

No. 08-559

IN THE
Supreme Court of the United States

E.K. MCDANIEL, WARDEN AND THE ATTORNEY
GENERAL OF THE STATE OF NEVADA,
Petitioners,

v.

TROY BROWN,
Respondent.

**On Writ of Certiorari to the
United States Court of Appeals
for the Ninth Circuit**

**BRIEF OF THE NATIONAL ASSOCIATION OF
CRIMINAL DEFENSE LAWYERS AS *AMICUS
CURIAE* IN SUPPORT OF RESPONDENT**

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**BRIEF OF THE NATIONAL ASSOCIATION OF
CRIMINAL DEFENSE LAWYERS AS *AMICUS
CURIAE* IN SUPPORT OF RESPONDENT**

This brief is submitted on behalf of the National Association of Criminal Defense Lawyers (“NACDL”) as *amicus curiae* in support of Respondent.¹

INTEREST OF *AMICUS CURIAE*

NACDL is a nonprofit organization with a direct national membership of more than 12,500 attorneys, in addition to more than 35,000 affiliate members from all 50 states. Founded in 1958, NACDL is the only professional association that represents public defenders and private criminal defense lawyers at the national level. The American Bar Association (“ABA”) recognizes NACDL as an affiliated organization with full representation in the ABA House of Delegates.

NACDL’s mission is to ensure justice and due process for the accused; to foster the integrity, independence, and expertise of the criminal defense profession; and to promote the proper and fair administration of justice. NACDL routinely files *amicus curiae* briefs in criminal cases in this Court and other courts.

¹ Pursuant to Rule 37.6, counsel for *amicus curiae* state that no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person or entity other than *amicus curiae*, its members, or its counsel has made a monetary contribution to the preparation or submission of this brief. The parties have consented to the filing of this brief.

INTRODUCTION AND SUMMARY OF ARGUMENT

Modern DNA evidence, uniquely probative of both guilt and innocence, can be a powerful tool in the administration of criminal justice. DNA evidence has played a critical role in exonerating individuals who have been wrongfully convicted, and sometimes sentenced to death, on the basis of what seemed to be substantial evidence of guilt. *See, e.g.*, Edwards Connors et al., Department of Justice, *Convicted by Juries, Exonerated by Science* 15-18 (1996); *see also* Brief for Respondent at 3-5, *Dist. Attorney's Office for the Third Judicial Dist. v. Osborne*, No. 08-6 (decided June 18, 2009). Likewise, advances in DNA testing have “rendered it literally possible to confirm guilt,” as well as innocence, “beyond any question whatsoever, at least in some categories of cases.” *Harvey v. Horan*, 285 F.3d 298, 305 (4th Cir. 2002) (Luttig, J., respecting the denial of rehearing en banc).

Precisely because it is so compelling, however, DNA evidence can be misused in a way that has especially dire consequences. This case illustrates what can go wrong when a court fails to guard against the introduction of inaccurate testimony regarding DNA evidence. At respondent Troy Brown's trial, the state's DNA expert – Renee Romero, of the county sheriff's office – testified that DNA evidence established a “99.999[9]67 percent” likelihood that Brown was the assailant who committed the crime in question.² Pet. App. 7a. That was incorrect. As the

² Because the Ninth Circuit relied on a trial transcript that seems to have erroneously omitted a “9,” its opinion attributes

Ninth Circuit explained below, Romero’s analysis falls into a category of error common enough to merit its own short-hand designation: the “prosecutor’s fallacy,” so called because it may overestimate “source probability,” or the likelihood that DNA evidence originated with a given suspect, by conflating it with “random-match probability,” or the chance that DNA evidence would match a randomly selected sample. *Id.* at 15a.

The admission of this kind of false statistical evidence is a serious and often, as here, highly prejudicial error. By testifying incorrectly that DNA evidence made it 99.999967 percent likely that respondent was guilty – and then helpfully clarifying that this left only a “.000033” chance of innocence, *see id.* at 40a – the state’s expert effectively directed a verdict of guilt. Given the gravity of that error, rendered especially profound by the weakness of the rest of the case against respondent, the Ninth Circuit correctly deemed admission of the “inaccurate and misleading” evidence a due process violation warranting a new trial. Pet. App. 19a (“[A]dmission of Romero’s unreliable and misleading testimony violated Troy’s due process rights . . .”).

Petitioner sought certiorari solely to review the Ninth Circuit’s application of *Jackson v. Virginia*, 443 U.S. 307 (1979). *See* Petition for Certiorari i.

a “99.99967 percent” to Romero instead of the 99.999967 percent to which she apparently testified. *See* U.S. Br. 9 n.3 (noting transcript error). This brief cites the actual 99.999967 percent figure throughout. Not that it matters: Either way, Romero’s testimony was false; and either way, it effectively instructed the jury that respondent’s guilt was scientifically proven beyond a reasonable doubt. *See infra* at 18-19.

But on one point *amicus* NACDL agrees with petitioner and the United States: This is no typical *Jackson* case. The Ninth Circuit did not evaluate all of the evidence presented to the jury, as is standard practice under *Jackson*. U.S. Br. 18. Nor, as the United States emphasizes, did the Ninth Circuit order an acquittal, the only appropriate relief under *Jackson*, *id.* at 1, 15, 17, 31. Instead, it remanded respondent for a new trial, *id.* at 32 n.15 – a course of action that would be impermissible had respondent’s first conviction violated *Jackson*.

Particularly in light of that disposition, the best reading of the opinion below – the one that does most to minimize, if not entirely resolve, its internal contradictions – is that the Ninth Circuit did not in fact decide this case on *Jackson* grounds. Rather, it held that the admission of Romero’s false testimony deprived respondent of his due process rights, Pet. App. 19a, and then, applying a *Jackson* gloss to its harmless-error review, deemed that error prejudicial because no reasonable juror could have convicted absent the false testimony, *id.* at 21a. That harmless-error standard demands more of a habeas petitioner than is actually required under *Brecht v. Abrahamson*, 507 U.S. 619 (1993). By clearing even that heightened standard, respondent certainly has established the necessary prejudice. But even if there were questions arising from the Ninth Circuit’s due process or harmless-error analyses, they are not questions raised by the state’s petition for certiorari. Accordingly, if the Court is not prepared to affirm the decision below on the grounds argued by respondent, *see generally* Brief for Respondent, then it may

wish to consider dismissing the petition as improvidently granted.

ARGUMENT

I. FALSE OR MISLEADING STATISTICAL PRESENTATION OF DNA EVIDENCE IS A SERIOUS PROBLEM REQUIRING RIGOROUS SAFEGUARDS.

Modern DNA testing produces scientific evidence that is “uniquely probative . . . if preserved and tested properly.” Brandon L. Garrett, *Claiming Innocence*, 92 Minn. L. Rev. 1629, 1647 (2008). But that evidence also must be explained properly to the jury. Otherwise, “the jury does not know what to make of the fact that [DNA] patterns match: the jury does not know whether the patterns are as common as pictures with two eyes, or as unique as the Mona Lisa.” *United States v. Yee*, 134 F.R.D. 161, 181 (N.D. Ohio 1991).

A DNA “match” occurs when all of the human genome materials or “alleles” in a genetic sample taken at a crime scene are identical to those of a given individual. Pet. App. 17a n.5; U.S. Br. 3. But by itself, the fact of a DNA match establishes only that an individual *could* be the source of a genetic evidentiary sample. See Samuel Lindsey, Ralph Hertwig & Gerd Gigerenzer, *Communicating Statistical DNA Evidence*, 43 *Jurimetrics J.* 147, 148 (2003). Whether that person is in fact the source depends, first of all, “on the integrity of the analysis,” *id.*, as laboratory or other errors in the testing process may render a putative match meaningless. It also turns on “the rarity of the DNA profile in question,” *id.*, a function

of the size and composition of the population of potential suspects. See Richard Lempert, *Some Caveats Concerning DNA as Criminal Identification Evidence: With Thanks to the Reverend Bayes*, 13 *Cardozo L. Rev.* 303, 306 (1991).

Determining the evidentiary weight to be accorded a DNA match requires evaluation of all of those factors, along with any benign reason that an innocent person's genetic material might be at a given crime scene. See Lindsey et al., *supra*, at 148. Because that ultimate probability assessment is "tangled in a web of statistical complexities," *id.* at 147-48, it is especially important that the jury be educated and not misled as to the meaning of a DNA match. *Id.* (citing "growing need to present such statistical scientific evidence in a form that judges and jurors can understand").

A. The Prosecutor's Fallacy Is a Dangerous Misuse of DNA Evidence.

One common and particularly damaging way in which a jury may be misled about the meaning of a DNA match is through the "prosecutor's fallacy" at issue in this case. The prosecutor's fallacy confuses two distinct probabilities: "random-match probability" and "source probability." See Lindsey et al., *supra*, at 150-51. Random-match probability is the probability that a person selected at random from the overall population would have DNA that matched a genetic sample recovered at a crime scene. Source probability, by contrast, is the probability that a given person is actually the source of the DNA found at the crime scene, given expert tes-

timony of a DNA match. See Lempert, *supra*, at 306; see also U.S. Br. 26 n.11. The prosecutor’s fallacy falsely asserts that source probability is equal to one minus the random-match probability – in this case, that given a random-match probability of one in three million, the likelihood that respondent was the source of the crime-scene DNA was 99.999967. Or, put differently, the fallacy wrongly submits that random-match probability is tantamount to the probability that the defendant is *not* the source of the incriminating DNA. See Lindsey et al., *supra*, at 150; see also U.S. Br. 25-26 & n.11.³

³ The actual relationship between the source probability and the random-match probability involves a significantly more complicated equation. It depends on a formula known as Bayes’ Theorem, and several other factors including the composition of the pool of potential suspects and the laboratory’s testing error rate. Bayes’ Theorem states that:

$$p(\text{source}|\text{match}) = \frac{p(\text{source})p(\text{match}|\text{source})}{p(\text{source})p(\text{match}|\text{source}) + p(\text{not source})p(\text{match}|\text{not source})}$$

See William C. Thompson & Edward L. Schumann, *Interpretation of Statistical Evidence in Criminal Trials: The Prosecutor’s Fallacy and the Defense Attorney’s Fallacy*, 11 Law & Hum. Behav. 167, 170 n.2 (1987). The term $p(\text{source}|\text{match})$ is the source probability, or the probability that the defendant was the actual source of the DNA at the crime scene given the fact that the prosecution’s expert reported a match. The terms $p(\text{source})$ and $p(\text{not source})$ are the “prior probabilities,” or the probabilities that the defendant was or was not, respectively, the actual source of the DNA at the crime scene based on all the other evidence before considering the DNA evidence. The terms $p(\text{match}|\text{source})$ and $p(\text{match}|\text{not source})$ are the probabilities that the prosecution’s expert would report a match if the defendant were or were not, respectively, the actual source of the DNA at the crime scene. See *id.*

The problem that gives the prosecutor’s fallacy its name is this: In actuality, source probability may be lower (and thus the defendant more likely innocent) than the probability of guilt produced by the prosecutor’s fallacy. *See* Pet. App. 16a (“probability of finding a random match can be much higher than the probability of matching one individual”). As recognized by courts and commentators across the country warning about the prosecutor’s fallacy, random-match probability represents only the chance that the DNA of an individual chosen at random from the suspect population (typically a racial group) would match the specimen collected from a crime scene. It does not and cannot establish the odds that a particular suspect is in fact the source of that crime-scene specimen.

That is because source probability is affected not only by random-match probability, but also by other factors – factors that may reduce source probability but are wrongly disregarded by the prosecutor’s fallacy. For instance, the probability of laboratory error or contamination of a DNA sample (whether intentional or inadvertent) must be factored into source probability, but is discounted entirely by the prosecutor’s fallacy.⁴ Similarly, source probability,

⁴ Accounting for laboratory error – which the prosecutor’s fallacy fails to do – is particularly important because “forensic evidence is not uniquely immune from the risk of manipulation.” *See Melendez-Diaz v. Massachusetts*, 129 S. Ct. 2527, 2536 (2009); *see also Dist. Attorney’s Office for the Third Judicial Dist. v. Osborne*, 129 S. Ct. 2308, 2327-28 (2009) (Alito, J., concurring) (“Indeed, modern DNA testing technology is so powerful that it actually increases the risks associated with mishandling evidence.”).

unlike the prosecutor's fallacy, takes account not only of the DNA match, but also of the weight of the *non*-DNA evidence against the defendant. *See* Lempert, *supra*, at 317.⁵ Finally, and highly relevant here, the probability that a suspect's relative was the source of crime-scene DNA is critical to determining source probability but rendered irrelevant by the prosecutor's fallacy. *Id.* at 325.

As a result, an expert DNA witness, cloaked with scientific credibility, may end up presenting a jury with statistics that are simply false, in that they overestimate the likelihood that a defendant is the source of crime-scene DNA. Indeed, that is precisely what happened in this case, a point nobody disputes. And if that incorrect source-probability number is high enough, as 99.999967 percent surely is, then that false testimony is likely to carry so much weight that it discourages the jury from considering non-DNA evidence which may lead to a reasonable doubt about the perpetrator's identity or the defendant's guilt. *See* Thompson & Schumann, *supra*, at 170-71, 182 (warning that the prosecutor's fallacy "could lead to serious error, particularly where the other

⁵ Indeed, for this reason, expert testimony as to source probability is always problematic. Because source probability turns in part on the weight of the non-DNA evidence, determining the probability accurately requires a DNA expert to consider non-scientific evidence – invading the province of the jury and adding undue weight to the incriminatory nature of a DNA match. *See* Lempert, *supra*, at 317-18 ("If the expert's judgment regarding the existence and probative value of a DNA match is influenced by her knowledge of other incriminatory information, the jury's estimate of the incriminatory weight of the DNA evidence will be inappropriately high.").

evidence in the case is weak and therefore the prior probability of guilt is low”).

B. Courts Carefully Monitor The Presentation Of DNA Evidence to Protect Against The Prosecutor’s Fallacy and Other Misleading Testimony.

None of the potential pitfalls discussed above would come as a surprise to courts across the country facing the challenges associated with DNA evidence. Aware of the significant risk that juries might be misled by the presentation of DNA evidence, those courts are implementing necessary safeguards to ensure that such evidence is accurately and meaningfully explained to juries.

Perhaps most important, most state courts will not allow stand-alone testimony that a defendant’s DNA “matches” a crime-scene sample; instead, the state must present statistical testimony explaining the significance of a match. *E.g.*, *People v. Coy*, 620 N.W.2d 888, 896 (Mich. App. 2000) (holding that failure to offer statistical evidence clarifying significance of possible DNA match was plain error, and observing that “[i]t appears that the majority of other states’ courts share the view that evidence of a DNA match without accompanying statistical interpretation is meaningless and inadmissible.”). Other courts have permitted evidence of DNA matches without explanatory statistics only because the expert witnesses otherwise made clear that a “match” does not mean that a defendant is the source of crime-scene DNA. *See Sholler v. Commonwealth*, 969 S.W.2d 706, 709–10 (Ky. 1998) (expert testified

that “match” did not mean that defendant was source of the DNA sample); *People v. Watley*, 667 N.Y.S.2d 376, 376 (N.Y. App. Div. 1997) (expert conceded that the DNA “could have come from others in the general population”).

Most relevant here, courts strive to prevent the logical error that was committed in this case: permitting the jury to “use the probability evidence as a measure of the probability of the defendant’s guilt or innocence, thereby undermining the presumption of innocence.” *State v. Roman Nose*, 667 N.W.2d 386, 397 (Minn. 2003). To guard against this possibility, some courts allow the admission of random-match probability evidence only when the expert refrains from suggesting that random-match probability may be equated with the probability of a defendant’s guilt, see *United States v. Gwaltney*, 790 F.2d 1378, 1383 (9th Cir. 1986) (government did not attempt “to reduce the ultimate question of innocence or guilt to one of mathematical probabilities”); *State v. Hannon*, 703 N.W.2d 498, 509 (Minn. 2005) (expert “did not give a bald percentage that the jury could mistake for a measure of the probability of [the defendant’s] guilt”), or from putting undue emphasis on the random-match statistic, *Roman Nose*, 667 N.W.2d at 397.

At a minimum, courts generally prohibit testimony purporting to identify a particular defendant as the definitive source of crime-scene DNA. *State v. Bloom*, 516 N.W.2d 159, 168 (Minn. 1994) (expert could not testify that a particular DNA profile was “unique” or that the defendant was the source of the DNA); see also *United States v. Chischilly*, 30 F.3d

1144, 1158 (9th Cir. 1994) (affirming admission of statistical DNA evidence only because the prosecution “was careful to frame the DNA profiling statistics presented at trial as the probability of a random match, not the probability of the defendant’s innocence that is the crux of the prosecutor’s fallacy”). Indeed, similar testimony has led to reversal even under plain-error review. *United States v. Massey*, 594 F.2d 676, 681 (8th Cir. 1979) (reversing as plain error because prosecutor “infused in the minds of the jury the confusion in identifying the hair with identifying the perpetrator of the crime”).

II. THE NINTH CIRCUIT CORRECTLY HELD THAT THE INTRODUCTION OF FALSE DNA TESTIMONY AT RESPONDENT’S TRIAL VIOLATED THE DUE PROCESS CLAUSE AND MANDATES A NEW TRIAL.

The risk that DNA evidence will be presented to the jury in a false and misleading light fully materialized in this case. The state’s DNA expert, an employee of the Washoe County Sheriff’s Office, made two errors in her DNA testimony: She committed the prosecutor’s fallacy, incorrectly conflating random-match probability with source probability; and she compounded that mistake by underestimating the chance that the crime-scene DNA was attributable to one of respondent’s brothers (at least some of whom were among the suspect pool). Together, those errors led to false testimony of a “99.999[9]67 percent” likelihood that respondent was the source of the incriminating DNA, and rendered respondent’s trial so “fundamentally unfair as to violate federal

due process.” Pet. App. 18a . And that violation occurred under exactly the circumstances experts have warned are most likely to produce a miscarriage of justice: where there are real deficiencies in the state’s non-DNA case against the defendant. *See* Thompson & Schumann, *supra*, at 170-71. Given “the weakness of the remaining evidence against” respondent, Pet. App. 17a, the Ninth Circuit properly ruled that a new trial is required.

A. The State Committed And Then Compounded The Prosecutor’s Fallacy In This Case.

1. The false DNA testimony in this case began with the classic prosecutor’s fallacy. The state’s expert, Ms. Romero, testified first that the random-match probability in this case – the chance that the DNA of a randomly selected individual would match the crime-scene DNA – was one in three million. And then, the fallacy: Romero went on to inform the jury that this random-match probability was equivalent to a scientific finding that “there was a 99.999[9]67 percent chance that Troy was the assailant.” Pet. App. 7a; *see also supra* at 3. And in case that formulation did not resonate sufficiently, the prosecutor had Romero rephrase the same mistake and testify that the likelihood of respondent’s innocence was .000033, for emphasis using a blackboard to subtract 99.999967 from 100. J.A. 459-60. Finally, the prosecutor relied on these false statistics in his closing argument, arguing that the jury could be “99.999967 percent sure” that respondent committed the crime. J.A. 730.

This is a textbook case of the prosecutor’s fallacy. Indeed, neither the state nor the United States contests that Romero’s crucial assessment of source probability was rendered incorrect by the prosecutor’s fallacy. *See* Brief for Petitioners at 54-55 (“Romero committed this fallacy in her testimony”); U.S. Br. 26 (explaining legitimate concerns about prosecutor’s fallacy). What sets this case apart is that Romero compounded that initial error with a second false statement – one that was, in the district court’s view, even more significant than the first, Pet. App. 40a – when she “inaccurately minimized the likelihood that [respondent] Troy’s DNA would match one of his four brothers’ DNA, thus underestimating the likelihood that one of Troy’s brothers could have been the perpetrator,” *id.* at 17a.

2. At trial, Romero testified that there was a 1 in 6500 chance that there would be a match between respondent’s DNA and that of one of his four brothers. That testimony was false on at least two different levels. First, Romero based her statistic on an underlying finding that there is a “25 percent chance that two brothers share both alleles at a single locus in common.” *Id.* at 41a. But even accepting that premise, Romero’s mathematical calculation was erroneous; it would follow that there is a 1 in 1024 chance, rather than 1 in 6500, that respondent’s DNA would match the DNA of one of his four brothers. *Id.* at 17a–18a.

Second, and more fundamentally, Romero’s underlying premise was incorrect. According to the contradicted expert report introduced on federal ha-

beas and known as the “Mueller Report,”⁶ Romero erred when she testified without elaboration or caveat that there is a 25 percent chance that two brothers will share both alleles at one locus. That conclusion is correct only in the “special case” in which “both parents are heterozygotes and share at most one allele in common. For other possible parental pairs the probability of two sib[ling]s matching could be 50% or 100%.” J.A. 1582. In other words, to support her testimony, Romero “chose[] a special case which suggests that sib[ling]s have the lowest chance of matching that is biologically possible.” *Id.*; see also Pet. App. 18a (Romero’s testimony “presented the narrowest interpretation of the DNA evidence”).

In fact, instead of the 1 in 6500 chance of a sibling match to which Romero testified, the more accurate probability of a sibling match is 1 in 66. *Id.* Even on its face, that difference is highly significant; as the Ninth Circuit explained, the actual probability of 1 in 66 is “almost one hundred times the probability asserted by Romero.” *Id.* But on the facts of this case, the difference is critically important. This is not a case in which the possibility of a sibling perpetrator is a remote hypothetical. All four of respondent’s brothers lived relatively near to respon-

⁶ In federal habeas proceedings, Respondent submitted the report of Dr. Lawrence Dochez Mueller, a professor at the Ecology and Evolutionary Biology Department at the University of California, Irving. See J.A. 1581–84. The district court admitted the report because “the thesis of the report was argued during” Brown’s state post-conviction proceedings, and because the state offered “no scientific evidence or information to counter Mueller’s conclusions.” Pet. App. 41a nn.2–3

dent and the scene of the crime. Two of them lived in the same small town where the crime occurred. And most compelling of all, one of respondent's brothers actually had been identified by the victim, not once but twice, as the assailant the police were seeking. Pet. App. 18a. A juror may well have harbored serious doubt as to whether one of Troy Brown's brothers had committed the crime – at least until Romero testified falsely that there was only a 1 in 6500 chance, rather than the much higher 1 in 66 chance, that a brother could have been the source of the DNA at the scene.

3. Cases like this one, in which the defendant's relatives are among the suspect pool, present a kind of perfect storm for inaccurate DNA testimony. As is clear from this case, estimating the probability of a sibling match is itself a complex undertaking, with the potential for serious error. But even if that process is completed perfectly, there is still the problem of the prosecutor's fallacy. As discussed above, *see supra* at 9, one of the factors that is improperly disregarded when random-match probability is conflated with source probability is the possibility of a blood-relative match. A defendant like Troy Brown is much more likely to share alleles with his brothers than with a person chosen at random. If the suspect population in his case includes at least some of his brothers (as it surely does), then the actual probability that respondent is the source of the crime-scene DNA decreases. But that decrease is not reflected if a DNA expert like Romero improperly uses random-match probability as a substitute for a full analysis of source probability. In short, the effects of prosecutor's fallacy are aggravated when, as in this case, a

defendant's relatives are among the suspect pool. See Lempert, *supra*, at 312 (when relatives are in suspect pool, probability that DNA would show a "match" even when defendant was not the source "will often be much higher" than random-match probability); I.W. Evett, *Evaluating DNA Profiles in a Case Where the Defence Is "It Was My Brother,"* 32 J. Forensic Sci. Soc. 5, 7-8 (1992).

B. The Ninth Circuit Correctly Held That Admission Of The False DNA Testimony Violated The Due Process Clause.

1. As the Ninth Circuit implicitly recognized, not every evidentiary error rises to the level of a Due Process Clause violation. But the admission of Romero's "misleading" DNA testimony, Pet. App. 3a, 16a, 18a, 19a, was not a garden-variety error. Instead, as the court below concluded, that error was sufficiently grave and consequential that it rendered respondent's trial "so fundamentally unfair as to violate federal due process." *Id.* at 18a.

The state's DNA expert testified that there was a 99.999967 percent chance that respondent was the source of the crime-scene DNA and, conversely, that there was only a .000033 chance that respondent was not the assailant. See *supra* at 3. That testimony, as discussed above, was concededly inaccurate. It also was tantamount to a directed verdict, effectively precluding the jury from voting to acquit.

Juries in Nevada are instructed that conviction does not require absolute certainty of a defendant's guilt. "Mere possible" or "speculat[ive]" doubt is not

enough to warrant acquittal; only “such . . . doubt as would govern or control a person in the more weighty affairs of life” constitutes the “reasonable doubt” that is a bar to conviction. Nev. Rev. Stat. § 175.211. In short, Nevada jurors are instructed that they may and should vote to convict on something less than 100 percent certainty of guilt. Against that backdrop, scientific testimony putting the percentage likelihood of guilt at 99.999967 has the same effect as a directed verdict. No reasonable juror, that is, could have understood that some percentage of certainty under 100 was sufficient to support a conviction and also believed that 99.999967 was not enough. *Cf. Francis v. Franklin*, 471 U.S. 307, 315-16 (1985) (in evaluating whether impermissible mandatory presumption has been applied against a criminal defendant, courts must consider “what a reasonable juror could have understood the charge as meaning”).

Moreover, as the United States emphasizes in its brief, *see* U.S. Br. 25-27, the jury was in no position to identify the flaws in Romero’s testimony for itself, or even to question its credibility. The false testimony at issue here was expert testimony, steeped in highly technical science and statistics. Because of its “aura of special reliability and trustworthiness,” that kind of evidence is particularly powerful to juries. *United States v. Collins*, 395 F. Supp. 629, 637 (M.D. Pa. 1975). And even if a juror were inclined to take a hard look, he or she almost certainly would lack the “specialized knowledge” necessary to draw independent conclusions. U.S. Br. 26 (“most educated lay-persons – and indeed, most lawyers – lack” technical knowledge necessary to understand prose-

cutor's fallacy). As the United States explains, "without specialized knowledge of genetics, DNA, and probability theory, a typical juror would not have a sound reason to reject the accuracy of Romero's uncontradicted assessment" of the relevant probabilities. *Id.*

In short, the jurors had neither reason nor capacity to discount Romero's false scientific testimony. That testimony, in turn, was almost uniquely prejudicial, assessing the probability of respondent's guilt at 99.999967 percent when jury instructions made clear that something less than 100 percent was required. Under those circumstances, the Ninth Circuit did not err in finding that respondent's trial had been rendered "fundamentally unfair" by the false DNA testimony.

2. The United States argues that "questions concerning the reliability of evidence, such as those raised by the court of appeals in this case," do not implicate the Due Process Clause, and are instead governed exclusively by state evidentiary rules. U.S. Br. 28. But that is not always the case, and it is not the case here.

First of all, there are no "questions concerning the reliability" of Romero's expert testimony. The problem here is not lingering "questions" about whether Romero got her testimony right, or about the "inherent reliability," *see id.*, of her scientific method. The problem is that Romero assuredly got it wrong, and testified falsely that there was a 99.999967 percent chance that respondent was the source of the crime-scene DNA.

Second, as the United States explains, when the Court has concluded that “inherently unreliable” testimony does not violate the Due Process Clause, it has done so on the grounds that “it is the province of the jury to weigh the credibility” of witness testimony. *Id.* at 28 (quoting *Kansas v. Venstris*, No. 07-1356 (Apr. 29, 2009), slip op. 7 n.*). But as the United States itself makes clear, that maxim cannot apply in this case, where the jury lacked the “specialized knowledge” necessary to judge for itself whether Romero’s testimony was true or false. *See supra* at 18-19; U.S. Br. 26.

In fact, this Court has indeed held that the Due Process Clause may be violated by the introduction of evidence much like that at issue here: unreliable eyewitness identifications. Like DNA-identification testimony, eyewitness-identification testimony, whether true or false, may be particularly compelling to jurors. And under this Court’s precedents, there is no question but that unreliable eyewitness-identification testimony may violate the Due Process Clause. *See, e.g., Manson v. Brathwaite*, 432 U.S. 98 (1977). The same principles apply here.

The United States argues that the eyewitness-identification cases are inapposite because they turn on “governmental practice[s]” that unnecessarily corrupt an identification, rather than on reliability itself. U.S. Br. 30 n.13. But as *Manson* makes clear, “reliability is the linchpin” of the Due Process Clause analysis. 432 U.S. at 114; *see also id.* at 127 (Marshall, J., dissenting) (“[s]uggestively obtained eyewitness testimony is excluded . . . precisely because of its unreliability”). And while cases like *Manson*

do require, to show a Due Process Clause violation, that there be some “governmental practice” linked to the unreliability of the eyewitness identification, that condition is certainly fulfilled here. It was the prosecutor in this case who tenaciously elicited the testimony that there was only a .000033 percent chance that respondent was innocent, and then in his closing argument told the jury that it “could be 99.999967 percent sure that [respondent] committed the crime.” Pet. App. 37a. And in any event, Romero herself, the source of the “unreliable” identification in this case, was a state actor, employed by the County’s own Sheriff’s Office. Nothing about the “government practice” prong of *Manson* distinguishes that case from this one.

C. The Due Process Violation In This Case Was Sufficiently Prejudicial To Warrant A New Trial.

After finding that admission of Romero’s false testimony rose to the level of a Due Process Clause violation, the Ninth Circuit went on to conclude that the violation was sufficiently prejudicial to require a new trial. Pet. App. 21a (ordering that respondent be retried with 180 days or released). Though the Ninth Circuit’s reasoning on this point may have been erroneous, its ultimate conclusion is correct.

1. Because this case arose on habeas review, the court below should have conducted its harmless-error inquiry pursuant to *Brecht v. Abrahamson*, 507 U.S. 619, 631 (1993), asking whether the due process error “had substantial and injurious effect or influence in determining the jury’s verdict.” See also *Fry v. Pliler*, 551 U.S. 112, 121-22 (2007). Instead, the

Ninth Circuit seems to have applied the insufficiency standard of *Jackson v. Virginia*, 443 U.S. 307 (1979), asking whether, absent the improperly admitted testimony, “*any* rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt.” Pet. App. 13a (italics in original).

The import of the Ninth Circuit’s multiple references to *Jackson* is admittedly unclear, and no account of the opinion below can resolve all of its internal contradictions. But the best reading of that opinion is that the Ninth Circuit borrowed the *Jackson* standard to engage in what otherwise would have been unremarkable harmless-error review. Such an unorthodox use of *Jackson* is not without precedent in the Ninth Circuit.⁷ Moreover, there is

⁷ In *Wigglesworth v. Oregon*, 49 F.3d 578 (9th Cir. 1995), for instance, another Ninth Circuit panel employed *Jackson* in the same way. The court there first held a lab report unconstitutionally unreliable under the Due Process Clause. It went on, citing *Jackson*, to consider whether, absent the lab report, the evidence was sufficient to support a conviction.

Wigglesworth, in turn, cites *United States v. Bishop*, 959 F.2d 820, 828 (9th Cir. 1992), for the proposition that a *Jackson* analysis must follow any finding that the Due Process Clause has been violated by the admission of unreliable evidence. But that is not what *Bishop* says. Instead, the *Bishop* court, which reversed defendant’s conviction under *Batson* and then went on to consider and reject his *Jackson* claim, holds only that when a defendant succeeds on a claim that entitles him to a new trial, it is still incumbent on the court to consider an outstanding *Jackson* claim which, if successful, would bar retrial and earn defendant an outright acquittal. *Id.* It may be that *Wigglesworth*’s over-reading of *Bishop* is the source of the Ninth Circuit’s peculiar approach to harmless-error review in these cases.

no other explanation for the relief granted by the Ninth Circuit; as the United States emphasizes, the remedy for an actual *Jackson* violation is not the new trial ordered by the Ninth Circuit, but an acquittal, U.S. Br. 1, 15, 17, 31. Similarly, eliminating the improperly admitted testimony from its evaluation of the strength of the state's evidence is standard practice if and only if the Ninth Circuit is conducting harmless-error review rather than a traditional *Jackson* analysis. Finally, at the conclusion of its opinion, the Ninth Circuit itself states that it had granted respondent's petition "on due process grounds," not on *Jackson* grounds. Pet. App. 21a.

On that understanding, the Ninth Circuit erred when it used *Jackson* instead of *Brecht* to conduct its harmless-error review. But that error favored the *state*, not respondent. *Brecht* harmless-error review is stricter than that applied to constitutional errors on direct review under *Chapman v. California*, 386 U.S. 18, 24 (1967). The Ninth Circuit's *Jackson* standard, however, is stricter still: Unlike *Brecht*, which allows relief so long as an error has a "substantial and injurious effect or influence" on a jury's verdict, the Ninth Circuit, employing the language of *Jackson*, limits relief to those cases in which the properly admitted evidence is *constitutionally insufficient* to support a conviction. If, as the Ninth Circuit properly held, respondent satisfied even that inappropriately high standard, then it follows, *a fortiori*, that the *Brecht* standard was satisfied, as well.

2. Whatever the standard, the Ninth Circuit's holding that the constitutional error in this case warranted a new trial is wholly correct. The Ninth

Circuit reviewed the same “numerous inconsistencies” in the state’s case that convinced the district court that any rational juror would have doubted respondent’s guilt. Pet. App. 19a-21a. And it concluded, with solid basis, that “given the weakness of the remaining evidence against Troy,” respondent “was most probably convicted based on the jury’s consideration of false, but highly persuasive, [DNA] evidence,” in the form of the prosecutor’s fallacy and Romero’s 99.999967 percent testimony. *Id.* at 17a.

First, there is ample record evidence suggesting that respondent was not in fact the assailant in question. There are questions about whether respondent could have been at the scene of the crime at the relevant time: One witness testified that respondent was elsewhere when the crime was committed. *Id.* at 19a-20a. Then there is the problem of the clothing: The descriptions of the assailant’s clothes provided by both the victim, Jane Doe, and two other witnesses do not match the clothing that respondent was wearing at the relevant time. *Id.* at 5a-6a.⁸ Though Doe stated that she had bitten her

⁸ Jane Doe told the police on the night of the assault that her attacker “did not wear a hat,” wore a “jacket with ‘a zipper for sure’” and wore “a watch which scraped her face.” Pet. App. 5a. Troy Brown was wearing a cowboy hat on the night of the attack. *Id.* at 5a-6a. Troy’s black satin coat had “no zipper” and he “did not own a watch.” J.A. 823; *see also id.* at 908. The other witnesses who claimed to have seen a man near Jane Doe’s trailer around the time of the attack – the Dokes – both described the man as wearing “a black coat with a fluorescent green skull and bandit emblem on the back.” *Id.* at 887; *see also* Pet. App. 5a-6a. Troy’s black satin jacket had an orange and yellow CG’s logo on the back. *Id.*

attacker's hand, the police found no evidence of any bite marks on respondent's hands when they examined him the next morning, nor blood on his clothing. *Id.* And although Doe testified that her assailant turned off the nightlight in her trailer, the only print found on the nightlight did not match respondent's, and none of respondent's prints were found anywhere else on the premises. *Id.* at 6a.

Moreover, Troy Brown's behavior immediately after the assault was "inconsistent with having something to hide." *Id.* at 20a-21a. Aware that he was under suspicion, respondent arranged for a full-body examination so that he would have a record of his physical condition shortly after the attack. *Id.* at 21a. And, during questioning prior to trial and at all phases of trial proceedings, Troy continually maintained his innocence. *Id.* at 20a-21a.

By itself, this record evidence would be enough to raise substantial questions about respondent's guilt. But here it is coupled with another very plausible suspect in the case, one with a much greater than average likelihood of matching Troy's DNA: respondent's brother, Trent Brown. Trent Brown lived across the street from Doe and was in the thick of the action on the night of the crime, at the same bar as his brother and the victim's mother; like Troy, it appears that Trent also was known to the victim and her family. *Id.* at 4a. And most significantly, the victim herself twice identified Trent and not Troy as her attacker. *Id.* at 20a.⁹

⁹ When asked to describe who her attacker looked like, Doe first said "Troy," and when asked again, responded, "Trent. Yes, Trent." Pet. App. 6a. Doe also said originally that her at-

This is simply not a case in which a reviewing court could be comfortable that the false DNA testimony did not have a “substantial” effect on the jury’s verdict under *Brecht*, 507 U.S. 619. The non-DNA evidence against respondent does not come close to corresponding to the 99.999967 percent likelihood of guilt to which Romero testified. And while in some other case, underestimating the likelihood of a sibling DNA match by close to 100 times – from 1 in 6500 to 1 in 66 – might not be critical, it surely was here, given that respondent’s brother, twice identified by the victim as her assailant, was at least a plausible suspect. In short, this is exactly the kind of case in which the prosecutor’s fallacy “substantially and injuriously” affects the jury’s verdict, see *Brecht*, 507 U.S. at 631: A case in which jury never focuses on the non-DNA evidence pointing toward acquittal because, thanks to the prosecutor’s fallacy, it is presented with the scientifically-proven “fact” that the defendant is “99.999967 percent” guilty. See Thompson & Schumann, *supra*, at 170 (prosecutor’s fallacy could lead to “serious error” where non-DNA evidence is weak and “prior probability of guilt is low”).

tacker’s hair looked like Troy’s, but then changed her mind and stated that it looked like Trent’s. *Id.* When Doe saw a television report depicting Troy’s arrest a few days after her assault, she identified the man on the television (Troy) as her attacker, *id.* at 6a-7a – but subsequently told police officers that the man on the television had sent her the flowers which came with a card signed by Trent, not Troy. *Id.* at 7a. And when shown a photo array that included Troy and nobody else known to her, Doe was unable to identify Troy as her assailant. *Id.*

D. The Court Should Not Resolve Any Questions Arising From The Ninth Circuit's Due Process or Harmless Error Analyses In This Posture.

As discussed above, the Ninth Circuit's analysis in this case – despite the misuse of *Jackson* as a standard for harmless-error review, which prejudiced respondent and not the state – was substantively correct. For that reason, *amicus* concurs in respondent's suggestion that the Court affirm the decision below on alternative due process grounds. *See* Brief for Respondent at 20.

If the Court concludes, however, that there are questions about the existence or gravity of a due process violation in this case, or about its review on federal habeas, then it should remand the case to the Ninth Circuit to address those questions in the first instance – respondent's alternative suggestion, *see id.* – or dismiss the case as improvidently granted. The Court should not itself reach out to resolve those questions, as they are not the questions upon which certiorari was granted.

The petition here was clearly and expressly limited to issues concerning sufficiency of the evidence review under *Jackson*. *See* Petition for Certiorari i. Accordingly, the Court should not resolve any of the very different due process questions that might be presented by the decision below. *See* Eugene Gressman et al., *Supreme Court Practice* 463 (9th ed. 2008) (the “Court considers only questions presented in the petition”); *see also, e.g., Mazer v. Stein*, 347 U.S. 201, 206 n.5 (1954) (“We do not reach for constitutional questions not raised by the parties. The fact

that the issue was mentioned in argument does not bring the question properly before us.”). Nor is this case a suitable vehicle for reaching the *Jackson* questions actually presented by the petition: Even if the Court were to agree with petitioner on every point argued, the decision below, turning as it seems to on distinct due process grounds, would remain unaffected. *Cf.* Gressman at 361 (“decision of the question upon which certiorari was granted may prove unnecessary because the judgment below was clearly correct on another ground”). Under these unusual circumstances, the wisest course may be to dismiss the petition as improvidently granted. *See id.* (dismissal of the petition may become necessary if the Court “conclude[s] that it cannot reach the question accepted for review without reaching a threshold question not presented by the petition”).

CONCLUSION

For the foregoing reasons, the judgment below should be affirmed. In the alternative, the judgment should be vacated and remanded to the Ninth Circuit, or the petition should be dismissed as improvidently granted.

Respectfully submitted,

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