

**Opening Statement of Professor Jennifer Laurin, Wright C. Morrow Professor of Law,
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“Facial Recognition Technology: Examining Its Use by Law Enforcement”

Subcommittee on Crime, Terrorism, and Homeland Security

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Chairwoman Jackson-Lee, Ranking Member Biggs, Chairman Nadler, Ranking Member Jordan, and Members of the Subcommittee on Crime, Terrorism, and Homeland Security –

Thank you very much for the invitation to address this subcommittee on the subject of facial recognition technology, or “FRT.” This is a vast and complex topic – concerning technology, criminal law, constitutional law, business and intellectual property, and more. I will address a small but important sliver of that vast landscape that intersects with my own research and teaching on forensic science and criminal investigation and adjudication. The three bottom line points that I want to leave you with are these: First, although FRT “matches” have not been held to be admissible in evidence in criminal cases, law enforcement use of FRT to identify suspects forms the basis for arrests, criminal convictions, and periods of incarceration in the federal system; second, while FRT has the capacity to be highly accurate under ideal conditions, there is *greatest* cause for concern about accuracy when used in criminal investigations; and third, that the criminal legal system is not well-designed to screen out mistaken or unreliable fruits of facial recognition technology.

To begin with the first point: FRT does lead to deprivations of liberty. Courts do not currently admit testimony or other evidence of FRT matches to establish that a defendant is the perpetrator of a crime, and my understanding is that federal prosecutors maintain that they do not seek to use such evidence in their case-in-chief. Nevertheless, evidence of FRT matches has been relied upon by federal courts in stages of criminal cases that are not governed by rules of admissibility – for example, in bail hearings to support decisions ordering pretrial detention of the defendant, and in sentencing to find facts that enhance a defendant’s sentence.¹ Perhaps more critically, the overwhelming majority of criminal prosecutions begin and end with no presentation of evidence before a jury at all; I refer of course to the nearly 98% of federal criminal convictions obtained through guilty plea.² In those cases, and given the designedly low evidentiary threshold of probable cause to arrest, FRT-generated matches can generate a criminal conviction without any courtroom testing of the Government’s evidence to prove the defendant’s identity. Moreover, even where FRT is used by law enforcement only to generate an initial lead, that early FRT match has the potential – particularly given the stickiness of cognitive biases – to

¹ See, e.g., *United States v. Lee*, 451 F. Supp. 3d 1, 4 (D.D.C. 2020); *United States v. Jones*, No. 16 CR. 121 (RWS), 2017 WL 3049543, at *3 (S.D.N.Y. Jul. 18, 2017).

² United States Sentencing Commission, *Fiscal Year 2020 Overview of Federal Criminal Cases* (Apr. 2021), https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2021/FY20_Overview_Federal_Criminal_Cases.pdf.

send investigators down an erroneous path that, even if ultimately corrected, has enormous consequence for a wrongly accused individual.³

The fact that FRT is shaping outcomes in criminal investigation and adjudication would be of little concern if there were no reason to question its accuracy as a means of identifying suspects. But as others have already noted today, despite significant advances that have improved the accuracy of FRT, significant concerns remain. There are at least two reasons why the criminal investigative context raises special worries about what we know about the reliability of FRT to identify individuals – particularly in performing what are known as “one-to-many” database searches. First, as the National Institute of Standards and Technology reported in its July 2021 Face Recognition Vendor Test, there remains significant variability in accuracy among FRT vendors based on different algorithms used for comparing known and unknown faces.⁴ Particularly given the results of the GAO’s recent survey of federal agencies, reporting that across and within agencies investigators are relying on a wide variety of different FRT systems,⁵ this accuracy variability points to a need for disclosure of and perhaps restriction on what public and private FRT systems are being utilized. Second, aside from variability and disparities in accuracy across systems and algorithms, law enforcement use of FRT to identify criminal suspects raises special accuracy concerns because it is particularly likely that less-than-ideal images will be used in such procedures. Studies of FRT that find low error rates do so only when using cooperative, front-facing, staged images; declines in accuracy are consistently seen when using side-view images, low-resolution images, or other images not captured under controlled circumstances – precisely the types of images that are often used in criminal investigations in which the perpetrator’s identity is not yet known.⁶ Thus, while FRT is understandably viewed by law enforcement as a powerful investigative tool, the criminal investigative context is in fact one of the most challenging settings in which to reliably deploy the technology.

None of this might give rise to a need for legislative intervention if the criminal legal system already possessed adequate means to police, as it were, investigative use of FRT. For a variety of reasons, it does not. Partly, this is due to the fact that as long as FRT matches are used as investigative tools and not themselves relied on as evidence in a criminal case, there is little opportunity for a defendant who is identified through use of FRT to challenge that practice in court – there is no evidence to suppress or the admissibility of which to litigate. Additionally, however, restrictive discovery – the sharing of case information between the prosecution and

³ See Jennifer E. Laurin, *Remapping the Path Forward: Toward a Systemic View of Forensic Science Reform and Oversight*, 91 *Tex. L. Rev.* 1051, 1096—97 (2013).

⁴ National Institute of Standards and Technology, NISTIR 8721 Draft Supplement (Jul. 7, 2021), https://pages.nist.gov/frvt/reports/1N/frvt_1N_report.pdf.

⁵ U.S. Government Accountability Office, *Facial Recognition Technology: Federal Law Enforcement Agencies Should Better Assess Privacy and Other Risks* (Jun. 2021), <https://www.gao.gov/assets/gao-21-518.pdf>.

⁶ National Institute of Standards and Technology, NISTIR 8721 Draft Supplement (Jul. 7, 2021), https://pages.nist.gov/frvt/reports/1N/frvt_1N_report.pdf.

defense – means that defendants are severely hobbled in litigating law enforcement use of FRT. In contrast to the regime in an increasing number of states, defendants in federal criminal cases do not have access to all – or even much – of the Government’s investigative file.⁷ Indeed, defendants might not even learn that an early FRT match procedure was performed. Moreover, the trial-based timing of disclosure in federal criminal cases means that little opportunity exists for defense attorneys to learn of and vet the reliability of Government evidence before entering a plea. Additionally, to date, defense claims that they are constitutionally entitled to information about FRT procedures under the holding of the case *Brady v. Maryland*, have gained little or no traction in courts.⁸ And, to the extent that meaningful vetting of FRT reliability requires probing the details of the algorithms generating match sets, the fact that many FRT systems are proprietary creates additional trade-secret barriers to disclosure of such information.⁹ These are just some of the reasons why the adversarial adjudicatory setting is poorly structured to test the reliability of FRT used by federal investigators.

In sum, FRT is an alluring forensic tool that has the potential to accurately open otherwise unavailable investigative avenues, but also has the potential to inject a new source of error into criminal adjudication. Troublingly, the federal criminal legal system is not well-designed to smoke out questionable uses of FRT through the ordinary operation of processing criminal cases – making consideration of other means of regulation and oversight especially necessary.

⁷ See Fed. R. Crim. P. 16.

⁸ 373 U.S. 83 (1963).

⁹ See generally Rebecca Wexler, Life, Liberty, and Trade Secrets, 70 Stan. L. Rev. 1343 (2018).