

Kate Milewski
Arizona State Bar # 024877
Pinal County Public Defender
P.O. Box 2457
Florence, AZ 85132
(520) 866-7199
Kate.Milewski@Pinal.gov

**IN THE SUPREME COURT
IN AND FOR THE STATE OF ARIZONA**

In the matter of:

Petition to Amend [Rule 702, Arizona Rules of Evidence](#)

Arizona Supreme Court
No. R-23-0004

Pinal County Public Defender
Comment in Support of Petition to
Amend to [Ariz. R. Evid. 702](#)

Pursuant to [Rule 28\(e\) of the Arizona Supreme Court Rules](#), the Pinal County Public Defender respectfully submits this comment supporting the adoption of the proposed amendment to [Rule 702 of the Arizona Rules of Evidence](#) as written. Unreliable expert testimony is a top cause for wrongful convictions. [Rule 702](#) is intended to require the preclusion of unreliable testimony. The proposed amendment clarifies the important gatekeeping function trial courts must play to ensure that unreliable expert witness testimony does not lead to unreliable verdicts. This Court should embrace the proposal.

I. Pinal County Public Defender Interest Statement

The Pinal County Public Defender provides legal defense services to indigent adults and juveniles facing criminal charges and/or mental health commitments when appointed by the Pinal County Superior Court or a Justice Court within Pinal County. Our goal is to provide superior legal representation, safeguard fundamental individual rights, and ensure equal access to the protections afforded by the United States Constitution, the Arizona Constitution, and the laws of Arizona.

The Pinal County Public Defender supports the proposed amendments to [Rule 702](#) because unreliable and misleading forensic expert testimony is a leading cause of wrongful criminal convictions. The proposed amendments clarify existing law that requires trial judges to carry out a gatekeeping function to keep unreliable expert testimony from reaching the jury. By clarifying the burden of proof the proponent bears and the requirement that expert opinions be conveyed in an accurate and reliable manner to the jury, the amendments will promote confidence in the criminal justice system and reduce the likelihood of wrongful convictions.

II. The proposed amendment will encourage trial courts to more carefully carry out their gatekeeping function in assessing the admissibility of expert testimony.

The Petition aptly demonstrates that [Rule 702](#) needs restyled to ensure that trial judges carefully assert their gatekeeping function to preclude unreliable expert

testimony. The admission of unreliable expert testimony in criminal cases has dire consequences. Unreliable expert testimony—forensic expert testimony especially—is a leading cause of wrongful convictions.

Unfortunately, the federal trend of judges deeming unreliable expert testimony admissible but subject to weighing considerations by juries also exists in Arizona state courts. The result is that [Rule 702](#)'s “exacting standards of reliability”¹ are not uniformly implemented.

This Court should take the corrective action outlined in the Petition and adopt the proposal as written.

A. Unreliable forensic expert testimony leads to wrongful convictions.

It is well established that unreliable forensic expert testimony leads to wrongful criminal convictions. See Jim Hilbert, *The Disappointing History of Science in the Courtroom: Frye, Daubert, and the Ongoing Crisis of "Junk Science" in Criminal Trials*, 71 Okla. L. Rev. 759, 762 (2019); Cynthia E. Jones, *Here Comes the Judge: A Model for Judicial Oversight and Regulations of the Brady Disclosure Duty*, 46 Hofstra L. Rev. 87, 118 (2017) (“Nearly 50% of the first 300 DNA-based exonerations of the Innocence Project involved inaccurate forensic science

¹ See *Weisgram v. Marley Co.*, 528 U.S. 440, 455 (2000) (“Since *Daubert*, moreover, parties relying on expert evidence have had notice of the *exacting standards of reliability* such evidence must meet.”) (emphasis added).

testimony.”) (citing Paul C. Giannelli, *Wrongful Convictions and Forensic Science: The Need to Regulate Crime Labs*, 86 NCLR 163, 172-96 (2007)).

More than a decade has passed since the National Academy of Sciences issued a report calling into question the reliability of all forensic expert testimony unrelated to DNA science. See *Strengthening Forensic Science in the United States: A Path Forward*, Commission on Identifying the Needs of the Forensic Science Community, National Research Council at 7 (2009). Despite the unreliability of much of forensic science, the same report noted that judges routinely admit the evidence without requiring the prosecution to establish that the expert evidence is reliable. *Id.* at 11-12.

Even after the NAS Report exposed the unreliability of much of forensic science, courts are loathe to critically assess the reliability of forensic expert testimony before admitting it. See Professor Jules Epstein, *Preferring the "Wise Man" to Science: The Failure of Courts and Non-Litigation Mechanisms to Demand Validity in Forensic Matching Testimony*, 20 Widener L. Rev. 81, 101 (2014).

The result is that the “current system is failing to protect defendants against false forensic testimony, because science is fundamentally irreconcilable with the bias inherent in partisan experts.” Kayla Marie Mannucci, *Framed by Forensics: Fulfilling Daubert's Gatekeeping Function by Segregating Science from the Adversarial Model*, 39 Cardozo L. Rev. 1947, 1974 (2018).

The first and simplest step this Court can take to address this systemic problem is to restyle [Rule 702](#) to encourage trial judges to perform their gatekeeping duty to preclude the admission of unreliable expert testimony. *See* Stephanie L. Damon-Moore, *Trial Judges and the Forensic Science Problem*, 92 N.Y.U.L. Rev. 1532, 1567-70 (2017) (explaining that a more rigorous application of [Rule 702](#) would “staunch the flow of unreliable forensic evidence into court.”)

B. The proposal improves the status quo by ensuring that Arizona courts act as gatekeepers of unreliable expert testimony to ensure the reliability of verdicts.

This Court has already declared that the proponent of expert evidence bears the burden of proving its admissibility by the preponderance of the evidence under [Rule 702](#). *State v. Bernstein*, 237 Ariz. 226, 228, ¶ 9 (2015); *see, also State v. Salazar-Mercado*, 234 Ariz. 590, 593, ¶ 13 (2014). Yet, this burden is absent from the text of the rule. *See Ariz. R. Evid. 702*. The result is that courts tend to skew toward admitting unreliable expert testimony rather than preclude it.

Additionally, [Rule 702](#) as it is currently written does not expressly require that an expert’s opinion be conveyed to the jury in a reliable manner. *See Ariz. R. Evid. 702(d)*. However, the overstatement of an expert’s opinion to the jury is one of the leading causes of wrongful convictions.

The Petition addresses both concerns.

1.) The text of the rule should contain the burden of admissibility.

Lawyers and judges should be able to resolve legal issues governed by a rule or statute by relying “on the very words of the instrument.” Antonin Scalia & Bryan A. Garner, *Reading Law: The Interpretation of Legal Texts*, 56 (2012) (explaining the “Supremacy-of-Text Principle” of statutory construction). The proposal that [Rule 702](#) be amended to explicitly provide that the proponent of expert evidence “demonstrates to the court that it is more likely than not that” the requirements of [Rule 702\(a\)-\(d\)](#) are met will enable more efficient and fair resolution of admissibility issues.

Moreover, the inclusion of the burden will alleviate confusion potentially caused by contradictory language in the current comment to [Rule 702](#) addressing “shaky but admissible evidence.” This Court has already held that the reliability of expert evidence must be proven by the proponent of expert evidence and that trial courts should preclude such evidence when it is unreliable. *Bernstein*, 237 Ariz. at 230 ¶17. By putting the burden of admissibility in the text of [Rule 702](#), this Court will alleviate confusion and ensure that the standard of admissibility is not ambiguous or that the standard is not supplanted by the 2012 comment. *See State v. Aguilar*, 209 Ariz. 40, 48, ¶ 26 (2004) (“Although a comment may clarify a rule’s ambiguous language, a comment cannot otherwise alter the clear text of a rule.”)

More importantly, an amendment to [Rule 702](#) that expressly incorporates the preponderance standard of admissibility will reduce the likelihood that trial judges admit unreliable expert testimony based on junk science. *See* Edward J. Imwinkelried, *The Best Insurance Against Miscarriages of Justice Caused by Junk Science: An Admissibility Test That Is Scientifically and Legally Sound*, 81 Alb. L. Rev. 851, 861 (2018) (embracing the preponderance standard).

An amendment which incorporates the existing burden of admissibility will improve [Rule 702](#).

2.) The text of the rule should more clearly prohibit experts from overstating an opinion in a manner that renders it unreliable.

A prominent factor in wrongful convictions is “misleading forensic evidence” that is “diagnostically overstated” at trial. Heather Murphy, *A Leading Cause for Wrongful Convictions: Experts Overstating Forensic Results*, New York Times (Apr. 20, 1999) (available at <https://www.nytimes.com/2019/04/20/us/wrongful-convictions-forensic-results.html>) (last accessed Apr. 12, 2023); *see, also* M. Chris Fabricant & Tucker Carrington, *The Shifted Paradigm: Forensic Science's Overdue Evolution from Magic to Law*, 4 Va. J. Crim. L. 1, 104 (2016) (discussing convictions identified by the Department of Justice attributable to the overstatement of forensic evidence).

After the National Academy of Sciences 2009 report was released, the Obama Administration formed the President’s Council of Advisors on Science and

Technology (PCAST), which published a report in 2016 echoing the NAS Report’s conclusions that the accuracy of forensic sciences has been seriously overstated. *See* Eric S. Lander, *Fixing Rule 702: The PCAST Report and Steps to Ensure the Reliability of Forensic Feature-Comparison Methods in the Criminal Courts*, 86 *Fordham L. Rev.* 1661, 1663–66 (2018).

PCAST made several recommendations to the federal Standing Advisory Committee on Evidence Rules “to propose a path forward with respect to [Rule 702](#).” *Id.* at 1665. PCAST’s recommendations addressed problems with the admission of forensic feature-comparison methods that are routinely admitted with “a claim to be able to identify the source of a sample with a high accuracy—even when the reliability of the methods have never been tested or when the methods have been tested and found to be unreliable.” *Id.* at 1676. Relevant here is PCAST’s recommendation that “the witness accurately states the probative value of the meaning of any similarity or match between the samples.” *Id.* at 1678.

Fair, accurate, and reliable testimony concerning DNA comparisons is particularly important in criminal trials. Expert testimony involving the comparison of DNA samples is often misunderstood by jurors and overstated by witnesses and their proponents. *See* § 60:20. *In general* [regarding the admissibility of DNA evidence], [7 Jones on Evidence § 60:20 \(7th ed.\)](#) (discussing “the various ways” the

explanations of the significance of DNA evidence should or should not be offered to the jury.)

A prominent error involving the presentation of DNA evidence is known as the “prosecutor’s fallacy” where there is an “assumption that the random match probability is the same as the probability that the defendant was not the source of the DNA sample.” *McDaniel v. Brown*, 558 U.S. 120, 128 (2010). “In other words, if a juror is told the probability a member of the general population would share the same DNA is 1 in 10,000 (random match probability), and he takes that to mean there is only a 1 in 10,000 chance that someone other than the defendant is the source of the DNA found at the crime scene (source probability), then he has succumbed to the prosecutor's fallacy.” *Id.* Recognizing “persuasiveness of [DNA] evidence in the eyes of the jury,” the United States Supreme Court has emphasized that “it is important that it be presented in a fair and reliable manner.” *Id.* at 136.

By clarifying [Rule 702\(d\)](#) to require that an “expert’s opinion reflects a reliable application of the principles and methods to the facts of the case, courts will reduce the likelihood that “the proponent gives the jury a bare-bones presentation which calls for their deference rather than providing the jury with enough information about the expert's methodology to enable the jury to make a rational appraisal of its weight.” Edward J. Imwinkelried, *Improving the*

Presentation of Expert Testimony to the Trier of Fact: An Epistemological Insight in Search of an Evidentiary Theory, 52 Ariz. St. L.J. 49, 65 (2020).

This Court should adopt the proposed amendment to [Rule 702\(d\)](#) to clarify that experts must present their opinions to the jury in a manner that accurately reflects the reliability of the opinion.

III. Conclusion

The concern that jurors will defer to experts and accept their opinions without scrutiny has concerned judges and lawyers for a long time. *See* Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv. L. Rev. 40, 54-55 (1901).

[Rule 702](#) is designed to prevent unreliable expert evidence from reaching the jury. The proposed amendments clarify the burden of proponents and the limitations on expert testimony. Both are welcome improvements to ensure that trial judges carry out their gatekeeping role.

This Court should adopt the proposed amendments outlined in the Petition.

Respectfully submitted this 1st day of May, 2023

By: /s/ Kate Milewski
Kate Milewski
Pinal County Public Defender