

Moving the Virtual Border to the Cellular Level: Mandatory DNA Testing and the U.S. Refugee Family Reunification Program

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Should the United States impose a genetic definition of “family” on refugees seeking to reunite with their families? This Comment chronicles the birth of DNA testing in the U.S. Refugee Family Reunification (Priority Three, or P-3) Program. It explores the inception of new rules that will require DNA testing for individuals processed as Priority Three refugees. Drawing on historical uses of non-DNA forensic testing in the U.S. immigration system and other areas of U.S. law, the Comment analyzes whether DNA testing will work in this context. It asks whether it is appropriate or even feasible to test family connections using DNA testing, a process which necessarily implies that family members must be biologically related to the refugee-applicant.

In particular, this Comment questions the wisdom of such a test in light of the norms of family unity and reunification that guide the Priority Three Program. It contemplates whether it is prudent or fair to require refugee families to prove their relationships through DNA testing, and what possible long-term effects DNA testing may have on U.S. refugee admissions, considering the already securitized state of the U.S. immigration discourse. Finally, the Comment offers suggestions to the agencies and officers tasked with implementing mandatory DNA testing in the P-3 Program. Ultimately, how much

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* J.D. Candidate, University of California, Berkeley, 2012. The author would like to thank Professor Kate Jastram for her extraordinary comments and guidance, and Professors David Caron and Jamie O’Connell for their outstanding mentorship and support. Warm thanks to the *California Law Review* staff, especially Makda Goitom, Emma Mann-Meginniss, and Chad Dorr. Finally, to the International Rescue Committee whose heroic employees work tirelessly on behalf of refugees and displaced people every day.

weight and faith should we place in DNA testing? And how far may the technology legitimately shape the U.S. refugee admissions program? As this Comment will argue, education, caution, and compassion are critical to the inquiry.

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INTRODUCTION

Introducing mandatory DNA testing in the refugee family reunification program poses grave problems for refugees. Should a buccal cheek swab determine a refugee's right to reunify with his or her family members? "[K]eep[ing] asylum seekers from the procedural door"¹ is the preferred solution in an increasing number of states. That is, to prevent refugees and others from setting foot on its shores, the country thwarts the individual's first step. In the United States, the advent of DNA testing and its increased use both within and outside of the immigration context have moved the virtual border to the cellular level.

DNA verification is often a welcome safeguard against fraudulent allegations of family relationships. The utility of DNA verification becomes less certain, however, as applied to refugees who genuinely believe that their families do qualify under the family reunification rubric, or who have absorbed individuals into their families following war and catastrophe. These distinctions demand urgent attention in light of the new rules proposed by the U.S. State Department, which will require DNA testing in the Refugee Family Reunification (Priority Three, or P-3) Program. Namely, while DNA testing has been used for years as a secondary means of confirming relationships between citizens, permanent residents or refugees, and related individuals who wish to join them in the United States, DNA testing has never been compulsory. Whether making it so is both legal under U.S. and international law and also wise policy are the subjects of this Comment.

I argue that mandatory DNA testing imposes an overly narrow definition of "family" on refugees seeking to reunify with their families through the Priority Three Program. While the United States has a legitimate interest in preventing fraud, and understanding that DNA testing might help some refugees who lack other documentation to prove their biological ties, I believe this constricted definition of family will destroy the fragile "families" that many refugees have managed to create following war, trauma, and displacement. Furthermore, I contend that individuals who have joined or been absorbed into families and survived the unthinkable should in many cases be credited with "family" member status.

In Part I of this Comment, I will provide a brief overview of the opportunities available to refugees who hope to reunify with their family members. This Part will focus specifically on the Priority Three Program. Part II will chronicle the birth of DNA testing in U.S. refugee admissions and the inception of new rules that will require DNA testing for individuals processed as P-3 refugees. Part III will explore the refugee family—its unique contours and realities—and the norms of family unity and reunification which guide

1. See *THE REFUGEE IN INTERNATIONAL LAW* 390 (Guy S. Goodwin-Gill & Jane McAdam eds., 3d ed. 2007).

U.S. refugee admissions. Part IV will consider the technology of DNA testing, exploring how this and other scientific applications have fared in the U.S. immigration system and in other areas of U.S. law. Part V will examine the policy implications of implementing mandatory DNA testing in the P-3 Program considering the already securitized state of the U.S. immigration discourse. Finally, Part VI will offer recommendations to the agencies and officers tasked with employing compulsory DNA testing in the P-3 Program. It will propose that further research, broadmindedness, and restraint are essential.

I.

PRIORITY THREE PROCESSING IN CONTEXT

The U.S. immigration system offers different options to individuals seeking refugee status and admission to the United States. The Priority Three program is just one of these options. This Part will furnish a broad overview of U.S. refugee admissions, paying special attention to family reunification mechanisms and the P-3 Program. In addition, this Part will explain the goals and purposes of the P-3 Program, particularly as they relate to DNA testing.

A. A Brief Overview of the U.S. Refugee Admissions

Refugees are individuals who are outside their country of nationality,² and who, due to “persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group or political opinion” are unable or unwilling to return to their country of origin, or to avail themselves of their country’s protection.³ Some refugees resettle in other countries that offer them greater protection. To resettle in the United States, refugees are classified according to a priority-based system.⁴ Priority 1 (P-1) refugees are identified by the Office of the United Nations High Commissioner for Refugees (UNHCR), U.S. embassies, or accredited nongovernmental organizations as constituting urgent individual cases.⁵ Priority 2 (P-2) refugees are those whom the United States deems to be of special humanitarian concern. Priority 3 (P-3) refugees are individuals of designated nationalities whose immediate family members entered the United States as refugees or who were granted asylum,⁶ enabling the refugee-applicant to apply for protection as the

2. See Immigration and Nationality Act (“INA”) § 101(a)(42)(B), 8 U.S.C. § 1101(a)(42)(B) (2006) (allowing some individuals who remain inside their countries of origin to qualify as refugees if the President so specifies, or if they are stateless).

3. INA § 101(a)(42)(A), 8 U.S.C. § 1101(a)(42)(A).

4. See U.S. DEP’T OF STATE ET AL., PROPOSED REFUGEE ADMISSIONS FOR FISCAL YEAR 2011 REPORT TO THE CONGRESS 7–15 (2010) [hereinafter FY 2011 REFUGEE ADMISSIONS REPORT], available at <http://www.state.gov/documents/organization/148671.pdf>.

5. *Id.* at 8; cf. UNHCR, DIV. OF INT’L PROTECTION, RESETTLEMENT HANDBOOK ch.5.3 (rev. ed. 1998) (explaining the refugee resettlement submissions process).

6. INA § 208(a), 8 U.S.C. § 1158(a) (asylum seekers are individuals who are already in the United States, and whose claims are adjudicated on U.S. soil, as opposed to refugees who are granted

immediate family member of the refugee or asylee who is already in the United States. In addition to these priority categories, refugees of special humanitarian concern can be admitted in response to unforeseen emergencies.⁷

The Refugee Act of 1980 established the U.S. refugee processing procedures.⁸ Under the Refugee Act, the Department of Homeland Security (DHS) is the agency responsible for refugee processing. DHS and U.S. Citizenship and Immigration Services (USCIS) field officers are responsible for making individual refugee status determinations abroad,⁹ and USCIS operates a Refugee Corps whose officers travel overseas to interview potential resettlement cases.¹⁰ The State Department's Bureau of Population, Refugees and Migration (PRM) funds and helps to select the populations and groups that are eligible for resettlement.¹¹ USCIS Refugee Officers then interview these individuals.

Individuals who are overseas and who meet the definition of "refugee" and also secure sponsorship from an individual or a voluntary agency in the United States may apply for resettlement.¹² The process involves rigorous information collection and extensive medical and background checks.¹³ Certain grounds of inadmissibility may be waived for humanitarian reasons or to ensure family unity.¹⁴

B. The Importance of Family Unity and Reunification

For decades, the U.S. immigration system and refugee admissions program have been guided by goals of family unity and reunification, as opposed to scientific certainty and precision.¹⁵ The right of a family to live as

refugee status while still outside the United States).

7. See INA §§ 207(a), (b), 8 U.S.C. §§ 1157(a), (b).

8. See The Refugee Act of 1980, Pub. L. No. 96-212, 94 Stat. 102 (codified as amended in scattered sections of 8 U.S.C.).

9. Resettlement Section, UNHCR Wash., US Resettlement Overview (2008), available at <http://www.unrefugees.org/atf/cf/%7BD2F991C5-A4FB-4767-921F-A9452B12D742%7D/USResettlementProgramOverview.pdf>.

10. See USCIS, Presentation, The U.S. Refugee Admissions Program 7 (Mar. 2011), available at [http://www.uscis.gov/USCIS/Resources/ResourcesforCongress/CongressionalReports/2011 National Immigration & Consular Conference Presentations/Refugee_Admissions_Program.pdf](http://www.uscis.gov/USCIS/Resources/ResourcesforCongress/CongressionalReports/2011%20National%20Immigration%20&%20Consular%20Conference%20Presentations/Refugee_Admissions_Program.pdf).

11. See *Bureau of Population, Refugees, and Migration*, U.S. DEP'T OF STATE, <http://www.state.gov/g/prm> (last visited Aug. 19, 2011).

12. See DHS Admission of Refugees Rule, 8 C.F.R. § 207.2(d) (2011).

13. See 8 C.F.R. § 207.1(a) (requiring an applicant to file an application with the Service office having jurisdiction over the area where the applicant is located or, when service areas are too far away, at designated U.S. consular offices); 8 C.F.R. § 207.2(a) (requiring Form I-590 (Registration for Classification as Refugee) and, for applicants fourteen years of age or older, biographical information forms and applicant cards); 8 C.F.R. § 207.2(c) (requiring a medical examination).

14. See 8 C.F.R. §§ 207.3(b), 1207.3(b).

15. See Immigration and Nationality Act of 1952, Pub. L. No. 82-414, 66 Stat. 163 (establishing the foundation of modern immigration law and emphasizing familial relations). The current INA continues this tradition, unifying temporarily divided families by exempting immediate relatives from family-based quotas and establishing comprehensive family-based preferences. See 8 U.S.C. §§ 1101(b)(1), 1151(b)(2)(A)(i) (2006); see also The Refugee Act of 1980, Pub. L. No. 96-212, 94

an integral whole is protected by international human rights law and also international humanitarian law.¹⁶ UNHCR, which is responsible for refugee protection, defines "family reunification" in reference to dependency, and thus recognizes both the variety of family relationships around the world and the importance of accommodating them.¹⁷

Understandably, family reunification is of the highest priority to the successfully resettled refugee or recognized asylee. DHS permits the admission of a refugee's spouse and children so long as these relationships existed prior to the principal refugee's admission to the United States.¹⁸ The relationship must also continue to exist at the time of the principal refugee's admission to the country.¹⁹ Children who were *in utero* at the time of admission²⁰ and those who have turned twenty-one years old during the process of admission or afterwards, but who are unmarried and were under twenty-one when their parent applied for refugee status, are also admissible.²¹ Other family relationships may not qualify,²² but more distant relatives can be granted DHS interviews and qualify for refugee status on their own, provided that they reside in the same household as the admitted refugee or asylee and fulfill other requirements.²³

Stat. 102, § 201(b) (codified at 8 U.S.C. § 1157(c)(3)) (permitting the Attorney General to waive most admission requirements "for humanitarian purposes, to assure family unity, or when it is otherwise in the public interest").

16. See Kate Jastram & Kathleen Newland, *Family Unity and Refugee Protection*, in *REFUGEE PROTECTION IN INTERNATIONAL LAW* 555, 566 (Erika Feller et al. eds., 2003).

17. See UNHCR, *supra* note 5, at ch. 4.6.5 ("There is no internationally recognized definition of dependency. For operational purposes, with regard to the active involvement of UNHCR offices in individual cases, the concept of *dependent* persons should be understood as persons who depend for their existence substantially and directly on any other person, in particular because of economic reasons, but also taking emotional dependency into consideration.").

18. 8 C.F.R. § 207.7(c).

19. *Id.*

20. *Id.*

21. INA § 207(c)(2)(B), 8 U.S.C. § 1157(c)(2)(B).

22. See INA § 207.7(b), 8 U.S.C. § 1157(c)(2); see also USCIS, I-730 REFUGEE/ASYLEE RELATIVE PETITION INSTRUCTIONS 2 (2011) [hereinafter, I-730 PETITION INSTRUCTIONS], available at <http://www.uscis.gov/files/form/i-730instr.pdf> (listing the following relatives of refugees as ineligible for admission: a spouse or child who has previously been granted refugee or asylee status; an adopted child if the adoption took place after the child turned sixteen years old, or if the child has not been in legal custody and living with the adoptive parent(s) for at least two years; a stepchild, if the marriage that created the relationship occurred after the child became eighteen years old; a husband or wife, if each was not physically present at the marriage ceremony and the marriage was not consummated; a husband or wife, if it is determined that the individual has attempted, or conspired to enter, into a marriage for the purpose of evading immigration laws; and parents, siblings, grandparents, grandchildren, nieces and nephews, uncles and aunts, cousins and in-laws).

23. See *Overseas Refugee Processing; Derivative Refugees*, 63 Fed. Reg. 43,957 (Sept. 16, 1998).

C. Priority Three Processing: One Avenue for Some Refugees to Reunify with Their Family Members

The United States offers two routes by which a refugee can reunify with his or her family members: the P-3 Program and I-730 processing. These programs differ in several respects—namely, who can apply, the applicant's status at the time of application, and the evidence required to prove eligibility. There are also differences with respect to the applicant's security screening procedures and the appeals processes available to individuals whose applications are denied.

The first difference between I-730 processing and the P-3 Program involves applicant eligibility. Unlike I-730 processing, which is open to all nationalities, the P-3 Program is confined to refugees from designated countries. In fiscal year 2011, these countries included: Afghanistan, Bhutan, Burma, Burundi, the Central African Republic, Chad, Colombia, Cuba, the Democratic Republic of Congo (DRC), Eritrea, Ethiopia, Iran, Iraq, the Republic of Congo (ROC), Somalia, Sri Lanka, Sudan, Uzbekistan and Zimbabwe.²⁴ The P-3 Program allows eligible, resettled refugees who are eighteen years of age or older to bring their immediate relatives—spouses, unmarried children under the age of twenty-one, and their parents—to the United States.²⁵ The petitioner (the refugee in the United States) formally requests allowance for his family members who are living overseas (beneficiaries) to join him. To qualify for P-3 processing, the beneficiary must be outside his or her country of origin as well as the United States. An eligible refugee relative living in the United States must file an Affidavit of Relationship (AOR).²⁶ The AOR records information about the claimed family relationship and could, until recently, be presented as an informal petition on the letterhead of a sponsoring refugee resettlement agency.²⁷ Information culled from the petitioning refugee's own, original application, as well as subsequent interviews and filings, are checked against relationships claimed on the P-3 family reunification application.²⁸

The I-730 process involves different requirements and expectations. Proceeding via this route, individuals admitted to the United States as refugees

24. See INA § 207(e), 8 U.S.C. § 1157(e) (authorizing the President to designate nationality groups eligible for the P-3 Program in his annual report to Congress); see FY 2011 REFUGEE ADMISSIONS REPORT, *supra* note 44, at 13 (explaining that selection of qualifying countries by the State Department Bureau of Population, Refugees, and Migration, in consultation with DHS and USCIS, occurs at the beginning of each fiscal year, and according to a certain set of criteria).

25. *The U.S. Refugee Admissions Program*, U.S. DEP'T OF STATE, <http://www.state.gov/g/prm/c26471.htm> (last visited Aug. 19, 2011).

26. *Id.*

27. See DAVID A. MARTIN, THE UNITED STATES REFUGEE ADMISSIONS PROGRAM: REFORMS FOR A NEW ERA OF REFUGEE RESETTLEMENT 48–49 (2005); see also JILL ESBENSHADE, AN ASSESSMENT OF DNA TESTING FOR AFRICAN REFUGEES 13 (2010).

28. ESBENSHADE, *supra* note 27, at 10.

or granted asylee status may submit within two years of their admission to the country, and as the principal applicants, a Form I-730 Refugee/Asylee Relative Petition²⁹ for their spouses³⁰ and minor,³¹ unmarried children to “accompany” or “follow to join” them.³² Asylees can also file I-730 Petitions, but the following discussion focuses only on refugees. Proceeding via the I-730 Program necessitates filing a separate Form I-730 for each family member.³³ The Form I-730 can be filed for relatives who are not eligible for the P-3 Program. While more nationalities can apply, fewer family members are able to, and the process used to cross-check claimed relationships is seemingly more demanding.³⁴

Evidence scrutinized to determine the validity of a claimed spousal or parent-child relationship on a Form I-730 includes marriage, birth and baptismal certificates, and photographs or fingerprints of the family members for whom the refugee is filing.³⁵ Although the unavailability of marriage and birth certificates creates a presumption of ineligibility,³⁶ an applicant may submit secondary evidence (such as church, school, or census records) to substantiate a claim.³⁷ Lacking these, an applicant may submit affidavits from living individuals who possess personal knowledge of the individual, or the event he or she seeks to verify (such as the location of a birth or a marriage). Affidavits are closely scrutinized.³⁸ As a last resort, the applicant may submit to Blood Group Antigen or Human Leukocyte Antigen (HLA) blood parentage tests, which identify antigens (molecules) that produce an immunological response on white blood cells to determine parentage, in order to prove a family relationship.³⁹ Tests are conducted at the refugee’s expense.⁴⁰ If none of these forms of evidence is available, the I-730 will be denied.⁴¹ An appeal from the refusal of an I-730 petition is not necessarily guaranteed.⁴² Thus, an applicant

29. See 8 C.F.R. § 207.7(d); I-730 PETITION INSTRUCTIONS, *supra* note 22, at 1.

30. See 8 C.F.R. §§ 101(a)(35), 101(b)(1)(A), (B), (C), (D), or (E).

31. See 8 C.F.R. §§ 207.7, 208.21, 1208.21.

32. See INA § 207(c)(2), 8 U.S.C. § 1157(c)(2).

33. 8 C.F.R. § 207.7 (d).

34. See 8 C.F.R. §§ 207.7(d)–(e), 208.21(f), 1208.21(f).

35. See 8 C.F.R. §§ 207.7(e), 208.21(c)–(d), 1208.21(c)–(d); see also I-730 PETITION INSTRUCTIONS, *supra* note 22, at 3–4 (providing additional instructions regarding adopted children, stepchildren, and spouses from previous marriages that have been legally terminated, as well as acceptable forms of secondary evidence).

36. See 8 C.F.R. §§ 207.7(e), 208.21(c)–(d), 1208.21(c)–(d).

37. 8 C.F.R. § 204.2(d)(2)(v).

38. See *id.* (stating that the applicant must overcome the absence of primary and secondary evidence).

39. See 8 C.F.R. § 204.2(d)(2)(vi); see also *Human Leukocyte Antigen Test*, ENCYCLOPEDIA OF SURGERY, <http://www.surgeryencyclopedia.com/Fi-La/Human-Leukocyte-Antigen-Test.html> (last visited Aug. 19, 2011); 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*, 1994 B.Y.U.L. REV. 129 (1994).

40. 8 C.F.R. § 204.2(d)(2)(vi).

41. See 8 C.F.R. § 207.7(g).

42. See 8 C.F.R. §§ 207.7(g), 208.21(e), 1208.21(e); see also *Ngassam v. Chertoff*, 590 F.

may face great difficulties in verifying a claimed relationship because of the already demanding process that exists to determine its validity.

In addition to the differences regarding who can apply, I-730 processing and the P-3 Program differ with respect to the status family members must possess and the evidence required to prove that status. Beneficiary refugees applying through the P-3 Program must meet the U.S. definition of “refugee” on their own.⁴³ Beneficiary refugees applying through the I-730 petition receive refugee status on a derivative basis.⁴⁴ They do not need to meet the definition of “refugee” themselves.

Regarding the security screening process for individuals claimed as family members, the procedures also differ between the P-3 Program and I-730 processing. All refugee applicants must undergo background security evaluations. These consist of biographic name checks and sometimes fingerprint checks. PRM is responsible for the initial vetting procedures.⁴⁵ Whether additional biographic and biometric screening by the DHS/USCIS Refugee Access Verification Unit, or RAVU,⁴⁶ is required seems to depend on whether an individual applies through the P-3 Program or via I-730 processing. While some I-730 petitions are checked by RAVU, all P-3 applications undergo RAVU review.⁴⁷ Only by clearing RAVU may an application proceed.

Finally, the appeals process for a denied P-3 application is more capacious than that applied to I-730 applications. If denied, an AOR in support of a P-3 application can be resubmitted along with additional evidence for review.⁴⁸ This does not seem to be the case for I-730 applications.

Overall, the P-3 Program has many advantages over I-730 processing. While admission through the P-3 Program requires individuals to prove refugee status and to undergo additional background checks, more family members are admissible and some level of informality is tolerated with respect to affidavits. Finally, in the P-3 context, denied applications do not necessarily represent closed doors. For these reasons, the P-3 process seems to be both more exacting and more generous than I-730 processing.

Importantly, for a discussion on DNA testing, the P-3 Program is different from the I-730 application process in a less-than-savory way. Over the years, government officials involved in the P-3 Program have suspected high levels of fraud.⁴⁹ While cultural differences and lack of adequate civil records systems

Supp. 2d 461 (S.D.N.Y. 2008) (finding that USCIS’s decision to deny an I-730 is non-reviewable).

43. See MARTIN, *supra* note 27, at 48.

44. *Id.*

45. U.S. DEP’T OF STATE ET AL., *supra* note 4, at 17–18.

46. See JULIE FARNAM, U.S. IMMIGRATION LAWS UNDER THE THREAT OF TERRORISM 149 (2005) (noting that the Refugee Access Verification Unit was established following the September 11 attacks in order to screen refugees, especially P-3 applicants).

47. *Id.* at 150.

48. See MARTIN, *supra* note 27, at 49.

49. *Id.*

are to blame in some cases,⁵⁰ officials have long supposed that many individuals know their family members do not qualify for P-3 processing but apply anyway.⁵¹ Then, too, some officials have come to believe the extent of the fraud can only be explained by “much more cynical” behavior: namely, “refugee brokers” buying and selling P-3 slots.⁵² Calls for reform fell on deaf ears until the September 11 attacks.⁵³ In the wake of the tragedy, Immigration and Naturalization Service (INS) instituted RAVU⁵⁴ and tasked it with detecting, deterring, and responding to misrepresentation in the refugee admissions process—especially, it seems, the P-3 program.⁵⁵ For some refugees, the advent of RAVU meant long delays, denial, or suspension of their cases.⁵⁶ Post-9/11, some P-3 refugee applicants died waiting to be admitted to the United States.⁵⁷ In response to its assignment, RAVU explored the possibility of using DNA testing in refugee admissions as a way of reducing the perceived fraud.

II.

DNA TESTING AND THE P-3 PROGRAM

DNA testing has transformed many areas of law, including the criminal and family law regimes. Changes in criminal identification, exoneration, and child custody determinations supply a few ready examples. This Part will explore the introduction of DNA testing in the U.S. refugee admissions program. Specifically, it will consider DNA testing in regards to family reunification procedures and the DNA pilot that changed the application process for P-3 applicants. Considering the fact that the U.S. refugee admissions program has long emphasized the importance of family unity and reunifying families, this Part asks whether DNA testing furthers or frustrates these national commitments.

50. See FARNAM, *supra* note 46, at 149.

51. *Id.*

52. *Id.*

53. *Id.*

54. See MARTIN, *supra* note 27, at 4 (“Family-based access through the P-3 category has suffered in recent years from widespread fraud, but the system is now far better equipped to detect and deter such manipulation, primarily through the workings of DHS’s Refugee Access Verification Unit (RAVU).”).

55. See U.S. DEP’T OF STATE ET AL., PROPOSED REFUGEE ADMISSIONS FOR FISCAL YEAR 2007 REPORT TO THE CONGRESS 20 (2006) (“Through its Refugee Access Verification Unit (RAVU), USCIS has been able to screen out many fraudulent applications and has thereby increased the productivity and integrity of adjudications overseas.”).

56. See FARNAM, *supra* note 46, at 150.

57. See Anastasia Hendrix, *Post-9/11 Delays Hurt U.S.-Bound Refugees/Security Checks Leave Immigrants in Dangerous Limbo*, S.F. CHRON., Nov. 30, 2003, at A1 (chronicling the story of a ninety-two-year-old Sierra Leonean woman whose case was suspended in the wake of 9/11: “Patricia Johnson died with her floral-print suitcase still neatly packed and sitting in her apartment in Gambia, where it had sat for more than two years while she waited to come live with her daughter in the Bay Area.”).

A. A Short History of DNA Testing in U.S. Immigration Law

The U.S. immigration system and refugee admissions program have functioned for years without DNA testing.⁵⁸ The first documented mention of USCIS policy concerning DNA testing occurred in 2000 in a memorandum from then-Acting Executive Associate Commissioner Michael D. Cronin.⁵⁹ The Cronin Memo, as it became known, provided INS field offices with guidance on the appropriate use of DNA testing to establish parental relationships in immigration proceedings, and also in I-730 refugee and asylee family reunification determinations.⁶⁰ The Cronin Memo permitted INS field officers to suggest, but not to require, HLA or DNA testing when documentation of a family relationship proved inconclusive, or when blood tests could not verify a claimed relationship.⁶¹

The Cronin Memo was candid as to its authority to require DNA testing: it apparently had none, neither in statutes nor in regulations.⁶² The memorandum was equally frank regarding the accuracy and reliability of DNA testing: “no parentage testing, including DNA testing, is 100 percent conclusive.”⁶³ The Cronin Memo noted that “due to the expense, complexity and logistical problems and sensitivity inherent in parentage testing,” INS field officers were to be “extremely cautious” when suggesting DNA testing.⁶⁴

Despite these problems with DNA testing, the Cronin Memo identified the many advantages it held over traditional methods of proving biological relationships. Cronin observed that DNA testing could be “especially useful” in countries hampered by limited medical and transportation facilities.⁶⁵ Unlike HLA testing, DNA testing does not require live human blood cells, which can be difficult to obtain and have a short shelf life.⁶⁶ With DNA testing, the State Department recommends a buccal cheek swab—a swab of the inside of the mouth—to collect a DNA sample, since buccal swabs are “easier to collect,

58. DNA forensic testing utilizes “DNA sequences to identify an individual for legal purposes” and to “establish biological relationships between individuals.” *Genetics Home Reference: What Are the Types of Genetics Tests?*, THE NAT’L LIBRARY OF MED. (Aug. 15, 2011), <http://ghr.nlm.nih.gov/handbook/testing/uses>. The first mention of DNA testing in the immigration system appeared in the 2000 Cronin Memorandum, as will be discussed. See MICHAEL D. CRONIN, U.S. DEP’T OF JUSTICE, HQADN 70/11, GUIDANCE ON PARENTAGE TESTING FOR FAMILY-BASED IMMIGRANT VISA PETITIONS, (July 14, 2000), *reprinted in* 77 INTERPRETER RELEASES 1096, 1104–12 (July 31, 2000) [hereinafter CRONIN MEMORANDUM].

59. See CRONIN MEMORANDUM, *supra* note 58.

60. See Homeland Security Act of 2002, Pub. L. No. 107-296, Title IV(c)-(f); 116 Stat. 2135, 2177-2212 (abolishing the INS and creating the DHS, dividing and distributing the responsibilities of the INS among three different agencies).

61. See CRONIN MEMORANDUM, *supra* note 58.

62. *Id.*

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.*

non-invasive, painless, and easier to ship.”⁶⁷ Finally, the Cronin Memo articulated that DNA parentage testing could “often provide conclusive results even when not all parties [were] available for testing.”⁶⁸

As time wore on, the unforeseen, and in some cases highly damaging, consequences of submitting to a DNA test were revealed. Individuals paid good money for DNA tests,⁶⁹ only to pay a greater cost later on when the tests uncovered long-buried instances of infidelity and rape, often concealed due to fear, stigma, and shame.⁷⁰ Other individuals who had fled war and violence were surprised when their DNA tests revealed they were not biologically related to the children they thought were theirs.⁷¹ Finally, the availability of DNA tests began to affect the admissibility of previously acceptable documentation: evidence and affidavits no longer necessarily qualified family members for admission to the United States.⁷²

Thus, while Cronin likely believed that DNA testing would have a positive impact on the U.S. immigration system, time revealed unanticipated consequences which had a deleterious effect on individuals seeking refugee status.

B. The P-3 DNA Testing Pilot Program

Historically, the P-3 Program used DNA testing sparingly—only to overcome RAVU denials.⁷³ This changed as concerns mounted regarding the extent of fraud in the P-3 Program. In 2006, the USCIS Ombudsman recommended that USCIS Director Emilio T. González take several steps: one, accept DNA test results as secondary evidence of family relationships; two, grant authority to local USCIS offices to require DNA testing in some circumstances; and three, initiate a DNA pilot project to study how mandatory DNA testing might be employed to prove family relationships.⁷⁴ In response, three months later, González reported that USCIS was contemplating a

67. See *DNA Relationship Testing Procedures*, U.S. DEP'T OF STATE, http://travel.state.gov/visa/immigrants/info/info_1337.html (last visited Aug. 19, 2011).

68. See CRONIN MEMORANDUM, *supra* note 58.

69. See, e.g., *Pricing*, ANDERGENE LABS, <http://www.andergene.com/pricing.html> (listing its base fee for “Legal Paternity Test” as \$395) (last visited Sept. 2, 2011).

70. See Rachel L. Swarns, *DNA Tests Offer Immigrants Hope or Despair*, N.Y. TIMES, Apr. 10, 2007, at A1.

71. See J. Taitz et al., *The Last Resort: Exploring the Use of DNA Testing for Family Reunification*, 6 HEALTH & HUM. RTS. 20, 26 (2002) (describing a Kenyan family that discovered the child they thought was theirs was not their biological offspring; apparently, the parents mistakenly claimed the child after years of separation due to civil war).

72. See N.C. Aizenman, *DNA Testing a Mixed Bag for Immigrants; In Visa Cases, Certainty Has a Cost, Lawyers Say*, WASH. POST, Oct. 25, 2006, at A1 (quoting a U.S. immigration lawyer as saying, “What’s troubling is that it seems like the availability of DNA testing is leading to a greater level of mistrust of identity documents that otherwise would have been readily accepted.”).

73. See *PRM to Allow DNA Testing for Refugee Family Reunification*, REFUGEE REP., May 2003, at 9.

74. Letter from Prakash Khatri, CIS Ombudsman, to Emilio T. González, Dir., USCIS (Apr. 12, 2006), available at www.dhs.gov/xlibrary/assets/cisomb-rr-31-uscis-sop-02-0807.pdf.

regulation that would allow local offices to demand DNA testing in instances where evidence was lacking or where fraud was suspected.⁷⁵ González clarified that DNA testing would not be suggested in all cases, due to the high cost of DNA testing, but he intimated that should the cost drop, USCIS might consider a blanket requirement. In the meantime, González noted that USCIS might conduct a DNA test pilot overseas but did not specify a location.

Two years later, in 2008, Michael L. Aytes, then-Associate Director for USCIS Domestic Operations, reaffirmed the findings contained in the Cronin Memo.⁷⁶ Aytes underscored the need to inform refugee applicants that DNA tests were voluntary and that submitting to a DNA test did not necessarily guarantee approval of one's application.⁷⁷ According to Aytes, only laboratories approved by the American Association of Blood Banks (AABB),⁷⁸ the accrediting agency for U.S. laboratories that perform DNA testing, could test refugees.⁷⁹ Because AABB-accredited DNA labs comply with strict chain-of-custody requirements and laboratory procedures, this presents the impression that they ensure a higher degree of accuracy and authenticity with respect to DNA test results.⁸⁰ Importantly, and despite Cronin's concern regarding expense, Aytes reiterated that the cost of testing and any related expenses (doctor's fees or expenses associated with transmitting test materials) were the applicant's responsibility.⁸¹

Just a few months later, in February 2008, González followed through on the USCIS Ombudsman's suggestion to launch a pilot program implementing compulsory DNA testing. In response to reported incidents of fraud—misrepresented family relationships and the selling of slots by refugee “brokers”⁸²—USCIS and PRM conducted a DNA pilot sampling of 500 African (mainly Ethiopian and Somali) refugees in Kenya, who were applying for admission via the P-3 Program.⁸³ PRM used the DNA tests to ascertain whether the relationships overseas applicants had claimed were valid.⁸⁴ The pilot did not test the relationships between individuals seeking admission to the

75. See Memorandum from Emilio T. González, Dir., USCIS, to Prakash Khatri, USCIS Ombudsman (July 5, 2006), available at http://www.dhs.gov/xlibrary/assets/CISOmbudsman_RR_26_DNA_USCIS_Response-07-05-06.pdf (Response to Recommendation #26, DNA Testing).

76. See Memorandum from Michael L. Aytes, Assoc. Dir., Domestic Operations, to Field Leadership 3 (Mar. 19, 2008) [hereinafter Aytes Memorandum].

77. *Id.*

78. *Id.*; see *Accreditation Program*, AMERICAN ASS'N OF BLOOD BANKS, <http://www.aabb.org/sa/overview/Pages/program.aspx> (last visited Aug. 20, 2011).

79. See Aytes Memorandum, *supra* note 76.

80. See, e.g., *Immigration DNA Testing Resources*, DNA RELATIONSHIP TESTING INDUSTRY, <http://usimmigrationdnatesting.com/Html/Index.ashx?industry-review> (last visited Aug. 20, 2011).

81. See Aytes Memorandum, *supra* note 76.

82. See ESBENSHADE, *supra* note 27, at 10.

83. *Id.*; see also Miriam Jordan, *Refugee Program Halted as DNA Tests Show Fraud*, WALL ST. J., Aug. 20, 2008, at A3; see also Jennifer Ludden, *DNA Tests Refugees' Claims Of U.S. Relatives* (July 20, 2008), <http://www.npr.org/templates/story/story.php?storyId=92716733>.

84. See ESBENSHADE, *supra* note 27, at 10.

United States and their relatives who had already been admitted to the United States.⁸⁵ Apparently, the government did not believe that it had the authority to test these U.S.-based refugees.⁸⁶ To circumvent concerns regarding the prohibitive cost of DNA testing, the U.S. government paid for the pilot.⁸⁷

Following the sampling, initially conducted in Kenya and later expanded to other African countries,⁸⁸ PRM reported that the DNA tests had revealed many applicants were not biologically related to the individuals they claimed as family members.⁸⁹ PRM noted that officials were able to confirm claimed biological relationships in fewer than 20 percent of the alleged family units.⁹⁰ In the remaining 80 percent of the cases, PRM had either identified a fraudulent relationship or the individuals had refused to be tested.⁹¹ Allegedly, most of the identified fraud involved falsely claimed parent-child relationships. Announcing the results of the pilot program, DHS iterated that it was “still considering how to deal” with the tens of thousands of African individuals who had already been admitted to the United States through the P-3 Program.⁹² Although DHS officials were careful to clarify that they were not suggesting that the refugees already admitted into the United States had committed fraud,⁹³ the statement conveyed the persistent doubt which government officials held regarding fraud in the P-3 Program.

Criticism and fear rippled through refugee communities, refugee resettlement agencies, and advocacy groups.⁹⁴ Individuals living in refugee

85. See *Fraud Halts US Refugee Programme*, BBC NEWS (Aug. 21, 2008, 10:01 GMT), <http://news.bbc.co.uk/2/hi/7573768.stm>.

86. See ESBENSHADE, *supra* note 27, at 11 (“Anchors were not generally tested, since the government quickly decided that they did not yet have the legal authority to require the test of someone in the United States.”).

87. *Id.* at 14.

88. See Bureau of Population, Refugees & Migration, *Fraud in the Refugee Family Reunification (Priority Three) Program: Fact Sheet*, U.S. DEP’T OF STATE (Feb. 3, 2009), <http://www.state.gov/g/prm/rls/115891.htm> [hereinafter *Fraud in the Family*] (noting that most of the three thousand individuals tested were Somalis, Ethiopians, and Liberians, and that testing was later expanded to Ethiopia, Uganda, Ghana, Guinea, Gambia, and Cote d’Ivoire).

89. *Id.*; see also U.S. DEP’T OF STATE ET AL., PROPOSED REFUGEE ADMISSIONS FOR FISCAL YEAR 2010 REPORT TO THE CONGRESS 12 (2010) (characterizing test pilot findings as “indications of extremely high rates of fraud”) [hereinafter FY 2010 REFUGEE ADMISSIONS REPORT].

90. See *Fraud in the Family*, *supra* note 88.

91. See ESBENSHADE, *supra* note 27, at 11; see also *US Suspends African Refugee Program After Discovering Fraud*, VOA NEWS (Aug. 20, 2008), <http://www.voanews.com/english/news/a-13-2008-08-20-voa59-66676452.html> (quoting State Department Deputy Spokesman Robert Wood, “I believe it was in February when this pilot test was conducted in Nairobi, and what was found was that roughly 20 percent of the cases—in only 20 percent of these particular samplings—were we able to find a family connection.”).

92. See Kevin Diaz & Mitch Anderson, *Fraud Claims Halt Refugee Program*, MINNEAPOLIS STAR TRIB., Nov. 28, 2008, http://www.startribune.com/templates/Print_This_Story?sid=35240159.

93. *Id.* (quoting DHS spokesman Bill Wright, “We’re still considering how to deal with them. . . . But I can say this: We can’t assume that the refugees we’ve admitted committed fraud, just based on the pilot test results alone.”).

94. See Ludden, *supra* note 83.

camps who had sought to join their family members in America panicked.⁹⁵ As word of the pilot spread, individuals who had hoped to apply for refugee status and admission through the P-3 program began missing appointments and refusing to take the test in overwhelming numbers.⁹⁶ Researchers hypothesize that motivations might have included a desire to preserve their unorthodox or untraditional “families,” or concerns that these family ties would be broken by failure to prove their family bonds were biologically sound.⁹⁷ Troubling to agencies and researchers was the fact that, among the individuals tested, no-shows, refusals, and single negatives (one of several individuals claiming to be biologically related to a certain individual but not actually being so) were all equated with entire cases being fraudulent. Because the government never released the underlying statistics from the pilot, no one knows how many individuals fell into each category: no-shows, refusals, and single negatives.⁹⁸ Questions, it seems, trumped answers.

In response to the results of the pilot program, PRM immediately suspended the P-3 Program in Kenya and Ethiopia, and later in Uganda.⁹⁹ In October 2008, PRM stopped accepting P-3 AORs for all nationalities, preventing new cases from being considered.¹⁰⁰ For those P-3 applications already under review, USCIS’s response was inconsistent. In some cases, P-3 applications that USCIS had approved before the pilot was conducted were allowed to proceed, but only if all applicants submitted to DNA testing.¹⁰¹ Individuals whose claimed family relationships had been substantiated by DNA testing could proceed with resettlement, provided that every relative claimed on the petition agreed to and passed a DNA test.¹⁰² Some petitions that U.S. officials had reviewed before the pilot and sent on to processing centers (none in Africa)¹⁰³ were sent on without requiring DNA testing.¹⁰⁴ The reason these individuals were processed differently is unclear.

Cases were frozen. Spots went unused and were then lost. Despite the President’s authorization of 80,000 refugees for the fiscal year 2009, only 74,000 refugees were admitted.¹⁰⁵ Ultimately, the closure affected would-be applicants from eighteen countries.¹⁰⁶

95. See Jordan, *supra* note 83.

96. *Id.*

97. See ESBENSHADE, *supra* note 27, at 12.

98. *Id.* at 11.

99. *Id.*

100. See *Fraud in the Family*, *supra* note 88.

101. See ESBENSHADE, *supra* note 27, at 11.

102. *Id.*

103. *Id.*

104. *Id.*

105. See DANIEL C. MARTIN, DHS OFFICE OF IMMIGRATION STATISTICS, REFUGEES AND ASYLEES: 2009 (2010), available at www.dhs.gov/xlibrary/assets/statistics/publications/ois_rfa_fr_2009.pdf.

106. See *Fraud in the Family*, *supra* note 88.

Crushing for refugees seeking to reunify their families was the fact that PRM announced the P-3 Program would remain closed until new measures had been “finalized and implemented for verifying family relationship claims.”¹⁰⁷ PRM reported that the procedures would “likely include DNA testing.”¹⁰⁸ An unnamed PRM official told the press that it was possible the government would someday require DNA testing for all refugees who claimed family members.¹⁰⁹ Later, PRM reported to Congress that DNA testing would likely be compulsory if and when the P-3 program reopened.¹¹⁰ Additionally, PRM reported it was in the process of redesigning the AOR. Instead of accepting informal affidavits, PRM would now require affidavits to be submitted on an official Department of State form.¹¹¹ This measure constituted one more step in the fight against fraud—if fraud could, in fact, adequately define the situation.

Finally, in September 2010, refugees’ fears were realized: PRM published proposed rules requiring DNA testing for P-3 applicants.¹¹² PRM did not offer a date on which it would reopen the P-3 Program. In a separate document, PRM confirmed that the P-3 AOR would be redesigned but stated only that DNA testing “might” (not “would”) be required.¹¹³ While PRM has made no further statements since September 2010, experts agree this last announcement suggests DNA testing will be obligatory when the P-3 Program is restored.

III.

THE REFUGEE FAMILY: SINGULAR CHEMISTRY, SERIOUS OBLIGATIONS

Family unity and family reunification are fundamental norms reflected in the U.S. refugee admissions program and in international law. Pertinent to this Comment, family unity and family reunification are important goals that animate the P-3 Program. To assess the wisdom of implementing DNA testing in the P-3 Program, one must first understand the refugee family. This Part will address three questions: First, how do refugees conceive of their “families”? Second, how do the United States and other countries define “family” in the refugee context? And third, what assumptions gird these definitions, and how does DNA testing align with them?

107. *See id.*

108. *Id.*

109. *See* Ludden, *supra* note 83 (“The senior immigration official says, it’s possible. We’re committed to doing the right thing, the official says, even if that means a redesign of the program as a whole.”).

110. FY 2010 REFUGEE ADMISSIONS REPORT, *supra* note 89, at 12; *see also* FY 2011 REFUGEE ADMISSIONS REPORT, *supra* note 4, at 14.

111. *See* FY 2010 REFUGEE ADMISSIONS REPORT, *supra* note 89, at 12.

112. *See* 60-Day Notice of Proposed Information Collection: DS-7656; Affidavit of Relationship (AOR); OMB Control Number 1405-XXXX, 75 Federal Register 54,690–91 (Sept. 8, 2010) [hereinafter Proposed Rules].

113. *See* ESBENSHADE, *supra* note 27, at 12.

A. Who Is the Refugee Family?

The refugee family is a group of individuals whom war and emergencies have separated, scattered, and shattered, and who then reconstitute, absorb survivors and press on. Many families separate for what they assume will be a temporary period, believing it is better to do so; or that the chances of survival, services, or resettlement are more likely; or that further abuse, disease, and death are less so.¹¹⁴ Many of these families never find each other again. The result is families comprised of orphans raised by nonparental kin, foster children, unaccompanied child laborers, former fighters who escaped from rebel armies, and all manner of nonnuclear relatives, friends, and strangers banding together to beat the odds.¹¹⁵ Necessity and humanity create these “families of choice or circumstance,”¹¹⁶ not biology. Complicated circumstances “denuclearize” and “fragment” biological relations.¹¹⁷

DNA testing cannot appreciate the refugee family or the refugee experience, because DNA neither detects nor reflects the harsh realities that refugees face. Requiring DNA tests to prove family relationships necessarily implicates a restricted view of what a “family” is and means: a nuclear family that includes only biological relationships, or their legal equivalent, such as formalized adoptions. This definition of family does not comport with the realities of the refugee family, and DNA testing cannot adequately determine family relationships in all circumstances.

B. Policy Versus Reality: Goals of Family Unity and Reunification Versus the Refugee Family

The right to family unity is championed in various international and regional human rights instruments.¹¹⁸ The drafters of the 1951 Convention Relating to the Status of Refugees were emphatic that family unity was an essential right of refugees, and also that measures be taken to protect the

114. See GILLIAN MANN, NETWORKS OF SUPPORT: A LITERATURE OF CARE ISSUES FOR SEPARATED CHILDREN 11, 14 (2001).

115. See Jordan, *supra* note 83 (quoting a Catholic charities relief worker: “Some families are raising children who aren’t their own but whom they call son or daughter.”); see also Kathleen Beegle et al., *Orphanhood and the Living Arrangements of Children in Sub-Saharan Africa* (The World Bank, Policy Research Working Paper No. 4889, 2009), available at http://www-wds.worldbank.org/servert/WDSContentServer/WDSP/IB/2009/07/24/000112742_20090724110307/Rendered/PDF/WPS4889.pdf.

116. Esther Sample, *State Practice and the Family Unity of African Refugees*, 28 FORCED MIGRATION REV. 50, 51 (2007).

117. Anne Staver, *Family Reunification: A Right for Forced Migrants?* 6 (Refugee Studies Center Working Paper Series No. 51, 2008), available at <http://www.rsc.ox.ac.uk/publications/working-papers/RSCworkingpaper51.pdf>.

118. See T. Alexander Aleinikoff, *International Legal Norms and Migration: A Report*, in MIGRATION AND INTERNATIONAL LEGAL NORMS 1, 17–18 (T. Alexander Aleinikoff & Vincent Chetail eds., 2003).

refugee family.¹¹⁹ States that are members of the Executive Committee of UNHCR (the United States is one) have repeatedly emphasized the importance of family unity and reunification.¹²⁰ U.S. law explicitly touts the sanctity and protection of the family: the Immigration and Nationality Act of 1952 definitively stressed the importance of family relationships,¹²¹ the current INA prioritizes the unification of temporarily divided families,¹²² and the Refugee Act of 1980 emphasizes family unity.¹²³

Importantly, no single, internationally accepted definition or concept of “family” exists. International law recognizes many forms of family,¹²⁴ but with a few exceptions, international instruments do not define it.¹²⁵ This gap is due, in part, to the wide variety of families that exist, confounding a universal classification.¹²⁶ Differences in family creation, constitution, and operation abound among states and regions.¹²⁷ “Family” can refer to blood relations, bonds created by marriage, childbirth, or dependency, or to situations where family is “abolished in favour of slightly bigger groups: the labour unit, the kibbutz . . . , the commune [and] religious sects.”¹²⁸ “Families” are formalized, or simply recognized, by consummation, tradition, locality, necessity, contract, and happenstance.¹²⁹ Despite this diversity, there is one family construct that most cultures agree upon, however, and that is the nuclear family: consisting of a mother, father, and one or more biological or adopted minor children.¹³⁰ Even applying this widely recognized definition, there is still disagreement among countries as to what “minor child” means, or whether stepchildren, illegitimate children, common-law spouses or even polygamous partners qualify.¹³¹

While international and humanitarian law and human rights instruments “exhort states to take best efforts to foster family unity,” national governments, as an exercise of their sovereignty, retain broad discretion when it comes to implementing safeguards and protections for the family.¹³² Inherent in sovereignty is the “right to choose an admissions policy.”¹³³ Because some

119. See Jastram & Newland, *supra* note 16, at 557.

120. *Id.*

121. 8 U.S.C. § 1326 (2011).

122. See 8 U.S.C. §§ 1101(b)(1), 1151(b)(2)(A)(i).

123. See Refugee Act of 1980, Pub. L. No. 96-212, § 207(c)(3), 94 Stat. 102 (1980).

124. See Jastram & Newland, *supra* note 16, at 582.

125. See R. Perruchoud, *Family Reunification*, 27 INT’L MIGRATION 509, 513 (2009).

126. See GERASSIMOS FOURLANOS, SOVEREIGNTY AND THE INGRESS OF ALIENS 88 (1986).

127. See U.N. Int’l Human Rights Instruments, Compilation of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies 149, U.N. Doc. HRI/GEN/1/Rev. 7 (39th Sess. (1990); General Cmt. No. 19: Art. 23 (The Family)).

128. THE MIGRATION ACQUIS HANDBOOK 119 (Peter J. van Krieken ed., 2001).

129. See *id.* (noting areas where the importance of the family as the basic unit of society has been “embedded in virtually all cultures”).

130. See Jastram & Newland, *supra* note 16, at 582.

131. See Perruchoud, *supra* note 125, at 513–14.

132. See Aleinikoff, *supra* note 118, at 18.

133. See MICHAEL WALZER, SPHERES OF JUSTICE 61–62 (1983).

states choose more traditional, narrower definitions of “family,” however, pledges to reunify refugee families are not always fulfilled.¹³⁴ In particular, when a refugee “family” encompasses kinship relationships that are not consanguine, those relationships may not be recognized in a state that defines “family” according to purely biological or formalized legal connections. Hence, for refugee families, lofty rhetoric regarding family unity and reunification does not always bear itself out.¹³⁵

In the United States, as in many countries, refugee policies and applications do not always comport with each other, nor do they square with realities on the ground. Americans sometimes find it difficult to accept families that include family members whose “composition does not correspond to their own definition” of “family.”¹³⁶ Practically speaking, however, one is hard-pressed to find a “typical” American family. Every conceivable combination of relatives and nonrelatives occupy U.S. households, not just “expected nuclear family members.”¹³⁷ U.S. citizens enter into same-sex marriages, same-sex unions, common law marriages, and cohabitation arrangements. Children are adopted, fostered, and conceived through in vitro fertilization and surrogacy arrangements. The problem of defining “minor children” further demonstrates the inconsistencies between U.S. policy and U.S. reality. For immigration purposes, the United States defines “minor child” as an individual under the age of twenty-one.¹³⁸ That is, an individual who is twenty-one years of age or older is expected to fend, legally and otherwise, for himself. In many American households, however, children remain dependent on their parents long after they reach the age of majority.¹³⁹ Thus, the United States seems to apply a different standard to refugees than it does to individuals who are already citizens.

UNHCR’s definition of family, grounded in notions of dependency, probably comes closest to depicting the refugee family’s experience. Considering this broader definition of family, the United States’ own liquid and evolving notions of “family,” and, most importantly, refugee realities, we should seriously question our decision to impose a model of “family” upon refugees that we do not ourselves apply. We ought to go further and ask what

134. See, e.g., Scot. Refugee Council, “One Day We Will Be Reunited”: Experiences of Refugee Family Reunion in the UK (2010).

135. See Cynthia S. Anderfuhren-Wayne, *Family Unity in Immigration and Refugee Matters: United States and European Approaches*, 8 INT’L J. REFUGEE L. 347, 348 (1996).

136. See Perruchoud, *supra* note 125, at 514.

137. See Nora V. Demleitner, *How Much Do Western Democracies Value Family and Marriage? Immigration Law’s Conflicted Answers*, 32 HOFSTRA L. REV. 273, 290 (2003).

138. INA § 101(b)(1), 8 U.S.C. § 1101(b)(1).

139. See Beth Kobliner, *Guiding a Child to Financial Independence*, N.Y. TIMES, Nov. 4, 2010, at F9 (noting that a recent Pew Research Center study found that “[o]ne in five people aged 25 to 34 lives in a multigenerational household, typically with their parents. . . . That figure has nearly doubled since 1980” and that a recently released market research survey “found that 85 percent of [individuals in their twenties] graduating last spring planned to move back home, up from 67 percent as recently as 2006.”).

types of family situations might not have qualified as “families” according to the DNA pilot, but perhaps should have.

C. Mandatory DNA Testing Will Frustrate the Norms of Family Unity and Family Reunification When Applied to the Refugee Family

Refugee stories cannot be quantified; mandatory DNA testing attempts to do so.¹⁴⁰ Because it is exacting, DNA testing might end up punishing families that are not nuclear but “sustained . . . by social forces [more powerful] than biological realities.”¹⁴¹ Specifically, DNA tests will not be able to account for families who have not formalized their relationships due to war, lack of functioning bureaucracies, long-held tradition or poverty.¹⁴² DNA testing could have a particularly adverse effect upon children who discover that the individuals they call parents are not in fact biologically related to them.¹⁴³

One oft-used argument for requiring DNA testing in the P-3 Program is the necessity of preventing fraud. According to PRM, the P-3 DNA pilot identified “fraud” in many instances, that is, in many P-3 applications. The U.S. government’s definition of fraud actually encompassed at least two important groups, however: individuals who had no familial relationships with those they claimed on their applications and applied anyway, and individuals whose family relationships did not conform with the U.S. government’s definition of “family.” While DNA testing may combat the knowing fraud in the first group, it is a blunt instrument that could imperil the applications of those in the second. The individuals in this second group have consciously built new families following disaster and displacement but lack the formal biological ties that forensic tests require.

Implicit in the DNA pilot was a false, underlying assumption that every failed DNA test represented a knowingly false claim by a refugee. According to Jill Esbenshade, a leading immigration expert, most refugees who made “fraudulent” applications did so not because they did not feel a kinship relationship with those named on their P-3 applications, but because they knew they lacked the requisite biological ties to meet the U.S. definition of family.¹⁴⁴

140. See Janice D. Villiers, *Brave New World: The Use and Potential Misuse of DNA Technology in Immigration Law*, 30 B.C. THIRD WORLD L.J. 239, 248 (2010) (criticizing the reduction of immigrants to “mere genetic entities.”).

141. DOROTHY NELKIN & SUSAN LINDEE, *THE DNA MYSTIQUE: THE GENE AS CULTURAL ICON* 77 (1995); see also Susan Carroll, *Source of Refuge, and Separation*, HOUSTON CHRON., Apr. 12, 2009, at B1 (quoting a resettled refugee: “‘You have families that technically are not considered families in the States,’ Lipovac said, such as a refugee who takes in his brother’s children or those of a distant relative killed in a war. . . . ‘There should be a little more humanity in the whole process.’”).

142. See ESBENSHADE, *supra* note 27, at 12.

143. See Convention on the Rights of the Child, G.A. Res. 44/25, art. 8 ¶ 1, U.N. Doc. A/RES/44/25 (Nov. 20, 1989), available at <http://www.un.org/documents/ga/res/44/a44r025.htm> (“State Parties undertake to respect the right of the child to preserve his or her identity, including nationality, name and family relations as recognized by law without unlawful interference.”).

144. See ESBENSHADE, *supra* note 27, at 12.

Preventing the entry of individuals who have survived the worst humanity has to offer or “Good Samaritans” who assumed the care of children who might otherwise have died runs contrary to the norms of family unity, family reunification, and refugee protection that the United States pledges to uphold.¹⁴⁵ By turning away families that fail a DNA test, the United States could revictimize deserving individuals and unwittingly sanction the behavior of the, in some cases, corrupt individuals that caused their misfortune in the first place—such as the wars and atrocities that led many individuals to flee their countries. Finally, while mandatory DNA testing may justifiably deter some individuals who are not related to those they claim, or who steal scarce slots, DNA testing also has the potential to penalize many “actual famil[ies]”¹⁴⁶ shaped by suffering and upheaval, and who deserve protection but cannot meet the United States’ rigid, technical standards.

IV.

EVALUATING THE SCIENCE OF DNA TESTING

The definition of “family” underlying the U.S. refugee admissions program informs both those who have been admitted to the country and also the means by which the United States tries to combat future admissions challenges. Government officials identify fraud as one of the biggest problems in the U.S. immigration system, and particularly in the P-3 Program. To combat fraud in the immigration system as a whole, officials have utilized a variety of mechanisms to test the veracity of immigrants’ and refugees’ claims. PRM’s proposed mandatory DNA testing is yet another procedure in a long line of testing procedures that has brought disadvantages along with supposed advantages.

A. Fraud in the P-3 Program

“Fraud” is a major problem in the U.S. immigration system. It has been for some time. Both within and outside of the P-3 program, one finds numerous instances of individuals seeking and achieving refugee status but who are later found to have lied about their backgrounds.¹⁴⁷ The problem with DHS’s

145. See Pamela Constable, *Torn Asunder in War, Then Peace*, WASH. POST, Dec. 11, 2008, at B1 (quoting a refugee services official: “A village is burning. People are running. Someone grabs a child and ends up raising him. The DNA may not be the same, but in every other way, he is the parent. . . . We certainly do not support fraud, but there is a human aspect, too. If my brother were killed in Somalia and I saved his child, according to our culture, that child is mine.”).

146. See Anderfuhren-Wayne, *supra* note 135, at 381.

147. See Laura Bentley, *U.S. Attorney’s Office Grandstands over Old Refugee Fraud Cases*, SONORAN NEWS (Aug. 18, 2010), http://www.sonorannews.com/archives/2010/100818/frmtpg_refugee.html (chronicling the story of former Bosnian Serb soldiers who did not disclose their military service and gained refugee status in the United States); see also *Lawyer Is Convicted of Fabricating Asylum Files*, WASH. POST, Feb. 12, 2009, at B5 (covering the story of a U.S. immigration lawyer who fabricated asylum applications for needy clients trying to remain in the United States); see generally DAVE EGGERS, *WHAT IS THE WHAT: THE AUTOBIOGRAPHY OF VALENTINO ACHAK DENG* (2006) (detailing the story of a Sudanese “Lost Boy” who entered the United States as an orphan but whose

conception of “fraud,” however, is that it conflates actual cases of fraud—where an individual knowingly claims someone as a family member whom he or she does not consider to be a family member—with cases where an individual genuinely considers someone to be a family member but lacks the requisite biological ties to that person. While it is important to address the legitimate fraud in the P-3 Program, doing so requires first decoupling the fraud in the initial set of cases from the second set of cases, where individuals legitimately feel kinship relationships to persons claimed as family members. Failing to do so could have serious consequences.

From a legal standpoint, the United States has a responsibility to ensure that scarce refugee slots go to those whom Congress intended and as international law requires. These responsibilities are articulated in no uncertain terms by the Refugee Act of 1980.¹⁴⁸ With respect to asylees, numbers do not matter, because no numerical limits exist with respect to the individuals who are recognized as asylees and their family members.¹⁴⁹ Unlike asylees, however, the U.S. government has set aside a number of slots for refugees based on the perceived global need and on the capacity of the United States to receive them. Since the number of people who need to leave their countries is presumably greater than the number of refugees the United States is willing to accept, the number that the United States does accept should at least be the number it has agreed to. By tolerating fraud in the P-3 Program, however, individuals who are truly in need of permanent resettlement in the United States could be denied their chance at liberty. Scarce slots could reward individuals who have deliberately misused and abused the system.

The risk of fraud is far reaching. From a policy standpoint, operating a fair and just refugee family admissions program is one way that the United States can continue providing sanctuary to millions of people fleeing from persecution. It is an essential means by which the United States can honor its commitment to the world’s stateless and vulnerable. If the U.S. refugee resettlement program is perceived to be fraud ridden, donors, communities, and individuals that historically accept and support refugees could grow disillusioned and cease to provide assistance.¹⁵⁰ Other countries that accept refugees may do so as well. The result is more individuals in need of help and less willingness—both at home and abroad—to help them.

parents were actually living at the time).

148. See The Refugee Act of 1980, Pub. L. No. 96-212, § 101, 94 Stat. 102 (1980) (holding the United States to “respond to the urgent needs of persons subject to persecution in their homelands,” by providing individuals who have been persecuted based on their race, religion, nationality, political opinion, or membership in a particular social group with protection).

149. The U.S. president designates each year certain countries and areas of the world from which the United States will fulfill its annual refugee quota; no such designation exists for asylees.

150. See *A New Beginning in a Third Country*, UNHCR, <http://www.unhcr.org/pages/4a16b1676.html> (last visited Aug. 20, 2011) (explaining that the United States accepts the majority of the world’s refugees).

While DNA testing could certainly benefit some refugees who lack documentation by which to prove their claimed relationships, mandatory DNA testing in the P-3 Program will affect more than just these individuals. For refugees whose family ties are not biological, DNA testing will not be advantageous. In light of the challenges, a review of the successes and shortcomings of DNA testing and other non-DNA-based identification techniques is surely warranted. It is hoped that by doing so, refugees, U.S. refugee admissions officials, and U.S. policymakers will be better prepared for what lies ahead when DNA testing becomes binding.

B. Government Error and Lack of Evidence in the U.S. Immigration System

DNA testing is not the only way, nor is it perhaps the best way, to identify fraud in the immigration system and in the refugee admissions program. In other areas of immigration law, DHS has used alternate methods to fight fraud with mixed results. Two examples inform this assessment: the use of non-DNA forensic evidence culled from physical exams to test claims made by unaccompanied minors who arrive in the United States, and evaluations conducted by forensic and medical experts assessing the veracity of Convention Against Torture (CAT) claims.

The Unaccompanied Minors Act tasks Immigration and Customs Enforcement (ICE), a division of DHS, with apprehending, detaining, and deporting individuals who are not authorized to remain in the United States.¹⁵¹ Children who enter ICE custody require different treatment than adult detainees.¹⁵² Unaccompanied alien minors—individuals determined to be less than eighteen years of age and who are unlawfully in the United States without a parent or other legal guardian—must be transferred to the Department of Health and Human Services (HHS) Office of Refugee Resettlement's (ORR) custody once it is determined that they are unaccompanied.¹⁵³ The ramifications of an erroneous age determination are severe: different benefits and services, or possibly even deportation.¹⁵⁴

151. See William Wilberforce Trafficking Victims Protection Reauthorization Act, Pub. L. No. 110-457 § 235(b)(4), 122 Stat. 5077 (2008) [hereinafter William Wilberforce Act].

152. See OFFICE OF INSPECTOR GEN., U.S. DEP'T OF HOMELAND SEC., OIC-10-122, AGE DETERMINATION PRACTICES FOR UNACCOMPANIED ALIEN CHILDREN – UPDATE 1 (2010) [hereinafter OIG-DHS, AGE DETERMINATION PRACTICES].

153. See Homeland Security Act of 2002, Pub. L. No. 107-296, § 462(a)–(b), 116 Stat. 2202–04 (2002).

154. See Letter from Carmel Clay-Thompson, Acting Dir., Office of Refugee Resettlement, to State Refugee Coordinators (undated State Letter #01-27), available at <http://www.acf.hhs.gov/programs/orr/policy/sl01-27.htm> (last visited July 18, 2011) (noting that minors, children under eighteen, are afforded the full range of assistance, care, and services available to foster children in a state: while unaccompanied youth who are determined to be over the age of eighteen at the time of arrival in the United States must find employment and become self-sufficient much earlier and often do not enjoy the benefit of continued education).

In order to separate unaccompanied alien minors from adults in ICE custody, the agency seeks to establish a minor's date of birth through interviews and document review. Minors often arrive without documentation, however,¹⁵⁵ or guardians and other family members who can vouch for them. DHS sometimes employs forensic age determination techniques to try and establish a minor's age.¹⁵⁶ Dental exams, skeletal exams, and wrist x-rays are three commonly-used methods. Evidence exists that, to varying degrees, these methods are inexact, outdated, not scientifically rigorous, and prone to error.¹⁵⁷ In general, medical experts and UNCHR officials claim that forensic techniques can only provide rough estimates of biological age,¹⁵⁸ and that age assessment is more precise when derived from multiple indicators and assessed in a holistic fashion.¹⁵⁹

155. See UNHCR, REFUGEE CHILDREN: GUIDELINES ON PROTECTION AND CARE 102 (1994) (noting that many births go unregistered, and identity documents are not issued or are lost, forged, or destroyed); see also Jill Benson, *Age Determination in Refugee Children*, 37 AUSTL. FAM. PHYSICIAN 822 (Oct. 2008) (noting that, in some cultures, the significance of birthdays does not carry the same weight it does in Western countries, and that in some countries calendars are banned and administrative mistakes are common); Eskinder Negash, Office of Refugee Resettlement, U.S. Dep't of Health & Human Servs., *Age Determinations of Aliens in the Custody of HHS and DHS* (Sept. 15, 2010), available at http://www.acf.hhs.gov/programs/orr/whatsnew/ORR_Program_Instructions_on_Age_Determination_of_UAC.pdf (noting that unavailable documentation, contradictory or fraudulent documentation and/or statements, ambiguous physical appearance, and diminished capacity are problematic in the unaccompanied alien minor context).

156. Christopher Nugent, *Whose Children Are These?: Towards Ensuring the Best Interests and Empowerment of Unaccompanied Alien Children*, 15 B.U. PUB. INT. L.J. 219, 229 (2006).

157. See PHYSICIANS FOR HUMAN RIGHTS & THE BELLEVUE/NEW YORK UNIVERSITY PROGRAM FOR SURVIVORS OF TORTURE, FROM PERSECUTION TO PRISON: THE HEALTH CONSEQUENCES OF DETENTION FOR ASYLUM SEEKERS 130–32 (2003) [hereinafter PHYSICIANS & BELLEVUE]; see also UNHCR, TRENDS IN UNACCOMPANIED AND SEPARATED CHILDREN SEEKING ASYLUM IN INDUSTRIALIZED COUNTRIES 2001–2003, at 2–3 (2004), available at http://www.savethechildren.net/separated_children/other_resources/statistics/UNHCRtrends2004.pdf (wrist x-rays inconclusive); Nils Chaillet et al., *Comparison of Dental Maturity in Children of Different Ethnic Origins*, 50 J. FORENSIC SCI. 1164, 1172–73 (2005) (discussing the effect of malnutrition, illness, stress, high temperatures, and humidity on tooth development); Stephano Mora et al., *Skeletal Age Determinations in Children of European and African Descent: Applicability of the Greulich and Pyle Standards*, 50 PEDIATRIC RES. 624, 624–27 (2001) (discussing skeletal maturity determination methods which were created for children of European descent and from privileged backgrounds); Francesca K. Ontell et al., *Bone Age in Children of Diverse Ethnicity*, 167 AM. J. ROENTGENOLOGY 1395, 1395–98 (1996) (for a discussion on dental exams not being ethnic group specific); A. Schmeling et al., *Effects of Ethnicity on Skeletal Maturation: Consequences for Forensic Age Estimations*, 113 INT'L J. LEGAL MED. 253 (2000).

158. See Valeria Santoro et al., *Forensic Age Estimation of Living Individuals: A Retrospective Analysis*, 193 FORENSIC SCI. INT'L 129e.1, 129e.4 (2009); see also UNHCR, REFUGEE CHILDREN: GUIDELINES ON PROTECTION AND CARE 102–03 (1994), available at <http://www.unhcr.org/refworld/docid/3ae6b3470.html>.

159. See Santoro et al., *supra* note 158; see also William Wilberforce Act § 235(b)(4) (“At a minimum, these procedures shall take into account multiple forms of evidence, including the non-exclusive use of radiographs, to determine the age of the unaccompanied alien”); UNHCR, GUIDELINES ON POLICIES AND PROCEDURES IN DEALING WITH UNACCOMPANIED CHILDREN SEEKING ASYLUM sec. 5.11 (1997) (urging the need for accuracy, safety, and dignity in the use of such exams, and recommending that the legal consequences of the age criteria be reduced or downplayed).

In light of this, the reliance ICE places on these test results is troubling.¹⁶⁰ It appears that officials frequently accept data as true, in spite of the margin of error that scientific experts and UNHCR urge, and that they use the data to determine, as opposed to hypothesize, a minor child's age.¹⁶¹ In addition to the inconclusiveness of the underlying data, there is evidence that some individuals conducting the forensic tests are not properly certified or regulated.¹⁶² Some contend that their findings are heavily skewed toward making adult age determinations, possibly reflecting an investigatory bias.¹⁶³ Finally, decisions regarding minors' ages are difficult to validate,¹⁶⁴ often wrong,¹⁶⁵ and frequently reversed.¹⁶⁶ In summary, the non-DNA forensic science techniques employed in unaccompanied minor age determinations do not inspire confidence. And, unfortunately, the techniques used to determine whether someone has been tortured and are deserving of sanctuary outside their country fare no better.

To bring a U.N. Convention Against Torture (CAT) claim successfully, an applicant must prove the underlying facts of the torture that he or she endured. Article 3 of the CAT states that: “[n]o State Party shall expel, return (*‘refouler’*), or extradite a person to another State where there are substantial grounds for believing that he would be in danger of being subjected to torture.”¹⁶⁷ Specifically, to prevail on a CAT claim, an individual must prove

160. See CHAD C. HADDAL, CONG. RESEARCH SERV., RL 33896, UNACCOMPANIED ALIEN CHILDREN: POLICIES AND ISSUES 31 (2009); see also Olga Byrne, *Unaccompanied Children in the United States: A Literature Review*, VERA INST. JUST. 18 (2008), available at <http://www.vera.org/content/unaccompanied-children-united-states-literature-review> (discussing the debate between DHS and advocacy groups about DHS techniques).

161. See HADDAL, *supra* note 160, at 31.

162. See OIG-DHS, AGE DETERMINATION PRACTICES, *supra* note 152, at 4 (noting that ICE officers required guidance on which medical or dental degrees, certifications and other credentials to indicate which practitioners are “‘best-qualified’ to conduct radiographic exams”).

163. See Alisa Solomon, *Kids in Captivity: Scared and Alone, Nearly 5000 Children Wind Up in INS Detention Each Year*, VILLAGE VOICE, Feb. 26, 2002, <http://www.villagevoice.com/2002-02-26/news/kids-in-captivity/1> (quoting an INS spokeswoman: “What if a terrorist who was 19 said he was 16 and an orphan and the story didn’t check out, but we released him and he went out and blew up a building? Would it be his attorney that would take the fall? I don’t think so.”).

164. See DON CIPRIANI, CHILDREN’S RIGHTS AND THE MINIMUM AGE OF CRIMINAL RESPONSIBILITY: A GLOBAL PERSPECTIVE 133–34 (2009).

165. See Jennifer Alexis Smythe, Comment, “*I Came to the United States and All I Got Was This Orange Jumpsuit*”: Age Determination Authority of Unaccompanied Alien Children and the Demand for Legislative Reform, CHILD. LEGAL RTS. J., Fall 2004, at 28, 32–33.

166. See PHYSICIANS & BELLEVUE, *supra* note 157, at 129, 134–35 (chronicling the story of an unaccompanied minor who claimed to be fifteen years old and was detained in an adult detention center for six months: “At the airport, they asked me where I was going? I said to my mother who was in Canada. They asked me who the passport belonged to and I said I didn’t know. They asked me how old I was. I told them I was 15. A woman in uniform said I was lying. They told me ‘We’re going to see if you’re 15.’ Then they brought me to the dentist.” Eventually she was reunited with her mother who corroborated she was only sixteen.).

167. United Nations, Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, G.A. Res. 39/46, U.N. Doc. A/RES/39/46, at art. 3(1) (Dec. 10. 1984) [hereinafter U.N. CAT]. Torture is defined as an intentional act, inflicting severe pain or suffering, under the custody or control of the offender, for a broad array of wrongful purposes, by or sanctioned

that he or she “is more likely than not” to endure torture if returned to his or her country of origin.¹⁶⁸ In making this determination, the Convention states that “the competent authorities shall take into account all relevant considerations including, where applicable, the existence in the State concerned of a consistent pattern of gross, flagrant, or mass violations of human rights.”¹⁶⁹ While the Convention does not explicitly require proof of torture, assessing CAT claims often involves investigating evidence of past incidents of government-sponsored or condoned abuse.¹⁷⁰ Individuals hoping to succeed on a CAT claim may submit to examinations by forensic pathologists, psychiatrists, and other medical experts to document and validate their allegations with scientific proof.¹⁷¹ Forensic experts’ determinations are critical and can “make the difference between the grant and denial of asylum for a torture survivor.”¹⁷²

Applicants filing CAT claims encounter problems of proof similar to those that applicants filing Unaccompanied Minor Act claims do. Torture victims often have little evidence of the torture that they suffered,¹⁷³ because many forms of torture (electric shocks and mock executions, for instance) leave no marks.¹⁷⁴ In other cases, the physical vestiges of torture can change.¹⁷⁵ Furthermore, some instances of torture are not obvious, and sometimes applicants do not divulge information about torture due to shame and fear.¹⁷⁶ Painful flashbacks, misinterpretation, and mistrust on the part of the individual being examined are common because victims frequently believe that a medical examiner cannot possibly relate to what they have experienced.¹⁷⁷ Even when individuals are willing to share this personal and deeply upsetting information,

by a public official and not arising out of lawful sanctions. *Id.* at art. 1(1).

168. See 8 C.F.R. § 1208.16(c)(2) (2011).

169. See U.N. CAT, *supra* note 167, at art. 3(2).

170. See 8 C.F.R. §§ 208.16(c)(3), 1208.16(c)(3).

171. Peter Mygind Leth & Jytte Banner, *Forensic Medical Examination of Refugees Who Claim to Have Been Tortured*, 26 AM. J. FORENSIC MED. & PATHOLOGY 125, 125–30 (2005).

172. PHYSICIANS FOR HUMAN RIGHTS, EXAMINING ASYLUM SEEKERS 15 (2001).

173. *Id.* at 3–4.

174. *Id.*

175. *Id.* at 43.

176. See David P. Eisenman et al., *Survivors of Torture in a General Medical Setting: How Often Have Patients Been Tortured, and How Often Is It Missed?*, 172 W. J. OF MED. 301, 301–04 (2000) (noting that urban physicians are frequently unaware that their patients from overseas are torture survivors); see also Kevin B. O’Reilly, *Testifying to Torture: How Doctors Find the Truth*, AM. MED. NEWS (Dec. 25, 2006), <http://www.ama-assn.org/amednews/2006/12/25/prsa1225.htm> (noting that it took more than a dozen visits for an Albanian Muslim who fled the Balkans and complained of “beatings that left no marks” to admit to his doctor that he had been sodomized by prison guards).

177. See UNHCHR, ISTANBUL PROTOCOL: MANUAL ON THE EFFECTIVE INVESTIGATION AND DOCUMENTATION OF TORTURE AND OTHER CRUEL, INHUMAN, OR DEGRADING TREATMENT OR PUNISHMENT 28–29 (1999), available at <http://www.ohchr.org/Documents/Publications/training8Rev1en.pdf> (discussing retraumatization, misinterpretation, and loss of control during torture exams and interviews); see PHYSICIANS FOR HUMAN RIGHTS, *supra* note 172, at 63 (noting that interrogation by an examiner can feel like torture and problems stemming from paranoia and gender differences are common).

there is inconsistency with respect to the amount of information they provide, the details they remember, and how urgently or emotionally they express themselves.¹⁷⁸ All of these factors can adversely affect an examination and lead to an erroneous assumption by a medical examiner or forensic expert.¹⁷⁹ Even worse, some forms of torture are so traumatizing or humiliating—female genital mutilation (FGM), for instance—that experts forgo forensic testing altogether.¹⁸⁰

In short, the limitations of science in this context are clear. When nonforensic scientific testing methods are employed to determine whether Unaccompanied Minor or CAT claims are true, human error, outmoded tests, and inadequate evidence can preclude legitimate evaluations. And tests may be given undue authority. In summary, relying on science in the immigration context yields historically worrisome results.

C. Use of DNA Testing in Other Areas of U.S. Law

In comparison to age determinations and torture evaluations and in spite of the aforementioned limitations, DNA testing is a remarkably reliable and straightforward testing method. As such, DNA testing certainly offers hope to those refugees who are unable to prove their family relationships by traditional means (namely documentation), but who can offer a painless and minimally invasive buccal cheek swab.¹⁸¹ Since its debut in a Florida criminal case in 1987, attorneys have used DNA relationship testing—that is, the type of testing that will be used in the P-3 Program—in thousands of civil and criminal cases in the United States.¹⁸² Unlike other forensic methods, the appeal of a DNA test lies in its sound molecular technology, its accuracy, and its replicability. Scientific experts and members of the judiciary consider DNA testing to be the most reliable forensic testing method when appropriate quality-control methods are followed.¹⁸³ Of course, DNA testing is a probabilistic determination: its exact level of accuracy depends upon the number and quality of genetic markers that are tested and compared.¹⁸⁴ Nevertheless, many consider the

178. See PHYSICIANS FOR HUMAN RIGHTS, *supra* note 172, at 19.

179. *Id.*

180. See O'Reilly, *supra* note 176.

181. See Villiers, *supra* note 140, at 245.

182. See Jonathan J. Koehler, *DNA Matches and Statistics: Important Questions, Surprising Answers*, 76 JUDICATURE 222, 222 (1993).

183. See Joseph T. Walsh, *Keeping the Gate: The Evolving Role of the Judiciary in Admitting Scientific Evidence*, 83 JUDICATURE 140, 142 (1999) ("DNA matching evidence, once viewed as controversial, is now readily accepted for identification purposes. The scientific basis for this evidence is now so well established that its admissibility is sanctioned by statute in many jurisdictions with only the projection of a random match left to expert opinion."); see also Niels Morling et al., *Paternity Testing Commission of the International Society of Forensic Genetics: Recommendations on Genetic Investigations in Paternity Cases*, 129 FORENSIC SCI. INT'L 148 (2002) (noting that DNA paternity testing has undergone significant changes since its inception, and it is now widely recognized that DNA investigations have enormous potential if performed and interpreted correctly).

184. See Jill Adams, *Paternity Testing: Blood Types and DNA*, SCITABLE, <http://www.nature>.

chance of a false match to be in the millions, billions, or even trillions.¹⁸⁵ And while flukes can occur,¹⁸⁶ the risk of coincidental matches¹⁸⁷ is small.¹⁸⁸

Insofar as specific applications go, DNA testing is used in many areas of law and life. In the criminal context, DNA tests are used to identify felons, exonerate the falsely accused,¹⁸⁹ solve cold cases,¹⁹⁰ and even crack burglaries.¹⁹¹ In family law, DNA testing is used to prove biological relationships, often for the purpose of arranging child custody, child support, and visitation arrangements.¹⁹² In trusts and estates law, DNA has been used to determine an intestate's right to succession.¹⁹³ In insurance law, DNA might be used to settle an insurance dispute.¹⁹⁴ Outside the courtroom, doctors and medical experts use DNA tests to test adults for genetic diseases, to confirm diagnoses, to determine an individual's chances of passing on a gene that

com/scitable/topicpage/paternity-testing-blood-types-and-dna-374 (last visited Aug. 20, 2011) (noting that "the exact level of accuracy depends on the number and quality of the genetic markers being considered.").

185. See Steven D. Levitt, *Are the F.B.I.'s Probabilities About DNA Matches Crazy?*, FREAKONOMICS (Aug. 19, 2008, 12:30 PM), <http://www.freakonomics.com/2008/08/19/are-the-fbis-probabilities-about-dna-matches-crazy> (noting that "while DNA testing is not perfect," and depends upon how many chromosome loci are tested, the chances of a match can be in the billions or trillions). But see Jason Felch & Maura Dolan, *DNA: Genes as Evidence: FBI Resists Scrutiny of 'Matches'*, L.A. TIMES, July 20, 2008, at M1 ("DNA 'matches' are not always what they appear to be. Although a person's genetic makeup is unique, his genetic profile – just a tiny sliver of the full genome – may not be. Siblings often share genetic markers at several locations, and even unrelated people can share some by coincidence. No one knows precisely how rare DNA profiles are. The odds presented in court are the FBI's best estimates.").

186. See Gina Kolata, *Cheating, or an Early Mingling of the Blood?*, N.Y. TIMES, May 10, 2005, at F1 (discussing the unusual case of "chimeras," individuals who present DNA from two cell lines and who have endured difficulties in the legal context when asked to provide DNA samples).

187. See Jonathan J. Koehler, *On Conveying the Probative Value of DNA Evidence: Frequencies, Likelihood Ratios, and Error Rates*, 67 U. COLO. L. REV. 859, 866 (1996) (commenting on the extremely low likelihood of a coincidental match occurring).

188. See William C. Thompson et al., *How the Probability of a False Positive Affects the Value of DNA Evidence*, 48 J. FORENSIC SCI. 1, 1–2 (2003) (noting the lack of investigation into the rate of and reasons why false positives occur).

189. See *Mission Statement*, INNOCENCE PROJECT, available at <http://www.innocenceproject.org/about/Mission-Statement.php> (last visited Aug. 20, 2011).

190. See NAT'L INST. OF JUSTICE, NCJ 194197, USING DNA TO SOLVE COLD CASES, (July 2002), <https://www.ncjrs.gov/pdffiles1/nij/194197.pdf>.

191. See Edwin Zedlewski & Mary B. Murphy, *DNA Analysis for "Minor" Crimes: A Major Benefit for Law Enforcement*, NAT'L INST. JUST. J., Jan. 2006, at 2–3, available at <https://www.ncjrs.gov/pdffiles1/jr000253.pdf>.

192. See Villiers, *supra* note 140, at 258; see also Janet L. Dolgin, *Choice, Tradition, and the New Genetics: The Fragmentation of the Ideology of Family*, 32 CONN. L. REV. 523 (2000).

193. See, e.g., Rochelle Cooper Dreyfuss & Dorothy Nelkin, *The Jurisprudence of Genetics*, 45 VAND. L. REV. 313, 315, 321–27 (1992); Larry Dorman, *Near Hometown of the Gipper, Protests Over an Exhumation*, N.Y. TIMES, Nov. 10, 2007, at D1.

194. See Robert D. Myers et al., *Complex Scientific Evidence and the Jury*, 83 JUDICATURE 150 (1999) (noting that "[s]ome states have already enacted legislation regulating health insurers' use of genetic testing data").

carries the risk of disease, or to screen embryos for genetic defects or predisposition to disease.¹⁹⁵

In each context, DNA testing has received praise and criticism. In criminal law, suspects have been erroneously identified despite supposedly foolproof DNA tests,¹⁹⁶ lab technicians have doctored results to fit prosecutors' cases,¹⁹⁷ and DNA samples have been switched and the error concealed.¹⁹⁸ Television shows featuring forensic testing have instilled in lay jurors a foundationless forensic expertise.¹⁹⁹ In family law, paternity tests have resulted in disputes with regard to chain of custody—whether proper control is maintained over DNA samples throughout testing.²⁰⁰ DNA paternity testing labs are not always accredited.²⁰¹ And, insofar as DNA tests can determine who a child's "real" parents are,²⁰² the results of a DNA test have the potential to fracture close bonds and lives.²⁰³ In trusts and estates law, some courts and scholars believe that DNA testing should not be used to determine intestate succession because genetics do not always trump a testator's wishes.²⁰⁴

Finally, in the medical context, experts question the oversight applied to DNA tests and the information that individuals who undergo them receive.²⁰⁵ In particular, some experts harbor reservations about the quality and clinical value

195. See *Genetic Testing*, MEDLINE PLUS, <http://www.nlm.nih.gov/medlineplus/genetictesting.html> (last visited July 21, 2011).

196. See Dustin Hays & Sara Katsanas, Genetics & Pub. Policy Ctr., DNA, Forensics, and the Law, (Aug. 2008), available at http://www.dnapolicy.org/images/issuebriefpdfs/DNA_Forensics_and_the_Law_Issue_Brief.pdf.

197. See Arthur Daemrich, *The Evidence Does Not Speak for Itself: Expert Witnesses and the Organization of DNA-Typing Companies*, 28 SOC. STUD. SCI. 741 (1998).

198. See Peter Jamison, *DNA Lab Fallout: Lawyers Ask Judge to Dismiss Rape Cases over Sample Switch*, S.F. WEEKLY (Dec. 10, 2010, 10:59 AM), http://blogs.sfweekly.com/thesnitch/2010/12/dna_lab_sample_switch_rape.php.

199. See Jennifer Frey, *On Crime-Scene Shows, the Science Is Arresting*, WASH. POST, Sept. 19, 2004, at N01; see also *The "CSI Effect,"* ECONOMIST (Apr. 22, 2010), <http://www.economist.com/node/15949089>.

200. See Katherine Groff, Genetics & Pub. Policy Ctr., DNA Paternity Testing (July 17, 2008), available at www.dnapolicy.org/images/issuebriefpdfs/Paternity.pdf.

201. See JoNel Aleccia, *Who's Your Daddy? Answer's at the Drugstore*, MSNBC.COM (May 23, 2008, 1:40 PM), http://www.msnbc.msn.com/id/23814032/ns/health-womens_health.

202. See Michael Grossberg, *Duped Dads and Discarded Children*, in GENETIC TIES AND THE FAMILY: THE IMPACT OF PATERNITY TESTING ON PARENTS AND CHILDREN 123–26 (Mark A. Rothstein et al. eds., 2005) (noting the ongoing debate between social parenting and biological responsibility).

203. See Ruth Padawer, *Who Knew I Was Not the Father?*, N.Y. TIMES, Nov. 22, 2009, at MM 38.

204. 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, 2859 (2008); see also Villiers, *supra* note 140, at 257.

205. See Andrew Pollack, *A Genetic Test That Very Few Need, Marketed to the Masses*, N.Y. TIMES, Sept. 11, 2007, at C3; see also Cheryl Berg & Kelly Fryer-Edwards, *The Ethical Challenges of Direct-to-Consumer Genetic Testing*, 77 J. BUS. ETHICS 17 (2008); Mairi Levitt, *Let the Consumer Decide? The Regulation of Commercial Genetic Testing*, 27 J. MED. ETHICS 398 (2001); Victoria Colliver, *Home DNA Tests: When You Just Have to Know*, S.F. CHRON., Aug. 21, 2007, at C1.

of over-the-counter DNA tests, and the risk of inaccurate test results and misinterpretation.²⁰⁶ There are ethical and moral quandaries, too: should a mother-to-be abort a child who may be born with a serious genetic disorder?²⁰⁷ What psychological harm might befall a child who tests positive for an adult-onset disease?²⁰⁸ In short, valuable knowledge obtained through DNA testing may have destructive, life-altering, or even life-threatening consequences.

D. Problems with Using DNA Testing in the P-3 Program

The history of DNA testing in the U.S. legal system raises important questions regarding its proposed application in the P-3 Program. While DNA testing may not suffer the same shortcomings as non-DNA forensic testing, its use in the P-3 Program poses great risks as a reliable source of evidence. The three biggest concerns for refugees making P-3 claims and seeking to reunify with their family members would seem to be laboratory error, misinterpreted test results, and prohibitive cost.

1. Laboratory Error

Reports of DNA laboratory testing error in the United States are not infrequent. Indications that labs are riddled with problems ranging from the unintentional²⁰⁹ to the premeditated or even flagrantly concealed²¹⁰ exist. Lack of training,²¹¹ sample mislabeling, switched samples, misinterpreted data,²¹² system backlog, failure to use proper scientific methods, distortion of statistical certainty,²¹³ underfunding, understaffing, and lack of appropriate oversight

206. See Berg & Fryer-Edwards, *supra* note 205, at 17.

207. See Rosemarie Tong, *The Virtue of Drawing Lines in Genetic Testing*, VIRTUAL MENTOR (May 2003), <http://virtualmentor.ama-assn.org/2003/05/pfor1-0305.html>.

208. See P.J. Malpas, *Predictive Genetic Testing of Children for Adult-Onset Diseases and Psychological Harm*, 34 J. MED. ETHICS 275, 275–78 (2008).

209. See Michael J. Saks, *Scientific Evidence and the Ethical Obligations of Attorneys*, 49 CLEV. ST. L. REV. 421, 424 (2001) (citing statistics from the Innocence Project indicating that unintentional, as opposed to fraudulent, forensic science errors play a factor in 63 percent of wrongful conviction cases).

210. See Jason Borenstein, *DNA in the Legal System: The Benefits Are Clear the Problems Aren't Always*, 3 CARDOZO PUB. L. POL'Y & ETHICS J. 847, 857 (2006); see also Rebecca Leung, *DNA Testing: Foolproof?*, CBSNEWS.COM (Feb. 11, 2009, 8:40 PM), <http://www.cbsnews.com/stories/2003/05/27/60II/main555723.shtml> (police department crime lab investigation revealed fudging of results to fit the prosecution's theory in a case, failure to use scientific procedures, and distortions of statistical certainty).

211. See Adam Liptak, *You Think DNA Evidence Is Foolproof? Try Again*, N.Y. TIMES, Mar. 16, 2003, at D5 (noting that law enforcement officers who give DNA testimony are, following short FBI trainings, "miraculously transformed from beat policemen into forensic scientists.").

212. See Susan Kruglinski, *Who's Your Daddy? Don't Count on DNA Testing to Tell You*, 27 DISCOVER MAG., 68–69 (2006) (a judge ruled that one of the largest paternity labs in the country had performed "shoddy" work).

213. See Leung, *supra* note 210 (quoting a criminology professor: "This doesn't meet the standard of a good junior high school science project.").

have all been documented.²¹⁴ A news story published some years ago chronicled the contamination of DNA evidence by a leaky roof, which was still leaking when the grand jurors went to tour it.²¹⁵

For U.S. officials who will be weighing DNA test results as evidence in refugee admissions applications, how overseas DNA samples are stored, who tests them, and who ensures that AABB standards are upheld are all questions that should give pause. The accuracy of DNA testing depends heavily upon laboratory conditions and technicians and how closely they abide by AABB codes. Recently, however, an AABB report noted that while there has been a decrease in the number of instances of AABB-accredited laboratories in the United States performing “non-legal” DNA relationship tests, they still occur and are not always accounted for.²¹⁶ According to the AABB, the State Department recently issued new information regarding the collection of samples at its overseas AABB-accredited posts.²¹⁷ The report indicates that problems have already arisen with respect to lack of witnesses at collection sites, chain of custody, and confusion regarding what tests have been ordered.²¹⁸

Even though the State Department appears intent on establishing secure and standardized DNA testing procedures, it is likely that problems that exist in AABB-accredited labs in the United States will at least be replicated, or even exacerbated, in the overseas P-3 DNA testing context. Diagnostic laboratory capacity in Africa, where much P-3 processing takes place, is less developed than it is in the United States.²¹⁹ Even if standards are followed, additional challenges may present themselves: lack of personnel to conduct the tests;²²⁰ inadequate funding, equipment, training, and management problems;²²¹ or

214. See News Release, Nat'l Acad. of Sci. et al., 'Badly Fragmented' Forensic Science System Needs Overhaul; Evidence to Support Reliability of Many Techniques is Lacking (Feb. 18, 2009), available at <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12589>.

215. See Adam Liptak, *Prosecutions Are a Focus in Houston DNA Scandal*, N. Y. TIMES, June 9, 2003, at A20 (quoting a professor of criminology who noted, “The roof is still leaking Water dripped on my head.”).

216. AABB RELATIONSHIP TESTING PROGRAM UNIT, ANNUAL REPORT SUMMARY FOR TESTING IN 2008, at 2, available at <http://www.aabb.org/sa/facilities/Documents/rtannrpt08.pdf> (noting that “[d]uring the revision cycle of the 9th edition, the Department of Homeland Security, United States Citizenship and Immigration Service (USCIS), and the US State Department met with the RT SPU to discuss the ‘non-legal’ testing and potential fraud (with both legal and non-legal collections). Non-legal testing is not acceptable for immigration purposes.”).

217. *Id.* at 2–3.

218. *Id.*

219. See generally *Africa: No A (H1N1) Cases—Reality or Poor Lab Facilities?*, IRIN NEWS (May 8, 2009), <http://www.irinnews.org/report.aspx?reportid=84287> (quoting the head of diagnostic research for the Foundation for Innovative New Diagnostics, “Diagnostic laboratory capacity in Africa is generally weak because until now, countries, partners and donors have not been serious enough about putting in place national laboratory policies and implementation plans.”).

220. See *Teleconference on Biological Relationship Testing: Opportunities and Challenges*, October 30, 2008, DHS (May 26, 2011), http://www.dhs.gov/xfoia/gc_1227730679187.shtm.

221. See *More Medical Laboratories in Africa to Get Accreditation*, MEDINDIA (July 29, 2000, 9:37 AM), <http://www.medindia.net/news/More-Medical-Laboratories-In-Africa-To-Get>

overwhelming case backlog.²²² In addition, some labs may face extreme temperature fluctuations, a lack of constant electricity or refrigeration capacity, not to mention the dangers associated with post-conflict environments.²²³ These concerns are not far fetched: with regard to human error, a case of switched DNA samples has already been reported in West Africa.²²⁴ There have also been reports of “middleman ‘brokers’” who claim to represent AABB-accredited labs but who do not in fact do so.²²⁵ From the perspective of a refugee facing mandatory DNA testing, this state of affairs is deeply disturbing. Since the U.S. government will only accept AABB-accredited test results, the use of a non-accredited lab could be fatal to a P-3 application. Refugees might end up paying for DNA tests they believe to be valid only to learn that their results, and hence their applications, are unacceptable.

2. Misinterpreted Test Results

Even when DNA tests are not compromised, the risk of misinterpretation and misapplication is a possibility.²²⁶ Officials tasked with translating a DNA test within the context of a P-3 application may not be properly trained or equipped to do so. Concerns regarding lack of training in DNA testing and analysis in the legal context have been voiced by many individuals.²²⁷ Judges and juries are not scientists.²²⁸ To some, this lack of scientific training is a major drawback since interpreting DNA test results involves hyper-technicalities that

Accreditation-55403-1.htm (“Many laboratories lack equipment, proper funding, adequate training for lab workers, and systematic management of work.”).

222. Wyndham Hartley, *SA’s Forensic Laboratories Must Be Combined—DA*, BUS. DAY (Apr. 16, 2010, 6:40 AM), <http://www.businessday.co.za/articles/Content.aspx?id=106388> (quoting South African Democratic Alliance police spokeswoman on the collapse of South Africa’s forensic laboratories: “[I]f these laboratories are not functioning optimally, court cases depending on forensic evidence can be delayed, lost or dropped. . . . Over the last four years, court case backlogs have steadily risen—driven in large part by backlogs in our forensic laboratories. Our forensic laboratories are now, in fact, in a state of crisis—they serve as one of the most severe bottlenecks in the entire criminal justice system, with the number of backlogged samples having risen by more than 300% since 2007.”).

223. See *Teleconference on Biological Relationship Testing*, *supra* note 220.

224. See Villiers, *supra* note 140, at n.194.

225. See *Teleconference on Biological Relationship Testing*, *supra* note 220.

226. See Peter Gill, *When DNA Goes on Trial*, NATURE, July 2, 2009, at 34, 34–35 (noting that, unlike in a court of law, “[e]valuative thinking is not encouraged in the binary court-room, which seeks yes or no answers.”); see also Saks, *supra* note 209, at 424 (observing that “[i]n the realm of fraudulent testimony . . . forensic science has no peer.”).

227. See Shirley S. Abrahamson, *Foreword: Genes and Justice—The Growing Impacts of the New Genetics on the Courts*, 83 JUDICATURE 102, 102 (1999).

228. See Stephen Breyer, *The Interdependence of Science and Law*, 82 JUDICATURE 24, 24 (1998) (noting that scientifically complex technology “increasingly underlies legal issues of importance to all of us [but that] a judge is not a scientist and a courtroom is not a scientific laboratory [and that] to do our legal job properly we [need] to develop an informed, though necessarily approximate, understanding of the state of . . . relevant scientific art.”); see also Mark A. Rothstein, *The Impact of Behavioral Genetics on the Law and the Courts*, 83 JUDICATURE 117, 119 (1999) (stating that “[j]udges and juries have little, if any, expertise in evaluating scientific claims.”).

most laypeople do not grasp.²²⁹ There are those who disagree and maintain that lay individuals can comprehend and apply the results of a DNA test in making legal determinations.²³⁰ While not attempting to provide an answer, any uncertainty as to our own abilities should inform our confidence regarding how well DNA testing interpretation will function in the P-3 Program.

It is unclear who will be interpreting the P-3 DNA test results and how they will do it. Whether intensive and ongoing trainings and a command hierarchy will be instituted is unknown. Adding steps and individuals to an already complex process might invite more opportunities for mistranslation and mistake. Instructions could be lost; so could data. This is worrisome from a systems standpoint, and, from a refugee's perspective, terrifying. Indeed, the consequences of a wrong DNA test determination by U.S. officials could be dire or even life threatening for refugees.²³¹ Applications could be held up for long periods of time or rejected outright. And, depending on the nature of the refugee's displacement, worsening poverty, illness and despair are likely outcomes. In conclusion, the possibility that a DNA test may be misinterpreted raises serious questions about the virtue of using DNA testing at all, in a context where the stakes are so high.

3. Prohibitive Cost

Finally, the cost of DNA testing will create problems for refugees and their family members. The proposed mandatory testing rules for the P-3

229. See Erin Murphy, *The New Forensics: Criminal Justice, False Certainty, and the Second Generation of Scientific Evidence*, 95 CALIF. L. REV. 721, 769 (2007) (noting the unjustified air of 'mystic infallibility' individuals give DNA tests in the courtroom).

230. See *U.S. v. Shea*, 957 F. Supp. 331, 344 (D.N.H. 1997) (quoting U.S. District Judge Paul J. Barbadoro: "I cannot accept [defendant's] contention that a laboratory or industry error rate is the best evidence of whether a test was properly performed in a particular case. Juries must decide whether a particular test was performed correctly based on all of the relevant evidence. . . . I am unconvinced by [defendant's] claim that a jury cannot properly assess the potential of a false match unless a false match error is calculated and combined with the random match probability estimate. . . . Although I acknowledge that a jury could become confused concerning the meaning and potential significance of a random match probability estimate, I am confident that the risk of confusion is acceptably small if the concept is properly explained.").

231. See *UNHCR Highlights Shortage of Resettlement Places*, UNHCR (July 5, 2010), <http://www.unhcr.org/4c31f3826.html> ("More than 80 per cent of the world's refugees live in developing countries where many cannot remain safely and have no possibility of integration. For many refugees, resettlement in a third country is the only way to find lasting safety and a new and permanent home."); see also Ilene Durst, *Lost in Translation: Why Due Process Demands Deference to the Refugee's Narrative*, 53 RUTGERS L. REV. 127, 128 (2000) ("Due process demands that any error will entail admitting a fabricator rather than returning a truth teller to continued persecution or, perhaps, death."); Robert Thomas, *Refugee Roulette: A UK Perspective*, in *REFUGEE ROULETTE: DISPARITIES IN ASYLUM ADJUDICATION AND PROPOSALS FOR REFORM* 166 (Jaya Ramji-Nogales et al. eds., 2009) ("Few other decision systems carry such dire consequences."); Hendrix, *supra* note 57 (quoting a refugee negatively impacted by the PRM DNA pilot: "We know people who have been murdered, who have died of diseases, who have been raped, deported or incarcerated. There are serious consequences when people are kept in this limbo.").

Program indicate that U.S.-based refugees or their family members, who are living abroad, will pay for the tests.²³² Even ardent supporters of mandatory DNA testing in the refugee context note that cost is a “major drawback.”²³³

While it has been suggested that a successful applicant—that is, one whose DNA test proves the biological relationship that he or she claims, thus greenlighting the refugee’s admission—may be eligible for reimbursement,²³⁴ the scenario still presents risks for the refugee-applicant. In the best-case scenario (a positive test result), a refugee will pay a substantial sum of money up front and wait for some time to be reimbursed. This is so because, by the time a resettled refugee applies for his or her family members to resettle in the United States, most of the refugee’s savings could have been extinguished on fulfilling the requirements of entry and the cost of traveling.²³⁵ Furthermore, although the amount of financial assistance that a successfully resettled refugee receives varies from state to state, in general refugees receive only modest start-up assistance.²³⁶ Factoring in a resettled refugee’s basic life needs, even an entire month’s worth of assistance will likely not cover the cost of even one DNA test.

One counterargument offered in response to these concerns is that refugee communities are cohesive. Presumably, they can join together to pay for the tests of family members of individuals whom they know. This arrangement would lessen the financial burden on any one individual. It is suggested that large refugee communities could even establish a revolving loan program to help P-3 applicants pay for their family members’ DNA tests. However, the likelihood that community cost-sharing will prove effective inevitably decreases as more and more individuals are required to submit DNA tests. If initial tests are not accepted, more tests might be needed. Costs could quickly mount. Considering the uncertain state of the U.S. economy, in which many resettled refugees have already lost their jobs and public benefits²³⁷ as overstretched resettlement agencies scramble to help them,²³⁸ the prospect of asking refugee communities to cover the cost of DNA testing does not present a

232. See *ESBENSHADE*, *supra* note 27, at 13.

233. See *MARTIN*, *supra* note 27, at 50.

234. See *Proposed Rules*, *supra* note 112.

235. Refugees must, among other expenses, repay their travel costs and pay for biometric testing in order to gain a green card. The International Organization for Migration (IOM) typically arranges transportation to the United States on a loan repayment basis. Refugees are expected to repay the cost of their transportation once they are established in the United States. See *Questions and Answers: Refugees*, USCIS (Mar. 25, 2011), <http://www.uscis.gov> (follow “Refugees and Asylum” hyperlink beneath “Humanitarian” subheading, then follow “Refugees” hyperlink, then follow “Questions and Answers: Refugees” hyperlink).

236. See *Refugees and Asylees*, NAT’L IMMIGRATION FORUM (June 29, 2010), <http://www.immigrationforum.org/research/display/refugees-and-asylees>.

237. See Robert Pear, *Many Indigent Refugees to Lose Federal Assistance*, N.Y. TIMES, Aug. 1, 2010, at A23.

238. See CHURCH WORLD SERV. IMPACT OF THE RECESSION ON REFUGEE RESETTLEMENT (2009), available at http://www.rcusa.org/uploads/pdfs/Final_CWS_Economy_Survey_05.28.09.pdf.

viable solution. Furthermore, as expert Jill Esbenshade explains, an unfortunate “class-based system” could result whereby only those refugees whose family members can afford to pay for a DNA test apply for resettlement.²³⁹

In summary, lessons learned from the experience of non-DNA forensic testing in the U.S. immigration system and from DNA testing in other areas of U.S. law suggest that distressing challenges lie ahead when DNA testing becomes obligatory in the P-3 Program. The use of non-DNA forensic testing methods in the immigration context demonstrates the complexities that arise with respect to outmoded tests and misinterpretation and misapplication of test results. The use of DNA testing in the United States reveals the difficulties associated with using this method to prove alleged facts, to confirm or establish legal relationships, or to prophesy future—but by no means inevitable—genetic scenarios. These situations provide an important backdrop against which to measure the proposal of mandatory DNA testing in the P-3 Program. With this in mind, it is important to consider the additional and disquieting policy implications of requiring DNA tests of refugees.

V.

THE POLICY IMPLICATIONS OF COMPULSORY DNA TESTING

This Part explores the prudence and fairness of requiring refugee families to prove their relationships through DNA testing. It considers the long-term consequences that DNA testing may have, taking into account the already securitized state of the U.S. immigration discourse.

A. A Securitized Immigration Discourse

Concerns about security and stability have long informed U.S. immigration policy.²⁴⁰ Scholars have documented the decades-old “securitization” of migration:²⁴¹ a monofocal preoccupation with security in the humanitarian context, and the stigmatization of, and lack of protection provided to, refugees and other outsiders who are deemed to challenge it.²⁴² Since WWII,²⁴³ and well into the Cold War,²⁴⁴ politicians and members of the media have characterized

239. See ESBENSHADE, *supra* note 27, at 14.

240. Alice Edwards, Essay, *Human Security and the Rights of Refugees: Transcending Territorial and Disciplinary Borders*, 30 MICH. J. INT’L L. 763, 763 (2009).

241. See HUMAN RIGHTS IN THE WORLD COMMUNITY: ISSUES AND ACTION 147, question 8 (Richard Pierre Claude & Burns H. Weston eds., 3rd ed. 2006) (noting that refugees are “conflated with terrorists, drug smugglers, and economic migrants . . . as ‘security problems’ rather than ‘humanitarian problems’—potential imposters or unwitting instruments of armed rebels mingling undetected amongst them . . . as sources of ethnic strife and political unrest in host countries.”).

242. See Gregor Noll, *Securitizing Sovereignty? States, Refugees and the Regionalization of International Law*, in REFUGEES AND FORCED DISPLACEMENT: INTERNATIONAL SECURITY, HUMAN VULNERABILITY, AND THE STATE 277, 277–82 (Edward Newman & Joanne van Selm eds., 2003).

243. See Ole Wæver, *Securitization and Desecuritization*, in ON SECURITY 46, 50 (Ronnie D. Lipschutz ed., 1995).

244. See BARRY BUZAN, PEOPLE, STATES AND FEAR: AN AGENDA FOR INTERNATIONAL

refugees and other migrants as a threat to countries' political and economic stability, cultural values, physical security, and diplomatic relations.²⁴⁵ In the 1980s, claims arose regarding "bogus refugees": individuals who had achieved refugee status but did not meet the immigration requirements to qualify as refugees.²⁴⁶ In the 1990s, refugees became increasingly associated with system abuse and fraud.²⁴⁷

After the 9/11 terrorist attacks, the bias toward refugees and other outsiders only intensified.²⁴⁸ The U.S. immigration system became a frontline in the "war on terror."²⁴⁹ Already restrictive measures applied to refugee admissions became even more so.²⁵⁰ In the wake of 9/11, refugee resettlement was mostly shut down.²⁵¹ Thereafter, a wave of legislation made it much harder for refugees to qualify as such, and to resettle in the United States. The USA PATRIOT Act introduced new border patrols and immigration inspections.²⁵² The United States began using biometric technology to prove individuals' identities.²⁵³ One year after Congress passed the PATRIOT Act, the Homeland Security Act of 2002 abolished the INS and moved its functions to the DHS, HHS, and USCIS.²⁵⁴ The PATRIOT Act, the Intelligence Reform and Terrorism Prevention Act of 2004, and the REAL ID Act of 2005²⁵⁵ all significantly broadened the definition of "material support" to include the assistance refugees and others seeking admission to the United States had

SECURITY STUDIES IN THE POST-COLD WAR ERA (2d ed. 1991).

245. Myron Weiner, *Security, Stability, and International Migration*, 17 INT'L SECURITY 91, 103-06 (1992).

246. Anna Pratt & Mariana Valverde, *From Deserving Victims to 'Masters of Confusion': Redefining Refugees in the 1990s*, 27 CANADIAN J. SOC. 135, 138 (2002).

247. *Id.* at 144.

248. See, e.g., Edwards, *supra* note 240, at 777 (explaining that the "exceptionalism" of the war on terror witnessed governments pursuing politically justifiable policies and laws that undermine fundamental human rights guarantees. Refugees are no longer the allies they were during the Cold War but are now thought of as "queue jumpers," "bogus refugees," and "terrorists.").

249. See NAT'L COMM'N ON TERRORIST ATTACKS UPON THE U.S., THE 9/11 COMMISSION REPORT 384 (2004), available at <http://www.9-11commission.gov/report/911Report.pdf> ("Looking back, we can also see that the routine operations of our immigration laws—that is, aspects of those laws not specifically aimed at protecting against terrorism—inevitably shaped al Qaeda's planning and opportunities. . . . We also found that had the immigration system set a higher bar for determining whether individuals are who or what they claim to be—and ensuring routine consequences for violations—it could potentially have excluded, removed, or come into further contact with several hijackers who did not appear to meet the terms for admitting short-term visitors.").

250. See THE REFUGEE IN INTERNATIONAL LAW, *supra* note 1, at 416-17.

251. Mark Krikorian, *Fewer Immigrants, a Warmer Welcome: Fixing a Broken Immigration Policy*, CTR. FOR IMMIGRATION STUDIES 5 (Nov. 2003), <http://www.cis.org/FixingImmigrationPolicy>.

252. USA PATRIOT Act of 2001, Pub. L. No. 107-56 §§ 402, 411-418, 115 Stat. 272 (2001) [hereinafter USA PATRIOT Act].

253. *Id.*

254. See Homeland Security Act of 2002 Pub. L. No. 107-296 §§ 451(b), 462(a), 471(a), 116 Stat. 2135, 2196, 2202, 2205 (2002).

255. See Pub. L. No. 109-13, div. B, 119 Stat. 231, 302-23 (codified as amended in scattered sections of 8 U.S.C.).

provided to terrorist groups.²⁵⁶ Because these Acts also expanded the definitions of “terrorism,” “terrorist activity,” and “terrorist organization,”²⁵⁷ many refugees and others whose activities were not actually intended to support terrorism but done to comply with orders from terrorist groups that dominated their communities now fell under the definition of “material support.” They were then barred from entering the United States.²⁵⁸

Refugee admissions plummeted after the 9/11 attacks. While the numbers of refugees admitted eventually rose, they remained and continue to remain far below pre-9/11 admission levels.²⁵⁹ That 9/11 was an intelligence breakdown and not simply an immigration system shortcoming seems to have been lost among many Americans.²⁶⁰ So, too, is the fact the immigrants detained after 9/11 were never linked to terrorist activities.²⁶¹ In spite of this, the fallout from 9/11 continues to have a real impact on refugee-applicants. The 9/11 attacks have resulted in hostility directed toward refugees in general.²⁶² Refugee and asylum seekers have been blacklisted and denied admission to and permanent residence in the United States.²⁶³ For many refugees whose approvals had been suspended or revoked, the United States has never even given them a reason.²⁶⁴

256. See Material Support Provision, INA § 212(a)(3)(B)(iv)(VI), 8 U.S.C. § 1182(a)(3)(B)(iv)(VI).

257. See USA PATRIOT Act § 805(a)(2)(B), 115 Stat. at 377 (expanding the existing ban on giving “material support” to terrorists to include “expert advice or assistance”); see also REAL ID Act of 2005, Pub. L. No. 109-13, 119 Stat. 302 (2005) (providing material support can include such things as the provision of a safe house, transportation, communications, funds, transfer of funds or other material financial benefit, false documentation or identification, weapons (including chemical, biological or radiological weapons), explosives, or training); Intelligence Reform and Terrorism Prevention Act of 2004, Pub. L. No. 108-458, 118 Stat. 3638 (2004) (requiring the government to prove that assistance was provided knowing that the organization had been designated as a “foreign terrorist organization,” or that the organization had been involved in international terrorism).

258. See ELANOR ACER ET AL., HUMAN RIGHTS FIRST, ABANDONING THE PERSECUTED: VICTIMS OF TERRORISM AND OPPRESSION BARRED FROM ASYLUM 1 (2006), available at <http://www.humanrightsfirst.org/wp-content/uploads/pdf/06925-asy-abandon-persecuted.pdf> (“[T]housands of vulnerable refugees have been prevented from receiving the protection of this country due to overly broad immigration law definitions contained in the USA PATRIOT Act and the Real ID Act of 2005.”).

259. Swetha Sridharan, *Material Support to Terrorism—Consequences for Refugees and Asylum Seekers in the United States*, MIGRATION POLICY INST. (Jan. 2008), <http://www.migrationinformation.org/Feature/display.cfm?ID=671>.

260. See Charles B. Kelly, *Demographic Developments and Security*, in GRAVE NEW WORLD: SECURITY CHALLENGES IN THE 21ST CENTURY 197, 206 (Michael E. Brown ed., 2003).

261. See Lisa Wong Macabasco, *We Are All Suspects Now*, MOTHER JONES (Nov. 16, 2005, 1:00 AM), <http://motherjones.com/politics/2005/11/we-are-all-suspects-now> (noting that “not one of the immigrants caught up in post-9/11 sweeps and detained was ever shown to have been involved in terrorist activities”).

262. See, e.g., Kirk Semple, *A Somali Influx Unsettles Latino Meatpackers*, N.Y. TIMES, Oct. 15, 2008, at A1 (quoting a Nebraska mayor who found the sight of Somali women, many wearing hijabs, “startling.” The mayor went on to say, “I’m sorry, but after 9/11, it gives some of us a turn.”).

263. See Anna Husarska, *Freedom Fighters Need Not Apply*, WASH. POST, Dec. 15, 2008, at A21.

264. See Hendrix, *supra* note 57.

In summary, despite the disjunction between immigration and 9/11, the latter has had a detrimental effect, which seems almost irreversible, on the former.

B. Discrimination, Privacy Concerns, and the Potential for More Fraud

Fraud is and will presumably always be a feature of the refugee program, but it is not the special province of refugees.²⁶⁵ One need look no further than Wall Street to locate many frustrating examples.²⁶⁶ While the United States has good reason to prevent individuals who buy or sell refugee slots and “skip the line” from entering the United States through the P-3 Program, mandatory DNA testing is not perhaps the best instrument to fight fraud.

1. Discrimination

Nondiscrimination among individuals on the basis of immutable characteristics is a firmly rooted principle in international law and in the laws of many nations around the world. This fundamental principle protects both citizens and noncitizens.²⁶⁷ According to the International Covenant on Civil and Political Rights (ICCPR), “[a]ll persons are equal before the law and are entitled without any discrimination to the equal protection of the law. In this respect, the law shall prohibit any discrimination and guarantee to all persons equal and effective protection against discrimination on any ground.”²⁶⁸ The ICCPR also states that, “[n]o one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation.”²⁶⁹ While the ICCPR’s language dictates broad antidiscrimination principles, its domestic force is questionable at best. The United States has ratified the ICCPR but with many reservations.²⁷⁰ Moreover, the ICCPR does not create a private cause of action in U.S. courts.²⁷¹

Be that as it may, expectations of fraud may have led the U.S. officials tasked with implementing the DNA pilot and evaluating its effectiveness to detect fraud which was not actually there. It is possible that confusion and lack of comprehension, not an inability to verify a claimed family relationship, were responsible for some of the responses that appeared to be “fraudulent” in the

265. See, e.g., David A. Martin, *A New Era for U.S. Refugee Resettlement*, 36 COLUM. HUM. RTS. L. REV. 299, 312 (2005) (conceding that “[i]n any selective system, fraud is an inescapable problem.”).

266. See, e.g., Lauren Pack, *Hurricane Katrina Evacuee Living on 6-Figure Income Fraudulently Took Federal Aid*, DAYTON DAILY NEWS (Sept. 14, 2010, 8:41 AM), <http://www.daytondailynews.com/news/crime/hurricane-katrina-evacuee-living-on-6hurricane-katrina-evacuee-living-on-6-figure-income-fraudulently-took-federal-aid-914522.html>.

267. See Aleinikoff, *supra* note 118, at 16.

268. International Covenant on Civil and Political Rights, 999 U.N.T.S. 171, art. 26.

269. *Id.* at art. 17.

270. Human Rights Committee, Consideration of Reports Submitted by State Parties Under Article 40 of the Covenant: Concluding Observations of the Human Rights Committee (United States of America), U.N. Doc. No. CCPR/C/USA/CO/3/Rev.1, para. 10 (Dec. 18, 2006).

271. See S. EXEC. REP. NO. 102-23, at 9, 19, 23 (1992).

DNA pilot. Because these expectations of fraud were not understood by U.S. officials, a presumption of fraud characterized evaluations of the DNA pilot. In other cases, a fear of being separated from loved ones likely caused refugees' unwillingness to proceed with DNA tests. Since U.S. authorities did not understand this refugee perspective, again, an impermissible presumption of fraud overshadowed the pilot experience. The end result is that, in at least some cases, individuals with perfectly worthy claims ended up losing their chance at resettlement because of other people's fraud²⁷² or officials' erroneous presumptions. Then, too, some refugees who felt entitled to make claims did not do so due to apprehension and a desire greater than that of resettling in the United States: a desire to remain intact as a family. Hence, while on the one hand, DNA testing could be commended for screening out individuals who do not qualify for resettlement, without statistics it is impossible to know whether the pilot represents a fair picture of the refugee families who are applying.²⁷³

Perhaps more important to this Comment is the issue of where and why the DNA pilot was conducted in the first place, the answers to which may indicate that questionable practices will persist when the P-3 Program is reinstated. Although PRM has announced that DNA testing will be mandatory for all P-3 applicants, if the pilot program offers any example, it suggests this testing will not be applied evenly across countries and refugee populations. When conducting the pilot, PRM officials applied a higher degree of scrutiny to applicants from African countries.²⁷⁴ But refugees from poorer (which often means African) countries tend to lack documentation to prove their family relationships.²⁷⁵ This reality raises questions as to whether these applicants will be tested more rigorously than individuals from other, more affluent (although by no means wealthy) P-3 countries. It prompts concerns that DNA testing will not be conducted blindly.

A third way refugees may encounter discrimination relates not to new technology but rather to ancient and deeply rooted traditions. Requiring a DNA test could force some refugees to betray their cultural and religious convictions.²⁷⁶ Someone who believes that submitting to a medical procedure,

272. See Ludden, *supra* note 83 (quoting Ralston Deffenbaugh of Lutheran Immigration and Refugee Services: "If it seems that family reunification has this dark shadow over it, then we might literally have, you know, the babies go out with the bathwater.").

273. UNHCR, Note on Family Protection Issues, EC/49/SC/CRP.14 at para. 16 (June 4, 1999), available at <http://www.unhcr.org/refworld/docid/4ae9aca00.html> ("The family unit has a better chance of successfully . . . integrating in a new country rather than individual refugees. In this respect, protection of the family is not only in the best interests of the refugees themselves but is also in the best interests of States.").

274. See ESBENSHADE, *supra* note 27, at 11.

275. See Perruchoud, *supra* note 125, at 514; Sherene H. Razack, *Simple Logic: Race, the Identity Documents Rule and the Story of a Nation Besieged and Betrayed*, 15 J.L. & SOC. POL'Y 181, 185 (2000).

276. See *Vaccination Requirements*, USCIS (Mar. 5, 2010), <http://www.uscis.gov> (select "News" tab; then follow "Questions and Answers" hyperlink; then, under "January 2010," follow

even something as minimally invasive as a buccal swab, would certainly believe a DNA test violates his or her beliefs. If an individual objects to a DNA test, what will happen? Will the P-3 application be allowed to proceed, but with suspicion and stigma attached? Will the application be rejected altogether?²⁷⁷

Lastly, refugees may face further discrimination from citizens in the United States. In the wake of the DNA pilot, some Americans voiced anti-refugee sentiments.²⁷⁸ While requiring refugees to submit to a DNA test may instill confidence in some Americans who had doubted the legitimacy of the U.S. refugee program after the DNA pilot,²⁷⁹ compulsory testing could instead crystallize in some Americans' minds the notion that all refugees commit fraud and are undeserving of resettlement. If that happens, U.S. officials might inadvertently risk the goodwill they seek to repair by implementing mandatory DNA testing. Refugees could be seen as taking advantage of American altruism and our refugee admissions program. They may be viewed as "work[ing] backroom deals,"²⁸⁰ or stealing the chance of liberty from "real" or "worthy" refugees.²⁸¹ This would surely represent a tragedy, and, for individuals who have endured so much already, be deeply crushing and unfair.

Indeed, the fraud that the DNA pilot detected was no shock to those who resettle refugees and who advocate on their behalf: individuals who view it as less a problem of duplicity and rather one borne of desperation.²⁸² While these

"Vaccination Requirements" hyperlink).

277. See Taitz et al., *supra* note 71, at 28 (describing the denial of an application of a permanent resident's son for insufficient documentary evidence because the son "had refused a request for DNA testing because as a Jehovah's Witness it contravened his religious beliefs").

278. See *More Disgusting News on DNA Testing in Africa*, REFUGEE RESETTLEMENT WATCH (Aug. 21, 2008), <http://refugeeresettlementwatch.wordpress.com/2008/08/21/more-disgusting-news-on-dna-testing-in-africa> ("[A]nd then how is this for more disgusting news. Catholic Charities and other of these groups which make their living resettling refugees using your tax dollars try to suggest there are other ways of defining family. You can just call someone son or daughter and magically they can come to America.").

279. See Ludden, *supra* note 83 (quoting Ralston Deffenbaugh, President, Lutheran Immigration and Refugees Services as saying: "It's also important on the domestic side because we want to make sure that as we involve volunteers and communities and so forth and the program depends so much on them, that they feel that they're not being taken as chumps.").

280. Sylvia Cochran, *Asylum Fraud Capitalizes on Refugee Fears and ICE Quotas*, YAHOO! NEWS (Dec. 10, 2010, 2:02 PM), http://news.yahoo.com/s/ac/20101210/pl_ac/7377186_asylum_fraud_capitalizes_on_refugee_fears_and_ice_quotas_1.

281. See SCOTT D. WATSON, *THE SECURITIZATION OF HUMANITARIAN MIGRATION: DIGGING MOATS AND SINKING BOATS* 143 (2009) (discussing the fact that refugees are blamed for threatening the state's humanitarian commitments to other refugees).

282. See Ludden, *supra* note 83 (quoting Lavinia Limon, President of the U.S. Committee for Refugees and Immigrants, on the issue of false claims: "Of course people are going to make false claims. . . . They've been in these camps for five years, 10 years, 15 years, 20 years. There is no future for them and they have a friend or a distant relative here in the United States. You know, when I put myself in that position, would I lie and say my cousin was my sister? Absolutely."); see also UNHCR, RESETTLEMENT SERV. DIV. OF INT'L PROTECTION SERVS., *POLICY AND PROCEDURAL GUIDELINES: ADDRESSING RESETTLEMENT FRAUD PERPETRATED BY REFUGEES* (2008), available at <http://www.unhcr.org/refworld/pdfid/47d7d7372.pdf> (characterizing fraud caused by "desperation due

insiders admit that making allowances for those who gain refugee status by false means is not the answer, they contend that categorizing desperate individuals as a fraudulent class is both worrisome and wrong.²⁸³ One prominent refugee resettlement agency notes that “fraud” was key to the refugee resettlement agency’s very founding.²⁸⁴ Namely, in order to smuggle Jewish intellectuals out of Nazi Germany, the forerunners of what would become the International Rescue Committee used forged documents to ferry individuals to freedom. In this instance, “fraud” was not questioned but has been championed.

2. Privacy Violations

As a legal matter, subjecting P-3 applicants to mandatory DNA testing could give rise to privacy violations. According to the Universal Declaration of Human Rights, “[n]o one shall be subjected to arbitrary interference with his privacy, family, home . . . honour and reputation.”²⁸⁵ Additionally, “[e]veryone has the right to the protection of the law against such interference or attacks.”²⁸⁶ While this right is not absolute,²⁸⁷ some might argue that DNA testing threatens refugees’ right to privacy in a way that should be deeply concerning to us.

Arguably, there is merit to affording refugees who hope to become U.S. citizens the rights that U.S. citizens already enjoy. By way of an example, it bears noting that U.S. citizens and residents enjoy the right to privacy in their medical records.²⁸⁸ But there do not appear to be safeguards with respect to DNA samples submitted to USCIS.²⁸⁹ Refugee-applicants apply for refugee status through the P-3 Program in the hopes of becoming U.S. residents; eventually, they hope to become citizens. Since refugee-applicants want and intend to become U.S. citizens, it is arguable that they should be afforded citizens’ privacy rights in their medical records.

These international and national privacy rights raise important questions about the fate of DNA samples collected and used to confirm or deny family relationships. Although the State Department has stated that it will not create a DNA database,²⁹⁰ the sweeping trend in the United States to do so at the state

to a perceived lack of services or durable solutions or other options” as a mitigating factor).

283. See Ludden, *supra* note 83.

284. See Varian Fry, U.S. HOLOCAUST MEMORIAL MUSEUM: HOLOCAUST ENCYCLOPEDIA, <http://www.ushmm.org/wlc/en/article.php?ModuleId=10005740> (last visited Aug. 20, 2011) (the Emergency Rescue Committee was the forerunner to the International Rescue Committee, www.theirc.org).

285. See Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. A/RES/217(III), art. 8 (Dec. 10, 1948).

286. *Id.*

287. See, e.g., Charles R. Beitz, *Human Rights as a Common Concern*, 95 AM. POL. SCI. REV. 269 (2001).

288. See HIPAA Privacy Rules, 45 C.F.R. § 160 (2011).

289. See Villiers, *supra* note 140, at 265.

290. See ESBENSHADE, *supra* note 27, at 15.

and federal level casts doubt on this assurance.²⁹¹ While storing samples for later use might help some refugees in other contexts later on,²⁹² privacy concerns weigh heavily against creating a DNA database for many reasons. Stockpiling samples for long periods of time²⁹³ could lead to samples being used for illegitimate purposes or searched and compared against other samples without an individual's knowledge.²⁹⁴ Data culled from DNA samples could be used to discriminate against ethnic groups and refugee populations.²⁹⁵ In an era where genetic exceptionalism has led many to describe DNA testing as eugenics by another name,²⁹⁶ keeping and amassing information about individual refugees and refugee populations could render the vulnerable and disenfranchised permanently so.²⁹⁷

3. *The Potential for More Fraud*

Imagine a scenario where refugee brokers sell not refugee slots, but DNA samples, or "access" to friendly (which is to say fraudulent), AABB-accredited lab technicians. This kind of fraud already takes place in other contexts, but

291. See Andrew Watson, *A New Breed of High-Tech Detectives*, 289 SCIENCE 850, 850–54 (2000) (noting that all U.S. states have passed laws which allow DNA samples to be collected from individuals convicted of rape or other sex crimes, and many also permit sampling from people convicted of murder, burglary, or even certain misdemeanors. Further, the U.S. national DNA database system, called CODIS, or Combined DNA Index System, began in October 1998 and collects data from all state databases.); see also Mark A. Rothstein & Meghan K. Talbott, *The Expanding Use of DNA in Law Enforcement: What Role for Privacy?*, 34 J.L. MED. & ETHICS 153, 153, 158 (2006) (“[V]irtually all of the data are compiled and released by crime laboratories and other entities with an interest in promoting the maintenance or expansion of DNA databases.”).

292. See Rothstein & Talbott, *supra* note 291, at 158.

293. See Christopher H. Asplen, *From Crime Scene to Courtroom: Integrating DNA Technology into the Criminal Justice System*, 83 JUDICATURE 144, 149 (1999) (“In many instances the biological sample is stored indefinitely. Given the changing nature of DNA technology, capabilities may be developed that allow analyses that were not anticipated at the time of sample collection.”).

294. See Villiers, *supra* note 140, at 267 (“The routine collection and storage of this DNA material, given voluntarily, for an important purpose, could devolve into a means of keeping a check on potential criminal immigrants in an anti-immigrant environment.”); see also Amy Harmon, *Where'd You Go with My DNA?*, N.Y. TIMES, Apr. 25, 2010, at WK1 (discussing questions of “informed consent” that arise in large-scale genetic research projects as demonstrated in a settlement between Arizona State University and Havasupai Indians whose DNA samples were used for purposes other than those they had consented to).

295. See Janet L. Dolgin, *Personhood, Discrimination, and the New Genetics*, 66 BROOK. L. REV. 755, 786 (2000); see also Taitz et al., *supra* note 71, at 28 (noting that certain ethnic groups are asked more often to undergo DNA testing than others, and that these requests correspond to the absence of documentation and poverty levels in developing countries).

296. See GINA SMITH, *THE GENOMICS AGE: HOW DNA TECHNOLOGY IS TRANSFORMING THE WAY WE LIVE AND WHO WE ARE* 199 (2004) (quoting the former director of the Center for Biomedical Ethics at the University of Virginia: “As a country, we have not outgrown bigotry, nor our regular desire to find scapegoats for economic conditions, nor the need to enlist science as the panacea for social conditions. The current hype that surrounds genetics will provide plenty of fuel for those who wish to push neo-eugenic schemes, whether or not they use the discredited description of ‘eugenics.’”).

297. See Rothstein & Talbott, *supra* note 291, at 155.

now it has the potential to occur under the guise of a seemingly secure DNA test. The hypothetical scenario demonstrates an important point: DNA testing may temporarily lessen fraud, but refugee brokers and some desperate refugees could find a way to defraud this new, supposedly foolproof system. While some argue that DNA testing will “put certain kinds of ‘refugee brokers’ and fraud rings out of business, and . . . largely shield [innocent refugees] from intimidation by criminal syndicates pressing them to add impostors to their applications,”²⁹⁸ it may simply change the way that fraud is committed and result in illegal attempts at U.S. entry.

No system is incorruptible. For the right price, lab technicians might swap or substitute samples, fabricate test results, or interpret and apply test results in a different or more favorable light than is warranted. Since corruption, bribery, and abuse are rampant in developing countries that house refugees, the possibility of an underground “business” founded to aid and abet fraud to gain U.S. entry is not unthinkable.

In addition to greater fraud, compulsory DNA testing carries another unfortunate consequence: life-threatening refugee resettlement. Some refugees would “cajole, bribe, threaten and kill for the opportunity”²⁹⁹ to reach the United States. The horrific situations that they flee are unimaginable to many Americans. Further narrowing the eye of the needle by demanding DNA tests for P-3 applications may only exacerbate the desolation, desperation, and dangerous lengths some refugees go to in order to reach the United States.³⁰⁰ As it stands, many refugees already entrust their passage to criminal smugglers, travel in dangerous vessels and containers, take perilous routes, and pay exorbitant sums of money.³⁰¹ Refugee men, women, and children fall victim to prostitution and servitude.³⁰² In some instances, the very organizations established to help refugees instead prey upon their vulnerability, accept bribes, and take advantage of them.³⁰³ Thousands of refugees do not make it.³⁰⁴ By requiring DNA testing in the P-3 Program, the United States risks developing a system so

298. MARTIN, *supra* note 27, at 50.

299. Sasha Chanoff, *After Three Years: Somali Bantus Prepare to Come to America*, INT’L ORG. FOR MIGRATION (Nov. 22, 2002), <http://reliefweb.int/node/114018>.

300. Jordan, *supra* note 83 (quoting Ralston H. Deffenbaugh Jr., president of Lutheran Immigration and Refugee Services: “As a refugee resettlement official noted in the wake of the pilot testing, ‘Desperation makes people more susceptible to abuse or bribery.’”).

301. See Ninette Kelley, *International Refugee Protection Challenges and Opportunities*, 19 INT’L J. REFUGEE L. 401, 420 (2007).

302. See UNHCR, Conclusion on Protection from Sexual Abuse and Exploitation, U.N. Doc. A/AC.96/987, at 21 (Oct. 10, 2001), available at http://www.un.org/ga/search/view_doc.asp?symbol=A/AC.96/987; see also Elizabeth Ferris, *Abuse of Power: Sexual Exploitation of Refugee Women and Girls*, 32 J. WOMEN CULTURE & SOC’Y 584 (2007).

303. See Kenya: UNHCR Head Accepts Nairobi Corruption Report, IRIN NEWS (Jan. 28, 2002), <http://www.irinnews.org/report.aspx?reportid=29962> (explaining that UNHCR officials were accused of taking bribes from refugees to streamline their resettlement applications).

304. See Somini Sengupta, *Boat to Safety Is Death Trap to Sri Lankans*, N.Y. TIMES, May 6, 2009, at A1.

impossibly exacting it will only encourage unlawful and perilous entry. The United States may end up endangering the very lives it commits to save.

VI.

RECOMMENDATIONS

The United States is not alone in using DNA testing in its immigration system.³⁰⁵ In September 2007, French President Nicolas Sarkozy proposed a new law that would sanction DNA testing to verify family relationships claimed by immigrants applying for visas.³⁰⁶ One year later, and following widespread protests,³⁰⁷ the French government enacted a modified version of the bill.³⁰⁸ In 2009, the United Kingdom instituted a widely criticized program in which the UK Border Agency (UKBA) attempted to use DNA testing to determine refugees' nationalities.³⁰⁹ Following a public outcry, the UKBA temporarily stopped its Human Provenance Pilot Project; later, it resumed the project without the nationality-testing component.³¹⁰ Responding to media questions, an unnamed U.S. official asked to comment on the UKBA Pilot stated that U.S. officials "have not used, nor are they considering DNA testing for verifying nationality."³¹¹ While the statement may bring some solace to those concerned about U.S. testing policies, concerns abound as to whether DNA testing is already being asked to do more than it can.³¹² It is possible that once mandatory

305. See Taitz et al., *supra* note 71, at 24–25 (listing Australia, Canada, Denmark, Finland, Hong Kong, China, the Netherlands, Norway, and Sweden).

306. See Tera Rica Murdock, *Whose Child Is This?: Genetic Analysis and Family Reunification Immigration in France*, 41 VAND. J. TRANSNAT'L L. 1503, 1508 (2008).

307. See Elaine Sciolino, *Proposal in France to Test Some Immigrants' DNA*, N.Y. TIMES, Oct. 11, 2007, at A3; see also Peter Allen, *Illegal Immigrants to Be DNA Tested Under New Crackdown in France*, DAILY MAIL ONLINE (Jan. 26, 2009), <http://www.dailymail.co.uk/news/article-1127823/Illegal-immigrants-DNA-tested-new-crackdown-France.html>.

308. See *French Parliament Adopts DNA Bill*, BBC NEWS (Oct. 24, 2007, 12:03 GMT), <http://news.bbc.co.uk/2/hi/europe/7059186.stm>.

309. *Experts Condemn Asylum DNA Tests*, BBC NEWS (Sept. 30, 2009, 14:43 GMT); see also *UKBA's Human Provenance Pilot Project*, HOME OFFICE (Oct. 14, 2010, 5:16 PM), <http://www.homeoffice.gov.uk/about-us/freedom-of-information/released-information/foi-archive-about-us/16022-UKBA-Human-Provenance> (reporting that UKBA officials had met with members of the Human Genetics Commission and "address[ed] their concerns").

310. See *id.*

311. Valerie Ross, *Can DNA Tests Reveal Nationality?*, SCI. LINE (Dec. 30, 2009), <http://www.scienceline.org/2009/12/can-dna-tests-reveal-nationality>.

312. See John Travis, *Scientists Decry "Flawed" and "Horrifying" Nationality Test*, SCI. INSIDER (Sept. 26, 2009, 9:57 AM), <http://news.sciencemag.org/scienceinsider/2009/09/border-agencys.html> (quoting geneticists and isotope specialists as saying: "[G]enes don't respect national borders, as many legitimate citizens are migrants or direct descendants of migrants, and many national borders split ethnic groups," and, "I don't think I could tell the difference between a Kenyan and a Somalian"); see also John Travis, *U.K. Border Agency Docs and Expanded Reactions*, SCI. INSIDER (Sept. 29, 2009, 10:01 AM), <http://news.sciencemag.org/scienceinsider/2009/09/nationality-tes-1.html> (quoting geneticists and isotope specialists: "I can't imagine how you use [isotope evidence] to define nationality. . . . It worries me as a scientist that actual peoples' lives are being influenced based on these methods.") (alteration in original).

DNA testing is implemented in the P-3 Program, U.S. officials could go further: lobbying for similar, controversial applications and programs that the officials in the UK implemented. U.S. officials could continue to push the envelope and use DNA testing to rubber-stamp dubious proposals and policies.

When conducted and interpreted appropriately, DNA tests hold enormous potential in many areas of law and life. Most immediately, and with respect to the U.S. refugee admissions program, DNA testing can provide important evidence of biological relationships when refugees lack any form of documentation or ability to prove their cases. That said, asking DNA tests to divine aspects of personhood such as kinship relationships that cannot be proven with genes has serious and harmful consequences. In putting unwarranted faith in DNA technology, the United States risks implementing “reactionary and protective legal, regulatory[,] or policy responses, quite possibly to the detriment of clearly legitimate uses of genomic data.”³¹³ Indeed, history yields many, unfortunate examples of science being used to divide, stigmatize, terrorize, and legally punish individuals.³¹⁴

Placing too much faith in DNA testing also risks giving the technology a bad name. If DNA testing is used to prove something it cannot, popular support for further research and testing could wane. The obvious solution, at a minimum, is to require extensive training on DNA testing, its advantages and disadvantages, its benefits and blind spots, and to exert a high level of restraint when using DNA test results to evaluate refugee claims. Additionally, if PRM does require DNA testing, it should occur in conjunction with a more expansive definition of “family”—ideally, the one that UNHCR utilizes. Applying a more inclusive definition in the context of DNA testing might “enable refugees to maintain the unity of their families as they are accustomed to.”³¹⁵ Since unity and reunification of refugee families are U.S. goals, they must be prioritized and compassion accorded to refugees.

313. See Dan Vorhaus, *Why the Errors of the Human Provenance Project Will Echo Beyond the U.K.'s Borders*, GENOMICS LAW REPORT (Sept. 29, 2009), <http://www.genomicslawreport.com/index.php/2009/09/29/why-the-errors-of-the-human-provenance-project-will-echo-beyond-the-uks-borders>.

314. See Frances Webber, *Bad Science?*, INST. OF RACE RELATIONS (Sept. 24, 2009, 10:00 PM), <http://www.irr.org.uk/2009/september/ha000014.html>. See generally A CENTURY OF EUGENICS IN AMERICA: FROM THE INDIANA EXPERIMENT TO THE HUMAN GENOME ERA (Paul A. Lombardo ed., 2011) (chronicling the history of eugenics in the United States and how it has been used to justify local laws, social programs, and cultural shifts); THE OXFORD HANDBOOK OF THE HISTORY OF EUGENICS (Alison Bashford & Phillipa Levine eds., 2010) (analyzing the global eugenics movement and documenting specific applications).

315. UNHCR, Note on DNA Testing to Establish Family Relationships in the Refugee Context 7 (June 2008), available at <http://www.unhcr.org/refworld/docid/48620c2d2.html>.

A. DNA Testing Should Be Used Only When Absolutely Necessary

There may be some wisdom to following UNHCR's lead and using DNA testing to substantiate claims that seem genuinely suspicious and cannot otherwise, or under any circumstances, be proven—and only after the refugee-applicant has exhausted all other means of validation. After all, when no proof exists aside from the refugee's own story, and when so many claims from desperate individuals are on the line, there may be nowhere else to turn other than an individual's genes. It is conceded that, in limited circumstances, DNA testing could be viewed as the most reliable, definitive and fairest means of confirming a person's biography.

Problematically, it does not appear that PRM plans to use DNA testing in this highly restricted and careful way. Even if PRM does impose limits on DNA testing, the experience of the DNA pilot suggests U.S. officials will not conduct DNA tests free of preconceived notions or interpret test results in a holistic manner. It is clear that the DNA tests in the pilot program proved to be the determining factor, as opposed to one of many factors, used to assess the veracity of claimed family relationships. Entire family cases were denied based on an individual's negative test result or refusal to be tested.³¹⁶ If USCIS officers are equally reliant on DNA testing moving forward, family reunification through the P-3 Program may prove Sisyphean for refugee-applicants.

U.S. officials are advised to follow UNHCR's guidance with respect to DNA testing. Again, UNHCR recommends that DNA tests be used only to verify family relationships when serious doubts remain, and only after all other means and types of proof have been exhausted.³¹⁷ Alternatively, UNHCR recommends that DNA testing be utilized when there are strong indications of fraudulent motives and DNA tests are considered to be the only reliable recourse to prove or disprove the fraud.³¹⁸ In short, DNA testing, if used at all, must be used cautiously, holistically and, insofar as possible, as a last resort.

B. The United States Should Adopt a Broader Definition of "Family"

Given that PRM will likely require DNA testing in all P-3 applications, it should follow UNHCR's recommendation and use DNA testing sparingly. Coupled with this application of DNA testing, PRM might also adopt a definition of "family" that is not restricted to biological relationships, but rather one which emulates the UNHCR's broader, more expansive and reality-based designation.

According to UNHCR, "[t]he family unit has a better chance of successfully . . . integrating in a new count[r]y than do individual refugees. In this respect, protection of the family is not only in the best interest of the

316. See *ESBENSHADE*, *supra* note 27, at 15.

317. See UNHCR, *supra* note 315, at 4.

318. *Id.*

refugees themselves, but is also in the best interest of States.”³¹⁹ In addition to requiring DNA tests in limited circumstances, the United States should adopt a broader definition of “family.” Officials tasked with reuniting refugees with those whom they consider to be family members, even when there are no biological ties, should understand that a broader definition will ensure that refugees have a support system and enable them to become self-sustaining residents more quickly. For refugees, it goes without saying that a broader definition of family will enable them to maintain and foster their kinship relationships even after leaving their home countries.

The stresses of refugee resettlement—isolation, loss of identity, language barriers and adapting to a new lifestyle³²⁰—are well documented. Until a refugee is reunited with his or her family, these resettlement stresses are exacerbated by isolation, loneliness, and the concern for the safety of family members left behind.³²¹ Furthermore, an isolated refugee may not know how to access the social support and help that may be available to him. Family reunification has the potential to buoy the resettled but understandably disoriented refugee and result in his speedier assimilation.³²² Family reunification can do this by lessening the economic burdens of resettlement,³²³ reestablishing support systems, and giving refugees “social capital” that will enable them to build new lives—sometimes in unwelcoming communities.³²⁴ Mandatory DNA testing, on the other hand, could imperil an otherwise positive resettlement experience, resulting in an indigent and unproductive resettled refugee population.³²⁵

CONCLUSION

DNA testing is poised to revolutionize the Refugee Family Reunification or P-3 Program. At a certain point, debating the wisdom of a seemingly inevitable policy choice without offering concrete and pragmatic suggestions

319. UNHCR, *supra* note 273.

320. See Marie-Antoinette Sossou, *Refugees' Life Transitions from Displacement to Durable Resettlement*, in HANDBOOK OF STRESSFUL TRANSITIONS ACROSS THE LIFESPAN 465, 479–80 (Thomas W. Miller ed., 2010).

321. See Carmelina Losaria Barwick et al., *Refugee Children and Their Families: Exploring Mental Health Risks and Protective Factors*, in IMMIGRANT AND REFUGEE CHILDREN AND THEIR FAMILIES: CLINICAL, RESEARCH AND TRAINING ISSUES 37 (Fern J. Cramer Azima & Natalie Grizenko eds., 2002).

322. See Jastram & Newland, *supra* note 16, at 565 (“A unified family is the strongest and most effective support system for a refugee integrating into the social and economic life of a new country.”).

323. See Sample, *supra* note 116, at 51.

324. See Helen Rose Ebaugh & Mary Curry, *Fictive Kin as Social Capital in New Immigrant Communities*, 43 SOC. PERSP. 189, 206 (2000).

325. See Carroll, *supra* note 141, at B1 (quoting a resettled refugee whose family’s case was put on hold following the DNA pilot: “If you cannot get your family here, your American dream looks different”).

would be irresponsible. The better path is to inform and alert those individuals tasked with implementing mandatory DNA testing in the P-3 Program as to the best practices for avoiding the technology's tunnel vision and pitfalls.

Admittedly, the issue is a complex one. How does one tackle fraud using science so as to run a fair and just refugee admissions program, when science cannot fully appreciate the non-genetic realities and life-threatening consequences that are involved? How does one balance strict legal requirements with humanitarian commitments and honor the realities of the world we live in, while aspiring to create a different and better situation?

First, more education is needed. U.S. officials must come to understand the "typical" refugee family: one that encompasses non-biological kinship relationships and bonds born of war, enormous suffering, and emergency. Second, officials must appreciate that because DNA testing implies a biological definition of family, it cannot test all refugee family relationships. That is, while DNA testing might benefit some refugees who cannot otherwise prove whom they are related to, making DNA testing obligatory is simply not justified in light of its many limitations. As to what those limitations are, DNA testing cannot adequately test all relationships claimed by refugees because not all "family members" possess biological or legal ties. Recognizing this distinction will be key to operating a truly just, as opposed to a definitionally airtight, program.

Third, U.S. officials must appreciate that DNA testing can fall prey to many problems that decrease its effectiveness, such as laboratory error, climate control issues, and deliberate, or even premeditated, abuse. Human beings' lives and relationships are at stake, and human error and weaknesses may adversely affect DNA testing's supposedly near-foolproof procedures. As long as this is true, DNA testing must not become the be all and end all solution.

Fourth and finally, DNA testing is expensive. Asking refugees who would give anything and everything for the chance to apply for resettlement in the United States, but who possess little or nothing in the way of resources, is unconscionable. Providing adequate funds to cover DNA tests at the front end or reimbursing refugees who are asked to undergo them should, if DNA testing becomes mandatory, be mandatory, too.

In closing, the benefits of DNA testing in the P-3 context must be weighed against the costs. Expansive thinking with regard to the refugee family, and the abstemious use of DNA testing in the family reunification context, are imperative. It is only by carefully and sensitively balancing the genetic truths and facts of existence that we may succeed at accomplishing our goal of protecting not genes, but families. Individuals are more than collections of their genes. The individuals who will be affected by mandatory DNA testing have been through more than most of us can imagine. Accordingly, the Refugee Family Reunification (Priority Three) Program must encompass more than genetic testing.