledged, in writing, the child as his. The child could also show entitlement to benefits if she was entitled to inherit under California’s intestacy laws. Under California law, since there was no evidence of presumptive paternity, the court agreed with the Administrative Law Judge that for intestate succession a court order establishing paternity must:

[B]e supported by clear and convincing evidence that the father has openly and notoriously held out the child as his own. Thus while the DNA finger printing analysis might be relevant to an adjudication under Section 7006, it would not be sufficient to establish the requisite relationship absent a finding by the court that the wage earner openly acknowledged paternity.

This standard of whether the father had “openly held out” the child as his is a standard that could be employed in the immigration context when faced with questions of disputed paternity and there is no DNA match. Beckstrom proposes to solve the difficulty of intestate succession by relying on genetics – the decedent’s assets should be given to the individuals most able to perpetuate the individual’s genes, even though there are multiple examples in actual wills and even in surveys of individuals which suggest

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63 *Le Fevre v. Sullivan*, 785 F. Supp. 1402, 1407 (C.D. Cal. 1991) (a child born out of wedlock applied for insurance benefits under the Social Security Act and although her evidence included the results of DNA tests the court held that it was not sufficient to meet the “openly held out” standard required under the Social Security Act).


66 *Id.* at 1404.

67 *Id.* At 1407.
that when given a choice, genetics is not always at the forefront of the testators’ wishes. Open and notorious acknowledgment of the child is a reliable indication of the father’s intent in trusts and estates and in immigration cases involving DNA.

V. Family Law Models

A. The Best Interest of the Child Standard

The goal of family reunification in immigration law is consistent with the view of the family as paramount in family law. In the latter field, the family, as a social structure, is the source of proper care and education of children and the optimal means of providing for the physical and emotional needs of each member. In earliest law, this philosophy contributed towards keeping marriages intact. Husbands were prevented from denying paternity when their wives gave birth during the marriage, on the basis of Lord Mansfield’s Rule. The actual paternity of a child born during the marriage of its mother to her husband was inferior to the presumed paternity of the husband. A woman could not deny the fatherhood of a man whom she had allowed to act as the father of her child. The law values this social relationship because it helps maintain the stability of

68 Beckstrom


70 Id.

71 Id. See Goodright v. Moss, 98 Eng. Rep. 1257, 1258 (1777). See also Nicholas S. Andrews, Atkinson v. Atkinson: Adoption of the Equitable Parent, 1988 DET. C.L. REV. 119, 119-23 (1988). Lord Mansfield’s Rule was overturned two hundred years later when the Michigan supreme court in Serafin v. Serafin, 258 N.W.2d 461 (1977), ruled that since the adverse consequences of illegitimacy no longer applied, the policy considerations favored a change in the rule but left intact the presumption of legitimacy, which can be rebutted by evidence that the husband is not the child’s biological father. Id. at 462-63.

72 Pendleton or Runner

the family and the society.\textsuperscript{74} Even when the public-policy underpinnings of Lord Mansfield’s rule lost their force, the presumption of paternity remained.\textsuperscript{75} Although it could be rebutted with blood tests and, eventually, DNA evidence, the law recognized the concepts of equitable adoption and estoppel as exceptions that would prevent a husband denying his duty to support the non-biological child.\textsuperscript{76} Mandatory use of DNA in immigration law would place the preeminence of the family in jeopardy, replacing social relationships with genetic relationships. In the immigration context, the results can be particularly devastating because the parties are frequently separated by many miles and maintaining the social relationship is challenging.

\textbf{B. Genetic Essentialism}

Genetic essentialism or biological determinism or is the belief that the sum and substance of each of us is our DNA.\textsuperscript{77} Professor Bender argues that although Aldous Huxley did not use the term “genetic essentialism” “what he was satirizing and warning against in \textit{Brave New World} was a world in which genetics “defines our family and our history and predicts our futures”\textsuperscript{78}  

\textsuperscript{74} Pendelton

\textsuperscript{75} \textit{Id.}

\textsuperscript{76} \textit{Id.}


\textsuperscript{78} Bender, 12 COLUM. J. GENDER & L. 1 at 41. Aldous Huxley, \textit{Brave New World} (1932)
Scientists allied with government in promoting genetic essentialism. Scholars such as Mary R. Andrlik and Mark A. Rothstein argue that federal welfare policy has influenced the prevalence of identity testing, pointing specifically to statutes such as the Family Support Act of 1988, the Omnibus Budget Reconciliation Act of 1993, and the Personal Responsibility and Work Opportunity Act of 1996, which helped to grow the commercial identity-testing industry. Secondly, these scholars argue, the focus on genetic testing has firmly established the concept that biological or genetic relationship and parental status are entwined:

[W]ith genetic essentialism part of the cultural atmosphere, it is easy to slide into the view that the genetic contribution is the essence of fatherhood. And if proof of paternity by means of genetic testing establishes a duty of support, then, logically, should not exclusion through testing end such a duty, or even unravel it back to its origin in mistake or deception?

Their third argument supports the cynical view that it is “all about the money.” Government promotion of testing, they state, is designed to increase financial support by parents, and reduce public spending on child welfare programs. Some members of the Fathers’ Rights Movement complain that “DNA testing stacks the deck against them – a

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83 Anderlik & Rothstein, supra note 75, at 218?

84 Anderlik & Rothstein, supra note 75, at 218.

85 Id.
positive DNA test will establish support obligations, but a negative test will not eliminate such obligations.\textsuperscript{86}

Other scholars propose analysis of the “intent” and “conduct” of the parties instead of biology or marriage in creating a legal family.\textsuperscript{87} These arguments are also reflected in court decisions. In Steven W. v. Matthew S. California’s Supreme Court decided a complex parental rights case.\textsuperscript{88} Julie, the biological mother, lived with Steven, but maintained a secret, sexual relationship with her husband, Matthew.\textsuperscript{89} Upon Michael’s birth, Steven assumed the role of father, until blood tests revealed that Matthew was the biological father.\textsuperscript{90} In the ensuing custody and visitation dispute, the court held that in the best interests of the child, the social relationship trumped the biological one:

\begin{quote}
[I]n the case of an older child [over two years of age] the familial relationship between the child and the man purporting to be the child's father is considerably more palpable than the biological relationship of actual paternity. A man who has lived with a child, treating it as his son or daughter, has developed a relationship with the child that should not be lightly dissolved.... This social relationship is much more important, to the child at least, than a biological relationship of actual paternity.\textsuperscript{91}
\end{quote}

\textsuperscript{86}Anderlik & Rothstein, \textit{supra} note 75, at 219.

\textsuperscript{87}Deborah H. Wald, \textit{The Parentage Puzzle: The Interplay Between Genetics, Procreative Intent and Parental Conduct in Determining Legal Parentage}, 15 AM. U. J. GENDER SOC. POL’Y & L. 379, 381 (2007) (discussing a variety of scenarios where the traditional rules are inadequate, e.g., surrogacy, same sex parents, etc. and public policy dictates a more expansive view of parenthood).

\textsuperscript{88}Steven W. v. Matthew S., 39 Cal. Rptr. 2d 535, 539 (Cal. Ct. App. 1995)

\textsuperscript{89}Id. at

\textsuperscript{90}Id. at

\textsuperscript{91}Steven W. v. Matthew S., 39 Cal. Rptr. 2d 535, 539 (Cal. Ct. App. 1995) (citing Susan H. v. Jack S., 37 Cal. Rptr. 2d 120 (Cal. Ct. App. 1994)); \textit{see} Atkinson v. Atkinson, 408 N.W.2d 516, 519 (Mich. Ct. App. 1987) (where Michigan’s Court of Appeals applied equitable parenthood theory to find, over the objection of the mother, in favor of a husband who was not genetically related to a marital child. The husband was found to be the legal parent where (1) the husband and child acknowledge a relationship as father and child, fostered by the mother prior to the filing of the divorce (2) the husband wants parental rights and (3) the husband is willing to pay child support).
The court continued:

The record establishes that Steven developed the enduring father-child relationship with Michael. He openly held Michael out as his son to his family, to the school, to the world. He signed the birth certificate, gave Michael his surname, and participated in all aspects of his emotional and financial support for the first four years of the child's life. Given the strong social policy in favor of preserving the on-going father and child relationship, the trial court did not err in finding that the conflict between the presumptions weighed in favor of Steven.\textsuperscript{92}

Professor Jacobs argues for the revision of current paternity laws to recognize a child’s right to have a relationship with both a biological and a social father.\textsuperscript{93} She observes that “biological fatherhood has been subordinated to social fatherhood to preserve an intact familial relationship, yet biological fatherhood has served as the sole means to establish the legal benefits and obligations of paternity.”\textsuperscript{94} She advocates the abandonment of the traditional two-parent paradigm in favor of a multiple parent model.\textsuperscript{95} She challenges courts to recognize a social father’s right to share, with the biological father, the responsibilities and benefits of fatherhood – thereby “protect[ing] the institution of parenthood and acknowledge[ing] that parentage is defined by much more than DNA.”\textsuperscript{96}

\textsuperscript{92} Steven W., 39 Cal. Rptr. 2d at 539. See Atkinson v. Atkinson, 408 N.W.2d at 519; see also Andrews, supra note 26 (a student note recognizing the importance of Atkinson v. Atkinson in the development of equitable adoption, elevating the psychological well-being of the child and placing women on equal footing with a man by allowing a woman to submit a blood test as proof of non-paternity); See also Chrisi G. Baunach, The Role of Equitable Adoption in a Mistaken Baby Switch, 31 U. LOUISVILLE J. FAM. L. 501, 508-13 (1992/93).


\textsuperscript{94} Id. at 810-11

\textsuperscript{95} Id. at 810-11?

\textsuperscript{96} Id.
The American Law Institute (‘ALI’) recognizes parents by estoppel and de facto parents.\textsuperscript{97} Equitable adoption \textsuperscript{98} and virtual adoption\textsuperscript{99} may also establish paternity despite the lack of a genetic relationship. Even without a formal legal contract between the parent and child or a court order, if the parent makes certain promises or acts in a manner that creates a responsibility on the part of the parent, the court can decree that the parent has adopted the child.\textsuperscript{100} If, for example, an adult took a child into his home for an extended period of time and then denied parentage, equity would hold the parent responsible for the child’s welfare, as if he/she had been formally, legally adopted.\textsuperscript{101} Adoption by estoppel is similar, and has most often been invoked when a parent dies without a will and a minor child whom she supported makes a claim on the estate based

\textsuperscript{97} \textit{American Law Institute, Principles of the Law of Family Dissolution: Analysis and Recommendations} §2.03(1) (2000).


\textsuperscript{99} \textit{See} Rebecca C. Bell, \textit{Virtual Adoption: The Difficulty of Creating an Exception to the Statutory Scheme}, 29 \textit{Stetson L. Rev.} 415 (1999) (exploring the history of virtual adoption, examining the underlying contractual and estoppel theories where a foster parent dies intestate after agreeing to legally adopt but failing to finalize the adoption, Bell concludes that a constructive trust is an effective alternative to the estoppel and contractual theories).

\textsuperscript{100} \textit{Id} at .

\textsuperscript{101} \textit{Id} at .
on the doctrines of equitable adoption or equitable estoppel.\(^{102}\) It is possible for a child to make this claim even when there is a will and the child is not named.\(^{103}\)

The Revised Uniform Parentage Act\(^{104}\) provides obstacles to challenging the paternity of a child with a presumed father.\(^{105}\) In the best interests of the child, a proceeding to adjudicate parentage may only be commenced within two years after birth, and a court may deny a request for genetic testing if (1) the conduct of the mother or presumed father estopps that party from denying parentage; and (2) disproving the relationship would be “inequitable.”\(^{106}\) The Revised Uniform Parentage Act therefore acknowledges the importance of a social-parental relationship that is more important than the genetic relationship in the best interest of a child over two-years old.

**VI. Potential Problems**

**A. Quality Control of Samples**

In the criminal context, questions concerning DNA testing procedures reflect unresolved disputes in the scientific community. These concerns should also give us

\(^{102}\) 2 Am. Jur. 2d Adoption § 60 (updated September 2008); 122 A.L.R.5th 205 (Originally published in 2004).

\(^{103}\) First National Bank v. Phillips, 176 W.Va. 395, 344 S.E.2d 201 (1986) (The Supreme Court in West Virginia held that if equitable adoption were established by clear, cogent and convincing evidence, even when there is an intestate death, an equitable adopted child could inherit as the sister of another child of the adoptive parent).

\(^{104}\) Uniform Parentage Act of 2000, U.L.A. Parentage Refs & Annos, Prefatory Note (2002) This federal incursion into the paternity arena in 1973 established a civil scheme for establishing parentage for non-marital children, in an effort to ensure that these children have two parents providing financial and emotional support.

\(^{105}\) \textit{Id} at

\(^{106}\) Anderlik & Rothstein \textit{supra}, note 75, at 227. \textit{See AMERICAN LAW INSTITUTE, PRINCIPLES OF THE LAW OF FAMILY DISSOLUTION: ANALYSIS AND RECOMMENDATIONS} § 2.03(b) (2002). The concept of “parent by estoppel” contemplates a man who believed in good faith that he was the child’s father, lived with the child and accepted responsibilities of parenthood for at least two years, and is therefore estopped to deny parental obligation.
pause in the immigration context, especially because USCIS relies on testing of family members in foreign countries.\textsuperscript{107} Although the immigration regulations require that petitioners and beneficiaries seek the services of an American Association of Blood Banks (“AABB”) approved genetics lab,\textsuperscript{108} the laboratory techniques are usually not as sophisticated as those in the United States. There are also strict policies regarding collection and chain-of-custody of the samples.\textsuperscript{109}

Questions regarding the integrity, competency and fallibility of the technicians, and the handling and labeling of samples in the U.S. and in the foreign country become crucial. If the technicians improperly collect or store the samples, they could become contaminated and the results would be useless.\textsuperscript{110} Adequate provisions for the storage of the DNA collected by these private companies is imperative.

**B. Privacy interests**

Our legal system provides that there is a privacy interest in medical information and financial records that requires an affirmative waiver of those rights before the information can be released. Once the DNA information is submitted to DHS, what safeguards are there on the use of such information? Can relatives of the individuals whose DNA is stored also be tracked? The possibility that once the DNA of the immigrant and their relatives is entered in the databank, this could become a law enforcement tool is a genuine concern. If mitochondrial DNA is stored, rather than

\textsuperscript{107} Cronin Memorandum *supra* note 6 at 5.

\textsuperscript{108} Aytes Memorandum, *supra* note 7.

\textsuperscript{109} “Under no circumstance should any other party, including those being tested, be permitted to carry or transport blood or tissue samples or test results” State Department manual on sample collection.

\textsuperscript{110} Borenstein, *supra* note 32, at 856-57.
nucleic DNA, the siblings of the owner of the banked DNA could potentially be identified, because all of a women’s offspring have the same mitochondrial DNA sequence.\(^{111}\) Over thirty years ago, Justice Brennan identified potential privacy hazards in storing medical information in computer databases.\(^{112}\) “The central storage and easy accessibility of computerized data vastly increase the potential for abuse of that information, and I am not prepared to say that future developments will not demonstrate the necessity of some curb on such technology.”\(^{113}\) The genetic information stored in governmental or private databases has the potential for even greater abuse and privacy infractions.\(^{114}\)

Courts have denied the expectation of privacy for undocumented immigrants.\(^{115}\) In February 2007 the Department of Justice announced a plan to collect DNA from arrested undocumented workers – an expansion of governmental powers because prior to this, only convicted felons were required to provide DNA evidence.\(^{116}\) Information is

\(^{111}\) See Michelle Hibbert, supra note 44, at 783, 785 (describing the arrest and conviction for rape of the brother of an individual whose DNA was banked, because the DNA was so similar that the laboratory suggested that the DNA might belong to the relative. Hibbert questions the ethical and legal legitimacy of this practice of genomic intrusion – does a sibling lose “privacy expectations of being free of searches merely because he is related to an offender”). See also Frederick R. Bieber, DNA Fingerprinting and Civil Liberty, 34 J.L. MED & ETHICS 222, 226 (2006) (relating several examples where analyzing DNA of family members has been used to identify suspects, leading to arrests and confessions).

\(^{112}\) See Michelle Hibbert, supra note 44 at 819.


\(^{114}\) See Moyer & Anway, supra note 43, at 706-07, 714 (discussion of Federal and State legislation governing the use of genetic information and the prediction that “as early judicial decisions shaped the future of DNA forensics, so too will early decisions shape the future of genetic engineering and genetic privacy”).


timeless – yet these tests can provide information protected by the Fourth Amendment.\footnote{117}{U.S. CONST. amend. IV.}

This could this pose a problem to petitioner, beneficiary or their relatives who might be identifiable from the DNA. Procedures must be instituted for the samples and/or results to be discarded so that they could they be used again for other purposes.

**C. Grounds of Inadmissibility**

The INA provides that aliens seeking to enter the United States as permanent residents or on a temporary basis as non-immigrants may be deemed inadmissible based on health concerns such as “communicable disease of public health significance;”\footnote{118}{8 U.S.C. § 1182(a)(1)(A)(i) (2008); 22 C.F.R. § 34.2(b) (2006).} physical or mental disorders;\footnote{119}{8 U.S.C. § 1182(a)(1)(A)(iii) (2008); 22 C.F.R. § 34.2(d)(2) (2006).} and persons determined to be drug abusers or addicts.\footnote{120}{8 U.S.C. § 1182(a)(1)(A)(iv) (2008).}

Government access to health information hidden in DNA may be damaging to the beneficiary. In addition, information from these tests may make the petitioner or beneficiary unattractive to insurance companies or employers. If these tests reveal the potential for future health problems, discrimination in hiring or in the ability to obtain health or life insurance could ensue.

The INA provides inadmissibility on the above health grounds and a catch-all – “likely to become a public charge”\footnote{121}{INA § 212(a)(4) (2008); 8 U.S.C. § 1182(a)(4) (2008); 22 C.F.R. § 40.41 (2006).} If there are no clear limits on the use of the DNA
information collected from the petitioner and the beneficiary, the public charge grounds of inadmissibility could be used to deny entrance based on present or future health risks. For example, if the DNA test shows that the beneficiary carries the gene for breast cancer, it could be used to deny admission. HIV positive individuals may be denied admission on the basis of the public-charge ground because the potential cost of health care for someone who develops AIDS is staggering. In an anti-immigrant environment, the routine collection and storage of this DNA material, given voluntarily, for an important purpose, could become a means of keeping a check on potential criminal immigrants. Although this might seem far-fetched, it is no more unbelievable than former New York Mayor and Presidential candidate Rudolph Giuliani’s suggestion to the New York legislature to collect donations of DNA samples of each newborn for the state databank, to facilitate their apprehension if the child grows up to be a criminal.

VII. Potential Solutions

Although DNA tests offer administrative convenience and perceived accuracy, the USCIS should resist any pressures to require the test for all family-based applicants. The current policy for the use of such tests should be maintained. The USCIS should recommend DNA tests only if questionable or no documents are available to prove the biological relationship between the petitioner and beneficiary. In many cases, DNA testing will confirm the relationship and the parties will be reunited. If the results


122 The Department of State recognizes that the public charge ground may be appropriate even when a valid affidavit of support is provided by the petitioner. “Chronic illness, physical or mental handicaps, extreme age or other serious conditions” are among the conditions identified. Cable, 98-State-102426. Accord USCIS, 71 Fed. Reg. 35732, 35737-38 (June 21, 2006).

123 See David Seifman, Getting DNA Samples at Birth Fine with Rudy, N.Y. POST, Dec. 17, 1998, at 34
demonstrate that there is no genetic relationship, then a procedure that is consistent with
the legislative intent of the Immigration and Nationality Act should be employed.\textsuperscript{124} Congress recognized the importance of reunification of families as a primary goal of the statute.\textsuperscript{125} For immigrant families, adjusting to cultural, financial and possibly language differences, the supportive role a family can play cannot be underestimated. The USCIS should recognize social fatherhood to allow families to remain in tact.

Those who advocate use of DNA testing will point out that such tests can eliminate the potential for fraud. Yet, it cannot be assumed that when the DNA shows no match, there is attempted fraud. As Mr. Owusu’s and the other cases cited in the New York Times article demonstrate, DNA testing can reveal unexpected results for parties with good intentions.\textsuperscript{126} There are many strong familial bonds where there is no blood or adoptive relationship. The equitable concept of estoppel should be employed to permit these families to reunite.

The government is capable of detecting immigration fraud. For example, under the Immigration Marriage Fraud Act there are several precautions to discourage fraudulent applications.\textsuperscript{127} The granting of a two-year conditional permanent residence

\begin{footnotesize}

\textsuperscript{125} Id.

\textsuperscript{126} Swarns supra note 32 at

\end{footnotesize}
for beneficiaries married less than two years and the joint filing of a petition (Form I-751) to remove the conditional permanent residence status serve to deter sham marriages. A marriage is presumed to be fraudulent and the alien is subject to deportation if a marriage entered into within two years prior to obtaining lawful permanent residence, is judicially annulled or terminated within two years after the lawful permanent resident’s entry in the United States. In the subsequent deportation proceedings, the burden is on the alien to rebut the presumption that s/he attempted to evade the immigration laws. The penalties for marriage fraud are substantial – imprisonment for up to five years and a $250,000 fine. In addition, a finding of fraud will bar the alien from obtaining permanent residence, even in a subsequent genuine marriage to another United States citizen or lawful permanent resident. Similar penalties would be necessary to discourage fraud in cases of claimed social fatherhood.

128 The IMFA established a procedure for the removal of the conditional residence. Ninety days prior to the second anniversary of the granting of the lawful permanent residence status, the couple must file a joint petition that establishes that the marriage is valid under the laws where it occurred, was not judicially annulled or terminated (except through the death of a spouse), was not entered into to obtain immigration benefits and no fee was paid for the filing of the petition. An interview with both parties may be required. 8 U.S.C. § 1186a (Check INA § 216(d) (1)(A).


130 Rodriguez v. INS, 204 F.3d 25, 28 (1st Cir. 2000) (finding that the state court judgment ending marriage that was based upon a finding of fraudulent intent to evade the immigration laws was a “presumption plus” that was not sufficiently rebutted).


132 See 8 U.S.C. § 1154(c) as amended by Pub. L. No. 99-639 § 4 providing a bar to permanent residence on the basis of an immediate relative petition if one engages in fraud or attempts or conspires to engage in fraud. See also 1 IMMIGRATION LAW AND DEFENSE § 4:40 (2009) (indicating that a finding of fraud… does not preclude approval of a second spousal visa petition filed by a petitioner on behalf of the same beneficiary if new evidence can be presented to overcome the earlier finding. See Matter of Isber, 20 I & N Dec. 676, (1993).
The Stokes interview is currently used in the New York district to discourage marriage fraud. The Stokes interview is a secondary interview where the USCIS officer separates the parties and questions them, using questions that a couple who are living together should be able to answer. They may be asked about their courtship, the marriage ceremony and honeymoon, color of their toothbrushes or sleeping attire, to compare their responses. The USCIS uses this as one means of detecting marriage fraud. Similar interview procedures could be put in place to combat fraud in family-based cases when the DNA results are inconclusive or show no familial relationship and the parties make an equitable claim of social fatherhood.

Conclusion

More oversight of the DNA testing companies and policies regarding quality assurance and privacy are necessary. Although the economic efficiency and administrative ease of such testing may lull us into complacency, the potential for abuse is substantial and once released, the DNA genie cannot be put back in the bottle, so we should proceed with caution. The legislative intent of the INA is consistent with the


(1) written notice to the parties of their rights, including the right to an attorney;
(2) the right to present evidence, including live witnesses, to cross-examine, and to rebut adverse evidence;
(3) the right to inspect the record of proceedings;
(4) the right to subpoena witnesses and documents;
(5) verbatim record of the proceeding (done by recording);
(6) referral back to the presiding officer for further adjudicatory proceedings after an investigation, if any; and
(7) a decision based solely on evidence of record.

134 See 1 IMMIGRATION LAW AND DEFENSE § 4:40 (2009)
movement in family law towards the recognition of social fatherhood and the equitable concept of estoppel. Immigration law should accept this more expansive view of fatherhood and allow fathers who are not the biological parent to sponsor and be sponsored for lawful permanent residence.