

STATE OF NEW JERSEY,

Plaintiff-Petitioner,

v.

FRENCH G. LEE,

Defendant-Respondent.

SUPREME COURT OF NEW JERSEY
DOCKET NO. 090662

CRIMINAL ACTION

On Certification Granted from a Final
Judgment of the Superior Court of New
Jersey, Appellate Division.

Sat Below:

Hon. Lisa A. Firko, J.A.D.

Hon. Avis Bishop-Thompson, J.A.D.

Hon. Lorraine M. Augostini, J.A.D.

**BRIEF OF AMICI CURIAE THE WILSON CENTER FOR SCIENCE AND
JUSTICE, PROFESSORS SIMON COLE AND BRANDON L. GARRETT,
AND KATE JUDSON, ESQ.**

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STATEMENT OF AMICI CURIAE

The Wilson Center for Science and Justice at Duke Law School, and an esteemed group of concerned scientists and scholars, respectfully apply for leave to file the accompanying *amici curiae* brief in support of defendant French Lee.

The Wilson Center for Science and Justice at Duke Law brings together faculty and students at Duke University in law, medicine, public policy, and arts and sciences to pursue research, policy, and education to improve criminal justice outcomes. Their work is non-partisan and evidence-informed. The Wilson Center is devoted to identifying better ways for law enforcement to collect eyewitness, confession, forensic, and other evidence, and to enhance the ability of judges, lawyers, and jurors to understand evidence presented in court. The Center was founded and is led by Faculty Director, Professor Brandon L. Garrett, the David W. Ichel Distinguished Professor of Law, where he has taught since 2018. Garrett was previously the Justice Thurgood Marshall Distinguished Professor of Law and White Burkett Miller Professor of Law and Public Affairs at the University of Virginia School of Law. His research and teaching interests include criminal procedure, wrongful convictions, habeas corpus, corporate crime, scientific evidence, civil rights, and constitutional law. One overriding concern of his work is to safeguard the accuracy and integrity of the criminal system, including through the use of reliable scientific and expert evidence.

The individual amici are legal scholars and scientists who have devoted a substantial part of their teaching, work, research, and/or writing to criminal law and procedure, including issues pertaining to the accuracy and reliability of evidence and equity in criminal outcomes. Their work has been published by major university presses and in leading scientific and law journals. The amici consist of:

Professor Simon Cole
Professor Brandon L. Garrett
Kate Judson, Esq.
The Wilson Center for Science and Justice

Simon Cole, Ph.D. is Professor of Criminology, Law and Society at the University of California, Irvine and the author of *Suspect Identities: A History of Fingerprinting and Criminal Identification* (Harvard University Press, 2001), which was awarded the 2003 Rachel Carson Prize by the Society for Social Studies of Science, and he is co-author of *Truth Machine: The Contentious History of DNA Fingerprinting* (University of Chicago Press, 2008).

Professor Brandon L. Garrett's work with the Wilson Center for Science and Justice is described above. He is the author of eight books and is a leading scholar of criminal justice outcomes, evidence and constitutional rights.

Kate Judson, Esq. is the Executive Director of the Center for Integrity in Forensic Sciences and an attorney.

No party or counsel for a party authored the proposed amici brief in whole or in part, or made any monetary contribution intended to fund the preparation or

submission of the brief. No person or entity other than the amici curiae, their members, or their counsel in the pending appeal funded the preparation and submission of the proposed amici brief.

STATEMENT OF FACTS AND PROCEDURAL HISTORY

Amici, The Wilson Center for Science and Justice, Professors Simon Cole and Brandon L. Garrett, and Kate Judson, Esq., adopt the Statement of Facts and Procedural History contained in the Defendant-Respondent’s brief.

As the Appellate Division opinion describes, the jury convicted French G. Lee of two counts of third-degree burglary, N.J.S.A. 2C:18-2(a)(1), and the primary evidence at trial came from a forensic analyst’s testimony regarding fingerprints found at the crime scene—a Wing King restaurant—along with video footage from surveillance cameras. The Appellate Division concluded, with the benefit of guidance provided by *State v. Olenowski*, 253 N.J. 133 (2023), that the trial erred by not conducting an N.J.R.E. 104 hearing and considering the reliability of the fingerprint expert’s analysis.

The defendant had also moved, in the alternative, to preclude the State’s fingerprint analysis expert from testifying that there was a fingerprint match or identification. The court granted defendant’s motion, in part, and directed the expert to qualify his opinion “with language such as within a reasonable degree of probability as opposed to a 100[%] match.”

Defendant also requested to voir dire prospective jurors about their opinions regarding the reliability of fingerprint evidence. The court denied defendant's request. No jury instructions were provided, either, regarding fingerprint evidence or its reliability.

At trial, Lieutenant Michael Wiltsey of the Burlington County Prosecutor's Office testified on behalf of the State as an expert in the field of fingerprint collection, preservation, comparison, and identification. Wiltsey described the ACE-V methodology, which he uses to compare fingerprints, and opined that the "science of fingerprints" allows him "to determine source identification," meaning "in [his] opinion that the two prints originated from the same source." Wiltsey concluded that "all four of these latent impressions were identified as originating from the same source as the exemplars of [defendant]."

ARGUMENT

As amici, we write to encourage this Court to affirm the Appellate Division and to remand for hearings examining the reliability of this type of evidence. We describe a range of reliability-related issues that should be examined at such a hearing. And we further explore why examining the reliability of latent fingerprint comparison methods, the application of those methods and the reliability of the examiner's work, and the reliability of the conclusions reached, should be routinely and carefully examined before a criminal trial.

I. THE REASON COURTS HAVE ADMISSIBILITY STANDARDS IS TO PROTECT FACTFINDERS FROM EXPOSURE TO EXPERT EVIDENCE THAT MAY APPEAR STRONGER THAN IT ACTUALLY IS.

New Jersey courts have long carefully examined forensic evidence and taken an approach relying on scientific research to inform guidelines for courts, including regarding use of experts and jury instructions. New Jersey courts, and all United States courts, have admissibility standards—as opposed to a system of “free proof” in which all parties can introduce any evidence they want, and potentially misleading evidence will be exposed through cross examination—because of concerns that factfinders may be unable to distinguish the superficial trappings of valid expert knowledge from truly valid expert knowledge. Thus, the Supreme Court’s 1993 ruling in *Daubert v. Merrell Dow Pharmaceuticals* set out gatekeeping responsibilities for judges to assess the reliability of expert evidence. 509 U.S. 579 (1993). *Daubert* set out a series of factors for courts to consider in evaluating the admissibility of expert testimony: whether the theory or technique relied upon (1) can be (and has been) tested; (2) has been subjected to peer review and publication; (3) has a known or potential rate of error; (4) includes the existence and maintenance of standards controlling its operation; and (5) is generally accepted within the relevant scientific community. *Id.* at 593–94.

When applying the *Daubert* standard, and considering whether to admit a scientific expert, New Jersey judges address these *Daubert* factors, as a “helpful—

but not necessary or definitive—guide” when assessing the reliability of scientific or technical expert testimony. *State v. Olenowski*, 253 N.J. 133, 149 (2023); *see also In re Accutane Litigation*, 234 N.J. 340, 398 (2018) (citing *Daubert*, 509 U.S. at 593-95).

More broadly, New Jersey courts have repeatedly acted to ensure that the evidence used in criminal cases is reliable. Thus, New Jersey now provides quite detailed instructions on eyewitness evidence, based on the 2011 decision by this Court in *State v. Henderson*, informed by a large body of scientific research, and based on proceedings initially held before a special master, at the direction of the Court. 208 N.J. 208, 302 (2011). New Jersey courts have conducted such reviews regarding other types of important evidence in criminal cases, including, for example, the Alcotest system used in driving while intoxicated cases. *State v. Cassidy*, 235 N.J. 482 (2018).

We also note that on December 1, 2023, Federal Rule of Evidence 702 was amended, for the first time since 2000, and making two important changes, both of which reflected pre-existing law, but were made to address failures to correctly apply the prior text of the rule. *See Fed. R. Evid. 702 (2023 amend.)*. The first change emphasized that the burden is, and always had been, on the party seeking to introduce expert evidence to show, by a preponderance of the evidence, that it is reliable. *Id.* The second emphasized that the opinions that an expert reaches must be

grounded in reliable methods. While New Jersey has not yet adopted this quite recent amendment to the federal Rule 702, that rule was amended to reflect an abiding concern with the reliability of scientific expert evidence. Thus, the Advisory Committee notes highlight how these revisions were “especially pertinent” to forensic evidence, including regarding the need to ensure that information about error rates and limitations of methods are disclosed and considered. *Id.* at 702(d). *See also* Memorandum from the Chair of the Committee on Rules of Practice and Procedure to the Clerk of the Supreme Court 227 (Oct. 19, 2022), found at https://www.uscourts.gov/sites/default/files/2022_scotus_package_0.pdf. Because those changes were both made to reflect what was already the law under Rule 702, and simply to reemphasize their importance, they are relevant regardless of when or whether a state decides to amend its Rule 702 to reflect those changes.

In this case, instead of showing how fingerprint evidence satisfies the application admissibility standard (the “*Daubert* standard”), the State proposes that an exception to the admissibility standard be bestowed up fingerprint evidence on the basis of around a century of use in criminal trials.

II. THE APPELLATE DIVISION CORRECTLY FOUND THAT THE TRIAL COURT ERRED IN RELYING SOLELY ON “HISTORICAL ACCEPTANCE” BY COURTS TO SATISFY THE *DAUBERT* STANDARD.

While courts have historically accepted fingerprint evidence in criminal cases in the United States, they did so during an extended pre-*Daubert* time period when

there were no reliability-based rules for screening scientific evidence presented by experts. Indeed, many jurisdictions lacked written rules of evidence. During this time, scientific research on fingerprint evidence was also in its infancy. Just as early rulings on since-discredited types of evidence such as suggestive eyewitness identifications, voice comparisons, and hypnosis-induced statements no longer stand on firm precedential or scientific ground, we should view with care quite dated rulings on forensics. Longstanding use in criminal trials cannot constitute the sole, or even a significant, basis for a finding of validity under *Daubert* for a variety of reasons. Simon A. Cole, *Grandfathering Evidence: Fingerprint Admissibility Ruling from Jennings to Llera Plaza and Back Again*, 41 Am. Crim. L. Rev. 1189, 1224 (2004).

A. The Appellate Division correctly stated “that in science, the repetition of authority does not automatically establish reliability.”

The notion that “historical acceptance” constitutes scientific validity (or “reliability”) is antithetical to science. The history of science is riddled with examples of beliefs about the natural world that were held for centuries but no longer are. The geocentric model of the universe and the belief that the Earth’s continents are fixed in place are two well-known examples. As just one example of the expression of this fundamental idea, in a 2003 essay, physicist Robert Park listed “the discoverer says a belief is credible because it has endured for centuries” as one

his “seven warning signs of bogus science.” Robert L. Park, *The Seven Warning Signs of Bogus Science*, 49 *Chron. of Higher Educ.*, Jan. 31, 2003, at B20.

B. Most of this “historical acceptance” predated *Daubert* and therefore did not constitute inquiries into scientific validity of fingerprint evidence.

It is also important to note that the “historical acceptance” of fingerprint evidence by courts began around 1910-11, well before either of the admissibility standards with which we are today familiar (*Frye* and *Daubert*) were in place. At the time, expert evidence was governed by the looser “marketplace test”—if an expert could sell their expertise in the marketplace, then it was of value to the courts. Michael J. Saks, *Merlin and Solomon: Lessons from the Law's Formative Encounters with Forensic Identification Science*, 49 *Hastings Law Journal* 1069 (1998). These early, pre-*Frye* published decisions found fingerprint evidence admissible primarily on two grounds: (1) all fingerprints are unique; and (2) authorities say fingerprint evidence is reliable. Gary Edmond et al., *Admissibility Compared: The Reception of Incriminating Expert Opinion (i.e. Forensic Science) Evidence in Four Adversarial Jurisdictions*, 3 *U. Denver Crim. L. Rev.* 31, 42 (2013).

1. The friction ridge discipline itself now holds that the uniqueness of human friction ridge skin does not vouch for the accuracy of fingerprint examination.

The fallacious reasoning that the reliability of a forensic technique can be

inferred from the supposed “uniqueness” of its target object has been widely criticized. See, e.g., Michael J. Saks & Jonathan J. Koehler, *The Individualization Fallacy in Forensic Science Evidence*, 61 Vand. L. Rev. 199 (2008); Simon A. Cole, *Forensics without Uniqueness, Conclusions without Individualization: The New Epistemology of Forensic Identification*, 8 Law, Probability and Risk 233 (2009). (To illustrate the flaw in reasoning: consider if eyewitness identification were thought to be 100% reliable because of the uniqueness of human faces.). Academic criticisms notwithstanding, today this position is reflected in the guidelines adopted by the United States Department of Justice. Department of Justice, *Approved Uniform Language for Testimony and Reports for the Forensic Latent Print Discipline*, 3 (2018), available at <https://www.justice.gov/file/1037171/download> (“an examiner shall not . . . assert that a ‘source identification’ or a ‘source exclusion’ conclusion is based on the ‘uniqueness’ of an item of evidence.”)).

2. **It is problematic to rely on authorities stating that fingerprint evidence is reliable, and, in any case, many authorities now question its reliability.**

Relying on authorities’ approval is simply another version of the “historical acceptance” argument discussed above. One reason for this is that prior to, and even after *Daubert*, most judges have simply assumed the validity of all forensic evidence. This judicial perspective was candidly described by federal Judge Harry Edwards,

who served as Co-Chair of a National Research Council committee that produced the important 2009 report *Strengthening Forensic Science in the United States*:

I started this project with no preconceived views about the forensic science community. Rather, I simply assumed, as I suspect many of my judicial colleagues do, that forensic science disciplines typically are well-grounded in scientific methodology and that crime laboratories and forensic science practitioners follow proven practices that ensure the validity and reliability of forensic evidence offered in court. I was surprisingly mistaken in what I assumed.

Harry T. Edwards, *Solving the Problems that Plague the Forensic Science Community*, Forensic Science for the 21st Century (2009).

In any case, however, the state of approval among relevant scientific authorities has changed greatly since the pre-*Frye* days in which courts relied on authorities like the *Encyclopedia Britannica*, *Nelson's Encyclopedia*, *Gross's Criminal Investigation*, *Fuld's Police Administration*, and *Osborn's Questioned Documents* to find fingerprint evidence admissible. *People v. Jennings*, 96 N.E. 1077, 1081 (Ill. 1911). Today, numerous reports by government agencies and scientific institutions have questioned the assumed validity of fingerprint evidence, as we discuss in the next sections.

C. Only after *Daubert*, when courts began holding admissibility hearings on fingerprint evidence, did courts begin to be exposed to evidence beyond uniqueness and appeal to authority.

Only when the *Daubert* decision prompted courts to look anew at fingerprint

evidence did courts begin to explore beyond the supposed pillars of the uniqueness of friction ridge skin and the approval of published authorities. Indeed, it is important to note that in the first challenge to the admissibility of fingerprint evidence under *Daubert*, in *United States v. Mitchell*, 365 F.3d 215 (3d Cir. 2004), the defendant offered to stipulate to the uniqueness of human friction ridge skin. *United States v. Mitchell*, Memorandum of Law in Support of Mr. Mitchell's Motion to Exclude the Government's Fingerprint Evidence, No. 96-407 (E.D. Pa 1999); Simon A. Cole, *Is Fingerprint Identification Valid? Rhetorics of Reliability in Fingerprint Proponents' Discourse*, 28 Law and Policy 109, 118 (2006). *Daubert* challenges to fingerprint evidence were never challenges to uniqueness, but rather to the claimed reliability of fingerprint identification by human examiners.

Over the course of two decades of admissibility hearings over fingerprint evidence, the content of these hearings and the resulting decisions extended far beyond debates about uniqueness and the citation of authorities. Courts grappled with, for example, the absence of any evidence about the accuracy, and then, with the first accuracy studies; emerging psychological studies of the effects of contextual bias on fingerprint examination; and the publication of assessments of fingerprint evidence by government and scientific institutions.

D. This evidence included:

1. Evidence about accuracy

Until 2011— that is, exactly a century after the first published decision finding fingerprint evidence admissible in a United States court— no properly designed studies of the accuracy of fingerprint analysis had been conducted. In 2011, at least one such study was published. Bradford Ulery et al., *Accuracy and Reliability of Forensic Latent Fingerprint Decisions*, 108 Proceedings of the National Academy of Sciences 7733 (2011). Igor Pacheco et al., *Miami-Dade Research Study for the Reliability of the ACE-V Process: Accuracy and Precision in Latent Fingerprint Examinations*, Final Technical Report (Dec., 2014). While the design and results of these studies have been hotly debated, they gave courts some evidence about accuracy to consider during admissibility proceedings.

2. Evidence about cognitive bias

A body of studies have shown that there are real risks of error in forensic techniques, including in fingerprint comparisons, when examiners are given contextual information, including that about judgments by other experts. Itiel E. Dror, David Charlton, Ailsa E. Peron, Contextual Information Renders Experts Vulnerable to Making Erroneous Identifications, 74 *Forensic Sci. Int'l.* 156 (2006).

3. Assessments of fingerprint evidence by scientific and government institutions

A range of forensic methods were powerfully impacted by the report released by the National Academy of Sciences in 2009, detailing the strengths and limitations of a wide array of traditional, non-DNA, forensic disciplines. As a district judge put it, in summarizing what changed beginning in 2009 after that report was released:

For much of the past century, forensic sciences, including toolmark evaluation and fingerprint comparison, have been widely accepted in and out of court. More recently, owing in part to the emergence of DNA analysis and the resulting exonerations, reports and studies have called into question these forensic disciplines. In 2009, the National Research Council, a division of the National Academy of Science, issued a report critical of the state of the forensic sciences, including toolmark and fingerprint comparison.

United States v. Cloud, 576 F. Supp. 3d 827, 835 (E.D. Wash. 2021).

The 2009 NAS report, Strengthening Forensics Science in the United States: A Path Forward (2009), found at <https://www.ojp.gov/pdffiles1/nij/grants/228091.pdf>, reached a series of specific conclusions regarding fingerprint expert evidence. The report stated that: “the ACE-V method does not specify particular measurements or a standard test protocol,” and as a result, “examiners must make subjective assessments throughout.” NAS Report, *supra*, at 139. The report explained:

ACE-V provides a broadly stated framework for conducting friction ridge analysis. However, this framework is not specific enough to qualify it as a

validated method for this type of analysis. ACE-V does not guard against bias, is too broad to ensure repeatability and transparency, and does not guarantee that two analysts following it will obtain the same results. For these reasons, merely following the steps of ACE-V does not imply that one is proceeding in scientific manner or producing reliable results.

Id. at 142.

The ACE-V method does not “qualify as a validated method for this type of analysis.” *Id.* at 142. The report noted that “claims that these analyses have zero error rates are not scientifically plausible.” *Id.* at 142. In response, several weeks after the 2009 NAS Report, the International Association for Identification, a leading professional organization of fingerprint examiners, issued guidance that no such claims of infallibility should be made. Memorandum from Robert Garrett, President, Int’l Assoc. for Identification, to All Members of the Int’l Assoc. for Identification (Feb. 19, 2009), found at http://www.iniai.org/uploads/7/3/0/1/73017799/2009_issue_1.pdf.

Although no studies had been conducted of the reliability of fingerprint examiner’s work at the time of the 2009 NAS Report, that began to change in response to the report. A 2011 FBI study aimed at assessing false positive and negative rates among fingerprint examiners used realistic fingerprint samples given to experienced examiners. In this landmark first such study to be conducted, the authors reported six false positive identifications among 3,628 non-matching pairs,

as well as far more false negative identifications. *Id.* This study provided the field with some information about error rates, at least under test conditions

By the time of the 2016 President’s Council of Advisors on Science and Technology (PCAST) Report, the 2011 FBI Study could be considered as part of a new assessment of the state of fingerprint evidence. *See* Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature, Companion Methods (2016), found at <https://obamawhitehouse.archives.gov/blog/2016/09/20/pcast-releases-report-forensic-science-criminal-courts>. The 2016 PCAST report examined fewer forensic methods than the 2009 NAS Report, but it evaluated methods, including fingerprint comparisons, in far greater detail. Further, since 2009, the field had produced additional research in addition to addressing some concerns regarding conclusion testimony. As the federal district judge in *Cloud* observed:

[I]n 2016, the President’s Council of Advisors on Science and Technology, or “PCAST,” issued another report on the state of forensic sciences, aimed at identifying any “additional steps on the scientific side, beyond those already taken” in the wake of the 2009 National Research Council report, “that could help ensure the validity of forensic evidence used in the Nation’s legal system.”

The PCAST Report focused more specifically on the testing and validation of forensic methods: “the need to evaluate specific forensic methods to determine whether they have been scientifically established to be valid and reliable.” *Cloud*, 576 F. Supp. 3d at 835. The Report highlighted that for any method, one needs to

know how reliable the particular expert is, through demanding and realistic proficiency tests. Yet, such testing is typically not done. In addition, the PCAST Report emphasized that for any forensic discipline studies must exist to evaluate the accuracy of the method itself. PCAST concluded that there was “foundational validity” to fingerprint work, because more than one black box study, using realistic materials, had been conducted in the field. Two such studies had been conducted, although one was quite small. PCAST Report, *supra*, at 9-10.

The PCAST Report concluded, in examining the findings of the 2011 FBI study as well as a second and smaller study done by the Miami-Dade police department that also sought to study fingerprint examiner error rates using realistic samples: “The false-positive rate could be as high as 1 error in 306 cases based on the FBI study and 1 error in 18 cases based on a study by another crime laboratory.” *Id.* And PCAST emphasized that such information about error rates should be reported to factfinders, who may otherwise assume that a method is infallible. The PCAST Report emphasized: “In reporting results of [a] latent-fingerprint examination, it is important to state the false-positive rates based on properly designed validation studies.” *Id.* at 9-10.

The fact that error rates exist in fingerprint analysis was nothing new, when PCAST conducted its inquiry, although the two studies PCAST focused on were a then-recent development. Proficiency studies in fingerprinting have been conducted

since the 1970s. Commercial proficiency tests in the mid-1990s attracted widespread attention because of the large number of participants who made errors on the tests. Brandon L. Garrett and Gregory Mitchell, *The Proficiency of Experts*, 166 U. Penn. L. Rev. 901 (2018) (describing results of 1990s latent fingerprint proficiency tests). Those tests were not designed to assess error rates in general, but they made clear that errors do occur, at a time when latent fingerprint examiners claimed infallibility and that the technique had a reported error rate of “zero.” See Jonathan J. Koehler, *Fingerprint Error Rates and Proficiency Tests: What They Are and Why They Matter*, 59 HASTINGS L.J. 1077, 1077 (2008); Simon A. Cole, *More Than Zero: Accounting for Error in Latent Fingerprint Identification*, 95 J. CRIM. L. & CRIMINOLOGY 985, 1043, 1048 (2005); see also, e.g., *United States v. Havvard*, 117 F. Supp. 2d 848, 854 (S.D. Ind. 2000), *aff’d*, 260 F.3d 597 (7th Cir. 2001).

In September 2017, the American Association for the Advancement of Science (AAAS) published an extensive report, reviewing fingerprint evidence methods more broadly, and discussing the language that examiners use to express their conclusions. The AAAS concluded: “Courtroom testimony and reports stating or even those implying that fingerprints collected from a crime scene belong to a single person are indefensible and lack scientific foundation.” Anne Q. Hoy, *Fingerprint Source Identity Lacks Scientific Basis for Legal Certainty: More Research into Validity of Fingerprint Comparisons Needed, Forensic Report Says*,

AAAS (Sept. 15, 2017). The report explained that examiners: “should acknowledge: (1) that the conclusions being reported are opinions rather than facts (as in all pattern-matching disciplines), (2) that it is not possible for a latent print examiner to determine that two friction ridge impressions originated from the same source to the exclusion of all others; and (3) that errors have occurred in studies of the accuracy of latent print examination.” AAAS Report, *supra*, at 11.

a. The State’s characterization of the PCAST and NRC reports as pertaining to weight, not admissibility, is incorrect.

The State’s Petition for Certification incorrectly claims that the PCAST and NRC reports pertain only to the weight of fingerprint evidence, not its admissibility:

Even if the PCAST and NAS Reports could be read to “cast doubt on the error rate of fingerprint analysis and comparison,” those critiques “go to the weight that ought to be given fingerprint analysis, not to the legitimacy of the practice as a whole,” such that “[t]he science could not possibly have been so unreliable as to be inadmissible” (State Pet. at 14).

In its crucial discussion of how its concept of “validity as applied” should be applied to fingerprint evidence, the PCAST report begins its discussion by saying “To address these matters, *courts* should take into account several key considerations” (p.101 (emphasis added)). Had the drafters of the PCAST report thought these points pertained only to weight, not admissibility, they would have used the term “factfinders,” rather than “courts.”

As for the NRC (or “NAS”) report, the State’s claim is a common one made in briefs opposing the holding of admissibility hearings: that the NRC committee’s Co-Chair, Judge Harry Edwards’s perfectly reasonable disclaimer stating that the report was not determinative of how admissibility should be decided “in a particular case” amounted to a claim that “the report is not intended to affect the admissibility of any forensic evidence.” Statement of Judge Harry T. Edwards, Co-Chair, Committee on Identifying the Needs of the Forensic Science Community, Committee on the Judiciary, United States Senate (Mar. 18, 2009); *United States v. Faison*, 393 Fed. App’x. 754 (2010); *see also United States v. Rose*, 672 F.Supp.2d 723, 725 (D. Md. 2009); *United States v. Cerna*, 2010 WL 3448528 (N.D. Cal. 2010).

In response to such claims, Judge Edwards described such arguments as:

A blatant misstatement of the truth. I have never said that the Committee’s Report is “not intended to affect the admissibility of forensic evidence” ... To the degree that I have commented on the effect of the Report on admissibility determinations, I have said something quite close to the opposite of what these briefs assert.

Harry T. Edwards, The National Academies of Sciences Report on Forensic Sciences: What it Means for the Bench and the Bar, 51 JURIMETRICS 1 (2010).

E. Therefore, the State’s claim that there has not been a “change in scientific understanding of fingerprint reliability” is incorrect.

The State’s claim that there has been no “change in scientific understanding of fingerprint reliability” since the cases that constitute the courts’ “historical

acceptance” of fingerprint evidence that supposedly justifies granting an exception to the admissibility standard is grossly overstated. A great deal has changed since the cases which constitute “historical acceptance.” As noted, accuracy studies have been conducted and published. Contextual bias studies have been conducted and published. Itiel E. Dror & David Charlton, *Why Experts Make Errors*, 56 J. FORENSIC IDENTIFICATION 600 (2006); Itiel E. Dror et al., *Contextual Information Renders Experts Vulnerable to Making Erroneous Identifications*, 156 FORENSIC SCI. INT'L 74 (2006). Statistical models for assigning probative value to fingerprint associations have been developed and published. *See, e.g.* Henry Swofford, Cristophe C. Champod, A. Koertner, Heidi Eldridge, Jeff Salyards, *A Method For Measuring The Quality Of Friction Skin Impression Evidence: Method Development and Validation*, 320 Forensic Sci Int. (2021). Government and scientific institutions have conducted and published extensive assessments of state of fingerprint. The first-ever official standards for fingerprint examination have been adopted and published. E.g., ASB Standard 015, Standard for Examining Friction Ridge Impressions, First Edition (2024), at https://www.aafs.org/sites/default/files/media/documents/015_Std_e1.pdf. Errors involving fingerprint examination have been exposed and made public. *See* OFFICE OF THE INSPECTOR GEN. OVERSIGHT & REVIEW DIV., A REVIEW OF THE FBI’S HANDLING OF THE BRANDON MAYFIELD CASE (2006). As noted, the fingerprint discipline has changed its advice to

fingerprint examiners about how to testify. Memorandum from Robert Garrett, President, Int'l Assoc. for Identification, to All Members of the Int'l Assoc. for Identification (Feb. 19, 2009), found at http://www.iniai.org/uploads/7/3/0/1/73017799/2009_issue_1.pdf.

1. Early *Daubert* hearings relied on arguments that are now disavowed by the friction ridge discipline.

Therefore, the information available to courts in *Daubert* hearings has changed over time. Some information and arguments that courts relied on in early admissibility proceedings are no longer accepted even by the parties that initially proposed them. The most obvious example is the “zero error rate” claim that was forcefully promoted by the government in the early admissibility proceedings. Simon A. Cole, *More Than Zero: Accounting for Error in Latent Fingerprint Identification*, 95 *Journal of Criminal Law and Criminology* 985 (2005). Courts credited and relied on this claim in finding fingerprint evidence admissible under *Daubert*. *United States v. Havvard*, 260 F.3d 597 (7th Cir. 2001); *United States v. Havvard*, 117 F.Supp.2d 848 (S.D. Ind. 2000). However, this position is no longer held either by federal prosecutors, Department of Justice, *Approved Uniform Language for Testimony and Reports for the Forensic Latent Print Discipline*, 3 (2018), at <https://www.justice.gov/file/1037171/download>; Department of Justice, *Supporting Documentation for Department of Justice Proposed Uniform Language for Testimony and Reports for the Forensic Latent Print Discipline*, 15 (2016), or by

the friction ridge discipline. ASB Standard for Friction Ridge Conclusions, ASB Standard 013 (2021), at https://www.aafs.org/sites/default/files/media/documents/013_Std_Ballot02_Redline.pdf.

F. The State even cynically appeals to fingerprint evidence’s winning record in admissibility determinations as a reason not to hold an admissibility hearing.

The previous section illustrates the reason for the problem with the State’s appeal to fingerprint evidence’s *Daubert* “wins” as evidence of its validity. Many of those “wins” were achieved on the basis of arguments (like “zero error rate”) that are no longer even held by prosecutors or the friction ridge discipline itself. The State’s appeal to *Daubert* wins is reminiscent of arguments made during the earliest *Daubert* challenges around the turn of the 21st century when the fingerprint discipline touted its winning *Daubert* “record” as evidence of the technique’s reliability. Simon A. Cole, *Grandfathering Evidence: Fingerprint Admissibility Ruling from Jennings to Llera Plaza and Back Again*, 41 Am. Crim. L. Rev. 1189, 1275 (2004). Such arguments served only to highlight the lack of scientific validity studies of fingerprint examination.

Even setting these points aside, we note the irony of the State’s citing of fingerprint evidence’s record of *Daubert* “wins” as a supposed reason for this Court to overturn the Appellate Division’s order to hold such a hearing. If “victory” is so likely, what is concern with holding a hearing? The State’s Petition offers no

compelling answer to the question posed in the preceding section. The State's remaining argument is about the supposed "enormous resources" that a *Daubert* hearing would require. These claims may be exaggerated, given what is involved in holding pre-trial hearings on a range of evidentiary issues in typical criminal cases.

III. The Court should uphold the Appellate Division's refusal to create a proposed "century exception" for evidence that has been used by courts for a long time.

The Appellate Division rejected the request that it create what we might call a "century exception," allowing expert disciplines that have been in regular use in the court for a century to be exempt from the admissibility standard that binds all other expert evidence used in New Jersey courts. The State's Petition to this Court offers no compelling reason to disturb that decision. Creating such an exception would create perverse incentives not only for fingerprint evidence but for other forms of expert evidence that courts often rely upon. Many decades of pre-*Daubert* rulings, relying on outdated or nascent methods do not provide a useful guide today, when we have more scientific research and more focused evidentiary standards for assessing the reliability of experts.

CONCLUSION

In conclusion, we agree with the Appellate Division that it is important to conduct hearings to examine the reliability of forensic evidence like fingerprint evidence. There are a range of important reliability-related issues, from the methods

used (including the documented steps followed and the potential role of cognitive bias), to the application of those methods, to the proficiency of the expert, to the manner in which conclusions were expressed. Further, other remedies should be considered at that hearing, including limiting testimony and jury instructions.

Respectfully submitted,

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