MATCH UP: INCREASING DISCLOSURE OF FACIAL RECOGNITION TECHNOLOGY WITH CRIMINAL DISCOVERY RULES

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INTRODUCTION

In February 2019, Nijeer Parks learned that police were looking for him, alleging shoplifting and evading arrest. Mr. Parks was accused of stealing from a hotel giftshop in Woodbridge, New Jersey, and attempting to hit a police officer with a rental car from a Hertz office in the hotel. Police thought that Mr. Parks looked like the shoplifting suspect based on a comparison of Mr. Parks’ state ID with a fake ID that the shoplifter had left behind. Like Mr. Parks, the shoplifter was a black man with a beard. Mr. Parks had an alibi: at the time of the crime, he was thirty miles away at a pharmacy making a money transfer through Western Union. He voluntarily went to the police station to

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3. Id.

4. See id. (noting Mr. Parks’ race and quoting Mr. Parks that “[t]he only thing we have in common is the beard”).

5. Id.
clear things up, but he was nonetheless arrested, detained for ten days, and he spent $5,000 in attorney’s fees before he was released from custody.

Despite his innocence, Mr. Parks initially considered taking a plea deal out of fear of losing at trial. A trial loss would result in a longer conviction compared to accepting a plea deal, and a sentence could be high since this charge would be Mr. Parks’ third felony. Mr. Parks fortunately was able to verify his alibi by finding a screenshot of the Western Union money transfer, which showed that he made the transfer at the pharmacy around the time of the shoplifting. The charges against him were ultimately dropped several months later. Mr. Parks was evidently able to convince prosecutors of his innocence, avoiding trial and the risk of a wrongful conviction and imprisonment. Given the length of time it took for his charges to be dropped, it is unclear how Mr. Parks’ case would have ended had he not been able to produce physical corroboration of his alibi.

Mr. Parks was selected as the primary suspect even though an investigation of his whereabouts at the time of the crime should have ruled him out as the culprit. It raises the question: how was Mr. Parks initially identified, and why was he pursued as a person of interest to begin with? The answer: a facial recognition program errantly matched the unknown shoplifter’s fake ID photo with a photo of Mr. Parks’ face. Police took the match and ran with it.

Facial recognition technology (FRT) is an automated computer tool that compares the image of one face in a target image to one or more images of other faces. Law enforcement at both the federal and state levels increasingly use FRT to identify individuals on scene who are either unable or unwilling to identify themselves, to document the

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8. Id.
9. Id.
10. Id.
11. Id.
12. Id.; Johnson, supra note 1.
13. Hill, supra note 2; Johnson, supra note 1.
14. See Hill, supra note 2 (“The next day, state investigators said they had a facial recognition match: Nijeer Parks . . . . The detective compared Mr. Parks’s New Jersey state ID with the fake Tennessee driver’s license and agreed it was the same person. After a Hertz employee confirmed that the license photo was of the shoplifter, the police issued a warrant for Mr. Parks’s arrest.”).
identity and mugshot of an arrestee into a FRT database, or to identify an unknown perpetrator of a crime captured by photo or video footage. To identify an unknown individual, law enforcement input the target photo of the individual into the FRT. The computer processes and compares the individual’s facial features to other faces in a database of photos within the FRT. The FRT then generates a list of top matches that most closely resemble the individual.

FRT has great potential to generate investigative leads and assist in solving crimes, but there are issues with FRT software and a lack of transparency about how it is used. Current technology is not perfect. FRT has questionable accuracy rates and documented biases in its matching algorithms. Human reviewers who look over the matches may be untrained, and FRT may prime police and prosecutors to pursue matches even if they are ultimately incorrect. Despite these documented complications with current iterations of FRT and increased public awareness of FRT searches by police, a plurality of Americans supports its usage and law enforcement continue to use it—though the extent to which it is used throughout the investigatory and criminal justice process is unclear. Law enforcement agencies

17. See FINKLEA ET AL., CONG. RSCH. SERV. R46586, FEDERAL LAW ENFORCEMENT USE OF FACIAL RECOGNITION TECHNOLOGY 2 (2020) (“Facial recognition broadly involves the automated searching of a facial image (a probe) against a known collection or database of photos.”).
18. See Crumpler & Lewis, supra note 15, at 3 (“Identification . . . is when facial recognition is used to determine whether a record for an unknown individual exists in a larger database of known faces.”).
19. Id.
20. See FINKLEA ET AL., supra note 17, at 4. (describing several Federal Bureau of Investigation cases where FRT was used, including to identify the stalker of high school girls, a bank robber, and an unconscious accident victim).
21. See generally Garvie et al., supra note 16.
22. See discussion infra Part I.B.
23. See discussion infra Part I.B.
24. Rainie et al., Public More Likely to See Facial Recognition Use by Police as Good, Rather than Bad for Society, PEW RSCH. CTR. (Mar. 17, 2022), https://www.pewresearch.org/internet/2022/03/17/public-more-likely-to-see-facial-recognition-use-by-police-as-good-rather-than-bad-for-society/ (finding in a study that eight-in-ten Americans “have heard or read at least a little about the use of” FRT and that 46 percent of American adults think “widespread use of facial recognition technology by police would be a good idea,” as opposed to 27 percent who oppose its usage).
25. FINKLEA ET AL., supra note 17, at 5.
make few, if any, public disclosures about their general use of or policies on FRT.26 And at the individual case level, law enforcement and prosecutors may not disclose information about the FRT search results that they relied on to identify a suspect.27

This lack of disclosure is detrimental to defendants and their attorneys. Defense counsel may be deprived of the opportunity to fulfill their investigatory duties to their clients to pursue “inconsistencies . . . and other possible suspects and alternative theories”28 raised by the nature of the FRT match and the other top matches the FRT produces. Moreover, for misidentified defendants who are unable to produce alibi corroboration unlike Mr. Parks, information on the closeness of the FRT match and on other matches, which might include the real culprit, may be important to their defense. It may help a defendant avoid a false conviction or feel less pressured to take a plea deal, like Mr. Parks initially considered. Defendants consequently need a legal mechanism to gain access to information on FRT results. Discovery may be one such mechanism.29

There are two primary categories of criminal material of which defendants can compel disclosure: 1) 
Brady
material, which is exculpatory case-related content that prosecutors are constitutionally obligated to provide to defendants per the Due Process Clause;30 and 2) content discoverable under statutory criminal discovery rules,31 which varies by jurisdiction and which prosecutors are either required to disclose unprompted or upon the defense’s request.32 Some scholars argue that certain FRT results constitute 
Brady
material.33 Less

27. Kaitlin Jackson, Challenging Facial Recognition Software in Criminal Court, 43 CHAMPION 14, 14 (2019). See also Garvie et al., supra note 16, at 59 (“The Pinellas County Public Defender, Bob Dillinger, reports that . . . his office has never received any face recognition information as part of a 
Brady
disclosure.”).
29. See Jason Tashea, To Improve Oversight of Facial Recognition, Expand Open-file Discovery, ABA J. (Nov. 25, 2019), https://tinyurl.com/mrvxj8b (advocating for increased open file discovery to promote disclosure of FRT).
32. See e.g., FED. R. CRIM. P. 16; MINN. R. CRIM. P. 9.01(1); MCR 6.201(B)(2); Md. R. 4-262(d)(2); N.Y. CRIM. PROC. § 245.20.
33. See Andrew Guthrie Ferguson, Facial Recognition and the Fourth Amendment, 105
scholarly attention, however, has been paid to the extent to which different discovery rules could enable defense counsel to access FRT results viewed as part of the investigation. This Note seeks to fill this gap.

Part I of this Note provides an overview of how FRT works, highlights intrinsic issues with the technology and its use, and examines why disclosure of FRT results may prove useful to criminal defendants. Part II provides a brief overview of *Brady* disclosures and then discusses the feasibility of obtaining FRT results under *Brady*, contending that *Brady* is not the most practicable vehicle for defendants to obtain FRT results. Part III summarizes and compares discovery rules in five different jurisdictions: federal jurisdictions, which use the Federal Rules of Criminal Procedure, and four states, which use their own respective discovery rules. It then examines the feasibility of discovering FRT results under each of the discovery rules. This Note argues that under current discovery regimes, there are likely significant barriers to defendants attempting to discover FRT results, except in certain “open file” jurisdictions with broadly tailored rules. Part IV concludes by recommending that jurisdictions amend their discovery rules so that content like FRT results is more readily discoverable, proposing model amendment language and discussing the benefits and drawbacks of this proposed solution.

I. FRT BACKGROUND AND USAGE

A. How FRT Works and How It Is Used

FRT is a computer tool that compares a target image of a face to one or more images of faces in its system. In general, FRT works in the following manner: a computer program codes each pixel of the image into a series of numbers based on the lightness and darkness of the pixel. This coding into numbers is done by a part of the computer program called a “filter.” Different filters are run multiple times until the series of numbers is consolidated into a “template” unique to the

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MINN. L. REV. 1105, 1209 (2021) (“In the interest of fairness, these other photos and underlying system data need to be preserved and, if appropriate, turned over as *Brady* material.”). See generally Rebecca Darin Goldberg, Note, You Can See My Face, Why Can’t I? Facial Recognition and *Brady*, 5 COLUM. HUM. RTS. L. REV. ONLINE 261 (2021).

34. Crumpler & Lewis, supra note 15, at 3.
35. Id. at 4.
36. Id.
The final template is then compared to other templated images. These other images come from the FRT’s database of photos, which originate from a variety of sources. Many police departments use FRT that draws from mugshot databases and state repositories of driver’s license photos. One FRT program used by approximately 2,400 law enforcement agencies, Clearview AI, even includes over three billion images scrubbed from the Internet. Once the FRT compares the target photo to other photos, depending on the specific FRT system, it can provide different types of outputs. The program could simply identify whether two target facial images match, such as how two facial images are compared when unlocking an iPhone by holding one’s phone to one’s face. FRT can also compare the target image against multiple images for a match. The FRT can then present top matches based on each comparison’s “similarity score,” which denotes how close of a match a photo in the database is to the target photo, or only produce “[i]mages that have a similarity score above a defined threshold.”

Law enforcement agencies are one major userbase of FRT. These agencies either contract to acquire an FRT system from a vendor, build

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37. Id. at 6. When first creating the software, FRT programmers used deep learning for the computer to practice making matches and learn the best filters to create the most accurate template for comparing images. Id. Deep learning is a type of machine learning which, somewhat like a brain with a “neural network,” can process certain features of data on its own without human input and adjust its algorithms to “learn” and improve in making predictions and having accurate outputs. Deep Learning. IBM (May 1, 2020), https://www.ibm.com/cloud/learn/deep-learning.


39. See Garvie et al., supra note 16, at 2 (“At least 26 states (and potentially as many as 30) allow law enforcement to run or request searches against their databases of driver’s license and ID photos.”).


41. Id. at 784–85.

42. Crumpler & Lewis, supra note 15, at 3; FINKLEA ET AL., supra note 17, at 2.


44. Id.

45. Id.

46. See FINKLEA ET AL., supra note 17 at 9 (“Similarity scores indicate the similarity between the probe and reference or gallery images.”).

47. Id. at 2.

48. See Garvie et al., supra note 16, at 15 (“[A]t least 52 state and local law enforcement agencies that we surveyed were now using, or have previously used or obtained, face recognition technology.”); FINKLEA ET AL., supra note 17, at 5 (“FRT is used by a number of federal law enforcement agencies.”).
their own systems, or run searches through another agency’s system. Generally, “[m]ost police face recognition systems will output either the top few most similar photos or all photos above a certain similarity threshold” who are “‘candidates’ for further investigation.” Some FRT might also display the similarity score or some other indicia of how close of a match the displayed photos are to the target photo. Law enforcement agencies use FRT and the matches it provides for several purposes. FRT can be used to confirm whether people are who they say they are by determining whether their faces match photos on record. FRT can also be used to identify unknown people by comparing photos of them to photos with corresponding names in a database. Police use FRT in this way to generate a virtual list of crime suspects. Although many jurisdictions provide limited information on their policies and usage of FRT, police who use FRT to identify a suspect typically use it only as an investigative lead, with further actions like an arrest subject to additional investigation. Indeed, some courts that have addressed FRT usage by police have stated that an FRT match of a suspect alone is not enough for probable cause. However, in practice, “the frequency and extent to which FRT is used at various phases of the criminal justice system (from generating leads

49. See Garvie et al., supra note 16, at 1–2, 55 (explaining that “local police departments are building their own face recognition systems;” noting that “one out of four state or local police departments has the option to run face recognition searches through their or another agency’s system;” and discussing interviews conducted “with two of the nation’s leading face recognition vendors for law enforcement”).

50. Id. at 9.

51. See Lynch v. State, 260 So. 3d 1166, 1169 (Fla. Dist. Ct. App. 2018) (describing how a crime analyst who ran FRT “said the software would assign a number of stars indicating the likelihood of a match”); Garvie et al., supra note 16, at 9 (“Finally, the algorithm examines pairs of faces and issues a numerical score reflecting the similarity of their features.”).

52. FINKLEA ET AL., supra note 17, at 1.


54. See id. (“One of the most common uses of FRT is verification (also known as 1:N or 1:many matching) is when facial recognition is used to determine whether a record for an unknown individual exists in a larger database of known faces.”).

55. Id.

56. Garvie et al., supra note 16, at 58.

57. An “investigative lead” refers to “a piece of information that allows a discovery to be made or a solution to be found.” Lead, CAMBRIDGE DICTIONARY, https://dictionary.cambridge.org/dictionary/english/lead (last visited Apr. 29, 2022).

58. See Jones, supra note 40, at 796 (“A common reassurance in defense of FRT is that there are sufficient procedural safeguards in place . . . because a positive facial identification is to be used by the police as ‘an investigative lead only and is not probable cause for arrest.’” (quoting Kashmir Hill, Wrongfully Accused by an Algorithm, N.Y. TIMES (Aug. 3, 2020), https://www.nytimes.com/2020/06/24/technology/facial-recognition-arrest.html)).

59. Id. (citing People v. Reyes, 69 Misc. 3d 963, 967 (N.Y. Sup. Ct. 2020)).
and helping establish probable cause for an arrest or indictment, to serving as evidence in courtrooms) is unknown.\textsuperscript{60}

\textbf{B. Issues with FRT – Both Inherent and in its Deployment}

The accuracy of FRT has grown dramatically over time. The U.S. National Institute of Standards and Technology (NIST) conducts a Face Recognition Vendor Test where different FRT vendors’ systems are tested for their precision in a controlled environment.\textsuperscript{61} From 2013 to 2021, the most accurate system tested each cycle went from having a 4.1 percent error rate to a 0.1 percent error rate, a notably rapid and significant improvement over time.\textsuperscript{62} FRT consequently has the potential to be a powerful and useful law enforcement tool, but unfortunately, significant issues persist concerning the technology itself and the manner in which it is used.

First, despite the promising statistics from NIST’s study, FRT has questionable reliability in practice. Proffered accuracy rates from the Face Recognition Vendor Test depend on “the quality of the images being compared, and the size of the search space,” as well as the fact “that images had good lighting, that the positioning of subjects’ faces was consistent, and that facial features were never unclear or obscured.”\textsuperscript{63} In “real-world settings” where testers do not have control over image quality, NIST found in a 2017 study that the false-negative error rate of the then-best algorithm ranged from 13 percent to as high as 64 percent.\textsuperscript{64} Furthermore, the nature of the database the FRT draws from can affect accuracy. For instance, since larger databases are more likely to contain photos of incorrect lookalikes, the larger the database of photos searched, the higher the rate of false positives.\textsuperscript{65}

\textsuperscript{60} FINKLEA ET AL., supra note 17, at 5.
\textsuperscript{61} Crumpler & Lewis, supra note 15, at 7, 9.
\textsuperscript{62} Id. at 7.
\textsuperscript{63} Id.
\textsuperscript{64} See id. at 7–8 (defining false negative as “when the system incorrectly says two images of the same person do not match”). The false negative error rate was calculated in the study “by conducting . . . mated searches of people in videos or stills against an enrollment dataset where persons are known to be in both the search probe and the enrollment dataset.” GROTHER ET AL., NAT’L INST. OF STANDARDS & TECHNOL., FACE IN EVALUATION (FIVE) FACE RECOGNITION OF NON-COOPERATIVE SUBJECTS 23 (2017), available at https://nvlpubs.nist.gov/nistpubs/ir/2017/NIST.IR.8173.pdf.
\textsuperscript{65} See Garvie et al., supra note 16, at 47 (“Larger databases are more likely to contain lookalikes that mislead face recognition algorithms into picking the wrong matches.”). A false positive is “when the system incorrectly says two images from different people are the same person.” Crumpler & Lewis, supra note 15, at 7.
Second, there are often bias issues inherent in the FRT software that affect its ability to accurately make matches. The issues stem from deep learning and how the algorithm was trained.66 The computer learns how to make the most accurate matches based on the training photo dataset with which it was provided.67 If a dataset contains mostly one demographic, then the FRT will only learn how to most accurately identify that demographic, and it will be less accurate at identifying other groups.68 Since popular photo datasets used to train FRT are mostly male and mostly white, some studies have found that FRT is most accurate in identifying white males and is less accurate in identifying “people of color, women, children, and the elderly.”69 This is particularly salient given that black individuals are arrested at disproportionately high rates.70 Moreover, the FRT photo databases that rely on mugshots likely subsequently include a disproportionate number of black individuals.71 These bias issues accordingly increase the chance of police misidentifying non-white male individuals based on a false positive, which could lead to an erroneous investigation.72 As evidenced by the mistaken arrest of Mr. Parks, the consequences of this troubling bias issue are not merely hypothetical.

Third, law enforcement’s general lack of transparency of FRT use raises additional questions about the efficacy of the technology. Law enforcement agencies across the country “generally tell the public very little about their use of facial recognition,” and “[v]ery few agencies require or obtain legislative approval of a police face recognition use policy.”73 Further, although some vendors have tested their FRT’s accuracy through NIST,74 the accuracy rates of FRT systems used by law enforcement are unclear.75 An investigation by the Georgetown

67. See id. (“The most significant factor contributing to bias in FRTs is the selection of training data.”).
68. See id. (“If algorithms are trained on datasets that contain very few examples of a particular demographic group, the resulting model will be worse at accurately recognizing members of that group in real world deployments.” (quoting William Crumpler, The Problem of Bias in Facial Recognition, CTR. FOR STRATEGIC & INT’L STUD. (May 1, 2020), https://www.csis.org/blogs/technology-policy-blog/problem-bias-facial-recognition) (internal quotations omitted)).
69. Id. at 787–88.
70. Garvie et al., supra note 16, at 3.
71. Id.
72. Jones, supra note 40, at 788.
74. See Crumpler & Lewis, supra note 15, at 7 (describing NIST’s Face Recognition Vendor Test).
75. See Garvie et al., supra note 16, at 47 (“The contracting process gives agencies a chance
Center on Privacy and Technology found that some “[a]gencies do not consider accuracy when purchasing systems” and may rely solely on vendors to explain software accuracy,76 with vendors being presumably self-interested in selling their product.

Fourth, FRT usage without trained human reviewers may further increase errors, and human review itself is not a panacea. Given these documented accuracy issues, human review is recommended after a match or matches are made by the FRT,77 but without training, human review can create an additional layer of bias.78 Humans are psychologically inclined to more easily recognize faces they know or have seen before, as well as faces of their same race.79 This “may increase the chance of eyewitness misidentification because eyewitnesses are likely to positively identify look-alikes, regardless of whether the look-alikes are actually the perpetrator,” and FRT is “specifically designed to produce results that look like the perpetrator.”80 Human comparison reviewers thus may make mistakes without training,81 and some agencies like the Federal Bureau of Investigation consequently have developed programs.82 However, one study found that only a limited amount of agencies that use FRT appear to train or even use reviewers.83

Finally, there are concerns that police and prosecutors may become more psychologically inclined to pursue individuals once they are identified by FRT.84 In an effect known as “tunnel vision,” police and prosecutors may zero in on and build a case around a suspect, seeking...

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76. Id.
77. Id. at 49 (“Since face recognition accuracy remains far from perfect, experts agree that a human must double-check the results of face recognition searches to ensure that they are correct.”).
78. See id. (“Humans instinctively match faces using a number of psychological heuristics that can become liabilities for police deployments of face recognition.”).
79. Id.
80. Goldberg, supra note 33, at 274.
81. Garvie et al., supra note 16, at 49–50. In its study of fifty-two law enforcement agencies that use FRT, based on the records provided, the Georgetown Law Center on Privacy & Technology identified only eight law enforcement agencies who “employed human gatekeepers to systematically review matches before forwarding them to officers.” Id. at 49.
82. Id. at 50.
83. Id. at 49–50.
84. See Brian Reichart, Tunnel Vision: Causes, Effects, and Mitigation Strategies, 45 Hofstra L. Rev. 451, 459 (2016) (“Once a suspect is identified, the effects of tunnel vision almost guarantee that the person will be seen as the actual wrongdoer.”).
out inculpatory evidence that confirms their belief that the suspect is the perpetrator while paying insufficient attention to exculpatory evidence. Tunnel vision in the criminal justice system can be fueled by a number of factors, from police officers’ heuristics of common crime circumstances and incentives to resolve matters quickly, to prosecutors’ institutional pressures to secure convictions. The nature of the adversary system, which “encourages lawyers to seek out information that is helpful to their position . . . and to present it, within ethical bounds, in the best possible light,” can also contribute to tunnel vision. To be sure, many police and prosecutors may not blindly follow an FRT match. For example, while there are limited statistics on FRT usage, a 2016 study noted that of the over 214,000 FRT searches run by the Federal Bureau of Investigation between August 2011 and December 2015, only 4 percent resulted in potential matches for further inquiry, suggesting that the Bureau did not simply pursue every match. However, the ease of quickly identifying a suspect via FRT compounded by these systematic forces does ring alarm bells that FRT usage has the potential to foster tunnel vision.

C. Implications of FRT’s Weaknesses: FRT Results Must Be Disclosed to Criminal Defendants

As FRT continues to increase in use and becomes normalized as a part of law enforcement investigations, more wrongful arrests are likely to occur. When FRT has been used as part of an investigation, defendants should be given access to the FRT results, which include similarity scores and other top matches viewed by law enforcement.

85 Id. at 451, 459.
86 Id. at 455.
88 Id. at 490.
91 See Goldberg, supra note 33, at 276 (advocating that FRT match results and similarity scores be provided in the context of Brady disclosures). “FRT results” will be used in this Note to refer to the similarity score of a match and other top matches produced by FRT and viewed by law enforcement when a search is run. Some reports have suggested that there is inconsistent disclosure to defense counsel in some jurisdictions that FRT was even used as part of the investigation. Garvie et al., supra note 16, at 59; Jackson, supra note 27, at 24. For simplicity, this Note will discuss discovery with the assumption that defense counsel is aware that FRT was used in some part of the investigation, such as by inferring FRT’s usage through a reference to FRT usage in a complaint. See FINKLEA ET AL., supra note 17, at 4 (describing statements from the
FRT results can be helpful to wrongfully accused defendants in several ways. First, FRT results could be used to cast doubt on the defendant’s guilt by revealing other potential suspects. Defense counsel is obligated to pursue independent investigations for their client, and if their client claims that they were wrongfully arrested and another person committed the offense, defense counsel may look for information on this potential other perpetrator. With access to FRT results, defense counsel could investigate the other FRT matches and, if appropriate, cast doubt on the defendant’s guilt by arguing that the true culprit is actually among the other matches. Second, FRT results could be used by defense counsel in pre-trial arguments or to argue that police investigations failed to consider alternative suspects. Third, defense counsel could raise concerns that the case was built around a shaky lead by pointing to a low similarity score in FRT results. Even if prosecutors believe they have sufficient evidence outside of the positive FRT match to bring a charge against the defendant, defense counsel’s findings and arguments using FRT results have the potential to cast doubt on the prosecution’s case or perhaps convince prosecutors to drop the charges.

Overall, FRT results may prove important to defense counsel’s pursuit of a mistaken identity defense, which in turn may affect whether the defendant is wrongfully convicted or feels compelled to accept a plea agreement. However, there is currently a lack of consistent disclosure to defense counsel about FRT search results, and defense counsel’s requests for information on the FRT results may be denied. Given the potential importance of FRT results to a defendant’s mistaken identity defense, a legal route to obtain information on FRT results is thus necessary.

DOJ noting usage of FRT in investigations, stating for example that “FRT, along with other pieces of evidence, has been used to support probable cause in affidavits in support of criminal complaints”.

93. See id. at 224 (“If a defendant argues third party guilt, claiming that a different individual committed the alleged crime, defense investigators might seek information about that alternative third-party suspect.”).
94. See Goldberg, supra note 33, at 288 (proposing how FRT could be relevant in the context of a Brady claim).
II. FEASIBILITY OF ACCESSING FRT RESULTS THROUGH BRADY DISCLOSURES

One potential route defense counsel can take to pursue disclosure of FRT results is by arguing that it is a required Brady disclosure. This Part provides a brief overview of Brady disclosures and the scope of material Brady covers. This Part then examines the likelihood that FRT results must be disclosed under Brady and contends that defense counsel will face significant difficulties seeking FRT results through this avenue of disclosure.

A. Brady Discovery Overview

Brady v. Maryland97 and its progeny held that the Constitution requires the disclosure of certain types of content. Brady held that a due process violation occurs when the government suppresses evidence favorable to the defendant if such evidence is material to either guilt or punishment.98 Evidence is material when “there is a reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different,” where a “‘reasonable probability’ is a probability sufficient to undermine confidence in the outcome.”99 The defendant need not have received an entirely different verdict had the material evidence been introduced; the materiality standard is met if the lack of disclosure resulted in not receiving a “fair trial . . . resulting in a verdict worthy of confidence.”100 The Supreme Court has noted that the prosecution is not required to turn over its entire case file to satisfy Brady requirements—only that which “would deprive the defendant of a fair trial.”101 These standards have been affirmed by the Supreme Court in recent cases.102 One example of a recent Brady violation is in Wearry v. Cain.103 A Supreme Court majority held that the State of Louisiana did not meet its Brady disclosure obligations by failing to disclose: 1) police records casting doubt on a key witness’ credibility;104 2) the fact that a

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98. Id. at 87; see also Giglio v. United States, 405 U.S. 150, 154 (1972) (extending Brady’s scope of required disclosure to impeachment material).
102. See Wearry v. Cain, 577 U.S. 385, 392 (2016) (stating that for petitioner to raise a successful Brady claim, the petitioner “must show only that the new evidence is sufficient to ‘undermine confidence’ in the verdict” (quoting Smith v. Cain, 565 U.S. 73, 76 (2012))).
103. Id.
104. Id. at 389.
second key witness sought to reduce his sentence in exchange for testifying;\textsuperscript{105} and 3) the medical records of an alleged accomplice, which revealed he had recently undergone knee surgery, when a witness had testified the accomplice had run to abduct a murder victim.\textsuperscript{106} The totality of the withheld information was sufficient to undermine confidence in the defendant’s guilty verdict.\textsuperscript{107}

B. Obtaining FRT Content Through Brady

Several scholars have contended that FRT material could or should be discoverable under \textit{Brady},\textsuperscript{108} suggesting that FRT material is sufficiently exculpatory given its lack of accuracy.\textsuperscript{109} These scholars note that even if FRT was merely a part of the investigation process and FRT results will not be used at trial, many jurisdictions have held that inadmissible content can still be discoverable under \textit{Brady} if it could reveal other evidence that is admissible.\textsuperscript{110} Some of these scholars also argue that when the FRT software provides similarity scores and the similarity score for a particular match is low, this is analogous to an eyewitness identifying the defendant with a lack of confidence, which ordinarily would be disclosed under \textit{Brady}.\textsuperscript{111} Likewise, one could argue that providing multiple results of matches is analogous to a witness making inconsistent statements in identifying multiple suspects, which is also typically \textit{Brady} material.\textsuperscript{112} Thus, FRT may in fact be materially exculpatory to where \textit{Brady} disclosures could technically be one disclosure vehicle, as these scholars suggest.

However, there are several practical barriers to relying on \textit{Brady} for disclosures of FRT results. To make \textit{Brady} disclosures, prosecutors

\begin{itemize}
\item \textsuperscript{105} Id. at 390.
\item \textsuperscript{106} Id. at 392.
\item \textsuperscript{107} Id.
\item \textsuperscript{108} See Ferguson, \textit{supra} note 33, at 1209 (“In the interest of fairness, these other photos and underlying system data need to be preserved and, if appropriate, turned over as \textit{Brady} material.”); Jackson, \textit{supra} note 27, at 21 (“Attorneys can strengthen their discovery requests by framing this portion of the request as a \textit{Brady} demand.”); Goldberg, \textit{supra} note 33, at 284 (“\textit{Brady} demands the pretrial disclosure of facial recognition confidence scores and alternative matches.”).
\item \textsuperscript{109} See Ferguson, \textit{supra} note 33, at 1209 (noting that because FRT similarity scores and accuracy rates can vary greatly, “parties should know the difference,” and arguing that other FRT photos “should be preserved as possible impeachment evidence” or exculpatory evidence); Goldberg, \textit{supra} note 33, at 282 (“\textit{Brady} demands the pretrial disclosure of facial recognition confidence scores and alternative matches.”).
\item \textsuperscript{110} See Ferguson, \textit{supra} note 33, at 1209 (noting that because FRT similarity scores and accuracy rates can vary greatly, “parties should know the difference,” and arguing that other FRT photos “should be preserved as possible impeachment evidence” or exculpatory evidence); Goldberg, \textit{supra} note 33, at 282 (“\textit{Brady} demands the pretrial disclosure of facial recognition confidence scores and alternative matches.”).
\item \textsuperscript{111} Goldberg, \textit{supra} note 33, at 284–85.
\item \textsuperscript{112} Jackson, \textit{supra} note 27, at 21.
\end{itemize}
must first identify what evidence they are obligated to disclose under Brady’s standards. This requires theoretical appraisals by prosecutors that are not evaluated by others or defense counsel, at least until defense counsel suspects something should have been disclosed and raises a Brady claim to be adjudicated by the court. Defense and prosecutors’ perspectives on what information is “material” often varies, and some prosecutors, incentivized to maximize the likelihood of conviction, may use the materiality standard as a justification to not disclose information. Moreover, even if a defendant contests a prosecutor’s declination to disclose FRT results, they must raise it during subsequent proceedings, where defense counsel faces a “heavy burden” of establishing materiality. Because of the deferential standards of review that typically apply, defendants rarely win on appeal, and even when they do, a win on appeal typically only entitles them to a new trial, not exoneration.

Furthermore, the limited caselaw directly addressing whether FRT results are Brady material have cast doubt on the feasibility of Brady as a primary vehicle for disclosure of FRT results. In Lynch v. State, Willie Allen Lynch was identified by FRT and arrested, even though the FRT results indicated that his match had a low similarity score. Mr. Lynch sought the photos of the other matches returned by FRT. The Florida appellate court rejected Mr. Lynch’s Brady argument because he failed to show the trial outcome would have been different had the additional photos been disclosed and failed to show the possibility that any of the other FRT matches not pursued by law enforcement were the true perpetrator. In a similar vein, in People v. Knight, a New York court rejected a defendant’s Brady claim seeking

113. See Yaroshefsky, supra note 31, at 1324–25 (“The prosecution has a duty to make reasonable efforts to insure [sic] that its agents make favorable evidence available to the defense.”).
115. See Christopher Deal, Note, Brady Materiality Before Trial: The Scope of the Duty to Disclose and the Right to a Trial by Jury, 82 N.Y.U. L. REV. 1780, 1796 (2007) (“The vast majority of Brady opinions involve postconviction challenges that arise after the defense discovers favorable evidence that the government failed to disclose in time for effective use at trial.”).
117. Medwed, supra note 114, at 1543.
118. Id.
119. Id. at 1543–44.
121. Id. at 1169.
122. Id.
123. Id. at 1170.
124. 69 Misc. 3d 546 (N.Y. Sup. Ct. 2020).
all 230 photos generated by FRT software as a potential match after the prosecution had only disclosed the photos that the detective had actually viewed.\textsuperscript{125} The court reasoned that the photos were no different than any other photo in a database that might look like the defendant, which would not be material.\textsuperscript{126} The court also noted that since the remaining 230 photos were assigned a lower similarity score, the defense failed to show how the photos would be exculpatory.\textsuperscript{127} While not dispositive nationwide,\textsuperscript{128} these early rulings have consequently caused some scholars to doubt \textit{Brady} as a means to obtain FRT results.\textsuperscript{129}

Overall, while defense counsel can continue to litigate \textit{Brady} arguments for FRT disclosure, it may not be the most feasible vehicle to access FRT results, further highlighting the need for an alternative way for defense counsel to access this information.

### III. Feasibility of Accessing FRT Results Under Current Discovery Rules

Discovery may be an alternative vehicle for defense counsel to seek disclosures of FRT results. Besides \textit{Brady} material,\textsuperscript{130} the government need only disclose additional known content as dictated by federal and state rules and statutes.\textsuperscript{131} These discovery rules vary in both scope and substance as to what prosecutors are required to turn over either voluntarily or when requested by the defense.\textsuperscript{132} This Part provides a brief overview of several case-study jurisdictions' discovery rules and the varying scope of material they cover, in order from most restrictive of what defendants are entitled to access to least restrictive. All selected

\begin{itemize}
  \item \textsuperscript{125} Id. at 547–48.
  \item \textsuperscript{126} Id. at 549.
  \item \textsuperscript{127} Id.
  \item \textsuperscript{128} See Goldberg, \textit{supra} note 33, at 279 ("\textit{Lynch}, however, did not settle the question of whether facial recognition results should qualify as \textit{Brady} material.").
  \item \textsuperscript{129} See Jones, \textit{supra} note 40, at 799 ("\textit{Lynch} represents one of the only judicial rulings on law enforcement’s use of FRT and suggests that a defendant’s right to information regarding such practices may be limited."). The merits of these courts’ interpretations of \textit{Brady} are outside of the scope of this Note. For one argument that FRT results should be discoverable under \textit{Brady}, see generally Goldberg, \textit{supra} note 33.
  \item \textsuperscript{130} See Ben Grunwald, \textit{The Fragile Promise of Open-File Discovery}, 49 CONN. L. REV. 771, 779 (2017) ("\textit{Brady} only requires disclosure of exculpatory evidence that satisfies a stringent materiality standard.").
  \item \textsuperscript{131} See Yaroshefsky, \textit{supra} note 31, at 1325 ("Federal and state court rules and statutes supplement prosecutors’ constitutional obligations.").
  \item \textsuperscript{132} See Grunwald, \textit{supra} note 130, at 778–79 (describing scholars’ categorization of discovery rules into “two models” of varying breadth).
\end{itemize}
jurisdictions have law enforcement who use or have access to FRT.\textsuperscript{133} This Part will then examine the likelihood of accessing FRT results through the different discovery rules. Based on the plain language of the rules and relevant caselaw interpretations,\textsuperscript{134} defendants’ likelihood of making a successful argument to obtain disclosures of FRT results depends on the restrictiveness of the rules. Unsurprisingly, the likelihood of disclosure increases as the rules become less restrictive in their scope of discoverable material. However, there are notable hurdles in \textit{all} jurisdictions. This Part contends that it is debatable whether FRT results must be disclosed under discovery rules in virtually all sample jurisdictions except for certain open file discovery jurisdictions.

\textbf{A. Restrictive Discovery Rules Entitling Defendants to the Least Amount of Content}

Some discovery rules only entitle defendants to access a limited amount of content in the government’s possession. One example of these restrictive discovery regimes are federal rules,\textsuperscript{135} studied below. It is also worth noting that some states, such as Virginia\textsuperscript{136} and Alabama,\textsuperscript{137} also have narrow discovery rules modeled after the federal rules.\textsuperscript{138}

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\textsuperscript{134} This Note is limited in that it did not conduct a full empirical review of all known FRT discovery motion rulings at trial court levels in federal and state courts. The author leaves a full empirical study of how trial courts in these sample jurisdictions and other jurisdictions have been handling FRT discovery requests to future scholarship.

\textsuperscript{135} See Grunwald, \textit{supra} note 130, at 778–79.

\textsuperscript{136} VA. R. SUP. CT. 3A:11(b).

\textsuperscript{137} ALA. R. CRIM. P. 16.

\textsuperscript{138} See Grunwald, \textit{supra} note 130, at 779 (“Over a dozen states model their defense
1. Overview of Restrictive Discovery

The Federal Rules of Criminal Procedure only require that prosecutors disclose certain categories of information at a defendant’s request, such as statements made by the defendant, the defendant’s criminal record, reports of examinations and tests, and the government’s list of expert witnesses.\(^{139}\) Here, it is relevant to note that the government must disclose and allow a defendant to examine and copy certain documents and objects like “papers, documents, data, [and] photographs,” but only if such objects are within the government’s control and are material to the defense, belong to the defendant, or are intended to be used by the government at trial.\(^{140}\) The federal rules’ materiality standard is different than \textit{Brady}’s materiality standard.\(^{141}\) In most jurisdictions, an item is material for discovery purposes only if its disclosure “would have enabled the defendant significantly to alter the quantum of proof in his favor.”\(^{142}\) Rather than demonstrate that exclusion would be “sufficient to undermine confidence in the outcome” of the trial like in \textit{Brady} claims,\(^{143}\) one of the ways the alternation of quantum of proof test can be satisfied in some jurisdictions is by showing that the disclosure would reveal admissible evidence.\(^{144}\) Though some courts have held that the materiality test is satisfied so long as the discovery \textit{advances} finding discovery rights on this federal rule.”\(^{139}\).  

\(^{139}\) \textsc{Fed. R. Crim. P. 16(a)}.  

\(^{140}\) \textsc{Fed. R. Crim. P. 16(a)(1)(E)}.  

\(^{141}\) \textit{See} Peter J. Henning, \textit{Defense Discovery in White Collar Criminal Prosecutions}, 15 GA. ST. U. L. REV. 601, 619 (1999) (describing the standards for what is “material” as “significantly different” because \textit{Brady}’s post-trial due process analysis is distinct from the federal rules’ requirement of adequate disclosure before trial).  


\(^{144}\) \textit{See Goris}, 876 F.3d at 45 (“This significant alteration may take place in a myriad of ways, such as ‘uncovering admissible evidence, aiding witness preparation, corroborating testimony, or assisting impeachment or rebuttal.”’ (quoting \textit{Lloyd}, 992 F.2d at 351)).
admissible evidence, others have noted that requests that involve speculation could be rejected. The materiality threshold of the federal rules “has been described as ‘not a heavy burden,’” and discoverable content under the federal rules need not satisfy as high a burden as in Brady claims by showing that it would be a due process violation for the content in question to be withheld. Nonetheless, the materiality requirement imposes an additional level of inquiry that defendants must satisfy when requesting disclosure.

2. FRT Discovery Under the Most Restrictive Rules

Under the federal rules, defense counsel could attempt to request disclosure of FRT results as “data” and “photographs” within the government’s control. However, this requires counsel to argue before the court that these narrow categories should encompass similarity scores and photos of the other matches, which risks rejection if the court finds FRT results too peripheral compared to other types of discoverable data and photographs.

Moreover, the rule’s materiality threshold may pose a significant barrier to defendants in making their request. To meet the heightened burden of need, defense counsel could argue that similarity scores may raise questions about the identification of their client amongst other matches, which would show the investigation was insufficient and thus material to their defense. Defense counsel may also argue that discovery of the other matches could demonstrate mistaken identity by pointing to another likely culprit among the matches with further investigation. However, neither defense counsel nor the court would have access to the FRT results at the time these arguments are made. Therefore, without knowing whether the defendant actually had received a low similarity score or if there were other viable suspects identified by the FRT, a court could reject the defense’s argument as

146. See Goris, 876 F.3d at 45–46 (affirming the lower court’s decision to deny the defendant’s discovery request that was grounded in a speculative theory).
148. See Henning, supra note 141, at 619 (“Yet, some courts do not appreciate the difference between [Brady and Rule 16], applying the stricter due process analysis to discovery claims under [Rule 16], thereby imposing an unnecessarily high standard that thwarts the Rule rather than comports with the goal of enhancing the fairness of the proceeding through discovery.”).
150. See Goldberg, supra note 33, at 288 (advocating, in the context of Brady, for disclosure of similarity scores and other photo matches since FRT usage raises questions on the investigation’s reliability under Kyles v. Whitley and the possibility of other potential suspects).
merely speculative. The court may reach this decision despite how, paradoxically, defense counsel would have no way of knowing the nature of the similarity scores or other matches to meet this materiality burden. Also, depending on the extent of other evidence inculpating the defendant, there is a risk that a court might categorize the request as seeking information that would be merely helpful, but not likely to make a difference at trial by significantly altering the quantum of proof in the defendant’s favor.

Defense counsel could alternatively attempt to frame the discovery request as comparable to seeking photos used in photo lineup identifications. Case law on the federal rules appears to suggest that photos used in photo lineup identifications fall within the scope of discovery. There are several similarities, since FRT essentially produces a lineup of photos for a human reviewer to select the individual who the reviewer believes may match the unidentified suspect. However, courts could differentiate the procedures; reviewing matches from a machine that provides a similarity score is different than asking a witness who directly observed the perpetrator to identify that individual in a lineup. Further, FRT is only used to kickstart an investigation of an individual, while witness identifications can be used to establish probable cause.

151. See id. at 278–79 (describing, in the context of a Brady claim, the fallacy of court’s holding that a defendant could not viably suggest an alternative culprit by identifying other FRT matches that resembled him when the needed photos were in the possession of law enforcement, which the government refused to turn over).

152. See 2 CHARLES ALAN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 254 (4th ed. 2008) (“There has still been no satisfactory answer to the question posed by Chief Justice Marshall more than two centuries ago: ‘Now, if a paper be in possession of the opposite party, what statement of its contents or applicability can be expected from the person who claims its production, he not precisely knowing its contents?’” (quoting United States v. Burr, 25 F. Cas. 187, 191 (C.C.D. Va. 1807))).

153. See Tashea, supra note 29 (“Current practice expects that traditional police lineups or photo arrays be shared with the defense, it should be no different when the lineup is done by a computer.”).

154. See United States v. Quintana-Sam, No. 2:10-CR-385 TS, 2010 WL 2933453, at *2 (D. Utah July 22, 2010) (ordering the prosecution to ensure that a photo lineup was produced as part of discovery materials); United States v. Cantres, No. 08CR234S, 2009 WL 2230846, at *2–3 (W.D.N.Y. July 24, 2009) (ordering the prosecution to produce photos and photo lineups shown to a witness). But see United States v. Cole, 453 F.2d 902, 905 (8th Cir. 1972) (finding no error in the prosecution failing to produce lineup photos shown to three witnesses because the fact that the witnesses had not identified the defendant in the photo lineup “was brought out fully at the trial” and “[t]heir production could have produced no greater revelation than that which occurred at trial”).

155. See NAT’L RSCH. COUNCIL OF THE NAT’L ACADS., IDENTIFYING THE CULPRIT: ASSESSING EYEWITNESS IDENTIFICATION 21 (2014) (“A positive identification might form probable cause for a search warrant or the apprehension and subsequent questioning of a subject,
In sum, although arguments can be made for discoverability of FRT results, these arguments risk court rejection due to the restrictively tailored nature of these discovery rules—both in terms of their limited discoverable content categories and their materiality requirement.

B. Less Restrictive Discovery Rules Entitling Defendants to More Content

At a middle level of restriction are discovery rules of states like Maryland and Michigan.

1. Overview of Less Restrictive Discovery

The Michigan rules list several categories of content that both the prosecution and defense counsel must provide when requested and categories of content that the prosecutor specifically must furnish when requested. Some of the categories of discovery content are synonymous with the federal rules, but Michigan’s statute provides that prosecutors must disclose some additional specific categories of material upon request, beyond the materials to which the federal rules entitle defendants. Notably, defense counsel may request “any police report and interrogation records concerning the case, except so much of a report as concerns a continuing investigation.” Maryland’s District Court and Circuit Court discovery rules also provide for discovery of material similar to the material discoverable in Michigan and federal jurisdictions. However, like Michigan, Maryland enumerates an additional specific category of discoverable material which is pertinent here: that prosecutors must disclose “[a]ll relevant material or information regarding . . . pretrial identification of the
defendant by a State’s witness.”160 It is also worth noting that the plain language of both Maryland and Michigan’s rules does not contain a materiality requirement, unlike in the federal rules.161

2. FRT Discovery Under Less Restrictive Rules

Discovery of FRT results may be more feasible under rules like Maryland’s and Michigan’s because the rules carve out additional categories of discoverable material that could apply to FRT. That feasibility depends, however, on persuading courts that FRT material fits in these carve-outs, as courts appear to play a major role in shaping the scope of material available under the rules based on their interpretation of the language of the rules.

i. Maryland FRT Discovery

Discovery of FRT under Maryland rules hinges on the FRT reviewer, such as a law enforcement officer, serving as a witness for the State. It also depends on courts’ statutory interpretation of what constitutes “pretrial identification” and to what extent related material is covered under the requirement that “[a]ll relevant material or information regarding” this identification be provided.162 Maryland’s Court of Appeals163 has noted that the purpose of Maryland discovery rules is to “assist the defendant in preparing his defense and to protect the accused from unfair surprise.”164 Indeed, the Maryland Court of Special Appeals165 has similarly noted that the requirement that all

160. Id. 4-262(d)(2)(C)(ii); id. 4-263(d)(7)(B). The District Court only requires this material be disclosed upon the defendant’s request, id. 4-262(d)(2), while the Circuit Court requires the prosecution to provide this material automatically and without request, id. 4-263(d). The Circuit Court also provides that “if the pretrial identification involved participation by personnel from a law enforcement agency,” the prosecution must also furnish copies of the agency’s eyewitness identification procedures as required by Maryland law, and proof of compliance or non-compliance. Id. 4-263(d)(7)(B).

161. Compare FED. R. CRIM. P. 16(a)(1)(E)(i) (providing that the government must “permit the defendant to inspect and to copy” several types of documents and objects if “the item is material to preparing the defense”) with MCR 6.201(B) (requiring the government make discovery disclosures “[u]pon request”), Md. R. 4-262(d) (listing when the government must make disclosures automatically and “[o]n written request”), and Md. R. 4-263(d) (requiring that the government make disclosures “[w]ithout the necessity of a request”).

162. Md. R. 4-262(d)(2)(C)(ii); 4-263(d)(7)(B).


165. The Maryland Court of Special Appeals is now known as the Appellate Court of
relevant material be provided “is broad.” The Court of Special Appeals has appeared to suggest that pre-trial identification discovery includes how the individual was identified and not just the fact the individual was identified. However, it is unclear from the cases whether the prosecution must merely disclose the circumstances of the identification, in that an identification was made from a search of FRT, or whether it must also disclose information related to the vehicle of identification, like the details of the FRT results. The cases most on point have found no discovery violation when a defendant simply has been put on notice that a witness could identify the defendant and testify to that identification. Available case law thus seems to suggest that at minimum, if an officer states that he or she identified a defendant, the prosecution may be obligated to disclose that the manner in which the defendant was identified was from a positive FRT match. Yet it is not clear whether under the Maryland rules, a defendant would be entitled to the FRT results.

Furthermore, discovery under the Maryland rules would require that courts expand the rule to identification initially by a machine rather than by human pre-identification. There are several Court of Special Appeals cases addressing discovery of police pre-trial identifications of unknown perpetrators captured on camera. However, based on the record, the police officers in these cases seem to have identified the defendants because they were already acquainted with them and were able to recognize them, much like an


167. See id. at *10–12 (stating that “the objectives of discovery were not fulfilled” when prosecution only provided the names of three officers who could identify the defendant, but not the circumstances in which they saw him).
169. See generally Myers, 243 Md. App. 154; Williams, 2020 WL 1274898.
170. See Myers, 243 Md. App. at 161 (describing how upon seeing a burglar’s face in surveillance footage, “Detective Nickles, who had known the appellant for years, immediately identified . . . the appellant”); Williams, 2020 WL 1274898, at *1 (recapping how, after being
ordinary witness who identifies an individual that the witness personally knows. Arguments can be made for the practical similarities of computer versus human identification, but such arguments risk a court ruling that the extension goes beyond what the rule drafters originally contemplated.

**ii. Michigan FRT Discovery**

FRT discoverability under Michigan’s rules likewise depends on statutory interpretation. Michigan has not defined what constitutes a “police report” within its court rules, but the State’s Court of Appeals has noted that the term should be construed broadly, erring on over-inclusion, and that the government should not withhold content merely because the requested content in question has another name besides “police report.” Michigan’s police report discovery rule has consequently been interpreted to include content like “tip sheets,” which are documents with information related to the case based on tips from informants. Defense counsel may be able to argue that FRT results are discoverable as a “police report” on the grounds that: 1) the list of matching photos and their similarity scores is generated into a report for police use, and is hence a police report; 2) since FRT is treated as a lead in an investigation against an individual, its content is comparable to the content that would be found in “tip sheets” (only the lead is generated by a machine and not a confidential informant), and 3) precedent and policy favor construing the term broadly to cover reports generated by the FRT software as it relates to the case. However, like in Maryland, disclosure feasibility would depend on courts accepting this argument.

Furthermore, there are common-law–imposed limitations on Michigan’s discovery rules that resemble a materiality requirement. Unlike Maryland’s rules, which require a showing that “the governing law makes that type of document or information available and that the information or document is relevant to the subject matter of the case,” Michigan courts have held that defense counsel must provide a specific justification for the discovery request of police reports and explain why requested “information is necessary to a preparation of its

shown a flyer of an unknown suspect, an officer told the lead detective that he recognized the individual and provided the detective with the defendant’s name).

171. MCR 6.201(B)(2).
173. Id.
defense” and is not merely “a fishing expedition.” Without having any prior insight on the nature of the similarity score and other matches, it is possible that courts may hold that the request is merely fishing. This evokes the same paradox caused by the federal rules’ materiality requirement: although FRT results may prove important to the defense, defendants have no way of knowing unless they have access to FRT results, which is what they are seeking in the first place.

In sum, good arguments can be made for discovery under these middle ground rules. However, depending on the breadth of the language under which FRT results would fall, as well as any additional court-imposed requirements, there are significant risks that courts may hold FRT results are not discoverable and are beyond the scope of discoverable content contemplated by the rules.

C. Least Restrictive Discovery Rules Entitling Defendants to the Most Amount of Content

Finally, at the least restrictive level of rules, which provide defendants with the broadest scope of content possible, some states have “open file” discovery. Open file rules typically “require disclosure of all materials associated with the case” that are “nonprivileged information in the prosecution’s entire file,” but the exact scope depends on the language of the rule. Two examples of open file jurisdictions are North Carolina and New York.

1. Overview of Least Restrictive Discovery

North Carolina’s criminal discovery rules provide in relevant part that upon the defendant’s request, the prosecution must provide “complete files of all law enforcement agencies, investigatory agencies, and prosecutors’ offices involved in the investigation of the crimes

176. See discussion supra Part III.A.2.
177. See Grunwald, supra note 130, at 773 (describing North Carolina’s adoption of “open file” discovery rules as some of the broadest discovery rights in the country).
178. Id. at 789.
179. Mike Klinkosum, Pursuing Discovery in Criminal Cases: Forcing Open the Prosecution’s Files, 37 CHAMPION 26, 27 (2013).
180. See Grunwald, supra note 130, at 789 (“Indeed, expansive discovery statutes differ on several important policy dimensions, each of which condition their effects on both the volume and timing of prosecutorial disclosure.”).
181. See generally N.C. GEN. STAT. § 15A-903; N.Y. CRIM. PROC. § 245.20.
committed or the prosecution of the defendant.”182 The rule defines “file” to include statements by the defendant, co-defendants, and witnesses; investigators’ notes; test results; and “any other matter or evidence obtained during the investigation.”183 North Carolina’s open-file criminal discovery rules are limited to felonies and certain types of misdemeanors.184

The language of New York’s rules is comparably broad and, in some ways, goes even further than North Carolina’s rules. Recently passed and made effective on January 1, 2020,185 the rules require that the prosecution automatically disclose “all items and information that relate to the subject matter of the case and are in the possession, custody or control of the prosecution or persons under the prosecution’s direction or control.”186 Most relevant here, the scope includes “photographs and drawings made or completed by a public servant engaged in law enforcement activity,” as well as:

All reports, documents, records, data, calculations or writings, including but not limited to preliminary tests and screening results and bench notes and analyses performed or stored electronically, concerning physical or mental examinations, or scientific tests or experiments or comparisons, relating to the criminal action or proceeding which were made by or at the request or direction of a public servant engaged in law enforcement activity.187

Some commentators have noted that North Carolina’s rules are often broadly read to include “‘everything’ collected and produced.”188 New York’s rules are explicit on this point, stating that there is “a presumption in favor of disclosure when interpreting” the section.189

2. FRT Discovery Under Open File Rules

Jurisdictions with open file discovery rules like North Carolina and New York are probably the only jurisdictions where FRT results are

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183. Id. § 15A-903(a)(1)(a).
184. See id. § 15A-901 (limiting scope of the rules to the superior court); id. § 7A-270, 272 (providing superior court jurisdiction over “the trial of criminal actions” and vesting district court jurisdiction in offenses “below the grade of felony”); Grunwald, supra note 130, at 790 (noting this limitation on case coverage and suggesting that this restriction may be for cost-saving purposes.)
185. CPL Article 245 and Discovery in Criminal Cases, Simon’s N.Y. Rules of Prof. Conduct § 3.8:14.
186. N.Y. Crim. Proc. § 245.20(1).
187. Id. §§ 245.20(1)(h), (j).
188. Grunwald, supra note 130, at 790.
plainly discoverable without need for the court to expand categories of discoverable material to include FRT, given the wide breadth of the rules’ coverage. However, discovery may be limited if boundaries are imposed on the state’s burden to identify discoverable material.

On their face, the North Carolina discovery rules and their coverage of “any other matter . . . obtained during the investigation”\textsuperscript{190} appear broad enough to include FRT results. If law enforcement’s file states that an FRT search was run and encloses the FRT results, the FRT results would likely be discoverable, since they would have been obtained during the investigation. However, it is noteworthy that discoverability depends entirely on law enforcement actually documenting the FRT results.\textsuperscript{191} Despite the breadth of the discovery rules’ language, the North Carolina judiciary has instituted limits on discovery so as not to permit infinite access to law enforcement information, holding that the state’s open file rules only “require production by the State of \textit{already existing documents}.”\textsuperscript{192} The prosecution accordingly has no obligation to “create or continue to develop additional documentation regarding an investigation.”\textsuperscript{193} Prosecutors are likewise “not required to conduct an independent investigation’ to locate evidence favorable to a defendant.”\textsuperscript{194} This is also in accord with the language of the discovery rules, which appear to implicitly put the onus of documentation and disclosure on law enforcement when they provide complete files to prosecutors.\textsuperscript{195} The implication here is that FRT results may be discoverable, but only if they are already a part of the case file,\textsuperscript{196} and it is unclear whether FRT results are generally documented in law enforcement’s files absent more information on North Carolina agencies’ filing policies.

\textsuperscript{190} N.C. GEN. STAT. § 15A-903(a)(1)(a) (emphasis added).
\textsuperscript{191} See Tashea, supra note 29 (“[I]f particular information doesn’t make it into a police report, then it isn’t going to show up in discovery—open-file or not.”).
\textsuperscript{193} Id.
\textsuperscript{195} See N.C. GEN. STAT. § 15A-903(c) (“On a timely basis, law enforcement and investigatory agencies shall make available to the prosecutor’s office a complete copy of the complete files related to the investigation of the crimes committed or the prosecution of the defendant for compliance with this section and any disclosure under G.S. 15A-902(a). Investigatory agencies that obtain information and materials listed in subdivision (1) of subsection (a) of this section shall ensure that such information and materials are fully disclosed to the prosecutor’s office on a timely basis for disclosure to the defendant.”).
\textsuperscript{196} See Tashea, supra note 29 (explaining that information not contained in a police report will not be discoverable).
In contrast, FRT results appear more likely to be disclosed under the New York rules for several reasons: the discovery rules have even broader language, New York caselaw precedent honors the presumption in favor of disclosure, and there appear to be higher standards on the government to provide discoverable content.

First, based on the plain language of the statute, FRT results fall under the scope of all “information that relate[s] to the subject matter of the case” since the results were part of the investigation. FRT results also fit under the requirement of disclosing “[a]ll reports, documents, records, data, calculations or writings, including but not limited to . . . comparisons.” Given that the purpose of FRT software is to run a comparison of an unknown individual’s face with known individuals’ photos, FRT comparison reports fit under the language of the rule. Indeed, at least one known New York opinion that directly addressed FRT discoverability, People v. Knight, held that prosecutors met their obligations to disclose comparisons by disclosing where the defendant was “ranked” by FRT as a top result/match relative to other individuals and by providing the photos of other top matches that were actually reviewed and compared by police. This case demonstrates that under broad language like New York’s, FRT results are discoverable. While People v. Knight was just one lower court case, other New York trial courts also appear to be extensively construing the discovery rules to cover broad requests for results from other databases, further lending support to FRT’s discoverability under the New York discovery rules. These broad readings also stand in accord with the rules’ explicit imposition of a “presumption in favor of disclosure.”

Moreover, New York remedies North Carolina’s documentation pitfall by appearing to impose an affirmative duty on the prosecutor to

197. N.Y. CRIM. PROC. § 245.20(1).
198. Id. § 245.20(1)(j) (emphasis added).
199. See People v. Knight, 130 N.Y.S.3d 919, 922 (N.Y. Sup. Ct. 2020) (“[T]o the extent that CPL § 245.20(1)(j) requires disclosure of ‘documents concerning comparisons,’ the People complied.”).
200. Id. at 922.
201. See, e.g., People v. Lustig, 123 N.Y.S.3d 469, 472–73 (N.Y. Sup. Ct. 2020) (holding that information generated from two New York Police Department databases, the Domain Awareness System (DAS) and Recidivist Tracking and Reporting Database (RTRD), “relate to the subject matter of the case” and prosecutors “were required to disclose the DAS and RTRD search results.”).
202. N.Y. CRIM. PROC. § 245.20(7).
ensure relevant information related to the case that would be discoverable is identified, providing:

[T]he prosecutor shall make a diligent, good faith effort to ascertain the existence of material or information discoverable under subdivision one of this section and to cause such material or information to be made available for discovery where it exists but is not within the prosecutor’s possession, custody or control; provided that the prosecutor shall not be required to obtain . . . information which the defendant may thereby obtain. For purposes of subdivision one of this section, all items and information related to the prosecution of a charge in the possession of any New York state or local police or law enforcement agency shall be deemed to be in the possession of the prosecution.203

Thus, unlike in open file jurisdictions like North Carolina where FRT results may be made available only if they have been documented, the plain language of the New York rules suggests that a prosecutor would not only need to disclose known information on an FRT search and its corresponding results, but would also need to make a diligent, good faith effort to determine if FRT was used and disclose its results. At minimum, the defense can argue that the plain language of the rules requires as such.

Overall, there may be some barriers to obtaining FRT results even in open file jurisdictions, but defense counsel can overcome such barriers if the language is broad and puts sufficient onus on the government to ensure it is included and provided to the defense like under New York’s discovery rules.

IV. RECOMMENDATIONS TO INCREASE DISCOVERY OF FRT MATERIAL

As the technology continues to advance, FRT results may one day become sufficiently reliable to where they may be introduced as evidence, and thus would be traditionally discoverable as part of the evidence prosecutors intend to use during trial.204 But until then, and as long as FRT continues to be inadmissible and used primarily as an investigatory tool,205 discovery of FRT results under current statutory

203. Id. § 245.20(2) (emphasis added).
204. See, e.g., FED. R. CRIM. P. 16(a)(1)(E)(ii) (requiring the government to disclose documents and objects in the government’s control if “the government intends to use the item in its case-in-chief at trial”).
205. See People v. Reyes, 133 N.Y.S.3d 433, 437 (N.Y. Sup. Ct. 2020) (“Facial recognition analysis thus joins a growing number of scientific and near-scientific techniques that may be used
regimes is limited and varies significantly by each jurisdiction’s discovery rules. While there are some viable arguments that defense attorneys can make in all jurisdictions to seek FRT information, disclosure is certainly not guaranteed except in open file jurisdictions with broad rules imposing affirmative governmental action to determine whether the material exists, like in New York.206

Legislators can play a role in increasing defense counsels’ accessibility to FRT results by amending state and federal rules to broaden the scope of discovery. The American Bar Association, which has its own proposed discovery standards,207 could also proliferate and recommend adopting these changes.

There are some indicators that there may be political appetite for this type of reform. In a recent study, 70 percent of American adults reported that they did not believe FRT identification was sufficient evidence for an arrest, and a majority thought facial recognition use would be more acceptable if there were reforms, such as increased police training on how to avoid erroneous identifications and notification to the public of FRT use in public spaces.208 Some jurisdictions have also taken actual legislative action to ban or limit the use of FRT:209 given several concerns, including privacy and other civil liberty considerations,210 some cities in California and Massachusetts prohibited government use of facial recognition technology.211 Oakland, California’s City Council specifically cited the inaccuracy of

as tools for identifying or eliminating suspects, but that do not produce results admissible at a trial.’); People v. Johnson, 43 Cal. Rptr. 3d 587, 597 (Cal. Ct. App. 2006) (“Whether facial recognition software is discerning and accurate enough to select the perpetrator, or whether it declared a match involving many different people who resembled [the defendant], or how many driver’s license photographs were searched by the software, is immaterial: what matters is the subsequent confirmatory investigation.”).

206. See supra Part III.C.2.


208. Rainie et al., supra note 24.


210. See Kate Conger et al., San Francisco Bans Facial Recognition Technology, N.Y. TIMES (May 14, 2019), https://www.nytimes.com/2019/05/14/us/facial-recognition-ban-san-francisco.html (“[C]ivil liberties advocates warn that the ability of facial surveillance to identify people at a distance, or online, without their knowledge or consent presents unique risks — threatening Americans’ ability to freely attend political protests or simply go about their business anonymously in public.”).

211. Haskins, supra note 209. The cities include Oakland, San Francisco, and Somerville. Id.
the technology and risk of misidentification and false incarcerations as rationales for the prohibition. 212 Though these are different reforms than the discovery changes proposed here, the study and examples of previous legislation relating to FRT suggests that the American public may generally desire FRT reforms which reduce the probability of misidentifications and which increase transparency of the technology.

Adopting all of New York’s discovery rules would certainly accomplish FRT discovery reform. However, jurisdictions may be reluctant to fully convert to open-file criminal discovery given the floodgates it would open. These jurisdictions could instead adopt a more tailored individual provision which would still be sufficiently broad to cover FRT results.

A. Example New Discovery Rule Language

This Note proposes one possible amendment:

Without the necessity of a request, the prosecutor shall provide to the defense all reports, documents, records, data, photographs, tangible objects, or writings, including but not limited to preliminary tests and results or bench notes and analyses performed or stored electronically, concerning physical or mental examinations or scientific tests or experiments or comparisons, and all information related to these aforementioned categories. The prosecutor shall make a good faith effort, with a presumption in favor of disclosure when interpreting this subdivision to ascertain the existence of material or information discoverable under this subdivision. The prosecutor shall be responsible for obtaining such discoverable material as necessary and shall provide it to the defense, including when specific material is inquired about by the defendant.

This sample language consolidates the bulk of three pertinent sections of New York’s rules on the discoverability of reports, data, photographs, and other documents and the requirement that prosecutors determine the existence of discoverable material and disclose accordingly. 213 This language is somewhat modified to be more explicit in shifting responsibility onto prosecutors to determine if reports like FRT results were viewed by law enforcement and to acquire the FRT results. This is to avoid situations where the results would be undiscoverable if the material was inadvertently left out of the file by law enforcement. The sample language also adds text from

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212 Id.

213 N.Y. CRIM. PROC. §§ 245.20(1)(j), (2), (7).
Maryland’s discovery rules, which explicitly note the automatic nature of disclosure, while also allowing for defendants to make an inquiry for specific discoverable information if they inadvertently failed to initially disclose it. The sample language further broadens the scope with additional language requiring “all information related to” the buckets of material, in order to ensure the widest possible breadth of the rules.

The sample language would cover FRT results as “reports,” “data,” and “photographs” concerning a “comparison.” It would also instruct both prosecutors and courts that if in doubt, the rules should be construed to allow for discovery of comparison materials like FRT results. These proposed rules would not explicitly enumerate the term “FRT” to account for any unforeseen terminology changes, variations, or advancements in FRT, thus preventing the need to constantly update the law every time a new type of technology similar to FRT or with a different name becomes available.

B. Potential Limitations to Proposed Discovery Reform

It is worth noting that the likelihood of discovery rule amendments across all states and federal jurisdictions depends on the amount of political momentum generated to enact such legislation, which is certainly not guaranteed here. Criminal defendants are historically a politically unpopular group, and there has been recent backlash to legislation perceived as reducing “tough-on-crime” policies. This reform is not likely to succeed if it is framed by opponents as enabling criminal defendants to delay or evade justice by casting doubt on their identification. It is also possible that legislators are not incentivized to spend political capital on criminal procedure reform that is unlikely to affect many constituents. This may especially be the case in jurisdictions with felony disenfranchisement, where repeat offenders—whose

214. See Md. R. 4-262(d)(1) (“Without the necessity of a request, the State’s Attorney shall provide to the defense all material or information in any form . . . that tends to exculpate the defendant or negate or mitigate the defendant’s guilt or punishment as to the offense charged and all material or information in any form . . . that tends to impeach a State’s witness.”).


mugshots may be in FRT databases, thus increasing their likelihood of identification—are unable to vote.

Legislators may also not be motivated to act given the lack of data on false-arrests and wrongful convictions due to FRT. Most attention on the issue has been limited to the context of highly publicized individual cases like Nijeer Parks'. Indeed, Mr. Parks’ case is one of just three known instances of wrongful arrests based on FRT identifications.217 However, some experts suspect that there are even more cases of wrongful arrests or convictions triggered by FRT that have yet to be identified.218 The full extent of injustices due to errant FRT identifications is currently unknown due to limited information on the issue, and increasing information on FRT results with modifications to discovery regimes may actually help shine more light on this issue. Nevertheless, the politics of criminal justice reform and the current state of limited information on the issue will likely create a hurdle to reform efforts. This also may be why similar discovery reforms relating to FRT have yet to be enacted.

There are also limitations to this recommendation in addition to legislative palatability. Broadening discovery will not prevent wrongful arrests. An individual who is misidentified by FRT and arrested will still spend some time errantly detained before a defense attorney is able to review the individual’s file, determine if FRT was used, and review FRT results for signs of mistaken identity to raise as a defense. Indeed, Nijeer Parks was held for ten days before he was released and spent additional months contesting the charges.219 There is also a risk that given the significant workloads on public defense counsel, defense attorneys will be unable to fully explore alternative matches and the technical significance of a questionable similarity score when crafting a defense.220 Only front-end reforms to FRT usage when investigating

217. See Johnson, supra note 1 (describing several known cases of false arrests and identifications due to erroneous FRT matches).

218. See Kashmir Hill, Wrongfully Accused by an Algorithm, N.Y TIMES (updated Aug. 3, 2020), https://www.nytimes.com/2020/06/24/technology/facial-recognition-arrest.html (quoting Clare Garvie of Georgetown University’s Center on Privacy and Technology, who stated that “I strongly suspect this is not the first case to misidentify someone to arrest them for a crime they didn’t commit. This is just the first time we know about it.”).


220. See Grunwald, supra note 130, at 825 (“[H]eavy caseloads [may have] prevented defense attorneys from effectively using the prosecutorial file to their clients’ advantage. Indeed, many attorneys may have lacked the time and resources to examine the contents of discovery packages carefully. Moreover, the typical package likely contains no ‘smoking guns’—only suggestive leads that would require time-consuming investigative follow-up.”).
and building a case could address the very nature of arrests based on FRT matches, which this Note leaves for other scholars to explore.  

Yet despite these limitations and need for front-end reforms, discovery is a start to provide a safety net to protect against wrongful convictions. Disclosure on FRT results will help defense counsel catch questionable matches and point to other credible suspects to help absolve individuals who may have been incorrectly identified.

CONCLUSION

Investigatory technology like FRT can and should continue to advance so that criminal perpetrators can be identified, and justice served, but there is a danger of misidentification as developers and the government agencies that use FRT work out the kinks. Safeguards are needed to ensure that individuals are not wrongfully convicted based on an investigation instigated by an inaccurate FRT match, and those safeguards can begin with transparency during discovery. Increased disclosure of FRT results can allow defense counsel to question the veracity of the match and support a misidentification defense by investigating other matches unpursued by police or prosecutors. Defense counsel can continue to make creative arguments for discovery under existing rules, but legislators should prioritize this need for information accessibility by amending discovery rules to ensure FRT information is within the scope of discovery.

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221. For one such discussion, see Ferguson, supra note 33, at 1207–09, advocating for a probable cause threshold to be met before an FRT search may be run, as well as the institution of testing, auditing, and certification requirements of the technology to meet a certain accuracy threshold.