# THE PARADIGM SHIFT IN THE PROPOSED AMENDMENT TO FEDERAL RULE OF EVIDENCE 702

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#### INTRODUCTION

Federal Rule of Evidence 702 empowers trial courts to act as "gatekeepers" to exclude unreliable expert testimony. In practice, a litigant can use Rule 702 to attack an opposing party's expert witnesses—either by motion or by objection—to preclude those witnesses from offering technical opinions. Because experts play such a critical role in many cases (often coming down to a "battle of the experts"), these motions or objections can have profound consequences on the outcome of a case. Rule 702 provides the requirements for admissible expert testimony:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
  - (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.<sup>2</sup>

Nevertheless, this gatekeeping function is inconsistent among the federal circuits. Courts tend to allow expert testimony into evidence more often than they reject such testimony.<sup>3</sup> By and large, judges will state that an attack on

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<sup>&</sup>lt;sup>1</sup> FED. R. EVID. 702 advisory committee's note to 2000 amendment (citing Daubert v. Merrell Dow Pharms., Inc. 509 U.S. 579 (1993)).

<sup>&</sup>lt;sup>2</sup>FED. R. EVID. 702.

<sup>&</sup>lt;sup>3</sup> See infra Section I.B.

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an expert's opinions goes more towards weight than admissibility.<sup>4</sup> This tendency is especially pronounced when the motion or objection goes to the conclusion that an expert reaches. For example, a forensic expert who compares fingerprints might conclude that a sample definitively matches the defendant's fingerprint. Even though fingerprint analysis has a non-zero error rate, courts generally permit the expert to offer this conclusion, allowing the expert to overstate the conclusion the analysis supports.<sup>5</sup>

For example, in *United States v. Watkins*, the government's fingerprint expert testified that "the error rate for identification is zero." The defendant argued that the district court should not have allowed this testimony at trial because fingerprint identification *does* have a non-zero error rate. The appellate court affirmed, focusing on the reliability of the methodology alone. But even if her methodology is reliable, the methodology does not support the conclusion that there is a zero rate of error. In effect, the expert was allowed to overstate her conclusion to make it seem more reliable to the jury than it truly is.

Such a permissive view of expert testimony effectively assumes that expert opinions are admissible unless the methodology used is patently unreliable. In the most egregious instances, courts even presume admissibility and place the burden on the *opponent* to demonstrate a lack of

<sup>&</sup>lt;sup>4</sup>See, e.g., United States v. Shea, 211 F.3d 658, 668 (1st Cir. 2000) ("[A]ny flaws in [an expert]'s application of an otherwise reliable methodology went to weight and credibility and not to admissibility."); Puga v. RCX Sols., Inc., 922 F.3d 285, 294 (5th Cir. 2019) ("As a general rule, questions relating to the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility.").

<sup>&</sup>lt;sup>5</sup>See, e.g., United States v. Straker, 800 F.3d 570, 631 (D.C. Cir. 2015) (affirming admission of fingerprint expert testimony even though the expert did not articulate a human error rate and claimed her methodology has a "zero rate of error"); United States v. Havvard, 260 F.3d 597, 599 (7th Cir. 2001) (affirming admission of expert testimony that two fingerprints "matched" despite recognizing the non-zero error rate of fingerprint comparisons).

<sup>&</sup>lt;sup>6</sup>450 F. App'x 511, 515 (6th Cir. 2011).

 $<sup>^{7}</sup>Id$ .

<sup>&</sup>lt;sup>8</sup> Id. ("[A]ssuming arguendo that the ACE-V method is not error-free, the fact that the fingerprint examiner testified that it was 100% accurate does not by itself mean that the district court erred in determining that the ACE-V method was scientifically valid." (emphasis added)).

reliability. But the burden has always rested exclusively on the *proponent* to persuade the judge of reliability by a preponderance of proof. <sup>10</sup>

Recognizing this inconsistency, the Advisory Committee on Evidence Rules (Committee) proposed an amendment to Rule 702 in May 2021. The Committee last revised the proposed amendment and accompanying note in mid-2022. If approved, the amendment can take effect as early as December 1, 2023. The proposal makes the following changes:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent demonstrates to the court that it is more likely than not that:

<sup>9</sup> See, e.g., In re Zyprexa Prods. Liab. Litig., 489 F. Supp. 2d 230, 282 (E.D.N.Y. 2007) ("Since 'Rule 702 embodies a liberal standard of admissibility for expert opinions,' the assumption the court starts with is that a well-qualified expert's testimony is admissible." (quoting Nimely v. City of New York, 414 F.3d 381, 395–96 (2d Cir. 2005))); Martinez v. Porta, 598 F. Supp. 2d 807, 812 (N.D. Tex. 2009) ("Expert testimony is presumed admissible...."); United States v. McCluskey, 954 F. Supp. 2d 1224, 1238 (D.N.M. 2013) ("The presumption under the Rules is that expert testimony is admissible." (quoting 4 JACK B. WEINSTEIN & MARGARET A. BERGER, WEINSTEIN'S FEDERAL EVIDENCE, § 702.02[1] (Mark S. Brodin, ed., Matthew Bender & Company, Inc. 2d ed. 1997))).

 $^{10}$ Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 592 n.10 (1993); FED. R. EVID. 702 advisory committee's note to the 2000 amendment.

11 See generally Preliminary Draft, Proposed Amendments to the Federal Rules of Appellate, Bankruptcy, Civil and Criminal Procedure and the Federal Rules of Evidence (2021),

https://www.uscourts.gov/sites/default/files/preliminary\_draft\_of\_proposed\_amendments\_2021.pd f.

<sup>12</sup>SUPREME COURT PACKAGE 248 [hereinafter PROPOSED AMENDMENT] (2022), https://www.uscourts.gov/sites/default/files/2022\_scotus\_package\_0.pdf. The Committee's revision to the amendment is not significantly different from its initial proposal. The Committee summarized the extensive public comments and hearings that it considered when it made changes to the amendment. COMMITTEE ON RULES OF PRACTICE AND PROCEDURE 895–1009 (2022), https://www.uscourts.gov/sites/default/files/2022-

06\_standing\_committee\_agenda\_book\_final.pdf.

<sup>13</sup> See Rules Enabling Act, 28 U.S.C. §§ 2071–2077. When the Advisory Committee on Evidence Rules approves a proposed amendment after considering public comments, the amendment proceeds to the Standing Committee and the Judicial Conference. *Id.* § 2073(b). As of this writing, the Standing Committee and Judicial Conference have approved the proposed amendment to Rule 702 as reproduced in this article. PROPOSED AMENDMENT, *supra* note 12, at 1. Thus, if the Supreme Court adopts the proposed amendment and transmits it to Congress by May 1, 2023, the amendment can take effect as early as December 1, 2023. *Id.*; *see* 28 U.S.C. § 2074.

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- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
  - (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods: and
- (d) the expert has reliably applied expert's opinion reflects a reliable application of the principles and methods to the facts of the case. 14

The first edit corrects the mistaken view of many courts that expert testimony is presumptively admissible. The language of the rule and the accompanying note clarify that the proponent must convince the judge, by a preponderance of the evidence, that the opinion satisfies all prongs of Rule 702.15 The second edit—concerning subdivision (d)—addresses courts' tendency to overrule objections raised against an expert's conclusions. The proposed amendment will explicitly require courts to reject an expert's testimony when the methodology does not support the conclusion. Even if the methodology is reliable, if the methodology supports an opinion within a certain rate of error, the expert may not overstate the analysis. The expert's conclusions are limited to what a reliable application of the methodology allows.

Because many courts have taken a more permissive view than what Rule 702 requires, these changes, if approved, will precipitate a paradigm shift in how judges and litigants handle expert testimony moving forward. Whereas before, when the proponent of the expert could be more confident that the court would allow the expert's testimony, this amendment will make it easier for opponents to exclude such testimony. Likewise, litigants relying on overstated conclusions, like in criminal prosecutions, would need to rethink the strength of their case and whether to proceed to trial. Although the proposed amendment may have profound effects in practice, it does not substantively change the law of Rule 702. Rather, this shift makes the trial court more clearly the "gatekeeper" to exclude unreliable expert testimony, which has been the law for decades.

This article will first address the purpose of Rule 702 and how the Committee has sought to solidify the trial judge's role as the "gatekeeper"

<sup>&</sup>lt;sup>14</sup>PROPOSED AMENDMENT, supra note 12, at 241–42 (new material is underlined; omitted material is lined through).

<sup>15</sup> Id. at 241, 248.

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for expert opinions. This article will then track how the federal circuits have deviated from that purpose by allowing a more permissive view of expert testimony. Finally, this article will explain how the proposed amendment would affect how judges and practitioners approach expert testimony admissibility in future litigation.

#### I. CURRENT STATE OF THE LAW UNDER RULE 702

# A. Origins of the Gatekeeping Function of Rule 702

#### 1. Judicial Precedent

# a. The Frye Test

Under modern Supreme Court precedent, Rule 702 positions the trial judge as a "gatekeeper" for expert testimony. But before the current formulation, the "general acceptance" test was the leading standard for expert testimony admissibility across the country for most of the twentieth century. The Court of Appeals for the District of Columbia first articulated this test in *Frye v. United States*. Under *Frye*, an expert opinion must be based on a "well-recognized scientific principle or discovery" that has "gained general acceptance in the particular field in which it belongs. Thus, in *Frye*, because the systolic blood pressure deception test at issue had "not yet gained such standing and scientific recognition among physiological and psychological authorities," the court affirmed exclusion of the expert's testimony.

### b. Daubert and the Federal Rules of Evidence

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, the Supreme Court reconsidered the test for the admissibility of expert testimony.<sup>20</sup> The trial court granted the defendant's motion for summary judgment because the unpublished scientific opinions of the plaintiffs' experts were not "generally

<sup>&</sup>lt;sup>16</sup> Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 585 (1993).

<sup>17293</sup> F. 1013 (D.C. Cir. 1923).

<sup>18</sup> Id. at 1014.

<sup>&</sup>lt;sup>19</sup> *Id*.

<sup>20 509</sup> U.S. at 582.

accepted," as required under *Frye*.<sup>21</sup> However, in 1975, between *Frye* and *Daubert*, the Federal Rules of Evidence became law.<sup>22</sup> The original version of Rule 702 simply read, "If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise."<sup>23</sup> As the Court noted, this rule imposes no "general acceptance" requirement.<sup>24</sup> The Court held that Rule 702 supersedes *Frye*; thus, expert testimony admissibility depends on Rule 702.<sup>25</sup>

The *Daubert* Court further held that the language of Rule 702 "establishes a standard of evidentiary reliability." Rule 702 requires the trial judge to determine "whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue." The Court reasoned that "scientific knowledge" means "a grounding in the methods and procedures of science" that is "more than subjective belief or unsupported speculation." Consequently, evidentiary reliability—"trustworthiness"—depends on whether the evidence is scientifically valid, which is whether "the principle support[s] what it purports to show." but the standard of evidence is scientifically valid, which is whether "the principle support[s] what it purports to show."

While the Court declined to establish a definitive checklist or test, it articulated several factors for judges to consider when making this determination.<sup>30</sup> These factors include whether the theory or technique can be tested, whether the theory or technique has been subject to peer review and publication, the known or potential rate of error, the existence of standards controlling the technique's operation, and whether the theory or technique has gained general acceptance in the relevant community.<sup>31</sup> In

<sup>&</sup>lt;sup>21</sup> Id. at 583-84.

<sup>&</sup>lt;sup>22</sup>An Act to Establish Rules of Evidence for Certain Courts and Proceedings, Pub. L. No. 93-595, § 1, 88 Stat. 1926, 1937 (1975) (before 2000 amendment).

<sup>23</sup> Id.

<sup>&</sup>lt;sup>24</sup>Daubert, 509 U.S. at 588.

<sup>&</sup>lt;sup>25</sup>Id. at 586–87.

<sup>&</sup>lt;sup>26</sup> Id. at 590.

<sup>&</sup>lt;sup>27</sup> Id. at 592.

<sup>&</sup>lt;sup>28</sup>*Id*. at 590.

<sup>&</sup>lt;sup>29</sup> Id. at 590 n.9.

<sup>30</sup> Id. at 593-94.

<sup>&</sup>lt;sup>31</sup>Id. The Court arrived at these factors in part by considering what makes "good science." See id. Unsurprisingly, then, the *Daubert* factors share some similarities with the scientific method.

effect, the *Frye* "general acceptance" inquiry did not disappear completely; rather, the Court demoted it from being the *sole* test for expert testimony admissibility to being one of many factors that the judge may consider.

The *Daubert* Court did not look at Rule 702 alone. The Court considered the interplay of other rules in the Rule 702 inquiry.<sup>32</sup> Relevant to this discussion are Rules 104(a) and 403. First, the Court made clear that admissibility under Rule 702 is a preliminary question of admissibility governed by Rule 104(a).<sup>33</sup> This means that the trial judge must assess whether expert testimony is reliable by a preponderance of the evidence.<sup>34</sup> Accordingly, the judge must find that expert testimony is *not* admissible unless the proponent can prove that the testimony is more likely than not reliable.

Second, the *Daubert* Court observed the special force that Rule 403 has on the Rule 702 inquiry:

Rule 403 permits the exclusion of relevant evidence "if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury . . . ." Judge Weinstein has explained: "Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it. Because of this risk, the judge in weighing possible prejudice against probative force under Rule 403 of the present rules exercises more control over experts than over lay witnesses."<sup>35</sup>

Because jurors have a harder time evaluating expert opinions, the trial judge has a tremendous responsibility to ensure that the jury hears only reliable expert testimony—even at the risk of "prevent[ing] the jury from

Nevertheless, as the Court would make clear in *Kumho Tire*, the Rule 702 inquiry is not limited to scientific testimony. *See infra* Section I.A.1.d.

<sup>32</sup> Daubert, 509 U.S. at 595.

<sup>33</sup> Id. at 592.

<sup>&</sup>lt;sup>34</sup> Id. at 592 n.10 (citing Bourjaily v. United States, 483 U.S. 171, 175–76 (1987)).

<sup>&</sup>lt;sup>35</sup> *Id.* at 595 (first quoting FED. R. EVID. 403 (before 2011 amendment); and then quoting Jack B. Weinstein, *Rule 702 of the Federal Rules of Evidence Is Sound; It Should not Be Amended*, 138 F.R.D. 631, 632 (1991)).

learning of authentic insights and innovations."<sup>36</sup> Thus, the *Daubert* Court recognized that Rule 702 creates a "gatekeeping role for the judge."<sup>37</sup>

Importantly, the language of *Daubert* seems to imply that the Rule 702 inquiry is limited to an expert's principles and methodology: "The focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." Indeed, many courts have read *Daubert* this way to allow into evidence expert conclusions untethered to otherwise reliable methodologies. However, when the Court later revisited this quote, the Court clarified that interpreting *Daubert* in this manner is improper.

# c. Joiner and Expert Conclusions

A few years after *Daubert*, the Court explained that this gatekeeping function should filter out not only unreliable methodologies but also unreliable expert conclusions. In *General Electric Co. v. Joiner*, the plaintiff sued General Electric for manufacturing machines that exposed him to certain hazardous chemicals at work, causing him to develop lung cancer. <sup>40</sup> The plaintiff's experts testified that his cancer was causally linked to his exposure to those hazardous chemicals. <sup>41</sup> However, the district court rejected this expert testimony because the studies upon which the experts relied did not support their conclusions. <sup>42</sup>

On appeal, the plaintiff pointed to language from *Daubert* that the focus of the Rule 702 inquiry "must be solely on principles and methodology, not on the conclusions that they generate." The Supreme Court rejected this argument. The Court reasoned that "conclusions and methodology are not

<sup>&</sup>lt;sup>36</sup>Id. at 597 ("That, nevertheless, is the balance that is struck by Rules of Evidence designed not for the exhaustive search for cosmic understanding but for the particularized resolution legal disputes.").

<sup>&</sup>lt;sup>37</sup> *Id*.

<sup>38</sup> Id. at 595.

<sup>&</sup>lt;sup>39</sup> See infra Section I.B.2.

<sup>&</sup>lt;sup>40</sup>522 U.S. 136, 139 (1997).

<sup>41</sup> Id. at 143.

<sup>&</sup>lt;sup>42</sup> *Id.* at 144–46. The experts relied on animal studies and four epidemiological studies, and the *Joiner* Court extensively describes the flaws with each one. *Id.* The experts' reliance on the animal studies was improper because the "studies were so dissimilar to the facts presented in this litigation." *Id.* at 144–45. Furthermore, the district court found—and the Supreme Court agreed—that none of the four epidemiological studies supported the experts' conclusion that exposure to the hazardous chemicals at issue causes lung cancer. *Id.* at 145–46.

<sup>&</sup>lt;sup>43</sup> Id. at 146 (quoting Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 595 (1993)).

entirely distinct from one another," so a trial court "may conclude that there is simply too great an analytical gap between the data and the opinion proffered." Ultimately, the Supreme Court found that the district court did not abuse its discretion by excluding the expert testimony. 45

Notably, the Court was careful to frame the issue as whether the studies supported the expert opinions *in this case*. <sup>46</sup> The Court declined to address whether an expert could *ever* use these studies. <sup>47</sup> Accordingly, even if the experts' methodology is reliable, their conclusions may still run afoul of Rule 702 if that methodology does not support those conclusions.

# d. Kumho Tire and Beyond

Shortly before the turn of the millennium, the Court made one more landmark decision that shaped Rule 702 into what it is today. In the original language of Rule 702, expert testimony was testimony that involved "scientific, technical, or other specialized knowledge." The *Daubert* Court couched its interpretation of the rule in terms of "scientific knowledge." However, in *Kumho Tire Co. v. Carmichael*, the Court clarified that the standard in *Daubert* applies to all expert testimony, not just "scientific" testimony. For example, in *Kumho Tire*, the plaintiffs' expert opined on the cause of a car's tire failure. The Supreme Court rejected the Eleventh Circuit's interpretation that "a *Daubert* analysis' applies only where an expert relies 'on the application of scientific principles,' rather than 'on skill-or experience-based observation." The *Kumho Tire* Court reasoned that Rule 702—according to *Daubert*—"establishes a standard of evidentiary reliability" through the word "knowledge," not modifiers to that word like "scientific." Thus, even though the expert in *Kumho Tire* relied on his

<sup>&</sup>lt;sup>44</sup> *Id*.

<sup>45</sup> Id. at 146-47.

<sup>46</sup> Id. at 144.

<sup>&</sup>lt;sup>47</sup> Id.

<sup>&</sup>lt;sup>48</sup>An Act to Establish Rules of Evidence for Certain Courts and Proceedings, Pub. L. No. 93-595, § 1, 88 Stat. 1926, 1937 (1975) (before 2000 amendment).

<sup>&</sup>lt;sup>49</sup> 509 U.S. 579, 589–90 (1993).

<sup>&</sup>lt;sup>50</sup> 526 U.S. 137, 147 (1999).

<sup>&</sup>lt;sup>51</sup> Id. at 143.

<sup>&</sup>lt;sup>52</sup> *Id.* at 146 (quoting Carmichael v. Samyang Tire, Inc., 131 F.3d 1433, 1435 (11th Cir. 1997), *rev'd sub nom.* Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999)).

<sup>&</sup>lt;sup>53</sup> *Id.* at 147 (quoting *Daubert*, 509 U.S. at 589–90).

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experience, the Rule 702 analysis under *Daubert* applied because he offered expert testimony.<sup>54</sup>

What these decisions—Daubert, Joiner, and Kumho Tire—demonstrate is that the Court envisioned an expansive "gatekeeping" function that would apply to a wide swath of cases involving expert testimony admissibility. The trial court has an important role in ensuring that the jury hears only reliable expert opinions, whether scientific or otherwise. This role applies not only to unreliable methodologies but also to unreliable conclusions—opinions untethered to reliable methodologies. Following on the heels of these decisions, the Committee reinforced this gatekeeping function when it amended Rule 702 in 2000.

### 2. The 2000 Amendment

The Committee integrated the *Daubert* decision and its progeny into the 2000 amendment to Rule 702. In 2000, the Committee amended Rule 702 as follows:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.<sup>55</sup>

Compared to the original 1975 version, the 2000 amendment specified several requirements for expert testimony, including that "the witness has applied the principles and methods reliably to the facts of the case." The Committee, in its note to the 2000 amendment, echoed the *Daubert* Court's description of trial judges as "gatekeepers to exclude unreliable expert testimony." The Committee also reiterated in the note that, pursuant to Rule 104(a), "the proponent has the burden of establishing that the pertinent

<sup>&</sup>lt;sup>54</sup>*Id*. at 151.

<sup>&</sup>lt;sup>55</sup> FED. R. EVID. 702 (amended 2000).

<sup>&</sup>lt;sup>56</sup> Id.

<sup>&</sup>lt;sup>57</sup>FED. R. EVID. 702 advisory committee's note to the 2000 amendment.

admissibility requirements are met by a preponderance of the evidence." Yet, in the advisory note, the Committee acknowledged that even after *Daubert*, "rejection of expert testimony is the exception rather than the rule." This appears little more than an observation of a trend in the case law at the time; however, courts have used this language to justify lowering the standard for admissibility. 60

Notably, the text of Rule 702 does not explicitly state that a judge may consider the expert's conclusions. Nevertheless, the Committee's note highlighted the *Joiner* ruling. As the note recognized, "Under the amendment, as under *Daubert*, when an expert purports to apply principles and methods . . . and yet reaches a conclusion that other experts in the field would not reach, the trial court may fairly suspect that the principles and methods have not been faithfully applied." In the same paragraph, the Committee stated that Rule 702 requires the trial judge to "scrutinize not only the principles and methods . . . but also whether those *principles and methods have been properly applied to the facts of the case.*" This language mirrors the last prong of Rule 702: "the witness has applied the principles and methods reliably to the facts of the case." Thus, based on the note's extensive discussion on this issue, the Committee plainly intended for courts to gatekeep not only when the expert's methodology is unreliable but also when the methodology fails to support the expert's conclusion.

The Committee would amend Rule 702 once more in 2011.<sup>66</sup> This is the current text of the rule as of this writing.<sup>67</sup> The Committee's note to the 2011 amendment makes it clear that the changes are "stylistic only" and are not

<sup>&</sup>lt;sup>58</sup> *Id*.

<sup>&</sup>lt;sup>59</sup> *Id*.

<sup>&</sup>lt;sup>60</sup> See infra Section II.B.1.b.

<sup>61</sup> See FED. R. EVID. 702 (amended 2000).

<sup>&</sup>lt;sup>62</sup>Following the reasoning of *Joiner*, while "the focus, of course, must solely be on principles and methodology, not on the conclusions they generate," "conclusions and methodology are not necessarily distinct from one another." FED. R. EVID. 702 advisory committee's note to the 2000 amendment (first quoting Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 595 (1993); and then quoting Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997)).

<sup>&</sup>lt;sup>63</sup> FED. R. EVID. 702 advisory committee's note to the 2000 amendment.

<sup>&</sup>lt;sup>64</sup>Id. (emphasis added).

<sup>&</sup>lt;sup>65</sup> FED. R. EVID. 702 (amended 2000); *accord* FED. R. EVID. 702(d) ("[T]he expert has reliably applied the principles and methods to the facts of the case.").

<sup>&</sup>lt;sup>66</sup>FED. R. EVID. 702.

<sup>&</sup>lt;sup>67</sup> See supra text accompanying note 2.

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intended "to change any result in any ruling on evidence admissibility."68 Accordingly, the substance of Rule 702 remains as amended in 2000.

# B. Deviation Among the Federal Courts

Courts in almost all circuits have adopted a more permissive view of the admissibility of expert testimony than what Rule 702 requires. This error arises prominently in two types of situations: (1) when the court applies the permissive Rule 104(b) standard of proof; and (2) when the court refuses to restrict expert conclusions untethered to the expert's methodology. This section will illustrate how these courts have misapplied Rule 702.

# 1. Applying the Wrong Rule 104 Standard

### a. Rule 104(a) vs. Rule 104(b)

The underlying error in many of these cases is the courts' application of the wrong Rule 104 standard. Rule 104 provides two standards for how judges decide preliminary questions of fact, including the admissibility of evidence:

- (a) In General. The court must decide any preliminary question about whether a witness is qualified, a privilege exists, or evidence is admissible. In so deciding, the court is not bound by evidence rules, except those on privilege.
- (b) Relevance That Depends on a Fact. When the relevance of evidence depends on whether a fact exists, proof must be introduced sufficient to support a finding that the fact does exist. The court may admit the proposed evidence on the condition that the proof be introduced later.69

In Bourjaily v. United States, the Supreme Court held that the standard of proof required to satisfy Rule 104(a) is by a preponderance of the evidence.<sup>70</sup> Specifically, the proponent must convince the judge that it is more likely than

<sup>&</sup>lt;sup>68</sup> FED. R. EVID. 702 advisory committee's note to the 2011 amendment.

<sup>&</sup>lt;sup>69</sup>FED. R. EVID. 104.

<sup>&</sup>lt;sup>70</sup>483 U.S. 171, 176 (1987). Under the preponderance standard, the party bearing the burden satisfies its burden if it convinces the factfinder that the claim is more likely than not true. See id. at 175.

not—greater than fifty percent—that the preliminary fact is true.<sup>71</sup> This standard applies to most admissibility determinations in civil and criminal cases.<sup>72</sup> By contrast, Rule 104(b) applies in limited situations—only when the relevance of the evidence at issue depends on a fact (also known as a "conditional fact").<sup>73</sup> For example, in *Huddleston v. United States*, the government charged the defendant with knowingly selling stolen video cassette tapes.<sup>74</sup> The government offered evidence that the defendant had sold stolen televisions in the past to prove that the defendant knew the cassette tapes—obtained from the same source as where he got the televisions—were also stolen.<sup>75</sup> As the Court recognized, evidence that the defendant had sold televisions in the past was relevant—under Rule 404(b)—only if the televisions were, in fact, stolen.<sup>76</sup> Because the relevance of the evidence depended on a fact, the Court applied Rule 104(b).<sup>77</sup>

Most importantly, Rule 104(b) is much more permissive than Rule 104(a). Rule 104(b) does not require the proponent to persuade the judge that the conditional fact is true by a preponderance of the evidence. Instead, the proponent need only show that a jury *could* reasonably find the conditional fact by a preponderance of the evidence. Essentially, Rule 104(b) asks,

<sup>&</sup>lt;sup>71</sup> See id. at 175 ("The preponderance [of the evidence] standard ensures that before admitting evidence, the court will have found it more likely than not that the *technical issues and policy concerns* addressed by the Federal Rules of Evidence have been afforded due consideration." (emphasis added)). The judge, when making a Rule 104(a) determination, may consider evidence that would otherwise be inadmissible under the Federal Rules of Evidence. *Id.* at 178 (citing FED. R. EVID. 1101(d)(1)).

<sup>&</sup>lt;sup>72</sup> *Id.* at 175. For example, in *Bourjaily*, the Court applied the Rule 104(a) standard to determine whether a statement is non-hearsay under Rule 801(d)(2)(E). *Id.* 

<sup>&</sup>lt;sup>73</sup> Huddleston v. U.S., 485 U.S. 681, 689 (1988).

<sup>&</sup>lt;sup>74</sup> Id. at 682.

<sup>&</sup>lt;sup>75</sup> Id. at 683–84.

<sup>&</sup>lt;sup>76</sup>Id. at 689. In 1988, Rule 404(b) read, "Evidence of other crimes, wrongs, or acts is not admissible to prove the character of a person in order to show action in conformity therewith. It may, however, be admissible for other purposes, such as proof of motive, opportunity, intent, preparation, plan, *knowledge*, identity, or absence of mistake or accident." *Id.* at 682 (emphasis added) (quoting FED. R. EVID. 404(b) (amended 1987)). Evidence of similar acts is relevant in this context "only if the jury can reasonably conclude that *the act occurred* and that the defendant was the actor." *Id.* at 689 (emphasis added).

<sup>&</sup>lt;sup>77</sup> Id. at 689–90.

<sup>&</sup>lt;sup>78</sup>Id. at 690 ("In determining whether the Government has introduced sufficient evidence to meet Rule 104(b), the trial court neither weighs credibility nor makes a finding that the Government has proved the conditional fact by a preponderance of the evidence." (emphasis added)).

<sup>&</sup>lt;sup>79</sup> Id.

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"Can a reasonable jury believe this fact?" Thus, whereas Rule 104(a) demands the proponent to convince the *judge* that a fact is true, Rule 104(b) merely requires the proponent to show that there is legally sufficient evidence such that a *jury* could find that fact. Accordingly, in *Huddleston*, the government need not convince the judge that the televisions were stolen but rather show that a jury could reasonably believe it is more likely than not. 81

Notably, Rule 104(b) still imposes a burden on the proponent to produce evidence sufficient to support a finding that the fact exists.<sup>82</sup> The key distinction between Rule 104(a) and Rule 104(b) is not who bears the burden but rather the bar that the proponent must meet. Nevertheless, as the next section illustrates, courts have mistaken which standard to apply and how to apply the right one.

# b. Erroneous Application of Rule 104(b) to Expert Testimony Admissibility

As noted earlier, both *Daubert* and the 2000 amendment to Rule 702 explicitly require judges to use the Rule 104(a) preponderance-of-the-evidence standard. Set, courts across the federal circuits often apply the more permissive Rule 104(b) "sufficient to support a finding" standard, even if those courts do not specifically state doing so. In 2020, the Lawyers for Civil Justice (LCJ) surveyed the federal circuits to highlight what the organization believed to be misunderstandings of Rule 702. In fact, the LCJ

<sup>&</sup>lt;sup>80</sup>Id. Even if the proponent persuades the judge by a preponderance of the evidence in a Rule 104(a) inquiry, the jury can still decide the fact is not true. In the context of experts, even if the judge admits an expert's testimony under Rule 702, the jury is free to believe or doubt the expert based on the expert's qualifications, principles, methodologies, or application. Symposium on Forensic Expert Testimony, Daubert, and Rule 702, 86 FORDHAM L. REV. 1463, 1500 (2018) [hereinafter Symposium].

<sup>&</sup>lt;sup>81</sup> *Huddleston*, 485 U.S. at 689–90. The Court justified using the more permissive Rule 104(b) standard in part because legislative history showed Congress intended Rule 404(b) to "[p]lace greater emphasis on admissibility." *Id.* at 688 (alteration in original) (quoting H.R. REP. No. 93-650, at 7 (1973), as reprinted in 1974 U.S.C.C.A.N. 7075, 7081).

<sup>&</sup>lt;sup>82</sup> See id. at 690 (describing the inquiry as "determining whether the *Government* has introduced sufficient evidence to meet Rule 104(b)" (emphasis added)).

<sup>&</sup>lt;sup>83</sup> See supra Section II.A. Indeed, both cite to Bourjaily. 509 U.S. at 592 n.10 (1993); FED. R. EVID. 702 advisory committee's note to the 2000 amendment.

 $<sup>^{84}</sup> Laws.$  for Civ. Just., Federal Courts' Misunderstanding of Rule 702 Demonstrates Need for Amendment (2020), https://www.lfcj.com/uploads/1/1/2/0/112061707/8.2020\_lcj\_combined\_702\_infographic.pdf

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found that, in 2020 alone, out of 1,059 federal cases that involved expert testimony admissibility, trial judges did not mention the preponderance standard in 686 cases, or about sixty-five percent.<sup>85</sup> In 135 cases—about thirteen percent—the trial judge explicitly applied a permissive standard for Rule 702.<sup>86</sup> For example, judges would use language like "liberal thrust," "liberal policy favoring admissibility, or "exclusion is the exception rather than the rule." The LCJ found that this language was indicative of "a presumption of admissibility."

Some courts expressly presume expert testimony is admissible. <sup>89</sup> Many judges justify this presumption using the language in the Committee's note to the 2000 amendment to Rule 702: "A review of the case law after *Daubert* shows that the rejection of expert testimony is the exception rather than the rule." However, nothing in the note suggests that this trend means expert testimony is presumptively admissible. Such an interpretation would contradict the note's earlier explicit reference to Rule 104(a)'s preponderance standard under *Bourjaily*. Even if a court were to apply the more permissive standard for conditional relevancy, Rule 104(b) requires the proponent to demonstrate the admissibility of the evidence, albeit at a lower bar. <sup>92</sup> Therefore, presuming the admissibility of expert testimony is erroneous.

For example, in *Nkemakolam v. St. John's Military School*, the defendant sought to exclude expert testimony from the plaintiffs' psychiatrist.<sup>93</sup>

 $[https://web.archive.org/web/20200923054538/https://www.lfcj.com/uploads/1/1/2/0/112061707/8.2020\_lcj\_combined\_702\_infographic.pdf].$ 

<sup>&</sup>lt;sup>85</sup>KATELAND R. JACKSON & ANDREW J. TRASK, FEDERAL RULE OF EVIDENCE 702: A ONE-YEAR REVIEW AND STUDY OF DECISIONS IN 2020, at 3 (2021), https://leea0198-de10-42c2-adc0-d9497e0cd1d5.filesusr.com/ugd/6c49d6 9aa76ee5643c4cfa847ba28ab8725d1e.pdf.

<sup>86</sup> Id. at 3-4.

<sup>&</sup>lt;sup>87</sup> Id.

<sup>&</sup>lt;sup>88</sup>Id. at 2. As discussed in the following paragraph, presuming admissibility is even more permissive than the Rule 104(b) standard.

<sup>89</sup> See cases cited supra note 9.

<sup>&</sup>lt;sup>90</sup> See, e.g., In re Scrap Metal Antitrust Litig., 527 F.3d 517, 530 (6th Cir. 2008) ("[R]ejection of expert testimony is the exception, rather than the rule,' and we will generally permit testimony based on allegedly erroneous facts when there is some support for those facts in the record." (quoting FED. R. EVID. 702 advisory committee's note to the 2000 amendment)); United States v. McCluskey, 954 F. Supp. 2d 1224, 1238 (D.N.M. 2013) (quoting the Committee's note to show that the "Federal Rules encourage the admission of expert testimony.").

<sup>&</sup>lt;sup>91</sup> See FED. R. EVID. 702 advisory committee's note to the 2000 amendment.

<sup>&</sup>lt;sup>92</sup> See supra Section II.B.1.a.

<sup>93</sup> No. 12-2132, 2014 U.S. Dist. LEXIS 22620, at \*5 (D. Kan. Feb. 24, 2014).

Applying Rule 702, the court cited the Committee's statement that "rejection of expert testimony is the exception rather than the rule." Notably, the court appeared to place the burden of *inadmissibility* on the defendant when it held that the defendant "has not provided any evidence or authority suggesting that [the expert's] procedures in this regard were improper or rendered his opinions unreliable." Instead of examining the plaintiffs' evidence to determine whether the expert satisfied each prong of Rule 702, the court focused exclusively on the defendant's lack of evidence. Unsurprisingly, the court denied the defendant's motion to exclude the psychiatrist's opinions. The court's reasoning reflects an erroneous presumption that the expert's opinions are reliable.

More often, courts will disregard challenges to expert testimony as going to weight rather than admissibility. <sup>98</sup> Thus, judges will be more permissive towards expert testimony to let *juries* decide issues regarding experts. <sup>99</sup> These judges overemphasize cross-examination's ability to weed out unreliable testimony. <sup>100</sup> Furthermore, this approach reflects an application of Rule 104(b): "Can a reasonable jury believe the expert is reliable?" Once again, the proper standard is the preponderance of the evidence under Rule 104(a). Applying Rule 104(b)'s more permissive standard is legal error, and in cases where experts are necessary to prove certain elements of a claim or defense, applying the wrong standard may very well be outcome determinative. <sup>101</sup>

<sup>&</sup>lt;sup>94</sup>Id. at \*3 (quoting FED. R. EVID. 702 advisory committee's note to the 2000 amendment).

<sup>&</sup>lt;sup>95</sup> *Id.* at \*7 (alteration in original).

<sup>&</sup>lt;sup>96</sup>*Id.* at \*5–8.

<sup>&</sup>lt;sup>97</sup>*Id*. at \*9.

<sup>&</sup>lt;sup>98</sup> See cases cited supra note 4.

<sup>&</sup>lt;sup>99</sup> See, e.g., Carmichael v. Verso Paper, LLC, 679 F. Supp. 2d 109, 119 (D. Me. 2010) (denying a motion to exclude expert testimony because "when the adequacy of the foundation for the expert testimony is at issue, the law favors vigorous cross-examination over exclusion"); Wendell v. GlaxoSmithKline, LLC, 858 F.3d 1227, 1237 (9th Cir. 2017) (reversing the lower court's exclusion of expert testimony because "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof" were more appropriate (alteration in original) (quoting Daubert v. Merrell Dow Pharms, Inc. 509 U.S. 579, 596 (1993))).

at 23 (2019) ("On the theory that the adversary system should take care of these issues, the Rule could freely admit all expert testimony and leave it to the lawyers to discredit it. But the key to *Daubert* is that cross-examination alone is ineffective in revealing nuanced defects in expert opinion testimony and that the trial judge must act as a gatekeeper to ensure that unreliable opinions don't get to the jury in the first place.").

<sup>&</sup>lt;sup>101</sup> See In re Roundup Prods. Liab. Litig., 390 F. Supp. 3d 1102, 1113 (N.D. Cal. 2018) (recognizing that the Ninth Circuit's permissive view towards expert testimony "has resulted in

Through this practice, judges have acted less like gatekeepers and more like doorstops. By using the wrong standard, courts are allowing into evidence all manner of expert testimony, whether reliable or not.

#### 2. Reluctance to Restrict Conclusions

The current language of Rule 702 does not explicitly require that an expert's conclusion be limited to what the expert's methodology allows. It is true that *Daubert* stresses that the focus of the Rule 702 inquiry "must be solely on principles and methodology, not on the conclusions that they generate." Yet, the Supreme Court also recognized in *Joiner* that "conclusions and methodology are not entirely distinct from one another." The Committee even emphasized the *Joiner* decision in its 2000 amendment to Rule 702. Nevertheless, judges are reluctant to entertain challenges based on an expert's conclusions. Many courts repeatedly cling to the language from *Daubert* that "[t]he focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." For these courts, the adversary system—through "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof"—is the proper arena for challenging expert conclusions.

slightly more room for deference to experts in close cases than might be appropriate in some other Circuits").

<sup>105</sup> See, e.g., Stollings v. Ryobi Techs., Inc., 725 F.3d 753, 765 (7th Cir. 2013) (alteration in original) (citation omitted) (finding the district court erred in excluding expert testimony because, in part, Rule 702 "does not ordinarily extend to the reliability of the conclusions that [the expert's] methods produce"); *In re* Zoloft (Sertraline Hydrochloride) Prods. Liab. Litig., 858 F.3d 787, 800 (3d Cir. 2017) (noting that the district court's criticism that an expert "drew a different conclusion from a study than its authors" is an inquiry "more appropriately left to the jury"); AmGuard Ins. Co. v. Lone Star Legal Aid, No. 18-2139, 2020 U.S. Dist. LEXIS 1169, at \*19–20 (S.D. Tex. Jan. 6, 2020) (rejecting defendants' motion to exclude expert testimony because their objection that the expert "does not sufficiently explain the connection between her experience and her conclusions" is "better left for cross examination").

<sup>106</sup> See, e.g., United States v. Hodge, 933 F.3d 468, 477 (5th Cir. 2019); Smith v. Ford Motor Co., 215 F.3d 713, 718 (7th Cir. 2000) ("The soundness of the factual underpinnings of the expert's analysis and the correctness of the expert's conclusions based on that analysis are factual matters to be determined by the trier of fact . . . . "); *In re* Bair Hugger Forced Air Warming Devices Prods. Liab. Litig., 9 F.4th 768, 777 (8th Cir. 2021); Seamon v. Remington Arms Co., LLC, 813 F.3d 983, 988 (11th Cir. 2016); Summit 6, LLC v. Samsung Elecs. Co., 802 F.3d 1283, 1295 (Fed. Cir. 2015).

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<sup>&</sup>lt;sup>102</sup> 509 U.S. 579, 595 (1993).

<sup>&</sup>lt;sup>103</sup> 522 U.S. 136, 146 (1997).

<sup>&</sup>lt;sup>104</sup> See supra notes 62-65 and accompanying text.

<sup>107</sup> Daubert, 509 U.S. at 596.

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But, once again, expert opinions pose additional hurdles for juries that are absent when evaluating lay witness testimony.<sup>108</sup> As a gatekeeper, the trial judge must prevent experts from misleading the jury by presenting conclusions untethered to otherwise reliable methodologies.

This reluctance to disturb expert conclusions is especially noticeable in fields where error rates are low. For example, in *United States v. Otero*, the defendants sought to exclude the government's firearms expert testimony in a *Daubert* challenge.<sup>109</sup> The firearms expert would testify that spent ammunition found at the crime scene came from guns seized during the defendants' arrest.<sup>110</sup> As the court characterized the testimony, the expert seemed to say that the spent ammunition *definitively* originated from the seized guns.<sup>111</sup> The court recognized that the expert's methodology has a nonzero error rate.<sup>112</sup> In fact, recent national studies had challenged the validity and accuracy of the expert's methodology.<sup>113</sup> Despite these issues, the court denied the defendants' motion and allowed the expert's testimony to come in unaltered.<sup>114</sup> On appeal, the Third Circuit affirmed the lower court's ruling on expert testimony admissibility, simply stating that it "see[s] no error in [the district court's] conclusion."<sup>115</sup>

This mistake is not limited to cases involving firearms experts. Similar problems appear in cases dealing with fingerprint comparison, 116 DNA

<sup>&</sup>lt;sup>108</sup> See id. at 595 (observing the heightened risk that expert opinions are misleading); ADVISORY COMM. ON EVIDENCE RULES, *supra* note 100, at 23 ("[C]ross-examination alone is ineffective in revealing nuanced defects in expert opinion testimony . . . .).

<sup>&</sup>lt;sup>109</sup>849 F. Supp. 2d 425, 427 (D.N.J. 2012), aff'd, 557 F. App'x 146 (3d Cir. 2014).

<sup>110</sup> Id. at 428-29.

<sup>&</sup>lt;sup>111</sup> See id. ("The proposed testimony of the Government's expert would give the opinion that spent ammunition recovered from that crime scene was fired from certain specific firearms recovered from Defendants.").

<sup>112</sup> Id. at 434.

<sup>&</sup>lt;sup>113</sup> *Id.* at 430 (citing Hon. Harry T. Edwards et al., Strengthening Forensic Science in the United States: A Path Forward (2009); and then citing National Research Council, Ballistic Imaging (2008)).

<sup>114</sup> Id. at 438.

<sup>&</sup>lt;sup>115</sup>United States v. Otero, 557 F. App'x 146, 149 (3d Cir. 2014) (alteration in original).

<sup>&</sup>lt;sup>116</sup>See cases cited supra notes 5-6.

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analysis,<sup>117</sup> and other disciplines.<sup>118</sup> Common in these cases is the judge's reluctance to gatekeep unsupported expert conclusions, even though Rule 702 demands the judge to do so. These erroneous rulings would eventually motivate the Committee to reevaluate Rule 702 for the first time in roughly two decades.

#### II. DEVELOPMENT OF THE PROPOSED AMENDMENT

# A. The 2016 PCAST Report and the 2017 Symposium

Recognizing the courts' deviation from their intended gatekeeping function, the Committee began discussing a potential amendment to Rule 702 in 2017. <sup>119</sup> On October 27, 2017, the Committee held a symposium regarding the admissibility of expert testimony under the Federal Rules of Evidence. <sup>120</sup> Its panelists included scientists, federal judges, law professors, and practitioners. <sup>121</sup> Central to the discussion was a report by the President's Council of Advisors on Science and Technology (PCAST) published in 2016. <sup>122</sup>

In the report, PCAST focused on the use of feature-comparison methods—including the analysis of DNA, bitemarks, fingerprints, and firearm marks—at trial.<sup>123</sup> PCAST noted that "many forensic feature-

<sup>&</sup>lt;sup>117</sup> See, e.g., United States v. Silva, 889 F.3d 704, 718 (10th Cir. 2018) ("Questions about errors in the implementation of otherwise-reliable DNA methodology typically 'go to the weight that the trier of fact should accord to the evidence, rather than its admissibility." (quoting 4 JACK B. WEINSTEIN & MARGARET A. BERGER, WEINSTEIN'S FEDERAL EVIDENCE, § 702.06[5][b] (Mark S. Brodin, ed., Matthew Bender & Company, Inc. 2d ed. 1997))); United States v. Gipson, 383 F.3d 689, 697 (8th Cir. 2004) (requiring—for challenges to the application of otherwise reliable methodology—a showing that the misapplication "skew[ed] the methodology itself" (quoting United States v. Beasley, 102 F.3d 1440, 1448 (8th Cir. 1996))).

<sup>&</sup>lt;sup>118</sup> See, e.g., United States v. Mire, 725 F.3d 665, 675 (7th Cir. 2013) (permitting a chemist to testify that the rate of error for testing plants for certain controlled substances is "infinitesimal").

<sup>&</sup>lt;sup>119</sup> Symposium, supra note 80, at 1467, 1470–71.

<sup>120</sup> Id. at 1463 n.\*.

<sup>&</sup>lt;sup>121</sup> *Id*.

<sup>&</sup>lt;sup>122</sup> See generally id. at 1465–1534.

<sup>123</sup> See generally PRESIDENT'S COUNCIL OF ADVISORS ON Sc. & TECH., EXEC. OFFICE OF THE PRESIDENT, FORENSIC SCIENCE IN CRIMINAL COURTS: ENSURING SCIENTIFIC VALIDITY OF FEATURE-COMPARISON METHODS (2016) [hereinafter PCAST REPORT], https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast\_forensic\_s cience report final.pdf. Feature-comparison methods are methods that attempt to determine

comparison methods have historically been assumed rather than established to be foundationally valid," but recent scientific developments demonstrate "the need to empirically test whether specific methods meet the scientific criteria for scientific validity." For example, many courts vouched for the reliability of hair comparison analysis. But more recent studies cast serious doubt on the reliability of these methods. Because some methods may fall short of scientific validity, "PCAST expects that some forensic feature-comparison methods may be rejected by the courts as inadmissible." 127

The panelists in the symposium echoed this problem. <sup>128</sup> The underlying issue with admitting unreliable testimony is the risk that the jury, even after weighing the evidence, will rely on "junk science." <sup>129</sup> As one professor recognized, a jury, in practice, tends to believe an expert simply because of the expert's status. <sup>130</sup> Even if the opposing side presents rebuttal expert testimony, the jury is free to choose which expert to believe. As a result, the risk remains that the jury will rely on junk science to reach its verdict. This concern would eventually manifest in the Committee's proposed changes to Rule 702(d). <sup>131</sup>

whether two samples match are related based on similar patterns, impressions, or other features. *Id.* at 1.

<sup>124</sup> Id at 122

<sup>&</sup>lt;sup>125</sup>United States v. Santiago Santiago, 156 F. Supp. 2d 145, 152 (D.P.R. 2001) (collecting cases).

<sup>&</sup>lt;sup>126</sup> See PCAST REPORT, supra note 123, at 83–86. Early studies proposed a minuscule theoretical error rate, like one in six trillion or one in one million. *Id.* at 84. Empirical studies in the last several decades, however, suggested the error rate is probably between eleven percent and seventeen percent. *Id.* at 86.

<sup>&</sup>lt;sup>127</sup> Id. at 122.

<sup>&</sup>lt;sup>128</sup> Symposium, supra note 80, at 1495. As one judge noted, some experts state that their opinions are "to a reasonable degree of scientific certainty," even though "[t]hat's a terminology no scientist would ever use." *Id.* Despite the expert witnesses' assurances, "[m]uch of this is either not in science or not firmly grounded in science" and "virtually none of this is certain." *Id.* 

<sup>&</sup>lt;sup>129</sup>Gen. Elec. Co. v. Joiner, 522 U.S. 136, 153 (1997) (Stevens, J., dissenting) (referencing the sort of "unscientific" testimony *Daubert* intended to exclude).

<sup>&</sup>lt;sup>130</sup> See Symposium, supra note 80, at 1502 ("Under current practice, expert testimony is not provided to educate the fact finder. It is offered as a conclusion to be deferred to by the fact finder.").

<sup>&</sup>lt;sup>131</sup>PROPOSED AMENDMENT, *supra* note 12, at 241–42. Certainly not all attendants of the symposium supported amending Rule 702(d). For example, an attorney for the Department of Justice argued that "any contemplated rule changes . . . are premature" and that cross-examination is the appropriate response to the concerns the PCAST report and other panelists have raised. *Symposium*, *supra* note 80, at 1526–27.

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#### B. The 2018 Conference

The following year, on October 19, 2018, the Committee met with a smaller group of panelists.<sup>132</sup> The Committee reiterated concerns from the symposium regarding forensic evidence.<sup>133</sup> While the 2017 symposium did not focus on which standard of proof should apply for Rule 702, this topic became a central point of discussion in the 2018 conference.<sup>134</sup> The panelists recognized the inconsistent application of Rule 702 across the federal circuits.<sup>135</sup> One panelist even noted that in his experience, experts tailor testimony to the circuit.<sup>136</sup>

However, while everyone at the conference agreed that Rule 104(a) applies to the Rule 702 inquiry, some questioned whether Rule 702 needed an amendment to clarify the standard. Several found it odd to make the standard explicit for Rule 702 but not for other rules, like Rule 404(b) and Rule 804(b)(6). Nevertheless, as the moderator pointed out, the Committee's note addresses these issues. Indeed, the note, as presented at the conference, clarified that the amendment should not raise any negative inference as to the applicability of the Rule 104(a) standard of proof for other rules. The Committee would ultimately proceed with making the standard explicit in its proposed amendment.

<sup>&</sup>lt;sup>132</sup>Conference on Proposed Amendments: Experts, the Rule of Completeness, and Sequestration of Witnesses, 87 FORDHAM L. REV. 1361, 1361 n.\* (2019) [hereinafter Conference].

<sup>133</sup> Id. at 1362-89.

<sup>134</sup> Id. at 1389-402.

<sup>135</sup> Id. at 1390-91.

<sup>&</sup>lt;sup>136</sup> *Id.* at 1391 ("I had an expert, and he would say . . . well, in this circuit, this is what the Rule is, but in this circuit it's this . . . .").

<sup>&</sup>lt;sup>137</sup> *Id.* at 1394–95. One panelist asked whether it was worth it to "go[] in and put[] in what we all agree is the law into the law?" *Id.* at 1394. Another worried judge's perception of the Committee's proposed amendment will be that the Committee is "saying the judge's job is to look at the science and decide who's right." *Id.* 

<sup>&</sup>lt;sup>138</sup> *Id.* at 1394, 1396–97. Notably, the Committee has, in the past, made explicit the applicable standard of proof for some rules. For example, the "sufficient to support a finding" standard from Rule 104(b) appears in Rule 602 (requiring a witness to have personal knowledge) and in Rule 901 (authenticating or identifying evidence). FED. R. EVID. 602; FED. R. EVID. 901(a).

<sup>&</sup>lt;sup>139</sup>Conference, supra note 132, at 1394.

<sup>&</sup>lt;sup>140</sup> *Id.* at 1394–95 n.74. This draft note is almost entirely identical to the note for the proposed amendment. *Compare id.*, *with* PROPOSED AMENDMENT, *supra* note 12, at 242–43.

<sup>&</sup>lt;sup>141</sup> PROPOSED AMENDMENT, supra note 12, at 241.

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# C. Specific Influences Evident in the Proposed Amendment

The 2016 PCAST report, 2017 symposium, and 2018 conference each played a significant role in shaping the proposed amendment. The changes to Rule 702(d) reflect the need for judges to exclude expert conclusions untethered from the expert's methodology. 142 In the Committee's note to the proposed amendment, the Committee referenced the concerns addressed in PCAST's report: "Expert opinion testimony regarding the weight of feature comparison evidence . . . must be limited to those inferences that can reasonably be drawn from a reliable application of the principles and methods."143 Consequently, "[f]orensic experts should avoid assertions of absolute or one hundred percent certainty—or to a reasonable degree of scientific certainty—if the methodology is subjective and thus potentially subject to error."144

Similarly, despite some panelists' concerns about whether Rule 702 needs to explicitly include the preponderance standard, the Committee proceeded with that change. 145 Likewise, when public comments opposed including the standard of proof, the Committee simply replaced "preponderance of the evidence" with "more likely than not." Thus, even after hearing others' reservations to the amendment, the Committee felt strongly enough about the issue to proceed with no meaningful changes from 2019 to 2022. 147

#### III. IMPACT OF THE PROPOSED AMENDMENT ON FUTURE LITIGATION

# A. The Proponent Has the Burden to Prove Reliability by a Preponderance of the Evidence

The first change to Rule 702 makes explicit the proper standard of proof for expert testimony admissibility and who bears that burden. Under the proposed amendment, in order for a judge to admit expert testimony, the proponent must demonstrate to the court that it is more likely than not that

<sup>&</sup>lt;sup>142</sup> See id. at 241-42.

<sup>&</sup>lt;sup>143</sup> Id. at 244–45.

<sup>&</sup>lt;sup>144</sup>*Id*. at 244.

<sup>145</sup> Id. at 241.

<sup>&</sup>lt;sup>146</sup>COMMITTEE ON RULES OF PRACTICE AND PROCEDURE, supra note 12, at 895.

<sup>&</sup>lt;sup>147</sup>Compare Conference, supra note 132, at 1366 ("The following requirements must be established by a preponderance of the evidence"), with PROPOSED AMENDMENT, supra note 12, at 241 ("the proponent demonstrates to the court that it is more likely than not that").

the testimony satisfies each prong of Rule 702. 148 The Committee explained in its note that this change clarifies that Rule 104(a)'s preponderance of the evidence standard governs Rule 702. 149 This clarification is consistent with the holding in *Daubert* and the Committee's note to the 2000 amendment. 150 Nevertheless, the Committee felt the need to make this standard explicit because "many courts have held that the critical questions of the sufficiency of an expert's basis, and the application of the expert's methodology, are questions of weight and not admissibility." 151

Practically, this change may not significantly affect how often litigants challenge expert opinions—attorneys often raise these objections despite the historical trend of admissibility. However, the clarification certainly places more pressure on proponents to ensure that their experts are reliable. Similarly, if more *Daubert* motions succeed, fewer cases are likely to go to trial, saving litigation resources for the parties and the courts.

# B. The Expert's Opinion Must Reflect a Reliable Application of the Methodology to the Facts

The second change to Rule 702 emphasizes the need for the judge to gatekeep not only an expert's methodology but also the expert's ultimate opinions. As noted earlier, the current language of Rule 702 does not explicitly state that a judge may consider an expert's conclusions. The proposed amendment rewords Rule 702(d) to clarify that the judge's gatekeeping function applies to the expert's opinions. By shifting the focus of Rule 702(d) from "the expert has reliably applied" to "the expert's opinion reflects a reliable application," the Committee stresses that trial courts *should* exclude based on the expert's conclusions themselves, not just based on the expert's methodology. Thus, "each expert opinion must stay within the bounds of what can be concluded from a reliable application of the expert's

<sup>&</sup>lt;sup>148</sup> PROPOSED AMENDMENT, *supra* note 12, at 241 ("A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent demonstrates to the court that it is more likely than not that: [the proponent has satisfied the prongs of Rule 702].").

<sup>&</sup>lt;sup>149</sup> Id. at 242 (citing Bourjaily v. United States, 483 U.S. 171, 175 (1987)).

<sup>&</sup>lt;sup>150</sup> See 509 U.S. 579, 592 (1993); FED. R. EVID. 702 advisory committee's note to 2000 amendment.

<sup>&</sup>lt;sup>151</sup>PROPOSED AMENDMENT, *supra* note 12, at 242.

<sup>&</sup>lt;sup>152</sup> See supra Section I.A.2.

<sup>&</sup>lt;sup>153</sup> PROPOSED AMENDMENT, *supra* note 12, at 241–42 ("the expert has reliably applied expert's opinion reflects a reliable application of the principles and methods to the facts of the case").

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basis and methodology."<sup>154</sup> If an expert's methodology leaves room for doubt, the court must prevent the expert from testifying that the expert's conclusions are certain.

As explained above, the proposed amendment seems to specifically target the concerns addressed in PCAST's report regarding feature-comparison methods and what the participants at the symposium and conference called an "overstatement" problem. The Committee disfavors expert testimony that suggests absolute certainty or "a reasonable degree of scientific certainty" if the methodology is potentially subject to error. If empirical evidence does not support such a degree of certainty, it would be improper for an expert to claim that level of confidence.

That said, this change does not affect the *types* of expert testimony offered. While the PCAST report highlighted that many methodologies had higher error rates than previously thought, the proposed amendment does not limit any methodology in particular.<sup>157</sup> As the Committee emphasizes in its note, the amendment would not "bar testimony that comports with substantive law requiring opinions to a particular degree of certainty."<sup>158</sup> The change to Rule 702(d) merely limits how the expert may *present* a conclusion. For example, while recent studies show fingerprint comparison has a non-negligible error rate, the proposed amendment would not categorically exclude fingerprint experts. Rather, the expert can present such testimony only if the expert also informs the jury of the potential for error.

In practice, while the change merely requires experts to be more careful about how they present their conclusions, the proposed amendment can impact case strategies. If juries tend to discount experts who now must admit to potential error, then litigants relying on those experts may reevaluate the strength of their case. This reevaluation would be most noticeable in criminal cases, where defendants may become less likely to plead guilty because the prosecution's experts can no longer offer conclusions of absolute certainty.

<sup>154</sup> Id. at 244.

<sup>&</sup>lt;sup>155</sup>See supra Section II.C.

<sup>&</sup>lt;sup>156</sup>PROPOSED AMENDMENT, supra note 12, at 244.

<sup>&</sup>lt;sup>157</sup> See generally PCAST REPORT, supra note 123, at 67–123. At the same time, the proposed amendment extends to disciplines beyond those discussed in the PCAST report. Nothing in the proposed amendment or Committee's note suggests that the change to Rule 702(d) should apply only to feature-comparison methods or the forensic sciences. Even though this change comes in response to issues raised in the PCAST report and cases dealing with forensics, the Committee most likely wanted to stamp out overstatements no matter the field.

<sup>&</sup>lt;sup>158</sup>PROPOSED AMENDMENT, supra note 12, at 245.

However, it will take time to observe any such trend as courts, litigants, and experts learn to apply Rule 702 as the drafters intended.

# C. A Shift in Practice but not in Law

# 1. The Proposed Amendment Clarifies and Solidifies the Judge's Gatekeeping Function

Although the two proposed changes to Rule 702 address separate issues that have arisen in the case law,<sup>159</sup> both changes reinforce the judge's gatekeeping role.<sup>160</sup> Because the proposed amendment emphasizes the trial judge's authority to assess expert testimony, the judge is more clearly a "gatekeeper" to unreliable evidence. As discussed above, courts in most federal circuits have hesitated to use their gatekeeping authority to exclude unreliable expert testimony.<sup>161</sup> These courts fear that to exclude expert testimony would be to weigh the evidence, a role reserved for the jury. Consequently, courts typically assume that expert testimony is reliable under Rule 702.

However, the word "gatekeeping" suggests that the court must *first* assess reliability before admitting such testimony. This reading is consistent with the Court's formulation in *Daubert*, which held that the trial judge "must *determine at the outset*, pursuant to Rule 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue." Thus, such testimony is unreliable *unless* demonstrated reliable by a preponderance of the evidence.

The need for courts to act as gatekeepers is more pronounced when the court considers an expert's conclusions—the subject of the second change. The Committee's note explains why courts must gatekeep unreliable expert opinions:

Judicial gatekeeping is essential because just as jurors may be unable, due to lack of specialized knowledge, to evaluate meaningfully the reliability of scientific and other *methods* underlying expert opinion, jurors may also lack the

<sup>&</sup>lt;sup>159</sup> See supra Section I.B.

<sup>&</sup>lt;sup>160</sup>Indeed, as members of the 2018 conference recognized, the two issues the proposed amendment seeks to address are related to each other. *Conference*, *supra* note 132, at 1363, 1366–67.

<sup>&</sup>lt;sup>161</sup> See supra Section I.B.1.b.

<sup>&</sup>lt;sup>162</sup> 509 U.S. 579, 592 (1993) (emphasis added) (footnote omitted).

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specialized knowledge to determine whether the *conclusions* of an expert go beyond what the expert's basis and methodology may reliably support.<sup>163</sup>

Accordingly, by clarifying and emphasizing the trial judge's role as gatekeeper, these proposed changes should make it more likely that juries hear only reliable expert opinions.

# 2. The Proposed Amendment Does Not Create a New Standard

Nevertheless, the changes are meant to clarify Rule 702, not to create a new standard. As one panelist noted in the 2017 symposium, "I don't actually remember anyone calling out for a new rule. What they were calling out for is for judges to use the rule." Likewise, in the note to the Committee's proposed amendment, the Committee stressed that "[n]othing in the amendment imposes any new, specific procedures" The amendment merely reminds all lawyers that judges are the gatekeepers of expert testimony, and proponents of expert testimony must convince the judge that such evidence is more likely than not admissible.

Regarding the first change, once again, both *Daubert* and the Committee's note to the 2000 amendment have expressly stated that the Rule 104(a) standard applies. Thus, the preponderance standard has been the law for decades, but current practices have compelled the Committee to make the standard explicit in the rule itself. The Committee and its panelists at the 2018 conference agreed that making Rule 702 explicitly reference Rule 104(a) would not change the law but would merely clarify. 168

Similarly, concerning the second change, Rule 702 has long permitted a court to exclude an expert's conclusion if the conclusion is unsupported by reliable principles and methods. <sup>169</sup> The proposed amendment will require

<sup>&</sup>lt;sup>163</sup> PROPOSED AMENDMENT, *supra* note 12, at 244 (emphasis added).

<sup>&</sup>lt;sup>164</sup> Symposium, supra note 80, at 1535.

<sup>&</sup>lt;sup>165</sup>PROPOSED AMENDMENT, *supra* note 12, at 245.

<sup>&</sup>lt;sup>166</sup>509 U.S. at 592 n.10 (citing Bourjaily v. United States, 483 U.S. 171, 175–76 (1987)); FED. R. EVID. 702 advisory committee's note to 2000 amendment (same).

 $<sup>^{167}</sup>$ PROPOSED AMENDMENT, supra note 12, at 242.

<sup>&</sup>lt;sup>168</sup> Conference, supra note 132, at 1393–94.

<sup>&</sup>lt;sup>169</sup> See Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997) ("[C]onclusions and methodology are not entirely distinct from one another."); FED. R. EVID. 702 advisory committee's note to 2000 amendment ("[W]hen an expert purports to apply principles and methods in accordance with

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courts to use their gatekeeping authority to exclude expert conclusions that go beyond the bounds of what the expert's methodology allows, like claims of absolute certainty.<sup>170</sup>

### **CONCLUSION**

Accordingly, if passed, the amendment would effect a substantial shift in expert testimony admissibility in practice; however, the standard is not new. Rather, the proposed amendment reinforces the judge's role as a gatekeeper, which has been the law for decades. By re-emphasizing the judge's gatekeeping duty, Rule 702 would ensure that juries hear technical opinions supported by empirical evidence.

professional standards, and yet reaches a conclusion that other experts in the field would not reach, the trial court may fairly suspect that the principles and methods have not been faithfully applied.").

<sup>170</sup>PROPOSED AMENDMENT, supra note 12, at 244.