DNA

. . . and the search for answers

By Dan Berger, Kayla Sheets and Karen K. Greenberg

An unusual series of cases handled by immigration attorney Dan Berger, one of the authors of this article, last year sparked our interest. Five couples in the United States entered a contract with various surrogacy clinics abroad for the conception of a baby using the husband's sperm and a donor egg. After the babies were born, the DNA tests concluded that the husband was "not the biological father of the child." It seemed as if the surrogacy clinics had either made a mistake, or were deliberately lying. One of the clinics said that the result "must be due to chimerism."

This raised questions. Could one of the babies actually be the genetic offspring of the U.S. male sperm donor? Can a DNA test be wrong? We looked up "chimerism" and found it discussed in a New York Times article from 2013; the article defined the term as cases where individuals have two genomes (entire sets of DNA) in their bodies. This led to a fascinating discussion among a group of scientists and lawyers, which in turn led ultimately to a presentation on this topic and then this article.

Standard DNA Testing for Adoption

To confirm a biological relationship between a child and alleged parents, DNA testing is performed. This section describes the typical information included in parental DNA test reports. A typical parental DNA test contains demographic and genetic information about the tested individuals. The demographic information includes full names, dates of birth, reported ethnicities and, ideally, the date and type of sample (buccal or blood) collected. The genetic information includes the list of identified markers by their unique alphanumeric names and associated lengths. Standard reports reference 15 markers (also called loci), that contain short stretches of repetitive DNA sequence (STRs = Short tandem repeats). Each of the child's markers will have two values, as one copy was presumably inherited from each biological parent. The markers may be coincidentally the same length, in which case they may appear on the report as one value.

When the probability of paternity or maternity is zero, the alleged parent is excluded from being the biological mother/father of the child. When the alleged parent is not excluded from being the biological father, the probability of parentage can be more than 99 percent, assuming no other close relatives are under consideration. One limitation to this type of DNA testing is it does not apply when the alleged mother/father is compared to a blood relative such as a cousin, sibling or identical twin. If needed, the lab may be able to perform additional studies. For example, if the baby is male, the lab can perform Y chromosome analyses on the alleged father and the tested baby. The Y chromosome is passed down from father to son. For babies of any gender, the lab can screen additional loci, which increases the reliability of the test result.

As a practical matter for immigration or adoption attorneys, clients will be happy with a positive DNA test result that confirms the visa category sought. The DNA test result will usually resolve the case. There are times where a DNA test result comes back negative, and the client accepts it, admitting that a child may not actually be genetically related to the petitioning parent. But in cases where the petitioner insists the DNA test is wrong, consider resampling, and repeating the test. Consulting a genetics expert is highly recommended in complex cases, since DNA technology is constantly evolving and a more robust test may be appropriate.

DNA Testing to Seek Biological Relatives

It is increasingly common for adoptees to utilize DNA testing to connect with biological parents, gamete donors and other relatives. While some parental DNA testing laboratories offer "kinship" tests that utilize the aforementioned methodology of 15 markers, the results are limited and not always informative. Labs specialized in ancestry testing generally use newer technology (called microarrays), which analyze hundreds of thousands of markers at a time. This enables the lab to compare the DNA of two individu-

als, and assess relationship. Close relatives will share long stretches of their DNA; distant relatives will share shorter contiguous segments. If no relatives are located via a first ancestry lab, it is recommended to pursue additional testing at different labs. The labs do not share their participant data and can yield different results. One particular lab permits users to upload data from previous labs to find relatives.

DNA Testing for Ethnicity

Prior to adoption, confirming the ethnic heritage of a child may be desirable. Some cases require excluding that the child does not have alleged Native American heritage. DNA testing is a temptation but is not always reliable. Currently, genotypic data associated with Native American tribes are quite limited, yielding a high rate of false negative results. Many tribes have long histories of incorporating non-Native members, making it difficult to isolate unique genotypic data that could reliably determine tribal heritage.

U.S. Immigration Law Related to Children

Despite the importance of DNA testing in an immigration case based on a genetic family relationship, the law is relatively vague. (For more details on the immigration part of this article, see http://agora.aila.org/product/detail/2739 and http://curranberger.com/images/navigating-dna-testing-immigration-21-BIB-13.pdf.) The immigration officer's manual, updated in 2008, states that DNA testing is voluntary, and does not guarantee approval of the petition. There is no clear guidance on when officers should request DNA tests, whether they can be submitted in advance, and what weight should be given to a person's refusal to submit to a DNA test. The author has found, though, that DNA is de facto the final arbiter of family relationships. A positive test (99.5 percent probability) leads to approval, and a negative test result leads to denial.

DNA testing also raises cultural and financial issues. Shipping samples in a secure chain of custody to an accredited lab in the United States can cost many hundreds of dollars. Also, the idea of drawing blood or taking saliva or skin samples may be scary or against religious beliefs for some. As an example, in the late 1990s, the U.S. Embassy in Guatemala ordered DNA testing for birth mothers whose children were being adopted by U.S. citizens. Quite a few birth mothers did not show up for the testing. It is hard to know how to interpret this — were the women not the genetic mothers of these children, and if so where did the children come from? Or were the women, many of whom were Mayan and from rural areas, afraid of the process?

Despite imperfections, DNA testing remains the gold standard in immigration cases. A negative test is often accepted. But, in the small number of cases where a family member insists the DNA test is wrong, there are some relatively straightforward ways to redo the test and confirm the results. Consulting a genetics expert is highly recommended in those cases, since the field is constantly evolving.

DNA Testing in Adoption, ICWA, Paternity and Gestational Carriers DNA

DNA, short for Deoxyribonucleic acid, is used to determine parentage through genetic marker testing. The presumption of paternity is easily rebutted by DNA, because most testing today produces statistical probability at 99 percent. The chances of the inaccuracy of the results are slight. However, a court may order retesting, and if the matter continues to be challenged, an expert witness to refute the results is crucial.

DNA alone does not the legal father make

There is no presumption of paternity in cases where a child is born to unwed parents. Paternity may be established by the execution of a Voluntary Acknowledgment of Paternity, or a Judgment of Paternity. In either case, the father's name is put on the birth certificate, and he is elevated to the legal father of the child, regardless if, subsequent to the adjudication of paternity, another man proves to be the biological father of the child by DNA.

This recent case of Jesse B. v. Tylee H. (In re Adoption of Jaelyn B.), 293 Neb. 917 (2016) confirmed this. Jesse executed a Voluntary Acknowledgement of Paternity and in accordance with his state law, he was deemed the legal father of the child. When the mother subsequently took action to have the child adopted by the biological father, the Voluntary Acknowledgment of Paternity trumped the results of the DNA test.

Michael H. v. Gerald D., 491 U.S. 110, 109 S. Ct. 2333, (1989), is the seminal case on a putative father's rights to custody of a child born to a woman during her marriage to another man. The Supreme Court held that when a child is conceived through an adulterous relationship, the biological father does not have a procedural due process right to a hearing to establish his paternity, because the Due Process Clause did not give him a liberty interest in maintaining a parental relationship with his child. No case has held that a biological father shall be recognized when a child is conceived within a marital union that wishes to embrace the child. Id. at 126-27. The biological father's putative constitutional right to establish paternity of his daughter was limited "by the circumstance that the mother is, at the time of the child's conception and birth, married to, and cohabitating with, another man, both of whom wish to raise the child as the offspring of their union." Id. at 129.

Similarly, the Massachusetts Supreme Court confirmed that a parental claim does not require a genetic relationship between the person seeking to establish full legal parentage. (MA October 4, 2016). Former same sex partner's lack of a biological relationship with the child conceived through assisted reproduction technology, was not a bar to her being deemed the legal parent. See, relying upon M.G.L.Ch. 209C s 6(a) (4) (man presumed father of child born out of wedlock if jointly with mother received child into his home and openly held child as their child).

DNA tests used in adoption-related matters

DNA can play a vital role in adoption matters to confirm the biological father and proper termination of his rights, or the opportunity for him to parent, in addition to his opportunity to participate in the adoption process, providing his medical and sociological history.

The Role of DNA in ICWA cases

It has been suggested that DNA testing will establish whether a child being considered for adoption is an Indian child. DNA testing would not be sufficient to determine whether the

Indian Child Welfare Act is applicable, because each tribe has its own set of rules to determine who is an Indian child.

DNA tests utilized in gestational carrier and surrogacy matters

All gestational carrier and surrogacy contracts should require DNA testing be performed prior to the birth of the child, as soon as a DNA test may be done. If the DNA test is negative, the carrier is in breach. The breach however, may make the contract voidable, but not necessarily void.

Dan Berger is a partner at the law firm of Curran & Berger in Northampton, Massachusetts, and a frequent speaker, editor and writer on immigration law. He won the 1995 American Immigration Lawyers Association annual writing competition for an article on INS policies toward international adoptions. Berger has also been editor for the AILA Immigration and Nationality Law Handbook since 2000, and edited Immigration Options for Academics and Researchers (2005 and 2011 editions), the International Adoption Sourcebook, and the Diplomatic Visa Guide. He has written on a wide variety of topics including on outstanding professor/researcher green cards, temporary visa "d3" waivers, green cards for Iraqi and Afghan translators, use of DNA evidence in immigration cases, and the elements of immigration law for in-house legal counsel. He is a graduate of Harvard College and Cornell Law School. Berger is on the editorial board of Lexis/Nexis Law 360, a founding member of the American Alliance of International Entrepreneurs, and honorary member and co-chair of the international committee of the American Academy of Adoption Attorneys, and serves on the travel subcommittee of the National Association of Foreign Student Advisers. He has been quoted in various media, including the Atlantic magazine and the Huffington Post. Berger developed his interest in immigration in college, where he studied immigration history and taught English to adult refugees.

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