UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

PORCHA WOODRUFF,

Plaintiff,

v.

LASHAUNTIA OLIVER,

Defendant.

Hon. Judith E. Levy
Case No. 5:23-cv-11886

AMICUS CURIAE BRIEF OF THE AMERICAN CIVIL LIBERTIES UNION AND THE AMERICAN CIVIL LIBERTIES UNION OF MICHIGAN IN SUPPORT OF PLAINTIFF'S OPPOSITION TO DEFENDANT'S MOTION FOR SUMMARY JUDGMENT

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INTEREST OF AMICI CURIAE

The American Civil Liberties Union ("ACLU") is a nationwide, nonprofit, nonpartisan organization dedicated to the principles embodied in the United States Constitution and our nation's civil rights laws. The American Civil Liberties Union of Michigan is a state affiliate of the ACLU. The ACLU has appeared before courts throughout the country in cases involving the dangers posed by unfettered police use of emerging technologies, including facial recognition technology. Attorneys associated with the ACLU, the ACLU of Michigan, and the Civil Rights Litigation Clinic at the University of Michigan Law School represented Robert Williams in *Williams v. City of Detroit*, No. 2:21-cv-10827-LJM-DRG (E.D. Mich.), alleging that the misuse of facial recognition technology by the Detroit Police Department led to Mr. Williams's wrongful arrest, and have filed amicus briefs in other cases involving similar facts. *See Oliver v. Bussa*, No. 2:20-cv-12711 (E.D. Mich.); *Parks v. McCormac*, No. 2:21-cv-04021 (D.N.J.).

INTRODUCTION AND SUMMARY OF ARGUMENT

The investigating officer in this case applied for an arrest warrant based on only two investigative steps purportedly tying Plaintiff Porcha Woodruff to the crime under investigation: an investigative lead generated by a facial recognition technology ("FRT") search, and a subsequent eyewitness identification from a photographic lineup procedure which incorporated that investigative lead. However,

the FRT result identifying Ms. Woodruff was false. And that FRT false match tainted the subsequent photo lineup by populating it with one person (Ms. Woodruff) who an algorithm had determined looked highly similar to the suspect, surrounded by five manually selected filler photos that necessarily looked less like the suspect. As a result, the photo array was impermissibly suggestive, and Ms. Woodruff was arrested for a crime she didn't commit—a fact that became immediately obvious to the investigating officer the moment she first saw Ms. Woodruff in custody. Oliver Dep. 44–45, Def.'s Ex. W, ECF No. 23-25, PageID.510–511. Ms. Woodruff's case illustrates the troubling and increasingly common problem of law enforcement's uncritical reliance on results of unreliable FRT searches, which leads to depriving the innocent of their liberty and directly violating their constitutional rights. And as this case illustrates, the harms of FRT misidentification disproportionately fall on Black Americans.

Amici write to aid the Court in rendering a decision based on an accurate understanding of facial recognition technology and how its use tainted the investigation in this case. In particular, this brief focuses on explaining why neither the facial recognition search nor the photo lineup procedure could supply probable cause for Ms. Woodruff's arrest. Although the defendant argues that she is protected by qualified immunity, *see* ECF No. 23-1, PageID.337–339, 341–342, amici urge

this Court to first decide whether there was probable cause for the arrest before turning to the qualified immunity analysis. *See Pearson v. Callahan*, 555 U.S. 223, 236 (2009) (recognizing that "it is often beneficial" for courts to decide whether there was a constitutional violation before addressing qualified immunity); *cf. United States v. Warshak*, 631 F.3d 266, 282 n.13 (6th Cir. 2010) ("If every court confronted with a novel Fourth Amendment question were to skip directly to good faith, the government would be given *carte blanche* to violate constitutionally protected privacy rights.").

This is particularly important because this case will likely yield the first judicial opinion in the nation on a developed record addressing some of the questions raised here relating to FRT and photo lineups, and the Court's decision could affect the lives of countless individuals.[1] Although Detroit has adopted serious reforms intended to reduce the chance of future wrongful arrests as part of its recent settlement of Robert Williams's wrongful arrest suit,[2] to amici's knowledge no other

[1] In other cases alleging wrongful arrest due to police reliance on incorrect FRT results, claims have been settled following discovery, *see Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.); *Oliver v. Bussa*, No. 2:20-cv-12711 (E.D. Mich.); *Parks v. McCormac*, No. 2:21-cv-04021 (D.N.J.), or litigation is still pending pre-discovery, *see Reid v. Bartholomew*, No. 1:23-cv-4035 (N.D. Ga.).

[2] *See* Settlement Agreement, *Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.), ECF No. 73-1, PageID.3309–3343, *available at*

police department has yet matched those protections, meaning that people across most of this district, and beyond, remain vulnerable to wrongful arrest in similar circumstances to what occurred here. Moreover, police across the country systematically fail to disclose their use of facial recognition technology to criminal defendants, meaning that people wrongfully arrested due to police reliance on erroneous FRT results may never know the cause of their arrest, and therefore may not be in a position to mount a legal challenge.[3] A decision from this Court on the issues addressed here would provide clarity to the public and law enforcement about their respective rights and responsibilities.

This brief makes three main points. First, FRT results are fundamentally unreliable—a fact the defendant and the City of Detroit do not contest—because of well-known technical limitations, racially disparate false-match rates, and human operator errors. Second, if police are ever to use FRT in investigations, it must be

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https://assets.aclu.org/live/uploads/2024/06/Final-Order-of-Dismissal-and-Settlement-Agreement.pdf.

[3] Douglas MacMillan et al., *Police Seldom Disclose Use of Facial Recognition Despite False Arrests*, Wash. Post (Oct 6, 2024), https://www.washingtonpost.com/business/2024/10/06/police-facial-recognition-secret-false-arrest/ ("Police departments in 15 states provided The Post with rarely seen records documenting their use of facial recognition in more than 1,000 criminal investigations over the past four years. According to the arrest reports in those cases and interviews with people who were arrested, authorities routinely failed to inform defendants about their use of the software . . . .").

followed by reliable investigative steps that independently establish probable cause—much unlike the subsequent "identification" by the complaining witness in this case, which was unreliable because it was tainted by the false-match lookalike (Ms. Woodruff) generated by the FRT process. And third, although case law recognizes that *reliable* witness identifications can establish probable cause, the features of the photo array in this case rendered it impermissibly suggestive, and thus too unreliable to furnish probable cause for Ms. Woodruff's arrest.

ARGUMENT

I. Facial Recognition Technology Is Inherently Unreliable and Cannot Be Relied on as a Positive Identification of a Suspect.

As the defendant and the City of Detroit recognize, facial recognition technology cannot produce a positive identification and cannot generate probable cause for an arrest.[4] There is good reason for this concession: Facial recognition algorithms are unreliable and indeed are not even *designed* to generate matches.

When police personnel run an FRT search, the algorithm extracts a "faceprint"[5] from the image of an unknown suspect (the "probe image" or "inquiry

[4] *See* Def.'s Br. 14, ECF No. 23-1, PageID.339; Def.'s Ex. G, ECF No. 23-9, PageID.375; Def.'s Ex. J at 1, 4, ECF No. 23-12, PageID.382, 385 (Detroit Police Dep't, Directive No. 307.5: Facial Recognition (Dec. 16, 2022)).

[5] A faceprint is a "map written in code that measures the distance between features, lines, and facial elements." *State v. Arteaga*, 296 A.3d 542, 555 (N.J. Super. Ct.

image") and compares it to a database of faceprints taken from images of known individuals (for example, arrest photos or drivers' license photos).[6] The system generates similarity scores for each comparison and then outputs a "candidate list" of possible matches, generally organized in order of similarity score. Although higher scores indicate the algorithm's calculation that the candidate appears more similar to the probe image than candidates with lower scores further down the list, a true match may appear anywhere in the candidate list, if it appears at all. Accordingly, facial recognition algorithms used by police are not designed to (and do not) return a single definitive match. Rather, they are probabilistic systems that return a number of *potential* candidates based on an "algorithmic best guess."[7] As

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App. Div. 2023) (quoting Andrew Guthrie Ferguson, *Facial Recognition and the Fourth Amendment*, 105 Minn. L. Rev. 1105, 1111 (2021)).

[6] For an explanation of how facial recognition technology works and its limitations, see the expert report on use of the technology in *Williams v. City of Detroit*. Expert Witness Report of Dr. Michael King ¶¶ 46–59, *Williams*, No. 2:21-cv-10827 (E.D. Mich.), *available at* https://assets.aclu.org/live/uploads/2024/06/Expert-Report-of-Dr.-Michael-C-King.pdf. *See also* Nat'l Acads. of Scis., Eng'g, & Med., *Facial Recognition Technology: Current Capabilities, Future Prospects, and Governance* 31–64 (2024) [hereinafter "National Academies Report"], https://nap.nationalacademies.org/catalog/27397/facial-recognition-technology-current-capabilities-future-prospects-and-governance.

[7] Eyal Press, *Does A.I. Lead Police to Ignore Contradictory Evidence*, The New Yorker (Nov. 20, 2023), https://www.newyorker.com/magazine/2023/11/20/does-a-i-lead-police-to-ignore-contradictory-evidence/.

one court put it, "[i]nstead of being designed to produce accurate results, [the FRT algorithm] is designed to produce possibilities." *State v. Archambault*, No. 62-CR-20-5866, slip op. at 14 (Minn. 2d Dist. Ct. Sept. 13, 2024), attached as Ex. A.

The number of possible-match candidates returned by an FRT system can be high. In this case, the search returned 73 possible candidates. Def.'s Ex. G, ECF No. 23-9, PageID.375. As a Detroit Police Department ("DPD") employee testified in another case, FRT searches run by the DPD can return "anywhere up to 10 to 100 or 500" potential matches. Dep. of Joseph Dablitz 18:17–18, *Oliver v. Bussa*, No. 2:20-cv-12711 (E.D. Mich.), ECF No. 51-3, PageID.984. Naturally, only one of the many candidates can be the true suspect. The rest will be innocent "false positives."

Furthermore, a true match to the suspect photo often will not appear in the results at all, either because the quality of the probe image is low, or because the database of images being searched does not include the true match, or for other reasons.[8] In this case, the database used for the FRT search was comprised of arrest photos,[9] but it is not known whether the true suspect had ever been arrested by

[8] *See* Patrick Grother et al., *Face Recognition Vendor Test (FRVT) Part 3: Demographic Effects* 5, Nat'l Inst. of Standards & Tech. (2019), https://perma.cc/7L99-A2QJ.

[9] *See* Def.'s Ex. H at 1, ECF No. 23-10, PageID.376; Def.'s Ex. J at 4, ECF No. 23-12, PageID.385 ("[The DPD Crime Intelligence Unit] shall perform facial

Michigan police. If her photo was not in the arrest photo database prior to the FRT search, then the chance of a false match was 100%.

Moreover, because many people share similar-looking facial characteristics, "[a]s more individuals are enrolled into a database, the possibility of a mismatch increases."[10] As of several years ago, the mugshot database used for DPD's search in this case contained more than five million arrest photos supplied by all but three counties across Michigan.[11] A database in the millions means there is a significant chance that any search will produce false positives.

These problems are compounded by additional defects, some inherent in the technology, others reflecting choices in its use. For example, through discovery in the Robert Williams case, undersigned counsel learned that the FRT algorithms utilized by both the Michigan State Police and DPD return leads based on years-old photos that no longer accurately reflect a suspect's current appearance.[12] When this

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recognition searches utilizing the Statewide Network of Agency Photos (SNAP) which include criminal mug shot images.").

[10] National Academies Report, *supra* note 6, at 53.

[11] Michigan State Police, *SNAP: Statewide Network of Agency Photos* 2, 4, *available at* https://www.aclu.org/cases/williams-v-city-of-detroit-face-recognition-false-arrest?document=Overview-Presentation--Statewide-Network-of-Agency-Photos (select "Download Document" to view) (produced in discovery in *Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.)).

[12] Dep. of Krystal Howard at 46:6–23, *Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.), ECF No. 60-3, PageID.3206.

occurs, the technology does not prompt the user to examine more current photos of the suspect or alert them that such photos exist in the database.

These features of FRT systems mean that "[a]t best, any one of th[e] results is potentially a false positive. At worst, all results are undeniably false positives." *Archambault*, slip op. at 18. As former Detroit Police Chief James Craig put it, "[i]f [police] were just to use the technology by itself, to identify someone, I would say 96 percent of the time it would misidentify."[13]

Although FRT algorithms generate false positives even in controlled test conditions, they are especially prone to error when probe image quality is low (as is often the case in real-world conditions), or when there are differences between the probe image and the database images it is being compared against. Lighting, shadow, angle, facial expression, and partial occlusion of the face all affect accuracy.[14] The resolution of an image (i.e., its blurriness) can also have a huge effect on the ability

[13] Jason Koebler, *Detroit Police Chief: Facial Recognition Software Misidentifies 96% of the Time*, Vice News (June 29, 2020), https://www.vice.com/en/article/dyzykz/detroit-police-chief-facial-recognition-software-misidentifies-96-of-the-time.

[14] *See, e.g.*, Patrick Grother et al., *Face Recognition Vendor Test (FRVT) Part 2: Identification* 9–10, Nat'l Inst. Standards & Tech. (2019), https://perma.cc/BR6Y-6X6D; U.S. Dep't of Homeland Sec., DHS/ICE/PIA-054, *Privacy Impact Assessment for the ICE Use of Facial Recognition Services* 26 (2020), https://perma.cc/2TMV-JMGH.

of a FRT algorithm to produce an accurate match.[15] In short, rarely (if ever) will the quality and orientation of a real-world probe image resemble the mugshots and drivers' license photos against which it is being compared.

In this case, the images suffered from several defects that rendered the search particularly unsuitable for producing an accurate result. The suspect depicted in the "inquiry image" (probe image) was wearing a hat that obscured her eyebrows, forehead, hairline, and top of head, and she was looking to the side. *See infra* Figure 1 (left). The image of Porcha Woodruff that was generated as the "investigative lead," in contrast, had no hat, and had a non-neutral facial expression that differed significantly from the probe image. *See* Figure 1 (right). Additionally, the probe image, extracted from a business's security camera, appears to have relatively low image resolution (although resolution cannot be definitively determined without access to the image in its original file format). *See* Figure 1. Finally, the image of Ms. Woodruff that returned as a possible match was not current. *See* Figure 1 (image from 2019). Each of these issues is well known to affect

[15] *See, e.g.*, Aman Bhatta et al., *Impact of Blur and Resolution on Demographic Disparities in 1-to-Many Facial Identification*, Proc. of the IEEE/CVF Winter Conf. on Applications of Comput. Vision (WACV) Workshops 412–20 (2024), https://perma.cc/MCQ3-QV5V.

accuracy of a search.[16] And "[w]hen a face image simultaneously contains multiple confounding factors," as here, the accuracy of the FRT search can be even further degraded.[17]

Figure 1 (copied from Def.'s Ex. H at 1, ECF No. 23-10, PageID.376).

Even where probe image quality is ideal, facial recognition systems exhibit race, gender, and age bias, with higher rates of false matches when used on people

[16] *See, e.g.*, National Academies Report, *supra* note 6, at 43 ("Typical problems include blur owing to motion; the subject not facing the camera; part of the face not visible owing to the subject wearing a cap, scarf, sunglasses, or the like; or the subject presenting a non-neutral expression."); *id.* at 46 (discussing effects of low "face quality" and "face aging").

[17] *Id.* at 47.

of color, women, and young adults than on white people, men, and older people.[18] According to the National Institute of Standards and Technology, "even the best algorithms can be wrong more than 20 percent of the time" in test conditions,[19] and "Asian and African American people were up to 100 times more likely to be misidentified than white men, depending on the particular algorithm and type of search."[20] Moreover, disparities in accuracy rates display intersectional effects: tests of some algorithms have shown, for example, that older Black women "were over 3,000 times more likely to have a false positive match than [younger] Eastern European men."[21] Here, of course, both the suspect and Ms. Woodruff are Black women. These disparities are a result of FRT algorithms being "trained mostly on

[18] *See, e.g.*, National Academies Report, *supra* note 6, at 55–57; Grother, *supra* note 8, at 7–8; K.S. Krishnapriya et al., *Issues Related to Face Recognition Accuracy Varying Based on Race and Skin Tone*, 1 IEEE Transactions on Tech. & Soc'y 8, 8–20 (2020), https://ieeexplore.ieee.org/document/9001031.

[19] Khari Johnson, *The Hidden Role of Facial Recognition Tech in Many Arrests*, Wired (Mar. 7, 2022), https://perma.cc/ECB6-LM22.

[20] Drew Harwell, *Federal Study Confirms Racial Bias of Many Facial-Recognition Systems, Casts Doubt on Their Expanding Use*, Wash. Post (Dec. 19, 2019), https://www.washingtonpost.com/technology/2019/12/19/federal-study-confirms-racial-bias-many-facial-recognition-systems-casts-doubt-their-expanding-use/.

[21] U.S. Comm'n on Civil Rights, *The Civil Rights Implications of the Federal Use of Facial Recognition Technology* 29 (2024), https://perma.cc/D4VS-5866.

White faces," on lighting and color contrast issues with digital photography that result in images of darker skinned people being underexposed, and other factors.[22]

Additional bias is introduced when police conduct a search against a database of images that overrepresents people of color, such as an arrest photo database (like the one used in this case) that reflects historical patterns of overpolicing of communities of color.[23] As in this case, in nearly every known U.S. suit against police alleging wrongful arrest due to police reliance on an incorrect FRT result, the person falsely identified and wrongly arrested is Black.[24]

On top of these technical problems, additional risk of error is introduced by human review of the FRT search results. Research has consistently shown that it is difficult for people to accurately identify people from other racial and ethnic groups.[25] When a human analyst does an initial review of the dozens or hundreds of FRT-generated candidates, the analyst's own cognitive biases can compound racial biases in the FRT-generated candidate list and introduce further error.

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[22] *Id.* at 24–29.

[23] Thaddeus L. Johnson et al., *Facial Recognition Systems in Policing and Racial Disparities in Arrests*, 39 Gov't Info. Q. no. 4, at 2, 7 (2022).

[24] *See supra* note 1 (listing cases); *see also, e.g.*, Press, *supra* note 7.

[25] *See The Handbook of Eyewitness Psychology*, *Volume 1: Memory for Events* 257–81 (Michael P. Toglia et al. eds., 2007) (detailing dozens of studies); Kate Crookes & Gillian Rhodes, *Poor Recognition of Other-Race Faces Cannot Always Be Explained by a Lack of Effort*, 25 Visual Cognition 430 (2017).

Even further, people reflexively over-rely on computer outputs because of "automation bias," "a heuristic replacement for vigilant information seeking and processing" that can "lead to decisions that are not based on a thorough analysis of all available information but that are strongly biased by the automatically generated advice."[26] Automation bias lulls human users of automated technologies, such as FRT, into an over-reliance on seemingly foolproof computers, leading the analysts to uncritically accept the computer's returns.[27] Automation bias means analysts will be less critical and discerning when selecting a possible match, including by deferring to the similarity scores generated by the algorithm in place of the analyst's own judgment. Human analysts may also assume there is an accurate match in a computer's returns even when there is not. Automation bias further influences investigations after an investigator receives an "investigative lead" from an analyst. As occurred here and in other cases litigated by counsel for amici, police all too often conduct minimal investigations designed to do nothing other than confirm the "lead," and do so without the context of having seen or reviewed the dozens or hundreds of other potential leads that would have been returned by the initial search, many of which might also have looked significantly similar to the suspect.

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[26] Raja Parasuraman & Dietrich Manzey, *Complacency and Bias in Human Use of Automation: An Attentional Integration*, 52 Hum. Factors 381, 391 (2010).

[27] *Id*. at 391–97.

For these and additional reasons, research shows that human operators make errors on average 50 percent of the time "when deciding which faces in candidate lists match the search image. This is consistent with research on eye-witness identification—which is known to be unreliable, with well-meaning witnesses often mistakenly identifying innocent suspects."[28]

Because of these and other sources of unreliability and error in the FRT search process, it is commonly agreed that the results of a facial recognition search do not constitute a positive identification of a suspect, and that additional reliable investigation is needed to develop probable cause to arrest. But far from conducting such reliable confirmatory investigation, in this case the sole additional investigative step was to conduct a photographic lineup with the complaining witness. As explained below, the lineup was necessarily tainted by the FRT false-match result, and could not provide probable cause.

[28] David White et al., *Human Oversight of Facial Recognition Technology in Forensic Applications* ¶ 5 (U.K. Parliament 2021), https://committees.parliament.uk/writtenevidence/38555/html/. *Accord* David White et al., *Error Rates in Users of Automatic Face Recognition Software*, 10 PLoS ONE e0139827 1, 1 (2015) (the selection process "potentially reduc[es] benchmark estimates [of FRT accuracy] by 50% in operational settings").

II. A Witness Identification Based Solely on a FRT Search Result is Inherently Suggestive.

The defendant argues that probable cause for Ms. Woodruff's arrest "was supported by an eye-witness identification." ECF No. 23-1, PageID.338. But that identification was the product of an unduly suggestive photo array tainted by the false-match result generated by the FRT search. It could not establish a positive identification and could not supply probable cause.

The presence of someone in a facial recognition candidate list alone is not a sufficient basis to proceed to a witness identification procedure, such as a lineup or photo array. As the American Law Institute explains, "[p]olicing agencies should not conduct eyewitness identifications unless they have . . . a substantial basis to believe that the suspect committed the crime and should therefore be presented to the eyewitness."[29] That is because one of the most significant determinants of the reliability of an eyewitness identification from a photo array or lineup is the inclusion

[29] Am. L. Inst., *Principles of the Law, Policing* § 10.03 (2023), https://perma.cc/B9V4-P4DU; *see also* Gary L. Wells et al., *Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence*, 44 L. & Hum. Behav. 3, 8 (2020) ("There should be evidence-based grounds to suspect that an individual is guilty of the specific crime being investigated before including that individual in an identification procedure.").

of the actual perpetrator of the crime.[30] In other words, when the true suspect is absent from the lineup, the chance of a false identification rises steeply. But as described above, facial recognition technology creates a list of speculative and, in most cases, unreliable candidate matches, meaning there is not a substantial basis to believe that an investigative lead generated by FRT actually committed the crime. FRT searches are, by their very design, prone to returning false matches who are lookalikes or "doppelgängers" for the true suspect. As one appeals court has explained, this "has obvious implications for the accuracy of the identification process because an array constructed around a mistaken potential match would leave the witness with no actual perpetrator to choose." *State v. Arteaga*, 296 A.3d 542, 557 (N.J. Super. Ct. App. Div. 2023). Instead, a witness has a greater chance of believing that the FRT-returned doppelgänger is a match to the suspect.[31] "[T]he

[30] Gary L. Wells et al., *Eyewitness Identification: Bayesian Information Gain, Base-Rate Effect Equivalency Curves, and Reasonable Suspicion*, 39 L. & Hum. Behav. 99, 115 (2015).

[31] *See* Rebecca Darin Goldberg, *You Can See My Face, Why Can't I? Facial Recognition and* Brady, 5 Colum. Hum. Rts. L. Rev. Online 261, 274 (2021); Laura Moy, *Facing Injustice: How Face Recognition Technology May Increase the Incidence of Misidentifications and Wrongful Convictions*, 30 Wm. & Mary Bill Rts. J. 337, 347–350 (2021).

witness's corroboration may be so closely tied to the computerized face-recognition match that it lacks independence," creating an inherently suggestive procedure.[32]

This dynamic has been central to all three of the known cases of wrongful arrests due to police reliance on incorrect FRT results in Detroit. As in this case, in the cases of Robert Williams and Michael Oliver, police applied for arrest warrants based solely on the combination of a false match from FRT and a false identification by a witness viewing a six-pack photo array that was constructed around the FRT lead with five filler photos.[33] In all three cases, the witnesses chose the FRT-derived false-match, instead of deciding that the true suspect did not in fact appear in the array, as was actually the case. As one of the nation's leading authorities on erroneous eyewitness identifications explained in her expert report in Robert Williams's wrongful arrest suit, this is a predictable result of such a suggestive lineup construction:

> Because the suspect was developed using facial recognition technology, which chose Mr. Williams' photo as a match from millions of photos, and the fillers were selected from "photos that we had saved, lots of photos of people" (Deposition of Detective Adams, p. 72), it is highly probable that Mr. Williams was a better match to the perpetrator

[32] Henry H. Perritt Jr., *Defending Face-Recognition Technology (And Defending Against It)*, 25 J. Tech. L. & Pol'y 41, 59 (2021).

[33] *See* First Am. Compl. ¶¶ 8–9, *Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.), ECF No. 54, PageID.2863–2864; Pl.'s First Am. Compl. ¶¶ 4, 8, *Oliver v. Bussa*, 2:20-cv-12711 (E.D. Mich.), ECF No. 23, PageID.178, 181.

> than any of the fillers. Low-similarity fillers increase the chances of mistaken identification of an innocent suspect, a finding that has been repeatedly replicated.[34]

The same problem infected this case: police presented the witness with a six-pack photo array consisting of a (years old)[35] photo of Ms. Woodruff, who had been selected by the FRT algorithm as looking highly similar to the suspect, surrounded by five filler photos that were manually selected by an officer and were significantly less similar to the suspect. *See* Def.'s Ex. O, ECF No. 23-17, PageID.409.

After Ms. Woodruff's wrongful arrest became public last year, Detroit's Chief of Police acknowledged the problem of erroneous FRT results tainting subsequent witness identifications, explaining that by moving straight from FRT result to lineup "it is possible to taint the photo lineup by presenting a person who looks most like the suspect" but is not in fact the suspect.[36] Subsequently, pursuant to the settlement agreement in Robert Williams's wrongful arrest suit, DPD amended its relevant policies to expressly ban this practice: "A request for an arrest warrant, or an arrest,

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[34] Expert Report of Margaret Bull Kovera at 7, *Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.), *available at* https://assets.aclu.org/live/uploads/2024/06/Expert-Report-of-Dr.-Margaret-Bull-Kovera.pdf.

[35] *See* Pl.'s Resp. 4, 12, ECF No. 29, PageID.855, 863.

[36] City of Detroit Gov't, *WATCH LIVE: Chief White Will Provide Updated Comments on a Lawsuit Filed Last Week*, Facebook (Aug. 9, 2023), https://www.facebook.com/CityofDetroit/videos/287218473992047.

shall not be made solely on the basis of an investigative lead developed through Facial Recognition technology in combination with a lineup identification. A request for an arrest warrant, or an arrest, must be supported by additional independent reliable evidence."[37] But that policy reform was too late for Ms. Woodruff, whose arrest was predicated on an unreliable lineup tainted by the FRT false-match result. Because the lineup was inherently suggestive, it could not supply probable cause.

III. Case Law Establishes that an Eyewitness Identification Can Provide Probable Cause Only if it is Reliable, and the Suggestive Photo Lineup Here Lacked Reliability.

"[A]n arrest warrant is valid only if supported by probable cause." *Ahlers v. Schebil*, 188 F.3d 365, 370 (6th Cir. 1999) (citing U.S. Const. amend. IV). The "probable cause determination is based on the 'totality of the circumstances,' and must take account of 'both the inculpatory *and* exculpatory evidence.'" *Wesley v. Campbell*, 779 F.3d 421, 429 (6th Cir. 2015) (quoting *Gardenhire v. Schubert*, 205

[37] Detroit Police Dep't, Directive No. 307.5, § 5.3, attached as Ex. A to Settlement Agreement, *Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.), ECF No. 73-1, PageID.3320. *See also* Detroit Police Dep't, Directive No. 203.11, § 4.3, attached as Ex. C to Settlement Agreement, *Williams v. City of Detroit*, No. 2:21-cv-10827 (E.D. Mich.), ECF No. 73-1, PageID.3337 ("Prior to conducting a photographic lineup, a supervisor shall ensure that there is an independent basis supported by reliable evidence that the suspect, whose picture is to be presented in the course of the photo lineup, committed the crime. An investigative lead generated by a search using facial recognition technology does not alone constitute an independent basis.").

F.3d 303, 318 (6th Cir. 2000)). Because the probable cause inquiry is largely fact-bound, "[i]n general, the existence of probable cause in a § 1983 action presents a jury question, unless there is only one reasonable determination possible." *Pyles v. Raisor*, 60 F.3d 1211, 1215 (6th Cir. 1995).

In her summary judgment brief, the defendant cites the Sixth Circuit's decision in *Ahlers v. Schebil* in support of her argument that the photo-array identification established probable cause for Ms. Woodruff's arrest. ECF No. 23-1, PageID.337. *Ahlers* makes clear, however, that an eyewitness identification will not constitute sufficient probable cause when there are reasons to doubt its reliability. 188 F.3d at 370. Moreover, *Ahlers* did not involve presentation of a photo array. Rather, the complaining witness specifically identified the alleged perpetrator by name. *Id.* at 367.

More on point is the body of case law and social science research concerning reliability of witness identifications from photo arrays.[38] A photo-array identification is not a talisman that automatically establishes probable cause. *See*

[38] "Over the past three decades, more than 2,000 studies related to eyewitness identification have been published. . . . The research is not only extensive, but it represents the gold standard in terms of the applicability of social science research to the law." *Perry v. New Hampshire*, 565 U.S. 228, 263 (2012) (Sotomayor, J., dissenting) (quoting *State v. Henderson*, 27 A.3d 872, 916 (N.J. 2011)) (cleaned up).

Bunkley v. City of Detroit, 902 F.3d 552, 563–64 (6th Cir. 2018) (a photo-array identification may not be sufficient to establish probable cause in the presence of facts undermining the reliability of the police investigation). Rather, photo-array identifications can be so "impermissibly suggestive as to give rise to a very substantial likelihood of irreparable misidentification." *Ledbetter v. Edwards*, 35 F.3d 1062, 1070 (6th Cir. 1994) (citation omitted); *see also Foster v. California*, 394 U.S. 440, 442–43 (1969).[39] A photo-array procedure is unduly suggestive, for example, when it has "steered the witness to one suspect or another, independent of the witness's honest recollection." *Wilson v. Mitchell*, 250 F.3d 388, 397 (6th Cir. 2001). This is no mere theoretical problem: "The empirical evidence demonstrates that eyewitness misidentification is the single greatest cause of wrongful convictions in this country." *Perry*, 565 U.S. at 263 (Sotomayor, J., dissenting) (internal quotation marks omitted).

In assessing the reliability of an eyewitness identification, the details matter. *See, e.g.*, *Smith v. Davis*, No. 23-3604, 2024 WL 3596872, at *5–9 (6th Cir. July 31, 2024), *pet. for cert. filed* (U.S. Oct. 10, 2024) (No. 24-421) (finding eyewitness

[39] Cases like *Ledbetter* and *Foster*, which address the reliability of photo-lineup identifications in the context of challenges to admission of evidence at trial, present "relevant considerations in the totality-of-the circumstances analysis that has traditionally guided probable cause determinations." *Legenzoff v. Steckel*, 564 F. App'x 136, 141 n.3 (6th Cir. 2014) (citation omitted).

identification unduly suggestive after careful consideration of surrounding facts). As explained above, *supra* Part II, the photo array presented to the complaining witness in this case was unduly suggestive because it consisted of a years-old photo of an innocent person chosen by a FRT algorithm as looking highly similar to the suspect, surrounded by five manually selected filler photos that necessarily looked less similar to the suspect.[40] The Detroit Police Department now recognizes the impermissible suggestiveness of this procedure: the current policy on eyewitness identifications, adopted pursuant to the settlement agreement in *Williams v. City of Detroit*, prohibits photo arrays from "us[ing] images of people who so closely resemble the suspect that a person familiar with the suspect might find it difficult to

[40] The identification suffered other defects as well. Although the complaining witness had spent several hours with the suspect, he stated that he had been drinking, and that he believed he had been drugged by the suspect, to the point of losing consciousness. *See* Def.'s Br. 15, ECF No. 23-1, PageID.340; Def.'s Ex. D, ECF No. 23-6, PageID.366. Research on "the effects of alcohol on identification accuracy show that high levels of alcohol promote false identifications." *Henderson*, 27 A.3d at 906; *accord State v. Almaraz*, 301 P.3d 242, 255 (Idaho 2013).

Additionally, the lineup was administered as a simultaneous photo array, rather than with sequential presentation of photographs. Numerous studies conclude that simultaneous presentation of photos results in a significantly greater risk of misidentification, and DPD policy now prohibits the practice. Nancy Steblay et al., *Eyewitness Accuracy Rates in Sequential and Simultaneous Lineup Presentations: A Meta–Analytic Comparison,* 25 L. & Hum. Behav. 459, 466, 468–69 (2001); DPD Directive No. 203.11, § 4.2(5), *supra* note 37 (No. 2:21-cv-10827, ECF No. 73-1, PageID.3336).

distinguish the suspect from the fillers (i.e., twins, look-alikes, facial recognition derived images, etc.)."[41]

Indeed, the array in this case violated a well-recognized rule of photo-array construction. As the Technical Working Group for Eyewitness Evidence, a multidisciplinary panel of experts convened by the National Institute of Justice, explained decades ago, police "should compose the lineup in such a manner that the suspect does not unduly stand out."[42] Subsequent research continues to "emphasize[] the value of ensuring the suspect does not stand out in a lineup."[43] Particularly relevant here, meta-analysis of multiple studies confirms that "[i]nnocent suspects [are] significantly more likely to be misidentified from lineups" when the suspect is only moderately similar to the filler photos, as compared to lineups where there is high suspect-filler similarity.[44]

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[41] DPD Directive No. 203.11, § 4.3(1)(i), *supra* note 37 (No. 2:21-cv-10827, ECF No. 73-1, PageID.3337).

[42] Tech. Working Grp. for Eyewitness Evidence, *Eyewitness Evidence: A Trainer's Manual for Law Enforcement* 32, Nat'l Inst. of Just. (2003), https://perma.cc/33W3-6QPR.

[43] Ryan J. Fitzgerald et al., *The Effect of Suspect-Filler Similarity on Eyewitness Identification Decisions: A Meta-Analysis*, 19 Psychol., Pub. Pol'y, & L. 151, 159 (2013).

[44] *Id.* at 160.

In short, "mistaken identifications are more likely to occur when the suspect stands out from other members of a live or photo lineup." *Henderson*, 27 A.3d at 897–98. When a photo array is constructed around an innocent false-match döppelganger generated by facial recognition technology, particularly when the photo used is years-old, the risk of such mistaken identification is intolerably high. The totality of the circumstances in this case indicates that the photo-array identification following the failed facial recognition process produced an unreliable identification, which could not establish probable cause.

CONCLUSION

For the forgoing reasons, amici urge the Court to hold that the defendant lacked probable cause for Ms. Woodruff's arrest. In the alternative, the Court should explain why that fact-specific question should be sent to a jury.

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Respectfully submitted,

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