# FAMILIAL SEARCHING: HOW IMPLEMENTING MINIMUM SAFEGUARDS ENSURES CONSTITUTIONALLY-PERMISSIBLE USE OF THIS POWERFUL INVESTIGATIVE TOOL

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### INTRODUCTION

Between 1985 and 1988, seven women and one man were killed in Los Angeles, and a ninth victim was raped but survived.<sup>1</sup> No useful leads materialized. Thirteen years passed, and the "Grim Sleeper" struck again, committing additional murders between 2002 and 2007.<sup>2</sup> Law enforcement was able to develop a DNA profile of the killer from evidence collected at some of the crime scenes, but the profile did not match any known offender profiles already lawfully stored in the state and national databases.<sup>3</sup> In 2010, the California Department of Justice conducted a Familial Search of the offender's DNA profile. This was the second search in this case, and the DNA database had grown by several hundred thousand samples from convicted offenders since the first search eighteen months earlier.<sup>4</sup> The second search showed that one offender who met the kinship index cutoff also had a Y chromosome profile that matched the perpetrator.<sup>5</sup> This information prompted law enforcement to investigate whether the convicted offender (who was already in the database) had a father, son, or brother who could have committed the unsolved crimes.6 The investigation included an instance where a detective followed the father of the convicted offender, and lawfully collected napkins, a fork, and a partially eaten slice of pizza that he discarded at a restaurant.7 Testing the DNA left on the abandoned

<sup>&</sup>lt;sup>1</sup> Michael Chamberlain, *Familial DNA Searching: A Proponent's Perspective*, 27 CRIM. JUST. 18, 28 (2012).

<sup>2</sup> Id.

<sup>&</sup>lt;sup>3</sup> See id. at 29

<sup>4</sup> See id.

<sup>5</sup> Id.

<sup>6</sup> Id.

<sup>&</sup>lt;sup>7</sup> For a discussion of abandoned DNA samples, see MING W. CHIN, MICHAEL CHAMBERLAIN, AMY ROJAS & LANCE GIMA, FORENSIC DNA EVIDENCE: SCIENCE AND THE LAW § 3:2 (2018) ("Collecting an 'abandoned' DNA sample has become an increasingly common

items revealed that the convicted offender's father was a match to the DNA profile developed from the evidence left at the Grim Sleeper's crime scenes.<sup>8</sup> After pursuing this lead further, investigators were able to determine that the offender's father was in fact responsible for the gruesome murders and rapes.

DNA evidence has been used in criminal investigations for nearly thirty years.<sup>9</sup> Though DNA testing has always been of interest to scientists, it was first used in 1987 to prosecute Tommie Lee Andrews, the first American convicted by DNA evidence.<sup>10</sup> Since then, DNA testing and analysis have routinely been used in criminal prosecutions, given their ability to individualize the source of forensic evidence.<sup>11</sup> When DNA evidence is available, it can be used to identify perpetrators or victims with incredible accuracy.<sup>12</sup> DNA can also be used to clear suspects and exonerate persons mistakenly accused or convicted of crimes.<sup>13</sup> In all, DNA technology is increasingly vital to ensuring accuracy and fairness in the criminal justice system.<sup>14</sup>

<sup>8</sup> See Chamberlain, supra note 1.

<sup>11</sup> Id. at 204.

tactic for law enforcement investigators who seek a reference sample for comparison purposes but lack the requite probable cause for issuance of a search warrant. The legality of this approach is premised on the established principle that no reasonable expectation of privacy attaches to property abandoned in public and thus accessible to anyone."). *See also* California v. Greenwood, 486 U.S. 35, 39 (1988) (the search of defendant's trash container left for curbside pickup did not infringe upon protected privacy interest).

<sup>&</sup>lt;sup>9</sup> See Michael D. White, Andrea R. Borrego & David A. Schroeder, Assessing the Utility of DNA Evidence in Criminal Investigations, in FORENSIC SCIENCE AND THE ADMINISTRATION OF JUSTICE: CRITICAL ISSUES AND DIRECTIONS 121, 123 (Kevin J. Strom & Matthew J. Hickman eds., 2015) ("DNA testing was first used in the mid-1980s... but it gained worldwide attention as part of the O.J. Simpson murder trial in the early 1990s.").

<sup>&</sup>lt;sup>10</sup> See Kristen Skogerboe, Innovation, Success, Error, and Confidence in Forensic DNA Testing, in FORENSIC SCIENCE AND THE ADMINISTRATION OF JUSTICE, supra note 9, at 201.

<sup>&</sup>lt;sup>12</sup> Using DNA to Solve Crimes, U.S. DEP'T JUST. ARCHIVES, https://www.justice.gov/ archives/ag/advancing-justice-through-dna-technology-using-dna-solve-crimes [https:// perma.cc/R8KH-YA5P] (last updated Mar. 7, 2017).

<sup>&</sup>lt;sup>13</sup> Id.; see Tall Bear, Member of Iowa Tribe, Exonerated After Serving 26 Years for a Murder DNA Evidence Proves He Didn't Commit, INNOCENCE PROJECT (June 11, 2018), https://www.innocenceproject.org/oklahoma-man-exonerated-after-serving-26-years-for-a-murder-dna-evidence-proves-he-didnt-commit [https://perma.cc/TNE8-5KKS].

<sup>14</sup> Using DNA to Solve Crimes, supra note 12.

In the United States, every state and the federal government collects DNA from individuals convicted of certain crimes.<sup>15</sup> Forty-eight states require the collection of DNA for any felony conviction, and forty-two states require the collection of samples for at least some misdemeanor convictions.<sup>16</sup> To organize and facilitate the use of DNA evidence, law enforcement agencies and governments-at state and national levels-around the world have established DNA databases to store the evidence.<sup>17</sup> Once it is collected, database analysts create a genetic profile of the DNA that can be stored electronically, and which law enforcement can compare against a growing bank of DNA samples taken from offenders with DNA picked up at other crime scenes.<sup>18</sup> As collections of DNA have expanded, so too have the ways in which DNA is used in criminal investigations.<sup>19</sup> Improvements in laboratory equipment and technology paved the way for new methods of processing, storing, testing, and analyzing DNA evidence.<sup>20</sup> Furthermore, DNA databanks have only increased in size as scientists became able to extract testable DNA samples from smaller and varied specimens.21

Though it varies by jurisdiction, generally speaking, once an arrestee or convicted person's DNA profile is entered into a database, the profile will remain in that database unless an event occurs that allows for expungement of the DNA profile.<sup>22</sup> The Combined DNA

19 See id.

<sup>&</sup>lt;sup>15</sup> NAT'L CONFERENCE OF STATE LEGISLATURES, CONVICTED OFFENDERS REQUIRED TO SUBMIT DNA SAMPLES (2013), http://www.ncsl.org/Documents/cj/ConvictedOffenders DNALaws.pdf [https://perma.cc/9NW8-3A3R]; *see* 34 U.S.C. § 40702 (2018) (authorizing the collection of DNA samples from an individual convicted of any felony federal offense).

<sup>&</sup>lt;sup>16</sup> NAT'L CONFERENCE OF STATE LEGISLATURES, *supra* note 15.

<sup>&</sup>lt;sup>17</sup> White et al., *supra* note 9; *see* Randy James, *A Brief History of DNA Testing*, TIME (June 19, 2009), http://content.time.com/time/nation/article/0,8599,1905706,00.html [https://perma.cc/F7J2-DXUY].

<sup>&</sup>lt;sup>18</sup> See Sheldon Krimsky & Tania Simoncelli, Genetic Justice: DNA Data Banks, Criminal Investigations, and Civil Liberties xvi (2011).

<sup>&</sup>lt;sup>20</sup> See generally Vernon J. Geberth, *30 Years of DNA Technology*, FORENSIC MAG. (Mar. 13, 2017, 3:18 PM), https://www.forensicmag.com/article/2017/03/30-years-dna-technology [https://perma.cc/HF8G-7K8Y].

<sup>&</sup>lt;sup>21</sup> Jessica D. Gabel, *Probable Cause from Probable Bonds: A Genetic Tattle Tale Based on Familial DNA*, 21 HASTINGS WOMEN'S L.J. 3, 12 (2010).

<sup>&</sup>lt;sup>22</sup> For example, a person may submit an application to have his DNA expunged from the state databank if, for example, the underlying conviction serving as the basis for the DNA

Index System (CODIS) uses the profiles in databases to enable federal, state, and local forensic laboratories to exchange and compare DNA profiles electronically.<sup>23</sup> Sometimes law enforcement will not receive a profile match after conducting a routine database search.<sup>24</sup> In these cases, subject to the state's DNA analysis regulations, the database agents may conduct a second search using different software and different search parameters. This may yield a DNA profile that does not exactly match the perpetrator's DNA profile but shares a "significant portion" of that profile, thus indicating the likelihood of biological relatedness<sup>25</sup>—giving rise to the name "Familial Search." Such a computerized search of an unidentified crime scene DNA profile against DNA profiles lawfully stored in a database may yield a collection of leads, which law enforcement officers may investigate further in connection with unsolved violent crimes.<sup>26</sup>

This Note supports the adoption of Familial DNA Search Policies by states that have not yet taken a position on the issue. Part I of this Note provides background on the role of Familial Searches in criminal investigations. This includes a discussion on the nature of Familial Searches, why they are useful, and the current state of the law. Part I also considers the different guidelines and protections in existing Familial Search Policies, as well as states' policies regulating their DNA databases. Part II discusses the Fourth Amendment and equal protection concerns implicated by Familial Searches and how a court may address such issues. Part III proposes that states that have not yet taken a position on Familial Searches adopt policies permitting this type of search. However, in crafting these new policies, the Proposal instructs states to comply with a set of minimum requirements, which will

profile has been reversed or vacated, *see* N.Y. EXEC. LAW § 995-c (McKinney 2012); CAL. PENAL CODE § 299 (West 2016); the charges are disposed of by acquittal, *see* MD. CODE ANN., CRIM. PROC. § 6-232 (West 2009); or the defendant was pardoned, *see* TEX. CODE CRIM. PROC. ANN. art. 55.01 (West 2017).

<sup>&</sup>lt;sup>23</sup> See Combined DNA Index System (CODIS), FBI, https://www.fbi.gov/services/laboratory/ biometric-analysis/codis [https://perma.cc/46RU-KYZS] (last visited Mar. 14, 2019).

<sup>24</sup> See id.

<sup>&</sup>lt;sup>25</sup> Chamberlain, *supra* note 1, at 1.

<sup>&</sup>lt;sup>26</sup> Frederick R. Bieber, Charles H. Brenner & David Lazer, *Finding Criminals Through DNA of Their Relatives*, 312 SCI. 1315 (2006).

mitigate negative effects of the policy that could potentially affect communities of racial minorities in disproportionate amounts.

This Note acknowledges that some states have already decided *not* to allow Familial Searches.<sup>27</sup> Maryland has chosen to prohibit Familial Searching, in part due to the concerns raised later in this Note.<sup>28</sup> However, this Note proposes measures that seek to mitigate the negative effects of a Familial Search Policy. If properly drafted and scrupulously monitored, Familial Search Policies have the potential to solve cold cases and exonerate individuals who have been wrongly convicted.<sup>29</sup> Thus, we may expect law enforcement in states that have banned Familial Searches to urge lawmakers in their states to adopt such policies in the future.

<sup>&</sup>lt;sup>27</sup> Maryland has, by statute, forbidden the use of Familial Searching. *See* MD. CODE ANN., PUB. SAFETY § 2-506(d) (West 2018) ("A person may not perform a search of the statewide DNA data base for the purpose of identification of an offender in connection with a crime for which the offender may be a biological relative of the individual from whom the DNA sample was acquired.").

<sup>&</sup>lt;sup>28</sup> Joyce Kim, Danny Mammo, Marni B. Siegel & Sara H. Katsanis, *Policy Implications for Familial Searching*, 22 INVESTIGATIVE GENETICS 1, 2, 6 (2011) ("Maryland banned familial searching of the state-specific database as part of legislation to expand its DNA databases to include arrestees of violent crimes because of the disproportionate number of racial minorities subject to arrest. In other words, legislators feared that allowing familial searching of an arrestee database could disproportionately focus law enforcement efforts on a large group of people who are primarily defined by their race, despite their never having committed a crime.").

<sup>&</sup>lt;sup>29</sup> Lauren Keiper, *More U.S. States Use Familial DNA as Forensic Tool*, REUTERS (Mar. 30, 2011, 8:38 PM), https://www.reuters.com/article/us-crime-dna-familial/more-u-s-states-use-familial-dna-as-forensic-tool-idUSTRE72T2QS20110331 [https://perma.cc/2537-5UFJ] ("Advocates tout familial DNA as the next practical step in maximizing the use of DNA, in a responsible manner, to solve crimes. They say familial DNA searching should be used only when all other investigative tools have been exhausted and only in the most serious cases.... Solving a crime faster by using familial DNA also means immediate exoneration of others and fewer potential victims, said Chris Asplen, a former federal prosecutor with a special focus on forensic DNA technology and its use in the courts.").

#### I. BACKGROUND

### A. Familial DNA Searches

In cases where traditional investigative tactics fail to yield a suspect, and where the perpetrator's DNA is not contained in a recorded profile,<sup>30</sup> Familial Searches provide law enforcement with a different way of analyzing genetic evidence that is already lawfully stored in a database.<sup>31</sup> To this end, while Familial Searches are not performed at the national level, several states—Arkansas, California, Colorado, Florida, Michigan, Ohio, Texas, Utah, Virginia, Wisconsin, and Wyoming currently perform these searches at the state level.<sup>32</sup>

Recently, Ohio conducted its first Familial Search after a ten-yearold girl suffered an abduction attempt from her bedroom window, and after a six-year-old girl was abducted and held for nearly a day, during which period she was sexually assaulted by the perpetrator.<sup>33</sup> The

<sup>31</sup> KRIMSKY ET AL., *supra* note 18, at 65 (Familial Searches "are premised on the notion that siblings and other closely related individuals share more common genetic material than unrelated individuals. Therefore, a DNA profile that is a near match to the DNA found at a crime scene may be that of a first-degree relative of the actual perpetrator (i.e., a parent, an offspring, or a full sibling). The source of the near match, then, may lead the police to the criminal suspect and, in some cases, provide valuable information about that individual.").

<sup>33</sup> Sarah Larimer, 'Basically a Monster': Man Accused of Abducting Girl from Her Cleveland Home 'In the Dead of Night', WASH. POST (Dec. 6, 2016), https://www.washingtonpost.com/

<sup>30</sup> PRESIDENT'S COUNCIL OF ADVISORS ON SCI. & TECH., REPORT TO THE PRESIDENT, FORENSIC SCIENCE IN CRIMINAL COURTS: ENSURING SCIENTIFIC VALIDITY OF FEATURE-COMPARISON MODELS 69 (2016), https://www.innocenceproject.org/wp-content/uploads/2017/ 03/PCAST-2017-update.pdf [https://perma.cc/H9R7-SCNP] ("To generate a DNA profile, DNA is first chemically extracted from a sample containing biological material, such as blood, semen, hair, or skin cells. Next, a predetermined set of DNA segments ('loci') containing small repeated sequences are amplified using the Polymerase Chain Reaction (PCR), an enzymatic process that replicates a targeted DNA segment over and over to yield millions of copies. After amplification, the lengths of the resulting DNA fragments are measured using a technique called capillary electrophoresis.... The raw data collected from this process are analyzed by a software program to produce a graphical image (an electropherogram) and a list of numbers (the DNA profile) corresponding to the sizes of ... each of [the] fragments (by comparing them to known 'molecular size standards'). As currently practiced, the method uses 13 specific loci and the amplification process is designed so that the DNA fragments corresponding to different loci occupy different size ranges-making it simple to recognize which fragments come from each locus.").

<sup>32</sup> Combined DNA Index System, supra note 23; see infra note 35.

Attorney General of Ohio called for the urgent need for a Familial Search, given that traditional investigative methods did not yield any leads, and that the perpetrator was kidnapping young children right from their bedrooms.<sup>34</sup> To facilitate the investigation, the Attorney General's Bureau of Criminal Investigation developed a Familial Search protocol, limited to the most serious unsolved crimes or serial cases with public safety components and cases in which all other leads have been exhausted.<sup>35</sup>

To regulate the ways in and the circumstances under which Familial Searches are used, some states codified policies that provide guidance to law enforcement and investigative authorities.<sup>36</sup> Though the policies vary by state, there are general protective measures that most if not all—of the states include in their policies. The first of these protective measures is the "case requirement." Under most policies, only violent cases causing serious injury or death, or cases that present a continuing threat of imminent and serious harm to the community, which remain unsolved after exhausting traditional investigative leads, qualify for Familial Searches.<sup>37</sup> For example, assuming other requirements are met, as of October 18, 2017, Familial Search applications may be submitted in New York as long as the DNA profile to be examined is associated with a homicide, violent sexual offense,

news/true-crime/wp/2016/12/06/basically-a-monster-man-accused-of-abducting-girl-fromher-cleveland-home-in-the-dead-of-night/?noredirect=on&utm\_term=.d4827d43d0e9.

<sup>&</sup>lt;sup>34</sup> News Release, Ohio Att'y Gen., First-Ever Familial DNA Search in Ohio Leads to Arrest of Man Accused of Attacking Kids (Dec. 5, 2016), http://www.ohioattorneygeneral.gov/Media/ News-Releases/December-2016/First-Ever-Familial-DNA-Search-in-Ohio-Leads-to-Ar [https:// perma.cc/6PC7-LVYL].

<sup>&</sup>lt;sup>35</sup> *Id.*; *see* OHIO BCI CRIME LAB., FAMILIAL SEARCH POLICY AND PROCEDURES (2016), http://www.ohioattorneygeneral.gov/Files/Briefing-Room/News-Releases/BCI/Familial-Search-Policy-and-Procedures.aspx [https://perma.cc/VJ95-XV8A].

<sup>&</sup>lt;sup>36</sup> See, e.g., OHIO BCI CRIME LAB., *supra* note 35; *see also* RONALD C. SLOAN, COLO. BUREAU OF INVESTIGATIONS, DNA FAMILIAL SEARCH POLICY 1 (2009), http://www.dnaresource.com/documents/ColoradoPolicy.pdf [https://perma.cc/92NM-J5HV]; *Familial Search Process Overview*, N.Y. ST. DIVISION CRIM. JUST. SERVS. (May 21, 2018), http://www.criminaljustice.ny. gov/forensic/forms/Familial-Search-Process-Overview-10-18-17.pdf [https://perma.cc/M9SK-ELYQ].

<sup>&</sup>lt;sup>37</sup> See, e.g., RONALD C. SLOAN, COLO. BUREAU OF INVESTIGATIONS, *supra* note 36, at 2; *see also* Memorandum of Understanding from the State of Cal. Office of the Att'y Gen. on Familial Searching Protocol 1 (June 14, 2011), https://oag.ca.gov/sites/all/files/agweb/pdfs/bfs/fsc-mou-06142011.pdf? [https://perma.cc/CJW5-QG34].

Class A felony kidnapping, Class A felony arson, or Class A felony terrorism.<sup>38</sup> The second protective measure is the "sample requirement." Most policies require that the forensic unknown DNA profile is a single-source,<sup>39</sup> complete profile produced after analyzing the crime scene sample.<sup>40</sup> Finally, there must usually be an agreement in writing between the chief law enforcement officer, the director of the state's forensic science division (or the director of the database to be searched), and the state Attorney General (or the local District Attorney), affirming that the case and sample requirements are met, and that a Familial Search would be appropriate under the circumstances.<sup>41</sup> In 2010, Peter Bibring, then a staff attorney for the American Civil Liberties Union, stated that if Familial Searching is to be used, the "Grim Sleeper" case is the kind of case in which it should be used.<sup>42</sup>

<sup>&</sup>lt;sup>38</sup> Familial Search Process Overview, N.Y. ST. DIVISION CRIM. JUST. SERVS., *supra* note 36 ("The DNA profile must be associated with a: (1) Penal Law article 125 felony offense, other than those defined in Penal Law sections 125.40 or 125.45; or (2) Penal Law article 130 offense that is defined as a violent felony offense pursuant to Penal Law section 70.02; or (3) Class A felony offense defined in article 130, 135, 150, or 490 [of] the Penal Law; or (4) Crime presenting a significant public safety threat[.]").

<sup>&</sup>lt;sup>39</sup> For a discussion of the distinction between single-source and mixed-DNA profiles, see REPORT TO THE PRESIDENT, *supra* note 30, at 7 ("Some investigations involve DNA analysis of complex mixtures of biological samples from multiple unknown individuals in unknown proportions. (Such samples arise, for example, from mixed blood stains, and increasingly from multiple individual touching a surface.) The fundamental difference between DNA analysis of complex-mixture samples and DNA analysis of single-source and simple mixtures lies not in the laboratory processing, but in the interpretation of the resulting DNA profile.").

<sup>&</sup>lt;sup>40</sup> See, e.g., Memorandum of Understanding from the State of Cal. Office of the Att'y Gen., supra note 37; see also VA. DEP'T OF FORENSIC SCI., POLICY RELATING TO ACCEPTANCE OF CASES FOR PERFORMANCE OF FAMILIAL DNA SEARCHING 2 (2018), https:// www.dfs.virginia.gov/wp-content/uploads/2018/05/109-D100-Familial-Search-Case-Acceptance-Policy.pdf [https://perma.cc/HVB5-MPZE].

<sup>&</sup>lt;sup>41</sup> See, e.g., VA. DEP'T OF FORENSIC SCL, *supra* note 40; *see also* OHIO BCI CRIME LAB., *supra* note 35, at 3; N.Y. State Div. of Criminal Justice Servs., Application to Request a Familial Search of the NYS DNA Databank, http://www.criminaljustice.ny.gov/forensic/forms/Familial-Search-Application-10-18-17.pdf [https://perma.cc/RNM6-TXVL] (last visited Mar. 14, 2019) (form FS-001) (showing an application to be completed by the law requesting law enforcement agency and the District Attorney).

<sup>&</sup>lt;sup>42</sup> Maura Dolan, *In Grim Sleeper Case, A New Tack in DNA Searching*, L.A. TIMES (July 10, 2010), http://articles.latimes.com/2010/jul/10/local/la-me-0710-grim-sleeper-dna-20100710 [https://perma.cc/4TP8-X9F7] (Bibring and others praised the procedures that were followed to ensure that the search comported with the state's requirements; the perpetrator presented a

Law enforcement officers may not perform Familial Searches unless they meet the case and sample requirements, as well as any other requirements prescribed in a search policy.43 Nonetheless, Familial Searching raises the question of whether it is fair for someone who has committed no crime to become a virtual suspect because a relative's DNA is on file.44 To be clear, law enforcement officers may only apply for a Familial Search if the sample in question was collected at the scene of a qualifying crime.<sup>45</sup> Furthermore, a kinship match via a Familial Search provides investigators with *leads*,<sup>46</sup> which are then pursued using traditional investigative methods, such as the collection of abandoned samples.<sup>47</sup> Familial Searches, when properly conducted, produce a list of likely potential relatives; however, not all of those likely potential relatives will be deemed suspects. For example, further investigation could reveal that one or more of the likely potential relatives were infants when the crime was committed or were out of town. Viable leads produced by the Familial Search are then pursued by traditional investigative methods.48

grave, violent threat to the community, and the agencies involved followed strict protocols to ensure that the Familial Search was properly conducted).

<sup>&</sup>lt;sup>43</sup> Familial Searches are almost always a tool of last resort, and the results, standing alone, are insufficient to convict an individual.

<sup>44</sup> Richard Willing, *Suspects Get Snared by a Relative's DNA*, USA TODAY (June 7, 2005, 11:17 PM), https://usatoday30.usatoday.com/news/nation/2005-06-07-dna-cover\_x.htm [https://perma.cc/J8RZ-9B34].

<sup>&</sup>lt;sup>45</sup> See supra sources cited note 37.

<sup>&</sup>lt;sup>46</sup> Leads produced by a Familial Search can aid investigators in cases where traditional leads have been pursued but were ruled out. Like traditional leads, leads produced by a Familial Search—standing alone—will be insufficient to convict, or even charge, an individual of a crime. For example, in the case of the Golden State Killer, after a Familial Search was conducted against a genealogy service database and a distant relative of the Golden State Killer was uncovered, "[d]etectives then used traditional investigative techniques to narrow the family members down to one suspect." Selk, *infra* note 53.

<sup>&</sup>lt;sup>47</sup> See supra sources cited note 7.

<sup>&</sup>lt;sup>48</sup> Doug Stevens & Maura Dolan, *How Familial DNA Searches Work*, L.A. TIMES (Apr. 27, 2018, 1:50 PM), http://www.latimes.com/local/lanow/la-me-g-familial-dna-how-it-works-20180426-story.html [https://perma.cc/6FBT-XBRD].

### B. Existing Policy Safeguards

To mitigate the legitimate concerns discussed in Part II, states have incorporated safeguards in their DNA-index statutes and Familial Search policies (to the extent that they are written). First, as an initial matter, a state must establish whether it is going to allow Familial Searches within database samples collected from convicted offenders *and* arrestees or just from convicted offenders.<sup>49</sup> However, some states' databases include *only* profiles of convicted offenders. In these states, it would follow that a Familial Search would be limited to the DNA profiles of convicted offenders, unless the Familial Search Policy expressly provides otherwise.<sup>50</sup>

Some states have permitted law enforcement to conduct Familial Searches on databases created by genealogy services, where individuals voluntarily provide their genetic material in search of relatives and ancestors.<sup>51</sup> While these services may notify users via their privacy

51 See infra note 52.

<sup>&</sup>lt;sup>49</sup> In essence, will states follow New York's model, only searching the database of convicted offenders, or will they follow Virginia's model, searching both the arrestee *and* convicted-offender databases?

<sup>&</sup>lt;sup>50</sup> See Information Bull. from the Cal. Dep't of Just., Div. of Law Enf't on DNA Partial Match (Crime Scene DNA Profile to Offender) Policy (2008), http://www.dnaresource.com/ documents/CAfamilialpolicy.pdf [https://perma.cc/J8J3-B767] (California's DNA Data Bank consists of a database of DNA profiles from offenders and a database of crime scene (evidence) profiles. "When a law enforcement agency is investigating an unsolved case that has critical public safety implications, the agency may request that DOJ conduct a modified CODIS search with the objective of identifying any offender(s) in the database who are likely to be related to the unknown perpetrator [i.e., a Familial Search]."); The NYS DNA Databank and CODIS, N.Y. ST. DIVISION CRIM. JUST. SERVS., http://www.criminaljustice.ny.gov/forensic/dnabrochure.htm [https://perma.cc/9LRY-54V6] (last visited Mar. 14, 2019) (the New York State DNA Databank includes samples of offenders convicted of any felony or Penal Law misdemeanor; thus, a Familial Search of the New York State DNA Databank will only search among DNA profiles of convicted offenders). But see VA. DEP'T OF FORENSIC SCI., supra note 40. Virginia's DNA data bank consists of (i) profiles of persons convicted of certain criminal offenses, (ii) profiles developed from samples provided by persons arrested for the commission or attempted commission of certain violent felonies or other specified crimes, (iii) profiles from deceased victims, (iv) profiles from unidentified human remains, (v) profiles from missing persons, (vi) profiles from individuals registered with the Virginia Sex Offender and Crimes Against Minors Registry, and (vii) profiles developed from crime scene evidence. Virginia's Policy allows Familial Searches to be conducted within all profiles maintained in the state's database, which means that profiles of convicted offenders and arrestees are subject to Familial Searches. Id.

policies that they may share users' personal (genetic) information with law enforcement,<sup>52</sup> users may not understand the full implications of what they are agreeing to, namely, that they may be exposing near or distant relatives to criminal liability.<sup>53</sup> Though states may choose to permit such searches, this Note proposes minimum safeguards in the context of databases created and maintained for law enforcement purposes, such as the convicted offender database, the arrestee database, or the sex offender registry.

Next, states prescribe specific cases that are appropriate for Familial Searches.<sup>54</sup> Under most policies, only violent cases causing serious injury or death, or cases that present a continuing threat of imminent and serious harm to the community that remain unsolved after exhausting traditional investigative leads, qualify for Familial

<sup>&</sup>lt;sup>52</sup> For example, by using GEDmatch's service, users acknowledge that GEDmatch is "unable to guarantee that users will not find other uses, including... Familial searching by third parties such as law enforcement agencies to identify the perpetrator of a crime, or to identify remains." *GEDmatch.Com Terms of Service and Privacy Policy*, GEDMATCH, https://www.gedmatch.com/tos.htm [https://perma.cc/3ED3-B3SJ] (last updated May 20, 2018). Similarly, Ancestry notifies its users that it "may share [users'] Personal Information if [it] believe[s] it is reasonably necessary to: comply with valid legal process (e.g., subpoenas, warrants)...." *Your Privacy*, ANCESTRY, https://www.ancestry.com/cs/legal/privacystatement [https://perma.cc/C62P-HBRP] (last visited Mar. 14, 2019).

<sup>&</sup>lt;sup>53</sup> For example, though California and federal law enforcement agencies held genetic samples left behind by the Golden State Killer, because his DNA was not in any database, the genetic material remained unidentified since his first crime in 1976. After twelve murders and the rape of forty-five women over the course of a decade, the identity of the Golden State Killer was still a mystery. It was not until law enforcement recently "checked the crime scene DNA against one of the genealogy sites that have lately become popular," that they were able to locate a distant relative of the Golden State Killer. "Instantly, the pool of suspects shrank from millions of people down to a single family. Detectives then used traditional investigative techniques to narrow the family members down to one suspect," Joseph DeAngelo, who was arrested in April 2018. Avi Selk, *The Ingenious and 'Dystopian' DNA Technique Police Used to Hunt the 'Golden State Killer' Suspect*, WASH. POST (Apr. 28, 2018), https://www.washingtonpost.com/news/true-crime/wp/2018/04/27/golden-state-killer-dna-website-gedmatch-was-used-to-identify-joseph-deangelo-as-suspect-police-say/

<sup>?</sup>utm\_term=.e2de2af8929e. DeAngelo is currently charged with thirteen counts of murder and thirteen counts of rape, and is awaiting trial. Amelia McDonell-Parry, *Golden State Killer Trial: Joseph DeAngelo Case Could Last 10 Years*, ROLLING STONE (Dec. 7, 2018, 1:14 PM), https://www.rollingstone.com/culture/culture-news/golden-state-killer-trial-10-years-766141 [https://perma.cc/RSZ8-U58U].

<sup>54</sup> See supra Section I.A.

Searches.<sup>55</sup> In addition to the case requirements, states' policies include a sample requirement. Most policies require that the forensic unknown DNA profile is a single-source, complete profile produced after analyzing the crime scene sample.<sup>56</sup> If the case and sample requirements are met, the law enforcement and investigative agencies involved in the case at issue are required, in most states, to submit a formal request in writing to conduct a Familial Search, affirming that the state's requirements have been met.<sup>57</sup>

<sup>56</sup> See supra note 40 (discussing California and Virginia's sample requirements); see also Familial Search Process Overview, supra note 36, at 2 (in New York, "[t]he sample must: (1) Be single source, or a fully deduced profile originating from a mixture; (2) Appear to have a direct connection with the putative perpetrator of the crime; (3) Reside in the State Databank; and (4) Have been searched against DNA profiles in the State DNA Databank's offender index."); *Partial Matches and Familial Searches, supra* note 55, at 2 (in Texas, "the evidentiary profile should be from an item of evidence having unambiguous connection to the crime in question and there is an acceptable level of certainty that the crime scene profile is relevant to the offender." Furthermore, the profile "must be a single source profile with results at all 13 core CODIS loci. A single source profile may be a major component of a mixture, but *will not* include an obligate allele . . . and *not* contain any ambiguous loci.").

<sup>57</sup> See, e.g., Tex. Dep't of Pub. Safety, Local CODIS Laboratory Familial Search Request Checklist (Feb. 2017), http://www.dps.texas.gov/InternetForms/Forms/LAB-CO-48.docm (form LAB-CO-48) (the Familial Search Request Checklist in Texas requires contact information for the requesting law enforcement agency as well as the requesting District Attorney's Office. It also requires the requestors to affirm that that the Familial Search will be used for a case in which all investigative leads have been exhausted or a case that has significant public safety concerns, such as a homicide or sexual assault. In addition, the requestors must affirm that the state's sample requirements have been met); see also Memorandum of Understanding from the State of Cal. Office of the Att'y Gen., supra note 37 (in California, a Memorandum of Understanding (MOU) must be established between the California Department of Justice's

<sup>&</sup>lt;sup>55</sup> See supra note 37 (discussing Colorado and California's case requirements); see supra note 38 (in New York, "the DNA profile must be associated with a: (1) Penal Law article 125 felony offense, other than those defined in Penal Law sections 125.40 or 125.45; or (2) Penal Law article 130 offense that is defined as a violent felony offense pursuant to Penal Law section 70.02; or (3) Class A felony offense defined in article 130, 135, 150, or 490 [of] the Penal Law; or (4) Crime presenting a significant public safety threat."); VA. DEP'T OF FORENSIC SCI., *supra* note 40 (with respect to case requirements in Virginia, a request for a Familial Search will only be considered if "the case involves an active investigation of an unsolved violent crime against a person."); *see* TEX. DEP'T OF PUB. SAFETY, PARTIAL MATCHES AND FAMILIAL SEARCHES 4 (2012), https://perma.cc/A4F9-ETP3 ("As a guiding policy, the offense of the case with the evidentiary profile should be from an unsolved homicide, sexual assault, or other violent crime that has significant public safety concerns. Property crimes will not be considered."); Information Bull. from the Cal. Dep't of Just., *supra* note 50 ("The process specified in the [Familial Search] Policy was developed keeping privacy concerns in mind while at the same time providing information that may be useful in solving a violent offense.").

The National DNA Index System (NDIS) is the national part of CODIS that contains the DNA profiles contributed by federal, state, and local participating forensic laboratories.<sup>58</sup> All fifty states participate in NDIS, and as of September 2018, NDIS contains over 13,528,363 offender profiles and 3,280,752 arrestee profiles.<sup>59</sup> The DNA Identification Act of 1994<sup>60</sup> established CODIS for the purpose of assisting law enforcement agencies across the United States by offering a way of catching repeat-offenders.<sup>61</sup>

The DNA Identification Act of 1994 also lays out the requirements for a state's participation in NDIS.<sup>62</sup> For a state to take advantage of NDIS, the participating state or local database must follow the standards set forth in the "Quality Assurance Standards for Forensic DNA Testing Laboratories."<sup>63</sup> Importantly, the federal guidelines impose on states rigid standards related to the education and training of databank personnel and management, security of the physical databank facility, chain of custody, equipment calibration and maintenance, and reports

<sup>58</sup> Frequently Asked Questions on CODIS and NDIS, FBI.GOV, https://www.fbi.gov/services/ laboratory/biometric-analysis/codis/codis-and-ndis-fact-sheet [https://perma.cc/R732-DZV6] (last visited Mar. 14, 2019).

<sup>59</sup> *Id.*; *see also CODIS-NDIS Statistics*, FBI.GOV, https://www.fbi.gov/services/laboratory/ biometric-analysis/codis/ndis-statistics (last visited Nov. 10, 2018).

<sup>60</sup> 34 U.S.C. § 12592 (2018).

<sup>61</sup> *Id.*; *see* KRIMSKY ET AL., *supra* note 18, at 77 ("[T]he idea was to create a database of known, convicted offenders so that law-enforcement officials could link those offenders to other crimes they might have committed ....").

<sup>63</sup> *Quality Assurance Standards for Forensic DNA Testing Laboratories*, FBI.GOV (Sept. 1, 2011), https://www.fbi.gov/file-repository/quality-assurance-standards-for-forensic-dna-testing-laboratories.pdf/view [https://perma.cc/A7DR-3K2F].

DNA Data Bank Program, the requesting investigating agency, and the requesting prosecuting agency. The MOU enumerates the specific roles and responsibilities of each of the parties, and requires each party to sign the MOU before the Familial Search is conducted); N.Y. State Div. of Criminal Justice Servs., Application to Request a Familial Search, *supra* note 41 (in New York, the application for a Familial Search must be completed by the requesting law enforcement agency and District Attorney's Office).

 $<sup>^{62}</sup>$  34 U.S.C. § 12592(b)(1)–(2)(A)(ii) (2018) (requiring in relevant part that (1) the laboratories participating in the National DNA Index comply with the Quality Assurance Standards issued by the FBI Director; (2) the laboratories submitting the DNA records are accredited by a nonprofit professional association of persons actively engaged in forensic science that is nationally recognized within the forensic science community; and (3) the laboratories submitting the DNA records undergo an external audit every two years to demonstrate compliance with the FBI Director's Quality Assurance Standards).

and case notes.<sup>64</sup> If a database fails to comply with the quality control and privacy requirements prescribed by 34 U.S.C. § 12592(b) and the federal Quality Assurance Standards set by the FBI Director, the database's access to NDIS may be subject to cancellation.<sup>65</sup> Not surprisingly, states and databases are greatly incentivized to remain in compliance with the quality control and privacy requirements so that law enforcement agencies may perform their duties unhindered.<sup>66</sup> In addition to this incentive, some circuit courts have found that although privacy interests are implicated by blood draws and the creation of a DNA profile in CODIS, the DNA Act offers a substantial deterrent to potential abuse by imposing criminal penalties for misuse of DNA samples.<sup>67</sup>

A state's DNA-index statutes and its existing database policies which exist largely so that the database remains in compliance with the federal standards—will, in many instances, serve as limitations on a Familial Search Policy.<sup>68</sup> To remain in compliance with federal

<sup>67</sup> See, e.g., United States v. Weikert, 504 F.3d 1, 12–13 (1st Cir. 2007). The court agreed with Weikert that his privacy was implicated by the blood draw, the creation of his DNA profile, and the entry of the profile into CODIS because, unlike fingerprints, DNA can offer up information about his daughter, his parents, or his other family members. However, the court found, citing 34 U.S.C. § 40706(c), that "the DNA Act offer[ed] a substantial deterrent to such hypothetical abuse by imposing a criminal penalty for misuse of DNA samples," (transferred from 42 U.S.C. § 14135e(c)), which states that "[a] person who knowingly discloses a sample or result . . . in any manner to any person not authorized to receive it, or obtains or uses, without authorization, such sample or result, shall be fined not more than \$250,000, or imprisoned for a period of not more than one year. Each instance of disclosure, obtaining, or use shall constitute a separate offense." *Id.* 

<sup>68</sup> For a discussion of the samples stored in states' DNA databases and its implications for the states' Familial Search Policies, see, for example, *supra* note 50.

<sup>64</sup> Id.

<sup>65 34</sup> U.S.C. § 12592(c) (2018).

<sup>&</sup>lt;sup>66</sup> See, e.g., U.S. DEP'T OF JUST. OFFICE OF THE INSPECTOR GEN., AUDIT OF COMPLIANCE WITH STANDARDS GOVERNING COMBINED DNA INDEX SYSTEM ACTIVITIES AT THE DENVER POLICE DEPARTMENT CRIME LABORATORY, DENVER, COLORADO (2017), https://oig.justice.gov/ reports/2017/g6017013.pdf [https://perma.cc/M83P-9TSW] (the Crime Laboratory in Denver, Colorado was the subject of an audit covering the period from February 2012 through March 2017 and was found to be deficient in two areas: (1) that it did not encrypt the backups of local CODIS data, and (2) that it did not timely notify the FBI on the change in employment status for ten IT users. The Denver Department of Safety promptly responded to the Inspector General's recommendations by presenting the actions that the databank would take to remediate the issues, and the Inspector General closed the case).

standards, some states have codified their own quality assurance programs, designed to ensure the quality, integrity, and accuracy of the entire DNA collection and storing procedure.<sup>69</sup> This means that even though Familial Searching is not conducted at the national level (i.e., not conducted through NDIS), a Familial Search conducted at the state or local level is likely to occur at a databank that complies with federal standards. States have also enacted statutes or policies specifically enumerating permitted and forbidden uses of DNA profiles stored in a database.<sup>70</sup> Similarly, states have imposed regulations regarding access to the profiles and who may obtain such access—including the convicted offender to whom the DNA profile belongs.<sup>71</sup> Finally, states

<sup>69</sup> See, e.g., VA. DEP'T OF FORENSIC SCI., FORENSIC BIOLOGY PROCEDURES MANUAL: QUALITY ASSURANCE PROGRAM 4 (2019), https://www.dfs.virginia.gov/wp-content/uploads/ 2019/01/210-D2001-FB-PM-QA.pdf [https://perma.cc/8M59-BVHQ]; see also N.Y. CITY OFFICE OF CHIEF MED. EXAM'R, FORENSIC BIOLOGY QUALITY ASSURANCE/QUALITY CONTROL MANUAL (2016), http://www.nyc.gov/html/ocme/downloads/pdf/Fbio/Quality%20Assurance-Quality%20Control%20Procedures.pdf [https://perma.cc/LK3V-HSN2].

<sup>&</sup>lt;sup>70</sup> See, e.g., MD. CODE ANN., PUB. SAFETY § 2-506(d) (West 2018) ("A person may not perform a search of the statewide DNA data base for the purpose of identification of an offender in connection with a crime for which the offender may be a biological relative of the individual from whom the DNA sample was acquired."); see also 12 R.I. GEN. LAWS § 12-1.5-10(5) (2018) ("DNA samples and DNA records collected under this chapter shall never be used under the provisions of this chapter for the purpose of obtaining information about physical characteristics, traits or predispositions for disease."); MICH. COMP. LAWS § 28.175a(1) (2018) (in Michigan, "the department shall only use the DNA profiles . . . for one or more of the following purposes: (a) law enforcement identification purposes; (b) to assist in the recovery or identification of human remains or missing persons; (c) academic, research, statistical analysis, or protocol development purposes only if personal identifiers are removed."); FLA. STAT. § 943.325(13)(b) (2018) (in Florida, "the analyses of DNA samples . . . shall be used only for law enforcement identification purposes or to assist in the recovery or identification of human remains or missing persons and may not be used for identification of any medical or genetic condition.").

<sup>&</sup>lt;sup>71</sup> See, e.g., COLO. REV. STAT. § 18-1-1104 (2019) (in Colorado, "the preserved DNA evidence shall, whenever possible, include a sample sufficient to allow for independent testing by the defendant."); see also MICH. COMP. LAWS. § 28.176(2) (2018) (in Michigan, "the DNA profiles of DNA samples received under this act shall only be disclosed as follows: . . . (c) To a defendant in a criminal case if the DNA profile is used in conjunction with a charge against the defendant."); FLA. STAT. § 925.11(1)(a)(1) (2018) (in Florida, "A person who has been tried and found guilty of committing a felony and has been sentenced by a court established by the laws of this state may petition that court to order the examination of physical evidence collected at the time of the investigation of the crime for which he or she has been sentenced that may contain DNA (deoxyribonucleic acid) and that would exonerate that person or mitigate the sentence that person received."); N.Y. EXEC. LAW § 995-c(6) (2019) (in New York, "DNA

have enacted statutes or policies requiring the expungement, or removal, of a DNA profile from the database if certain conditions are met—for example, if it is determined that the DNA profile is not connected to the criminal offense, or if the conviction has been vacated.<sup>72</sup> However, in some states, the onus is on the criminal defendant to submit an application to have his DNA profile expunged from the database.<sup>73</sup>

<sup>72</sup> See, e.g., VA. CODE ANN. § 19.2-11.10 (2018) (in Virginia, "If the Department receives written confirmation from a law-enforcement agency or attorney for the Commonwealth that a DNA profile that has been uploaded pursuant to this chapter into any local, state, or national DNA data bank was determined not to be connected to a criminal offense or that the DNA profile is of an individual who is not the putative perpetrator, the Department shall expunge the DNA profile from the DNA data bank."); *see also* N.Y. EXEC. LAW § 995-c(9) (in New York, "(a) Upon receipt of notification of a reversal or a vacatur of a conviction, or of the granting of a pardon ... of an individual whose DNA record has been stored in the state DNA identification index ... the DNA record shall be expunged from the state DNA identification was originally entered for an order directing the expungement of any DNA record and any samples, analyses, or other documents relating to the DNA testing of such individual in connection with the investigation or prosecution of the crime which resulted in the conviction that was reversed or vacated or for which the pardon was granted.").

<sup>73</sup> See, e.g., CAL. PENAL CODE § 299(b) (West 2019) ("Pursuant to subdivision (a), a person who has no past or present qualifying offense, and for whom there otherwise is no legal basis for retaining the specimen or sample or searchable profile, may make a written request to have his or her specimen and sample destroyed and searchable database profile expunged from the databank program if any of the following apply: (1) Following arrest, no accusatory pleading has been filed within the applicable period allowed by law ... or if the charges which served as the basis for including the DNA profile in the state's ... Database ... have been dismissed prior to adjudication by a trier of fact; (2) The underlying conviction or disposition serving as the basis for including the DNA profile has been reversed and the case dismissed; (3) The person has been found factually innocent of the underlying offense...; or (4) The defendant has been found not guilty or the defendant has been acquitted of the underlying offense.").

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records contained in the state DNA identification index shall be released only for the following purposes: . . . (b) for criminal defense purposes, to a defendant or his or her representative, who shall also have access to samples and analyses performed in connection with the case in which such defendant is charged.").

### II. ANALYSIS

### A. Constitutional Questions

Familial Searches, by their nature, have the effect of extending the size and reach of the nation's DNA databases, effectively including the male grandparents, parents, children, and siblings of the arrestees and convicted offenders whose DNA profiles are already stored in databases.74 To put this into context, Virginia's DNA database currently holds over 439,000 DNA profiles from convicted offenders and arrestees, contained in two separate indices.75 Assuming all the prescribed requirements are met, Virginia's Familial DNA Policy allows Familial Searches to be conducted against both the convicted offender and arrestee indices.<sup>76</sup> This means that if an offender, X (whose DNA profile is not in the Virginia database), commits a violent offense and leaves his DNA at the crime scene, his genetic profile may nonetheless be findable if X's brother, Y, was previously arrested and Y's DNA profile was entered into the database.77 Thus, despite the obvious utility of Familial Searching as an investigative tool, and the safeguards that states have built into their policies, the practice of Familial Searching raises important constitutional questions-specifically in regards to Fourth Amendment and equal protection concerns.

<sup>&</sup>lt;sup>74</sup> David Lazer & Frederick R. Bieber, '*Familial Searching*,' *Its Promise and Perils*, L.A. TIMES (July 10, 2010), http://articles.latimes.com/2010/jul/10/opinion/la-oe-lazer-grim-sleeper-dna-20100710 [https://perma.cc/WU9H-ECJX].

<sup>&</sup>lt;sup>75</sup> Databank Statistics, VA. DEP'T FORENSIC SCI. http://www.dfs.virginia.gov/about-dfs/dnadatabank-statistics [https://perma.cc/6GWD-FPUE] (last visited Jan. 23, 2019).

<sup>&</sup>lt;sup>76</sup> VA. DEP'T OF FORENSIC SCL, *supra* note 40 (while states that collect DNA samples from both arrestees and convicted offenders typically maintain these profiles in separate databases, given the different status of the individuals, not all states follow Virginia's practice of allowing Familial Searches of *both* the arrestee and convicted offender databases).

<sup>&</sup>lt;sup>77</sup> See Sonia M. Suter, All in the Family: Privacy and DNA Familial Searching, 23 HARV. J.L. & TECH. 309, 328 (2010). Critics of Familial Searching may refer to Brother Y as a "genetic informant," since Brother Y's sample yields a biologically-related match to Offender X's sample. Brother Y acted as a "genetic informant" in leading law enforcement to his family members, including Offender X, who otherwise likely would not have been found, had it not been for Brother Y's DNA profile. *Id.* 

### 1. Fourth Amendment

The Fourth Amendment guarantees that people will be free from unreasonable searches and seizures by law enforcement officers and government agents.<sup>78</sup> The U.S. Supreme Court adopted a reasonable-expectation-of-privacy standard to provide guidance in claims of Fourth Amendment violations.<sup>79</sup> The Court eventually adopted the two-part inquiry enumerated in Justice Harlan's concurring opinion in *Katz v. United States*,<sup>80</sup> in which the inquiry was described as first, has the person exhibited an actual (subjective) expectation of privacy, and, second, is this expectation one that society is prepared to recognize as "reasonable"?<sup>81</sup>

The collection of DNA from convicted felons is permitted in fortyeight states on the grounds that once a person is convicted of a felony, his identity has become a matter of state interest and he has lost any legitimate expectation of privacy in the genetic information.<sup>82</sup> Once DNA profiles are stored in a database, law enforcement officers can use those profiles in an analysis of an unidentified sample from a crime scene to identify the crime scene sample, link the crime scene sample to

<sup>78</sup> U.S. CONST. amend. IV ("The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.").

<sup>&</sup>lt;sup>79</sup> See Katz v. United States, 389 U.S. 347, 351, 359 (1967) ("What a person knowingly exposes to the public, even in his own home or office, is not a subject of Fourth Amendment protection.... Wherever a man may be, he is entitled to know that he will remain free from unreasonable searches and seizures.").

<sup>80</sup> Id. at 360 (Harlan, J., concurring).

<sup>&</sup>lt;sup>81</sup> *Id.* at 361 ("As the Court's opinion states, 'the Fourth Amendment protects people, not places.' The question, however, is what protection it affords to those people. Generally, as here, the answer to that question requires reference to a 'place.' My understanding of the rule that has emerged from prior decisions is that there is a twofold requirement, first that a person have exhibited an actual (subjective) expectation of privacy and, second, that the expectation be one that society is prepared to recognize as 'reasonable.'").

<sup>&</sup>lt;sup>82</sup> See People v. Robinson, 224 P.3d 55, 65–66 (Cal. 2010); see also United States v. Amerson, 483 F.3d 73, 86 (2d Cir. 2007); United States v. Mitchell, 652 F.3d 387, 413 (3d Cir. 2011); Banks v. United States, 490 F.3d 1178, 1188 (10th Cir. 2007) ("Numerous courts addressing DNA-indexing statutes have explained that the identification of suspects is relevant not only to solving the crime for which the suspect is arrested, but also for maintaining a permanent record to solve other past and future crimes.").

an existing profile, or exclude possible suspects.<sup>83</sup> Except in very limited circumstances, because a convicted offender loses his expectation of privacy in his genetic information upon conviction of the qualifying offense, he cannot claim that further testing and analysis of his DNA profile for investigative purposes—including Familial Searches—violates his Fourth Amendment rights.<sup>84</sup> Less clear is the argument against a Fourth Amendment claim raised by a family member whose DNA was findable as a result of his relative's DNA profile in the database.<sup>85</sup>

The constitutional doctrine of standing<sup>86</sup> provides that our constitutional protections are personal in nature.<sup>87</sup> In the context of

<sup>86</sup> Though the Supreme Court does not refer to the standing analysis as "standing" any longer, the change in the language of the question of whether one's own Fourth Amendment rights were violated does not affect the substantive analysis. See Rakas v. Illinois, 439 U.S. 128, 138-39 (1978) ("[H]aving rejected petitioners' target theory and reaffirmed the principle that the rights assured by the Fourth Amendment are personal rights, which may be enforced by exclusion of evidence only at the instance of one whose own protection was infringed by the search and seizure, ... the question necessarily arises whether it serves any useful analytical purpose to consider this principle a matter of standing, distinct from the merits of a defendant's Fourth Amendment claim. We can think of no decided cases of this Court that would have come out differently had we concluded, as we do now, that the type of standing requirement discussed in Jones and reaffirmed today is more properly subsumed under substantive Fourth Amendment doctrine. Rigorous application of the principle that the rights secured by this Amendment are personal, in place of a notion of 'standing,' will produce no additional situations in which evidence must be excluded. The inquiry under either approach is the same. But we think the better analysis forth-rightly focuses on the extent of a particular defendant's rights under the Fourth Amendment, rather than on any theoretically separate, but invariably intertwined concept of standing.") (emphasis added) (internal citations and quotation marks omitted).

<sup>87</sup> Steagald v. United States, 451 U.S. 204, 219 (1981) ("The common law...recognized, as have our recent decisions, that rights such as those conferred by the Fourth Amendment are personal in nature, and cannot bestow vicarious protection on those who do not have a

<sup>83</sup> KRIMSKY ET AL., supra note 18, at 25–26.

<sup>&</sup>lt;sup>84</sup> Erin Murphy, *Relative Doubt: Familial Searches of DNA Databases*, 109 MICH. L. REV. 291, 334 (2010). *But see* MD. CODE ANN., PUB. SAFETY § 2-506(d) (West 2018) (despite the diminished expectation of privacy held by convicted offenders, Maryland expressly prohibits Familial Searching within its state database).

<sup>&</sup>lt;sup>85</sup> Henry T. Greely, Daniel P. Riordan, Nanibaa' A. Garrison, Joanna L. Mountain, *Family Ties: The Use of DNA Offender Databases to Catch Offenders' Kin*, 34 J.L. MED. & ETHICS 248, 257 (2006) ("The un-convicted relatives of offenders do not have that diminished expectation of privacy, but extending [the special needs or totality of the circumstances] doctrines to family members has the problem that nothing has been seized from them and they have not been searched."). In other words, we do not even reach the two-part inquiry described in Justice Harlan's concurring opinion in *Katz v. United States* when considering the Fourth Amendment rights of the un-convicted relatives of offenders. *See supra* note 77 and accompanying text.

Familial Searches, an individual who suffers the harm of being genetically "found" cannot easily claim that this harm stemmed from a violation of his own rights, as required by the doctrine of constitutional standing.<sup>88</sup> This is because it was the lawfully-obtained profile of the individual's convicted (or arrested) relative that was subjected to additional search and testing,<sup>89</sup> *not* the sample of the individual whose genetic profile was "found." However, the *harm* in this scenario affects not the convicted offender (or arrestee), but his relatives, especially if the relative is identified as the perpetrator of the crime being investigated.<sup>90</sup> Even though the relative felt the effects of the Familial Search, a lack of standing may prevent him from raising a cognizable claim, as his genetic information was not the subject of the Familial Search.<sup>91</sup>

Though the constitutionality of Familial Searches has not been addressed by the Supreme Court, the Court has addressed a similar search under a Fourth Amendment analysis. In *Skinner v. Railway Labor Executives' Association*,<sup>92</sup> the Court affirmed the holding of the

89 Id.

92 489 U.S. 602 (1989).

reasonable expectation of privacy in the place to be searched."); *see Rakas*, 439 U.S. at 134 ("A person who is aggrieved by an illegal search and seizure only through the introduction of damaging evidence secured by a search of a third person's premises or property has not had any of his Fourth Amendment rights infringed.").

<sup>&</sup>lt;sup>88</sup> Murphy, *supra* note 84, at 334 ("Standing problems might prevent any person from raising a cognizable claim. The relatives (who suffer the harm of being 'found') cannot easily claim that the harm stemmed from a violation of their own rights, as required by established doctrine, because it was the lead whose genetic information was subjected to additional search and testing. Yet the real harm affects not the lead, but the lead's relatives, especially one identified as a source.").

<sup>90</sup> Id.

<sup>&</sup>lt;sup>91</sup> *Id.*; *see* Kim et al., *supra* note 28, at 2. Unlike a standard database search of an unidentified profile collected from a crime scene, which seeks an exact match to an existing profile in the database, in "a familial search, investigators run a low-stringency search with the intention of identifying a relative of the perpetrator." The "search" at issue in a Fourth Amendment discussion in the context of a Familial Search is the low-stringency search of the database. In other words, the DNA profiles of arrestees and/or convicted offenders already in the database are the subjects of the search; i.e., the unidentified genetic sample collected from the crime scene is *not* the subject of a Familial Search. Thus, because the unidentified genetic sample is not the subject of the arrestee of convicted offender) would be able to assert standing in a constitutional challenge to the Familial Search. *Id.* 

Court of Appeals for the Fifth Circuit that the collection and testing of urine constitutes a search, in that it intrudes upon expectations of privacy that society has long recognized as reasonable, as the "chemical analysis of urine, like that of blood, can reveal a host of private medical facts...including whether he or she is epileptic, pregnant, or diabetic."93 However, the Court has also held that the touchstone of the Fourth Amendment is reasonableness, and the reasonableness of a search is determined by assessing, on the one hand, the degree to which it intrudes upon an individual's privacy and, on the other hand, the degree to which it is needed for the promotion of legitimate governmental interests.94 Though state and federal DNA-indexing statutes have withstood Fourth Amendment challenges, courts remain divided as to the appropriate test to apply.95 Regardless of whether, in assessing the constitutionality of Familial Searches under a Fourth Amendment analysis, a court applies the special needs test or the totality of the circumstances test, it is unlikely that a court will find that the individual interest at issue in a Familial Search outweighs the interest of society as a whole.96

### i. Special Needs Analysis

Under a special needs analysis, a court would consider whether a proposed Familial Search Policy is designed to serve special needs, beyond the normal need for law enforcement.<sup>97</sup> The Court in *City of* 

<sup>93</sup> Id. at 617.

<sup>&</sup>lt;sup>94</sup> United States v. Knights, 534 U.S. 112, 118 (2001); *see* Samson v. California, 547 U.S. 843, 848 (2006).

<sup>&</sup>lt;sup>95</sup> Nicholas v. Goord, 430 F.3d 652, 659 (2d Cir. 2005) ("The Second, Seventh, and Tenth Circuits have applied the special-needs test.... The Third, Fourth, Fifth, Ninth, and Eleventh Circuits have applied a general balancing test.").

<sup>&</sup>lt;sup>96</sup> See Sonia M. Suter, All in the Family: Privacy and DNA Familial Searching, 23 HARV. J.L. & TECH. 309, 330 (2010). This Note asserts that Familial Searching will withstand a Fourth Amendment challenge in light of the Court's current Fourth Amendment jurisprudence. However, this Note acknowledges courts' shifting approach in areas such as data stored in and emanating from our cellular phones, GPS devices, and other technologies. See Carpenter v. United States, 138 S. Ct. 2206 (2018). As Fourth Amendment doctrine continues to evolve, the arguments against Familial Searching raised in this Note may one day sustain a challenge against use of this procedure on Fourth Amendment grounds.

<sup>&</sup>lt;sup>97</sup> City of Indianapolis v. Edmond, 531 U.S. 32, 37 (2000). For a discussion on the special needs test, see Maryland v. King, 569 U.S. 435 (2013). The Supreme Court reviewed the Maryland DNA Collection Act, which authorizes Maryland law enforcement authorities to

Indianapolis v. Edmond further held that pursuing general crime control alone is insufficient to pass constitutional muster under the special needs test.98 With respect to Familial Searching, states with existing policies largely only permit these searches when all other investigative leads have been exhausted.99 Furthermore, Familial Searches are not intended to combat crime in a general sense; rather, they are intended to be used only to aid in the investigations of specific, violent, unsolved crimes—in most cases, homicide and sexual offenses.<sup>100</sup> If a state adopts a Familial Search Policy containing the minimum safeguards proposed in this Note, a court could easily find that traditional investigative means have been exhausted, but the need to solve these violent crimes remains. That states' DNA-indexing statutes have withstood Fourth Amendment challenges under the special needs test. That DNA databases are expanding to include DNA profiles from offenders convicted of lower-level offenses shows the special need for powerful investigative tools-such as Familial Searches-to assist in closing these unsolved, violent crimes, in which the perpetrators have evaded apprehension.

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collect DNA samples from an individual who is charged with a crime of violence, or other specific crime. The Act limits the information that may be added to the state's DNA database, and how that information may be used. *Id.* at 443–44. Specifically, only DNA records that directly relate to the identification of individuals shall be collected and stored, and no purpose other than identification is permissible. *Id.* The Court determined that the Act is reasonable under the Fourth Amendment because in some circumstances—such as when faced with special law enforcement needs, diminished expectations of privacy, minimal intrusions, or the like—certain general, or individual, issues may render a warrantless search or seizure reasonable. *Id.* at 447. "The legitimate government interest served by the Act is one that is well established: the need for law enforcement officers in a safe and accurate way to process and identify the persons and possessions they must take into custody." *Id.* at 449. The Court explained: "It is beyond dispute that 'probable cause provides legal justification for arresting a person suspected of crime, and for a brief period of detention to take the administrative steps incident to arrest." *Id.* (citing Gerstein v. Pugh, 420 U.S. 103, 113–14 (1975).

<sup>98</sup> City of Indianapolis, 531 U.S. at 47.

<sup>&</sup>lt;sup>99</sup> Memorandum of Understanding from the State of Cal. Office of the Att'y Gen., *supra* note 37.

<sup>100</sup> Id.

### ii. Totality of the Circumstances Analysis

The majority of courts have applied the totality of the circumstances test in reviewing DNA-indexing statutes.<sup>101</sup> If a court decided to review a Familial Search Policy under this analysis, the court would evaluate whether a Familial Search is a reasonable search by "assessing, on the one hand, the degree to which it intrudes upon an individual's privacy, and, on the other hand, the degree to which it is needed for the promotion of legitimate governmental interests."<sup>102</sup> With respect to the first consideration, it is important to remember that Familial Searches are only used for the most violent offenses, and that the unidentified sample in the Familial Search was abandoned by the perpetrator at the crime scene. Much like how convicted offenders lose their expectation of privacy in their genetic profile once they are convicted,<sup>103</sup> so too do perpetrators of unsolved crimes who leave their DNA at a crime scene.<sup>104</sup>

Against this backdrop, it is unlikely that a court will find Familial Searches unreasonable within the meaning of the Fourth Amendment under either the special needs analysis *or* the totality of the circumstances analysis. Instead, it is likely that courts will view these searches as "a carefully calibrated method of using convicted offender DNA samples already lawfully present in the state database to generate, where possible, a strong investigative lead in selected serious but unsolved criminal investigations."<sup>105</sup>

### 2. Equal Protection Questions

According to census data as of July 1, 2018, the estimated population of the United States is 327,167,434.<sup>106</sup> Of this, 60.7% of

<sup>&</sup>lt;sup>101</sup> For a discussion of the Totality of the Circumstances Test generally, see Amanda Pattock, Note, *It's All Relative: Familial DNA Testing and the Fourth Amendment*, 12 MINN. J.L. SCI. & TECH. 851, 863 (2011)

<sup>&</sup>lt;sup>102</sup> United States v. Knights, 534 U.S. 112, 119 (2001).

<sup>&</sup>lt;sup>103</sup> See cases cited supra note 82.

<sup>&</sup>lt;sup>104</sup> See CHIN ET AL., supra note 7.

<sup>105</sup> Chamberlain, supra note 1, at 30.

<sup>&</sup>lt;sup>106</sup> *QuickFacts: United States*, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table/US/PST045216 [https://perma.cc/HQ8L-ZAHZ] (last visited Mar. 14, 2019).

people identify as white,107 13.4% identify as Black or African American, and 18.1% identify as Hispanic or Latino.<sup>108</sup> According to FBI data, in 2016, there were 9,374 arrests for murder and non-negligent manslaughter offenses.<sup>109</sup> Though Black individuals comprise less than a quarter of the total population of the United States, nearly half of the total arrests were of Black individuals.<sup>110</sup> Similarly, the Federal Bureau of Prisons reports that of the 179,917 prisoners in federal custody, 104,981 (58.3%) are white and 68,252 (37.9%) are Black.<sup>111</sup>

The disproportionate number of incarcerated Black and Hispanic individuals, relative to their percentage of the population as a whole, is reflected within individual states as well. For example, California's estimated population, as of July 1, 2017, was roughly 39,536,653.112 37.2% of the population identified as white, 6.5% identified as Black or African American, and 39.1% identified as Hispanic or Latino.113 However, of the 129,416 incarcerated people in California in 2016, 27,866 (21.5%) identified as white, 36,887 (28.5%) identified as Black, and 55,756 (43.1%) identified as Hispanic.<sup>114</sup> In Texas, the estimated total population in 2016 was 28,240,245-11,729,618 (41.5%) identified as white, 3,230,618 (11.4%) identified as Black, and 11,439,402 (40.5%) identified as Hispanic.<sup>115</sup> However, of the 134,547 individuals in state

<sup>107</sup> Specifically, "White alone, not Hispanic or Latino." Id.

<sup>108</sup> Id.

<sup>109</sup> Table 21: Arrests by Race and Ethnicity, 2016, FBI.GOV, https://ucr.fbi.gov/crime-in-theu.s/2016/crime-in-the-u.s.-2016/topic-pages/tables/table-21 [https://perma.cc/4MYY-U29Z] (last visited Mar. 14, 2019).

<sup>110</sup> Id. (4,935 Black or African American individuals were arrested in 2016 for murder and non-negligent manslaughter, while 4,192 white individuals were arrested for the same category of crimes.)

<sup>111</sup> Inmate Race, FED. BUREAU PRISONS, https://www.bop.gov/about/statistics/statistics\_ inmate\_race.jsp [https://perma.cc/WB34-RC5H] (last updated Feb. 23, 2019).

<sup>112</sup> QuickFacts: California, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/CA [https://perma.cc/GHP8-K4E5] (last visited Mar. 14, 2019).

<sup>113</sup> Id.

<sup>114</sup> CAL. DEP'T OF CORRECTIONS & REHAB., OFFENDER DATA POINTS 10 (2016) https://sites. cdcr.ca.gov/research/wp-content/uploads/sites/9/2018/04/Offender-Data-Points-as-of-December-31-2016.pdf [https://perma.cc/DX8B-R95A].

<sup>115</sup> Texas Population, 2016 (Projections), TEX. DEP'T HEALTH & HUM. SERVS., https:// www.dshs.texas.gov/chs/popdat/ST2016p.shtm [https://perma.cc/R8F4-Y9T7] (last updated Dec. 17, 2014) (note that the Department updates projections for Texas biennially as more accurate data becomes available).

prison in 2016, 42,410 (31%) were white, 45,776 (34%) were Black, and 45,628 (33.9%) were Hispanic.116

Given these statistics, and the fact that states collect DNA samples from all convicted felony offenders, it follows that the number of DNA profiles of Black and Hispanic offenders in the state databanks are disproportionately higher than that of white felony offenders. This consequence is further complicated by the fact that Familial Searches are traditionally only used in investigations related to violent felony offenses, for which people of color are arrested and incarcerated in disproportionately higher numbers than white offenders.<sup>117</sup> It is an unfortunate reality "that the American criminal justice system is heavily racialized," in that "racial disparities have been identified in all parts of the system, from arrest, trial, and access to legal services to conviction, sentencing, parole, execution, and exoneration."118 Familial Searches are a part of this imperfect system, and until a massive overhaul of the criminal justice system truly changes this reality, it is left to states and law enforcement to ensure that their actions and policies provide equal treatment to the greatest extent possible.

In this landscape, it should not come as a surprise that we must address equal protection concerns in the context of Familial Searchesin particular, that racial minorities may allege disproportionate harm resulting from the use of Familial Searches.<sup>119</sup> While the central purpose

118 KRIMSKY ET AL., supra note 18, at 252; see generally Marc Mauer, Justice for All? Challenging Racial Disparities in the Criminal Justice System, 37 HUM. RTS. 14 (2010).

<sup>119</sup> Daniel J. Grimm, Note, The Demographics of Genetic Surveillance: Familial DNA Testing and the Hispanic Community, 107 COLUM. L. REV. 1164, 1185 (2007) ("Plaintiffs alleging disproportionate harm allocated along racial or ethnic lines often invoke an equal protection

<sup>116</sup> TEX. DEP'T OF CRIMINAL JUSTICE, FISCAL YEAR 2016 STATISTICAL REPORT 1 (2017), https://www.tdcj.texas.gov/documents/Statistical\_Report\_FY2016.pdf [https://perma.cc/J3KS-LJKY].

<sup>117</sup> ALEXIA COOPER & ERICA L. SMITH, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUST., NCJ-236018, HOMICIDE TRENDS IN THE UNITED STATES, 1980-2008 11 (2011), https:// www.bjs.gov/content/pub/pdf/htus8008.pdf [https://perma.cc/SN7E-8K25] ("Blacks were disproportionately represented among homicide victims and offenders... In 2008, the offending rate for blacks (24.7 offenders per 100,000) was 7 times higher than the rate for whites (3.4 offenders per 100,000)."); see Written Submission from Am. C.L. Union on Racial Disparities in Sentencing, to Inter-Am. Comm'n on Hum. Rts., 153d Sess. (Oct. 27, 2014), https://www.aclu.org/sites/default/files/assets/141027\_iachr\_racial\_disparities\_aclu\_ submission\_0.pdf [https://perma.cc/857P-WTA9].

of the Equal Protection Clause of the Fourteenth Amendment is the prevention of official conduct discriminating on the basis of race, disproportionate *impact* alone does not amount to an equal protection violation.<sup>120</sup> To support a claim alleging an equal protection violation, the practice or law in question must ultimately be traced to a racially discriminatory *purpose*, which can be inferred from the totality of the relevant facts.<sup>121</sup> However, the Supreme Court has never held that a law or practice, neutral on its face and serving ends otherwise within the power of government to pursue, is invalid under the Equal Protection Clause simply because it may affect a greater proportion of one race than another.<sup>122</sup>

In reviewing a Familial Search policy for an alleged equal protection violation, a court would consider whether the policy at issue was adopted for a particularized discriminatory purpose, or if the policy, equally applied, has a disproportionate impact on racial minorities.<sup>123</sup>

<sup>123</sup> See McCleskey v. Kemp, 481 U.S. 279, 351 (1987) ("A criminal defendant alleging an equal protection violation must prove the existence of purposeful discrimination. He may establish a prima facie case of purposeful discrimination by showing that the totality of the relevant facts gives rise to an inference of discriminatory. Once the defendant establishes a prima facie case, the burden shifts to the prosecution to rebut that case. The State cannot meet this burden on mere general assertions that its officials did not discriminate or that they properly performed their official duties. The State must demonstrate that the challenged effect

remedy. However, . . . such an argument is unlikely to succeed despite strong evidence that familial testing will exacerbate ethnicity-based disparities in DNA databank systems.").

<sup>&</sup>lt;sup>120</sup> Washington v. Davis, 426 U.S. 229, 242 (1976); *see* Ashcroft v. Iqbal, 556 U.S. 662, 676 (2009) ("[P]urposeful discrimination requires more than intent as volition or intent as awareness of consequences. It instead involves a decisionmaker's undertaking course of action 'because of,' not merely 'in spite of,' the action's adverse effects upon an identifiable group"; a petitioner must therefore show that the policy was adopted and implemented not for a neutral reason, but for the purpose of discriminating on account of race, religion, or other group.).

<sup>&</sup>lt;sup>121</sup> Washington, 426 U.S. at 240.

<sup>&</sup>lt;sup>122</sup> *Id.* at 242 ("Necessarily, an invidious discriminatory purpose may often be inferred from the totality of the relevant facts, including the fact, if it is true, that the law bears more heavily on one race than another. It is also not infrequently true that the discriminatory impact . . . may for all practical purposes demonstrate unconstitutionality because in various circumstances the discrimination is very difficult to explain on nonracial grounds. Nevertheless, we have not held that a law, neutral on its face and serving ends otherwise within the power of government to pursue, is invalid under the Equal Protection Clause simply because it may affect a greater proportion of one race than of another. Disproportionate impact is not irrelevant, but it is not the sole touchstone of an invidious racial discrimination forbidden by the Constitution. Standing alone, it does not trigger the rule . . . that racial classifications are to be subjected to the strictest scrutiny and are justifiable only by the weightiest of considerations.").

While racial minorities are more likely to feel the effects of Familial Searches in disproportionately higher numbers, this "effect" would be a reflection of the equal application of the search to *all offenders* within the database. That is, assuming all other procedural safeguards and requirements are followed, a Familial Search can be conducted against *any* sample already in the database, regardless of the convicted offender's race. This is consistent with the Supreme Court's well-settled rule that "the Fourteenth Amendment guarantees equal laws, not equal results."<sup>124</sup>

It would be difficult to make the argument that a Familial Search Policy—when properly drafted and implemented—presents a racially discriminatory purpose, such as an actual intent to prosecute racial minorities in higher numbers than white offenders. Rather, the purpose of a Familial Search Policy would be to use DNA profiles, already in a database, to investigate unsolved crimes, regardless of the race of the perpetrator or convicted offender.<sup>125</sup> Considering the entirety of the circumstances, a court could easily find that Familial Searches are an effective tool for an important public purpose, and that the application

was due to permissible racially neutral selection criteria.") (internal quotation marks and citations omitted).

<sup>&</sup>lt;sup>124</sup> Pers. Adm'r of Mass. v. Feeney, 442 U.S. 256, 273 (1979). In *Feeney*, a female nonveteran failed to secure employment for civil service positions on several occasions because of the Massachusetts Veterans Preference Statute, which grants an absolute lifetime preference to veterans by requiring that any person, male or female, including a nurse, qualifying for a civil service position, who was honorably discharged from the United States Armed Forces, must be considered for appointment to a civil service position ahead of any qualifying nonveterans. *Id.* at 261–64. Appellee alleged that the absolute preference formula, by inevitably operating to exclude women from consideration for the best Massachusetts civil service jobs, denied women equal protection of the laws in violation of the United States Constitution. *Id.* at 259, 271. The Supreme Court held that the statute does not violate the Equal Protection Clause of the Fourteenth Amendment on sex discrimination grounds, since the distinction drawn by the statute between veterans and nonveterans is not a pretext for gender discrimination, and it had not been shown that the law in any way reflects a purpose to discriminate on the basis of sex. *Id.* at 274–75.

<sup>&</sup>lt;sup>125</sup> The Supreme Court has held that "the discriminatory impact...may for all practical purposes demonstrate unconstitutionality because in various circumstances the discrimination is very difficult to explain on nonracial grounds." *Washington*, 426 U.S. at 242. Here, there is a clear threat of Familial DNA Searches yielding discriminatory impacts via race results due to incomplete databank guidelines and underutilized enforcement measures. The minimum guidelines proposed in this Note aim to correct that problem, thereby ensuring that the Familial Searches are conducted within the metes and bounds of the Constitution.

of Familial Searches is not discriminatory, even if the *effects* are racialized.

In certain circumstances, a disproportionate effect on Black and Hispanic communities can be viewed in a positive light. DNA testing is routinely used to exonerate people convicted of crimes and to exclude people from a possible list of suspects.<sup>126</sup> Familial Searching is no different and allows investigators in some cases to reopen cold cases and exonerate wrongfully convicted individuals.<sup>127</sup> For example, in 2003, a newspaper editor was raped and killed in North Carolina, and investigators collected DNA left at the crime scene and compared it to the DNA profiles contained in the state's database.<sup>128</sup> Though the sample did not match any of the 40,000 profiles in the database, the sample was "remarkably similar" to that of a convicted offender named Anthony Brown, whose profile was already in the database.<sup>129</sup> This led investigators to consider Brown's male relatives, namely, his brother Willard.130 Investigators lawfully collected a cigarette butt Willard smoked and discarded, and after an analysis, investigators concluded that the DNA from his cigarette butt matched the sample recovered from the murder of the newspaper editor.<sup>131</sup> Willard pleaded guilty in December 2004 to the rape and murder of Deborah Sykes in 1984, for which Darryl Hunt had been wrongly convicted and served eighteen years in prison.132

Darryl Hunt, Willard Brown, and Anthony Brown were Black males, two of whom had their DNA profiles stored in the state database.<sup>133</sup> It was Anthony Brown's crime and his subsequent conviction via a Familial Search yielding his brother's DNA profile that

<sup>&</sup>lt;sup>126</sup> See DNA Exonerations in the United States, INNOCENCE PROJECT, https://www.innocence project.org/dna-exonerations-in-the-united-states [https://perma.cc/D92E-Y2F2] (last visited Mar. 14, 2019) (as of this writing, the Innocence Project alone has exonerated 362 people since 1989 using DNA testing. Of the 362 exonerees, 222 are African American, 109 are Caucasian, and 27 are Latinx).

<sup>127</sup> See Kim et al., supra note 28, at 2.

<sup>128</sup> See Willing, supra note 44.

<sup>129</sup> Id.

<sup>130</sup> See id.

<sup>&</sup>lt;sup>131</sup> See id.

<sup>132</sup> See id.

<sup>133</sup> See id.

exonerated Darryl Hunt.<sup>134</sup> Cases like this show the full potential of Familial Searches. Although members of Black and Hispanic communities may feel the negative effects of Familial Searches in disproportionate amounts, by the same logic, these communities may also feel the *positive* benefits in disproportionately higher amounts, in that there are more offenders who can potentially be exonerated by this kind of search. At the other end of the spectrum, we can consider the victims of violent crimes, who are frequently members of racial minorities.<sup>135</sup>

While this Note proposes a policy specifically for Familial Searches, it is worth reiterating the importance of strict regulations guiding the actions of law enforcement officers and personnel working with physical evidence. Crime laboratories—not just DNA databanks—"serve the criminal justice system as a whole" by working for everyone in the community, "not just the police and prosecutors who request laboratory services."<sup>136</sup> Communities and individuals suffer when crime laboratories fail to closely follow rules that balance a state's important need to solve crimes against the rights and liberties of individuals. For example, in 2002, the Houston Police Department Crime Laboratory "was among the many crime laboratories around the country plagued with serious issues."<sup>137</sup> In response, Houston city and community leaders implemented a "unique model of crime laboratory governance

<sup>134</sup> See id.

<sup>&</sup>lt;sup>135</sup> See Kim et al., supra note 28, at 6 ("Despite the potential for disproportionate scrutiny of racial minorities in familial searching, victims of violent crimes are often members of racial minority populations, such that improved conviction rates achieved with the use of familial searching [will] also benefit those communities."); see also JENNIFER L. TRUMAN & MICHAEL R. RAND, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUST., NCJ-231327, CRIMINAL VICTIMIZATION, 2009 1, 4 (2010) https://www.bjs.gov/content/pub/pdf/cv09.pdf [https:// perma.cc/2UAX-GVSF] ("Blacks were more likely than whites to be victims of overall violent crime, robbery, and aggravated assault, and somewhat more likely than whites to be victims of race (American Indian, Alaska Native, Asian, Native Hawaiian, and other Pacific Islander) of overall violence, robbery, aggravated assault, and simple assault.").

<sup>&</sup>lt;sup>136</sup> Nicole Bremmer Cásarez & Sandra Guerra Thompson, *Three Transformative Ideals to Build a Better Crime Lab*, 34 GA. ST. U. L. REV. 1007, 1010 (2018); *see* Adam Liptak, *The Nation; You Think DNA Evidence is Foolproof? Try Again*, N.Y. TIMES (Mar. 16, 2003), https://www.nytimes.com/2003/03/16/weekinreview/the-nation-you-think-dna-evidence-is-foolproof-try-again.html.

<sup>137</sup> Cásarez & Thompson, supra note 136, at 1011.

[melding] the efficiencies of the corporate structure with the public accountability ethos of democratic governance."<sup>138</sup> In the few years since the implementation of the new system, Houston's crime laboratory has become "a model of excellence" particularly in "(1) reduc[ing] the risk of wrongful convictions... [and] (2) provid[ing] timely results [to] better assist police investigations...."<sup>139</sup> When procedures and guidelines that account for the human factor inherent in most physical evidence matters are implemented *and* rigorously enforced, the risk that these procedures will infringe on the rights and liberties of individuals decreases, while retaining the important community utility of these procedures.

A state that has not yet taken a position on Familial Searching must consider all of the policy safeguards that have been implemented by other states, as well as the additional limitations resulting from various federal regulations. The next Part considers all of these factors and proposes a minimum set of safeguards that should exist in a new Familial Search Policy.

### III. PROPOSAL

States that have not yet taken a position on Familial Searches should adopt a policy permitting these searches. However, given the legitimate equal protection concerns<sup>140</sup> raised by the use of these searches, such a policy should incorporate a minimum set of guidelines, outlined in the model policy and model application.<sup>141</sup> In short, these

<sup>138</sup> Id. at 1012.

<sup>139</sup> Id.

<sup>&</sup>lt;sup>140</sup> See Greely et al., supra note 85, at 260 ("the way that family forensic DNA puts African-Americans under much greater investigative scrutiny may not be unconstitutional, but seems unfair and quite possibly unwise."). As Greely and his co-authors note, it is unlikely that a court will hold that Familial Searching is unconstitutional on Equal Protection grounds, given that "[i]t is not the result of any unstated racially discriminatory purpose or intent in the use of family forensic DNA, but a consequence of the vast disproportion, for whatever reasons, in felony convictions between African-Americans and U.S. Caucasians." *Id.* at 259. This Note's Proposal seeks to provide strict standards that provide for equal application of this investigative tool, while urging law makers and law enforcement to develop equally strict standards in other areas of criminal investigations to move closer towards achieving equal results from Familial Searching.

<sup>&</sup>lt;sup>141</sup> See infra Apps. A & B.

minimum guidelines seek to ensure that Familial Searches are only used in violent, unsolved crimes that present an imminent threat of harm to the community. Most importantly, the proposed policy seeks to prevent law enforcement from exploiting the powerful nature of Familial Searches by requiring an involved application process. Equally important is the proposed "Expungement" section, in that it does not allow law enforcement to capitalize on DNA profiles in a databank that should have been expunged, even if the onus was on the owner of the genetic information to apply to have the profile removed.

Each section of the proposed application and policy attached as appendices exists to ensure that Familial Searches are not used haphazardly or in frivolous cases. Given the serious Fourth Amendment and equal protection implications created by Familial Searches, it is critical that a state's policy is closely followed. First, it is imperative that states establish in their Familial Search Policies that these searches may not be conducted at the will of law enforcement; rather, these searches must be used in limited cases, where the perpetrator is charged with specific, violent crimes, and in which traditional investigative measures have not produced any leads. The benefit of a Familial Search will be vitiated if law enforcement is permitted to independently select cases for which to conduct a Familial Search. Such unregulated discretion is likely to lead to a negative impact on racial minorities who, for reasons beyond the scope of this Note, disproportionately feel the negative effects of our imperfect criminal justice system.<sup>142</sup>

Only if law enforcement is presented with such a case may it consider submitting an application for a Familial Search. The application exists to serve as a written record of all parties involved in requesting the Familial Search. Given the privacy concerns related to Familial Searches, it is important to maintain a complete and accurate record of all parties who had access to the information pertaining to the request, and, ultimately, the parties who had access to the DNA profile and results of the Familial Search. The application further ensures that the parties conduct the necessary due diligence and affirm that the initial case and sample requirements have been met before the Search process begins.

<sup>142</sup> KRIMSKY ET AL., supra note 18, at 252.

In drafting a Familial Search Policy, a state must make the decision whether the convicted offender index will be the only index searched, or if other indices-such as the arrestee index or DNA profiles saved as part of the state's Sex Offender Registry-will be combed during a Familial Search as well. Of course, states differ with respect to the sources of the DNA profiles in their state databanks-some only create profiles for convicted offenders, while others create profiles for arrestees as well.<sup>143</sup> In making this decision, states should consider the fact that courts have generally upheld DNA data banks of convicted offenders on the notion that such individuals have a diminished expectation of privacy, as balanced against society's need to promote law and order.144 Arrestees do not necessarily hold the same diminished expectation of privacy in their genetic information, and so it may be more likely that an arrestee would prevail on a challenge against a Familial Search on Fourth Amendment grounds, whereas a convicted offender is significantly less likely to prevail on such a challenge.

The Quality Assurance Standards applying to DNA databanks exist because the regulating authorities acknowledge the wealth of personal information contained within the databanks.<sup>145</sup> If the databank in which the Familial Search is to be conducted is not in compliance with the applicable state or federal Quality Assurance Standards, there may be room for a violation of an individual's right to privacy in his genetic information. If states are required to affirm, prior to a Familial Search, that its databanks are in compliance with the prescribed standards, law enforcement agencies that wish to take advantage of Familial Searches will push the regulating state agency to remain in compliance, so that Familial Searching is available as a tool to them. In practice, this incentive will promote the privacy interests of individuals whose DNA profiles are stored in the databanks.

<sup>&</sup>lt;sup>143</sup> See Information Bull. from the Cal. Dep't of Just., Div. of Law Enf't, *supra* note 50; *see also The NYS DNA Databank and CODIS*, *supra* note 50. *But see* VA. DEP'T OF FORENSIC SCI., *supra* note 40.

<sup>144</sup> KRIMSKY ET AL., supra note 18, at 156.

<sup>&</sup>lt;sup>145</sup> *Id.* at 232 (DNA can reveal "personal biological relationship[s], [which] can have serious consequences for individuals or their families. Similarly, DNA can reveal information about one's ethnic origins.... Finally, DNA can provide information about whether an individual was physically present at a certain location. A person's DNA found on a bedsheet at the scene of a crime is prima facie evidence that the person was at the location.").

A comprehensive Familial Search Policy must also state, in no uncertain terms, that a Familial Search may only be used for the purpose of providing law enforcement an investigative lead related to the case described in the application for the Familial Search, assuming all of the other requirements have been met. Most states have specifically enumerated permissible and forbidden uses of DNA profiles stored in their databanks,<sup>146</sup> and Familial Searches should not be used in any manner inconsistent with these rules. In addition to these permissible and forbidden uses, some states require that a DNA profile always contain enough testable material so that the criminal defendant can conduct tests as part of his defense in a case.<sup>147</sup> For this reason, states should add an additional safeguard in their Familial Search Policy, which would require that in the event a Familial Search is permitted, "[t]here must [still remain] enough untested DNA from the crime scene left over to permit additional specialized testing."<sup>148</sup>

Familial Searches provide law enforcement with a list of investigative leads, *not* a list of suspects. Given the personal information that may be uncovered as a result of a Familial Search, a Familial Search Policy should include a provision instructing when and how the results of a Familial Search shall be reported—both to the investigating agency and the subject of the Familial Search.<sup>149</sup>

Though it may seem self-evident, policymakers should explicitly state in their Familial Search Policies that only results from Familial Searches should be provided to law enforcement in the case at issue. If a Familial Search is permitted under a state's policy, the results may yield *relatives*—arrested or convicted, depending on the policy—of the person to be identified.<sup>150</sup> On the other hand, while traditional DNA searches

<sup>146</sup> *See* sources cited *supra* note 69.

<sup>&</sup>lt;sup>147</sup> See, e.g., COLO. REV. STAT. ANN. § 18-1-1104 (2019).

<sup>&</sup>lt;sup>148</sup> Chamberlain, *supra* note 1, at 26.

<sup>&</sup>lt;sup>149</sup> As with all of the provisions in the Proposed Familial DNA Search Policy, *infra* Appendix A, the "Reporting" section merely provides guidance to a state in formulating its own policy, and a state may select a different time or means to report the results of Familial Search.

<sup>&</sup>lt;sup>150</sup> Familial DNA Searches, FINDLAW, http://criminal.findlaw.com/criminal-rights/familialdna-searches.html [https://perma.cc/7739-LCU2] (last visited Mar. 15, 2019) ("[a] familial DNA search is a search by law enforcement in DNA databases for genetic information indicating a relative of a person they seek to identify. When a search for an exact match to a DNA sample comes up fruitless, a familial DNA search may bring back a partial match, indicating a sibling, child, parent or other blood relative. For example, DNA from a crime scene

look for an exact match to a DNA sample,<sup>151</sup> they may also yield a partial match to a sample contained in a database,<sup>152</sup> and states vary as to whether they allow partial matches resulting from traditional DNA searches to be included in the results reported to law enforcement.<sup>153</sup> An inadvertent partial match resulting from a traditional DNA search may have the same practical effect—for investigation purposes—as the results of a Familial Search, which is a deliberate search of a DNA database using specialized software and search parameters.<sup>154</sup> Nonetheless, the adoption of a Familial Search Policy will not automatically mean that law enforcement can use partial matches resulting from traditional DNA searches, especially in jurisdictions

<sup>153</sup> Familial DNA Searches, supra note 150 ("There remains somewhat of a middle ground between traditional DNA searching and explicit familial DNA searching that involves partial matches that come up in a traditional DNA search. For example, a traditional DNA search, rather than an explicit search for family members, turns up a partial match. States vary in whether they allow such partial match information to be included in the results reported to law enforcement officials.").

<sup>154</sup> Michael B. Field, Saniya Seera, Christina Nguyen & Sara Debus-Sherrill, *Study of Familial DNA Searching Policies and Practices: Case Study Brief Series* 1 (Nat'l Inst. of Justice, Office of Justice Programs, U.S. Dep't of Justice Case Study Brief, Award No. 2013-R2-CX-0013, 2017), https://www.ncjrs.gov/pdffiles1/nij/grants/251081.pdf [https://perma.cc/X5XF-WN8E].

might not match any DNA in state or federal databases, but if the person's son had been recently incarcerated and thus his information entered into a state DNA database, a familial DNA search could lead police to the son, and ultimately to their suspect.").

<sup>&</sup>lt;sup>151</sup> *Id.* ("With a traditional DNA search, authorities can see whether crime scene DNA matches the DNA of anyone whose DNA has been collected in an array of state and federal DNA databases.").

<sup>152</sup> Natalie Ram, Fortuity and Forensic Familial Identification, 63 STAN. L. REV. 751, 763 (2011) ("A 'partial' match ... refers to two genetic profiles-one derived from a crime scene sample and the other from CODIS--that share some, but not all, of the thirteen core DNA loci that comprise a CODIS profile. This kind of match generally excludes the offender whose CODIS profile provides the match, because that individual's DNA is demonstrably different from the crime scene sample. A partial match may instead inculpate the offender's close genetic relatives as possible perpetrators of a crime because they, like the crime scene sample, share some but not all of the examined loci with the individual whose CODIS profile provided the partial match. The information derived from a partial match where two nonmatching profiles share rare genetic markers will be particularly suggestive of a relative's involvement in a crime. The target of a partial match is thus fundamentally different from that of an exact match: the partial match targets an offender's close genetic relatives, while an exact match targets the offender himself. Partial matches may be uncovered either fortuitously or deliberately. While fortuitous partial matches appear in routine database searches, deliberate partial matches are the product of an intentional database search for such matches. Fortuitous partial matches may turn up as the result of lower-stringency search parameters.").

where such partial matches are statutorily barred from inclusion in reports to law enforcement. Allowing inadvertent partial matches from traditional searches must be considered separately by the jurisdiction's lawmakers.

Finally, state databanks should be required—pursuant to state and/or federal law—to expunge DNA profiles from the databanks in certain circumstances, such as when the offender's conviction has been vacated, or when it has been determined that the DNA profile is not related to the crime for which it was collected.<sup>155</sup> While we may wish to trust that states follow the expungement requirements to remain in compliance with the state and federal laws, statutes and procedures related to expungement of DNA profiles vary by state, and, in many cases, DNA profiles are not expunged.<sup>156</sup> Applying to have one's profile expunged from the databank can be a costly and lengthy process, and an individual should not be subject to the far-reaching effects of a Familial Search merely because he cannot afford to apply to have his profile expunged and remain abreast of the status of his application.<sup>157</sup> As of 2015, only five states have laws that prohibit the use of a DNA sample that should have been expunged but was not.<sup>158</sup> Adopting a Familial

<sup>155</sup> See sources cited supra note 72.

<sup>&</sup>lt;sup>156</sup> See Wayne A. Logan, Government Retention and Use of Unlawfully Secured DNA Evidence, 48 TEX. TECH L. REV. 269, 279–80 (2015) ("In only eleven states [of the thirty-two allowing for pre-conviction DNA collection] . . . DNA profiles and samples are automatically expunged by the government when it is determined that expungement is in order. In the remaining twenty-one states, the onus is on individuals to seek expungement, an often complex, lengthy process entailing costs, which combine to result in very low incidence of expungement. In addition, only rarely do state laws require that an arrestee be notified of the right to seek expungement and the circumstances under which it can occur. Consequently, as a practical matter, DNA profiles and samples remain in government hands.").

<sup>157</sup> See id.

<sup>&</sup>lt;sup>158</sup> *Id.* at 281–82 ("Alabama: '[U]se [of a DNA sample] is authorized until... the circuit court where the individual was arrested, orders that the DNA should be expunged.' Colorado: 'A data bank or database match shall not be admitted as evidence against a person in a criminal prosecution and shall not be used as a basis to identify a person if the match is ... [o]btained after the required date of destruction or expungement.' Maryland: 'A record or sample that qualifies for expungement or destruction ... and is matched concurrent with or subsequent to the date of qualification for expungement: (1) may not be utilized for a determination of probable cause regardless of whether it is expunged or destroyed timely; and (2) is not admissible in any proceeding for any purpose.' Nebraska: 'Any DNA sample obtained in violation of this section is not admissible in any proceeding for any purpose whatsoever.' North Carolina: 'Any identification, warrant, probable cause to arrest, or arrest based upon a database

Search Policy that allows DNA profiles that should have been expunged to be combed during a Familial Search comes dangerously close to violating the privacy and equal protection rights we hold so dearly. For this reason, in the context of Familial Searches, states should take extra care not to allow the Familial Searches to comb through profiles that should have been expunged from the databank, *even if* in that state, the onus is on the criminal defendant to submit an application to have his profile expunged.

To reiterate, the Proposed Familial DNA Search Policy provides a suggested *minimum* set of guidelines. States may choose to add additional procedures or requirements to their own policies. However, the guidelines provided here are the minimum set to ensure that even if the Familial Searches disproportionately impact racial minorities, as long as the searches are conducted within the strictures of these guidelines, they will have been applied equally, thus comporting with the equal protection requirement that the law must not have a discriminatory *purpose*.<sup>159</sup>

# A. Counterarguments

Opponents of Familial Searching may argue that these searches are presumptively unreasonable, in that the government is using a technological device that is not in general public use to explore private details that would have been unknowable without physical intrusion.<sup>160</sup>

match of the defendant's DNA sample which occurs after the expiration of the statutory periods prescribed for expunction of the defendant's DNA sample, shall be invalid and inadmissible in the prosecution of the defendant for any criminal offense.").

<sup>&</sup>lt;sup>159</sup> See Ashcroft v. Iqbal, 556 U.S. 662, 677 (2009) ("to state a claim based on a violation of a clearly established right, respondent must plead sufficient factual matter to show that petitioners adopted and implemented the detention policies at issue not for a neutral, investigative reason but for the *purpose* of discriminating on account of race, religion, or national origin.") (emphasis added).

<sup>&</sup>lt;sup>160</sup> See Kyllo v. United States, 533 U.S. 27 (2001). In *Kyllo*, police suspected that petitioner was growing marijuana in his house using high-intensity lamps. Police, without a warrant, aimed a thermal-imaging device at petitioner's house. The thermal-imaging device revealed that the roof over the garage and a side wall of the home were relatively hot compared to the rest of the home and substantially warmer than neighboring homes. Officers concluded that the amount of heat emanating from the house was consistent with the use of high-intensity lamps typically required for growing marijuana indoors. *Id.* at 29–30. The scan lasted only a few

It is true that, in the case of a Familial Search, law enforcement would be using technology unavailable to the public to test someone's DNA sample for a possible kinship match in a DNA database. However, the Supreme Court in *Kyllo v. United States* held that the Fourth Amendment must be construed "in a manner which will conserve public interests as well as the interests and rights of individual citizens."<sup>161</sup>

In the case of forensic evidence, the unidentified DNA sample at issue is left by its owner at the scene of a violent felony offense. After a crime scene unit collects the sample left at the scene, investigators are permitted, in any state, to search that DNA against the local, state, and national databases. Familial Searching offers law enforcement a different way of using the lawfully-stored DNA profiles to potentially solve a violent crime. Assuming that a state's Familial Search Policy contains the minimum safeguards proposed in this Note, such a policy would be consistent with each state's intent to take advantage of the full investigative potential of their DNA databases, which they have shown by requiring DNA samples from individuals convicted of certain offenses.<sup>162</sup> While the government would indeed be using technology that is not publicly available to learn information that would otherwise be private, the DNA sample at issue was abandoned by its owner at the scene of a crime, and courts have never held that lawfully-obtained DNA evidence from a crime scene could not be used to pursue investigative leads. Familial Searching provides law enforcement with those leads so that the unsolved crimes may be investigated further.

Opponents of Familial Searches may also ask how close is close enough when considering the results of Familial Searches and if a true kinship match has been found. To address this concern, it helps to first

minutes and was performed from an officer's vehicle parked across the street from the house. Based on tips from informants, utility bills, and the thermal-imaging scan, a federal judge issued a warrant authorizing a search of the home. *Id.* The Supreme Court held that the use of a thermal-imaging device aimed at a private home from a public street to detect relative amounts of heat within the home constituted a search within the meaning of the Fourth Amendment. Agents obtained, by using sense-enhancing technology that was not in general public use, information regarding the inside of the home, which could not otherwise have been obtained without physical intrusion into a constitutionally-protected area. *Id.* at 40.

<sup>161</sup> Kyllo, 533 U.S. at 40 (quoting Carroll v. United States, 267 U.S. 132, 149 (1925)).

<sup>162</sup> *Supra* note 15.

understand the genetic similarities between relatives. Close or firstdegree relatives—a parent or sibling—are expected to share about fifty percent of one another's DNA variants.<sup>163</sup> Second-degree relativesuncles, aunts, nephews, nieces, grandparents, grandchildren, or halfsiblings-share about twenty-five percent of their DNA variations.164 Third-degree relatives-great-grandparents or great-grandchildrenshare about twelve percent of their DNA variations.165 Studies have found that the chance of two unrelated people matching at thirteen or more allele sites is small-about 1 in 2,000.166 However, critics may argue that even this small percentage can yield a high number of false leads when combing through a database containing several million DNA profiles.<sup>167</sup> The results of a Familial Search may yield a false lead, which can lead investigators to pursue an investigation into an individual who is actually unrelated to the convicted offender. This unrelated individual may then be subject to an improper search, which of course triggers a discussion of a possible constitutional violation.

To resolve this issue, more advanced techniques are being explored. One of these techniques involves the use of "likelihood ratios."<sup>168</sup> Likelihood ratios have been found to make better use of genetic information and produce a prioritized list of partial matches.<sup>169</sup> Another method of narrowing long lists of possible relatives of offenders is to subject the stored DNA samples identified in a partial match to

<sup>163</sup> KRIMSKY ET AL., *supra* note 18, at 69.

<sup>164</sup> Id.

<sup>165</sup> Id.

<sup>166</sup> Id. at 72.

<sup>167</sup> Id.

<sup>&</sup>lt;sup>168</sup> *Id.* at 74 ("As applied to familial searching, this is a statistical method that goes beyond simple allele counting and instead evaluates the genetic evidence to support the likelihood that two individuals are related compared with the likelihood that they are not . . . For DNA testing the [likelihood ratio] is the probability of the observed genetic profiles given proposed familial relationships versus the probability of observing the genetic profiles if the donor of the evidence and the identified partially matching profile sources are unrelated.").

<sup>&</sup>lt;sup>169</sup> *Id.* at 74 ("In addition to comparting the amount of sharing between any two individuals with the amount of sharing that would be expected if those individuals were siblings or parent and offspring, the [likelihood ratio] can take into account the relative frequencies of the matching alleles in the population. The rarer the alleles that match, the more likely it is that the match indicates a potential familial relationship.").

additional genetic testing.<sup>170</sup> Of course, these methods would require accessing the stored biological samples of individuals in the database and subjecting them to additional genetic tests,<sup>171</sup> which may raise a separate inquiry beyond the scope of this Note.

Finally, opponents of Familial Searching may argue that its use will contribute to a 1984-esque society in which individuals are cataloguedhere, based on their genetic profile. Opponents might ask, what measures, if any, are in place to prevent law enforcement officers from collecting genetic samples at birth, or following around individuals to collect abandoned DNA samples to bolster a DNA database? These are valid concerns. The collection and testing of abandoned DNA samples are allowed in most states.<sup>172</sup> Thus, should individuals bear the burden of removing all traces of genetic material from their trash so that law enforcement cannot access it? It seems obvious that the threat of overpolicing has always been present-abandoned DNA samples could be collected by law enforcement even before Familial Searching was used. Furthermore, the Proposal in this Note does not make this threat any worse, assuming that the prescribed precautions and limitations are followed. In fact, if properly implemented, this Proposal should have the effect of providing law enforcement agencies with a useful tool, but one that is very limited in its use, given the case and sample requirements, and the affirmations that must be made prior to conducting a search.

<sup>&</sup>lt;sup>170</sup> *Id.* at 75 (some have advocated for the "use of ancestry-testing techniques—specifically Y-chromosome analysis and mitochondrial DNA sequencing—to exclude individuals from investigation who cannot be related to the true perpetrator through either paternal or maternal lineage.").

<sup>171</sup> Id.

<sup>&</sup>lt;sup>172</sup> Kevin Hartnett, *The DNA in Your Garbage: Up for Grabs*, BOSTON GLOBE (May 12, 2013), https://www.bostonglobe.com/ideas/2013/05/11/the-dna-your-garbage-for-grabs/sU12MtVLkoypL1qu2iF6IL/story.html [https://perma.cc/A8XT-YRYQ] ("Detritus containing DNA was effectively useless to most people two decades ago. But today it is becoming faster and cheaper to sequence fragments of DNA—revealing the unique genetic material that begins to make us who we are—and the law has yet to catch up. State laws are a patchwork of regulations, and most jurisdictions, including Massachusetts, are mum about the privacy status of the DNA we leave behind us every day.").

#### CONCLUSION

Familial DNA Searches are a powerful tool available in criminal investigations. These searches have the potential to assist investigators in pursuing leads in cold cases where perpetrators have evaded law enforcement, sometimes for many years.<sup>173</sup> These searches can also exonerate individuals who were wrongly convicted of past crimes.<sup>174</sup> However, if left unregulated, it is likely that Familial Searching will devolve into yet another investigative technique that unfairly discriminates against racial minorities, who are subject to such discrimination in nearly every other area of our criminal justice system.<sup>175</sup>

The safeguards proposed in this Note for Familial Search Policies are a minimum set of requirements that any new policy should incorporate in order to protect against equal protection violations that are likely to arise in an unregulated Familial Search system. Because of larger issues relating to disproportionate numbers of genetic profiles belonging to individuals of color, these individuals are bound to feel the effects of Familial Searching—both negative *and* positive—in disproportionately higher numbers than their white counterparts.<sup>176</sup> However, the Supreme Court has consistently held that a discriminatory impact alone is insufficient to support a claim under the Equal Protection Clause. Rather, a petitioner must show that the Policy was made with a discriminatory *purpose*.<sup>177</sup> In the context of Familial Searches, so long as the minimum proposed safeguards are followed in a state's policy, equal application of Familial Searches will be ensured, even if equal results cannot be ensured.

<sup>173</sup> Supra note 1.

<sup>&</sup>lt;sup>174</sup> Willing, *supra* note 44.

<sup>&</sup>lt;sup>175</sup> See, e.g., Timothy Williams, Study Supports Suspicion that Police Are More Likely to Use Force on Blacks, N.Y. TIMES (July 7, 2016), https://www.nytimes.com/2016/07/08/us/studysupports-suspicion-that-police-use-of-force-is-more-likely-for-blacks.html ("The report found that although officers employ force in less than 2 percent of all police-civilian interactions, the use of police force is disproportionately high for African-Americans—more than three times greater than for whites.").

<sup>&</sup>lt;sup>176</sup> Willing, *supra* note 44; *see supra* Section II.A.2.

<sup>177</sup> Supra note 122.

# Appendix

# A. Proposed Application for Familial Search

# I. TO BE COMPLETED BY REQUESTORS

# (A) Contact Information for Requesting Agencies

Law Enforcement Agency		
Agency Name		
Address		
Director Name		
Phone		
Email		
Name of Party Completing this Application		

District Attorney		
Agency Name		
Address		
Director Name		
Phone		
Email		
Name of Party Completing this Application		

# (B) Case Information

Include the name of the DNA laboratory that	
performed the testing on the forensic sample and	
the sample's CODIS specimen ID	
Include the relevant section(s) of the State Penal	
Law, including the appropriate subsection(s)	
Include information regarding sample location,	
multiple cases with same sample, etc.	
Include a narrative describing what reasonable	
efforts have been taken to date	
If there is an allegation that exigent circumstances	
exist, include a description of those circumstances	

(C) Signatures (of Directors and individual(s) who completed this application)

# II. TO BE COMPLETED BY THE STATE CODIS ADMINISTRATOR

# (A) Contact Information for State CODIS Administrator

State CODIS Administrator		
Agency Name		
Address		
Director Name		
Phone		
Email		
Name of Party Completing this		
Application		

# (B) Sample Information

	Yes	No
The forensic DNA profile is a single source, or a fully		
deduced profile originating from a mixture		
The forensic DNA profile appears to have a direct		
connection with the putative perpetrator of the crime		
The forensic DNA profile Has been searched against		
DNA profiles in the State DNA Databank's offender		
index		

(C) Signatures (of Directors and individual(s) who completed this application)

### B. Proposed Familial DNA Search Policy Guidelines

### Introduction

A Familial Search request can be made for forensic profiles from unsolved serious offenses that have not been previously associated with a convicted offender through searches of the State DNA Databank. The process associated with Familial DNA Searching requires special DNA testing and, possibly, an investigation by law enforcement of the potential relative. Accordingly, the State's policy on case acceptance for this process was developed taking into consideration both privacy concerns and agency resources, recognizing that it may provide information useful for identifying the perpetrator of a violent crime against a person.

### Application

A request for a Familial Search must be made jointly by the Directors of the investigating law enforcement agency and the District Attorney with jurisdiction. A Familial Search may *not* be conducted prior to the filing and approval of the application.

#### **Case Requirements**

The DNA profile must be associated with a:

- Violent felony offense (*specify specific Penal Law articles*);
- Crime presenting a significant public safety threat

The requestors must be able to demonstrate that:

- Reasonable investigative efforts have been taken in the case; and
- Exigent circumstances exist warranting a Familial Search

#### Sample Requirements

The requestors should discuss potential submissions for Familial Searching with the laboratory that generated the forensic DNA profile *prior* to submitting an application. The sample must:

- Be single source, or a fully deduced profile originating from a mixture;
- Appear to have a direct connection with the putative perpetrator of the crime; and
- Have been searched against DNA profiles in the State DNA Databank's offender index

Here, there should be a list of every source of DNA profiles in the State's databank (e.g. convicted offenders, arrestees, deceased victims, unidentified human remains, missing persons, individuals registered with the State's Sex Offender Registry) and explicit guidance on which index or indices are to be searched during the course of a Familial Search.

#### Quality Assurance Standards

Prior to conducting the requested Familial Search, the Director of the State's Department of Forensic Science (*or similar position*) shall affirm, in writing, that the State's databank in which the Familial Search is to be conducted is fully in compliance with the State's Quality Assurance Standards, or, if the State has not adopted its own standards, with the federal standards applicable to all databanks that participate in NDIS. This includes, but is not limited to, standards related to the education and training of databank personnel and management, security of the physical databank facility, chain of custody, equipment calibration and maintenance, and reports and case notes.

#### Specifically-Enumerated Permissible Uses

Here, it should be explicitly stated that the results of the Familial Search are solely to provide investigative leads related to the specified case in the application for the Search. Results of the Familial Search should not be used in any manner contrary to the uses permitted by State law, or in any manner expressly forbidden by state law (e.g. to obtain information on human physical traits, predisposition to disease, or medical or genetic disorders).

### Reporting

Interests in the family and protecting "family secrets" are valued in our society. For example, an individual may not know he was adopted, or he may be unaware that he has a brother. To protect these interests, a Familial Search that yields one or more leads shall not be reported to the subjects of those leads until investigators have determined that the subject of the lead could be a suspect in the unsolved case at issue.

# Expungement

A Familial Search may *not* be conducted among a DNA profile(s) that should have been expunged from the State databank pursuant to the relevant state or federal law. If it has been determined that the results of a Familial Search yield a Familial match to a profile that should have been expunged from the databank, the results shall not be reported to the requesting agencies, and the results shall not be used as investigative leads by any law enforcement agency.