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## THE SUPREME COURT OF NEW HAMPSHIRE

Rockingham No. 2007-300

## THE STATE OF NEW HAMPSHIRE

v.

## RICHARD LANGILL

Argued: February 13, 2008 Opinion Issued: April 4, 2008

<u>Kelly A. Ayotte</u>, attorney general (<u>Ann M. Rice</u>, associate attorney general, on the brief and orally), for the State.

<u>Samdperil & Welsh, PLLC</u>, of Exeter (<u>Richard E. Samdperil</u> on the brief and orally), for the defendant.

DUGGAN, J. Pursuant to RSA 606:10 (2001), the State appeals the decision of the Superior Court (<u>Coffey</u>, J.) to exclude expert testimony concerning the identification of a fingerprint of the defendant, Richard Langill. We reverse and remand.

Ι

The record supports the following relevant facts. On March 25, 2004, the police responded to a report of a burglary at an apartment in Derry. The complainant informed the police that someone had stolen \$1,200 from a safe in her bedroom bureau and approximately five dollars in coins from a bottle. On

April 1, 2004, the police lifted latent prints from the bureau, bottle, and the top and right side of the safe. They forwarded the prints to the New Hampshire Department of Safety State Police Forensic Laboratory (NHSPFL). In February 2005, Lisa Corson, a level one criminalist in the fingerprint unit of the lab, identified the latent impression from the bureau as the defendant's fingerprint. In May 2005, the defendant was indicted for burglary. See RSA 635:1 (2007).

Before trial, the defendant moved to exclude Corson's testimony identifying the latent fingerprint as belonging to him. He argued: (1) Corson was not qualified to testify as a fingerprint expert; (2) the fingerprint methodology used by the NHSPFL, called ACE-V methodology, is generally unreliable under RSA 516:29-a (2007), New Hampshire Rule of Evidence 702 (Rule 702), Baker Valley Lumber v. Ingersoll-Rand, 148 N.H. 609 (2002), and Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993); (3) even if ACE-V methodology is generally reliable, Corson did not apply that methodology reliably to his case; and (4) admission of the fingerprint evidence would be unfairly prejudicial under New Hampshire Rule of Evidence 403.

The trial court held a two-day <u>Daubert</u> hearing on the admissibility of Corson's fingerprint testimony. Corson testified as an expert in fingerprint evidence on behalf of the State, while the defendant offered the testimony of James Starrs, an expert in the scientific status of fingerprint comparison, and Steven Ostrowski, a level two criminalist with the NHSPFL. During the hearing, Corson provided the following background information concerning fingerprint identification and ACE-V methodology.

Fingerprints are comprised of patterns of friction ridge skin. Because the friction ridge skin forms during gestation, it is permanent and unique to each individual. A known impression or inked print is obtained from an individual by the controlled application of black ink to the fingers' friction ridge surfaces. The prints are stored on a ten print card that also lists the name and date of birth of the individual to whom the prints belong. A latent print is a chance reproduction of friction ridge skin that is left behind when a fingertip touches an object. The quality and clarity of latent prints varies, with latent prints generally exhibiting greater distortions than inked prints.

Fingerprints are categorized into three levels of increasing friction ridge detail. Level one detail, called ridge flow, consists of three basic patterns: arch, loop, and whorl. Five percent of all fingerprints have an arch pattern, sixty percent have a loop pattern, and thirty-five percent have a whorl pattern. Level one detail also includes focal areas of a print, such as delta regions (triangular shaped areas where fields of ridges have grown in together). An examiner may also use level one detail to orient a latent print; that is, to determine which end is up or down. An examiner cannot individualize a print to a person using only level one detail, but can exclude a person at this level.

Level two details, commonly referred to as Galton points, focus upon characteristics of ridge paths, such as places where ridges end, bifucate, or create dots. They also include observations of the directions of these characteristics and their locations in relation to other identifiable features of the print. Because level two details are unique and permanent to each finger, an examiner can individualize a print to a person at this level. Level three detail observes tiny features or ridge attributes, such as pores on a ridge, and the shape, edge, and width of the ridge itself.

The Scientific Working Group on Friction Ridge Analysis, Study and Technology (SWGFAST) establishes guidelines for fingerprint analysis. The NHSPFL has incorporated these guidelines into its standard operating procedures. Pursuant to the SWGFAST guidelines, NHSPFL uses the ACE-V methodology to examine fingerprints. See State v. Connor, 156 N.H. \_\_\_\_, \_\_\_\_, 937 A.2d 928, 929-30 (2007).

The first step in ACE-V methodology – analysis – requires the examiner to scrutinize first the latent print, and then the known impression. The examiner identifies, in order, the level one, level two, and, if possible, level three details of the latent print to determine whether it is suitable for comparison to a known print; that is, whether sufficient quality (clarity) and quantity of detail is present to match the latent print to an individual. If the latent print is not sufficient, the examiner does not analyze a known impression. If the latent print is sufficient, the examiner obtains the inked print and separately identifies its level one, level two, and level three details. When these details are not consistent between both the latent and the known, e.g., if the latent print has whorl patterns, and the known impression has no whorl patterns, the examiner excludes the known print and stops the analysis. If, however, the details are consistent between the prints, the examiner begins step two of the method – comparison.

During the comparison phase, the examiner places the latent and known prints next to each other, and observes the friction ridge detail to determine whether, based upon similarity, sequence and spatial relationship, the details agree between both prints. If the examiner identifies discrepancies between the prints, the examiner determines whether such discrepancies are explainable, e.g., whether a particular distortion in the latent print is consistent throughout the print. When the discrepancies are not explainable, the known impression is excluded and the process stops. Otherwise, the examiner continues to the next step – evaluation.

During this stage, the examiner formulates a conclusion based upon the analysis and comparison of the friction ridge details. The examiner may determine that the latent print and the known impression are from the same

source (individualization or identification) or different sources (exclusion), or that the results are inconclusive.

The final step is verification, where another qualified examiner independently verifies the first examiner's conclusion by conducting his or her own analysis, comparison, and evaluation to arrive at his or her own conclusion. Under the SWGFAST guidelines, verification is mandatory only when an examiner makes a positive identification. Thus, when the second examiner repeats the process, the verification is not blind because the second examiner knows that another examiner already made a positive identification.

At the <u>Daubert</u> hearing, Corson testified that she applied the ACE-V methodology to analyzing the latent print lifted from the complainant's bureau. She testified that she examined the latent print before looking at the known print. She identified the latent print as having an arch pattern and determined that it had sufficient quality and quantity of detail for individualization. Using an enlarged picture, she further described specific level two and level three characteristics of the latent and known prints, and demonstrated precisely how she compared the two prints to reach her conclusion that the latent print came from the defendant's finger. Corson testified that, while she did not memorialize these observations in contemporaneous bench notes, she photographed the print to document the presence of details. Corson testified that written notes are unnecessary because an independent qualified examiner may observe the features from the photograph. Finally, Corson explained that her conclusion was verified by Timothy Jackson, a criminalist with twenty years experience and the person in charge of the fingerprint unit.

Starrs testified that, pursuant to NHSPFL's Standard Operating Procedures, which apply to every forensic science laboratory in the NHSPFL, Corson was required to memorialize her observations in contemporaneous bench notes. He opined that Corson's failure to take such notes renders her identification unreliable. Starrs further opined that blind verification in single latent print cases would reduce human errors and misidentifications.

Ostrowski disputed this assertion, explaining that blind verification is not a necessary component of the scientific process, and is instead a quality assurance measure. He testified that, while blind verification may provide greater quality assurance, no studies demonstrate that it diminishes or eliminates erroneous identifications, and no oversight organization, such as SWGFAST, currently requires blind verification. Ostrowski acknowledged, however, that the Federal Bureau of Investigation (FBI) may begin blindly verifying single latent prints, and that SWGFAST had recently submitted a draft proposal recommending blind verification for all single latent print cases.

Ostrowski further testified that "no part of the scientific process . . . require[s] contemporaneous note taking of the mental process." He explained that scientists take notes while they are collecting their data on "things that are constantly changing." Because "[t]he data, in a fingerprint case, is the image of the latent impression" and has already been collected, "[a]ny kind of note taking would not further support the identification," although it "would be a means of seeing where that examiner went wrong if an erroneous identification came to fruition later on." Ostrowski explained that "[t]here . . . [is] no suitable way to thoroughly document the mental process that one would go through to come to the conclusion of individualization or not . . . to the point where another examiner would use that to come to their [sic] own conclusion." Thus, while contemporaneous bench notes might assist an examiner during his or her analysis or might save that examiner's work for his or her future reference, they would not allow another individual to observe the examiner's reasoning process. Ostrowski testified that, even if he had the initial examiner's bench notes, he would always redo the analysis, comparison, and evaluation of the latent print because he would want to avoid any bias that would arise from having previously read the notes.

Additionally, if the initial examiner who individualized a latent print was no longer available to testify at a criminal trial, Ostrowki testified that he would never testify to an identification based upon that examiner's bench notes. Instead, he would need to independently examine the images himself before testifying to an individualization. Finally, Ostrowski testified that NHSPFL's protocols do not require an examiner to take contemporaneous bench notes when verifying an individualization, and that such notes are not a component of the ACE-V methodology.

In its ruling on the defendant's motion to exclude, the trial court reaffirmed that Corson was qualified to provide expert fingerprint testimony, and concluded that ACE-V is generally a reliable methodology for analyzing latent fingerprints. However, the trial court excluded Corson's testimony because "her application of the ACE-V (Analysis, Comparison, Evaluation, and Verification) methodology to the single latent print in this case was unreliable as a result of incomplete documentation and possibly biased verification." Specifically, the trial court reasoned: "[I]n light of the fact that Ms. Corson did not document her analysis, and that [NHSPFL] does not employ a blind verification procedure for single latent prints, there is insufficient basis for the court to find that the ACE-V principles were reliably applied to the facts in this case."

The State moved for reconsideration, arguing that neither contemporaneous notes nor blind verification are necessary for the ACE-V methodology to have been reliably applied to this case. Specifically, the State contended that Corson's documentation is consistent with all relevant

standards and criteria; Corson did take contemporaneous notes by marking the latent print with a shorthand "horseshoe shaped marking"; and this documentation "is consistent with what the rest of the fingerprint community is doing across the country." Additionally, the State maintained that blind verification is a quality assurance measure that is not part of the scientific process of the ACE-V methodology, and that blind verification has not been proven to eliminate or reduce misidentifications.

The trial court denied the State's motion for reconsideration. Citing RSA 516:29-a, I(c), the trial court reaffirmed that in the absence of additional evidence indicating that Corson reliably applied the ACE-V methodology to this case, either in the form of contemporaneous bench notes or implementation of a blind verification process for single latent print cases, Corson's testimony was inadmissible.

On appeal, the State argues that the trial court unsustainably exercised its discretion by "exceed[ing] its role of making a threshold determination of admissibility, impos[ing] standards of reliability beyond those established by th[e] scientific community, and undert[aking] the jury's function of weighing the credibility of the expert's testimony." Specifically, the State contends that the trial court "misconstrued the focus of RSA 516:29-a, I(c)" by "requir[ing] a detailed assessment of whether Ms. Corson properly followed the ACE-V methodology in reaching her conclusion." Alternatively, the State maintains that, "even if RSA 516:29-a, I(c) required the trial court to evaluate Ms. Corson's implementation of the ACE-V methodology in this case, the court erred in finding the application unreliable."

Relying upon <u>State v. Dahood</u>, 148 N.H. 723, 735 (2002), the defendant counters that "[u]nder [Rule] 702, it is not enough that the scientific principles are reliable; the State must also put forth evidence that the test is properly administered in each specific instance." He argues that the State failed to demonstrate that Corson applied the ACE-V methodology reliably in this case because Corson's "case notes' did not detail her process or findings, and because the verification process, indicated only by another examiner's initials, did not make reliable the initial examiner's conclusions."

II

We generally review a trial court's determination of expert reliability under Rule 702 for an unsustainable exercise of discretion. <u>State v. Pelletier</u>, 149 N.H. 243, 251 (2003). Rule 702 states:

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.

Thus, expert testimony must rise to a threshold level of reliability to be admissible. Baker Valley, 148 N.H. at 613.

In <u>Baker Valley</u>, we applied the <u>Daubert</u> framework for evaluating the reliability of expert testimony to Rule 702. <u>Id</u>. at 614. Subsequently, in 2004, after our decision in <u>Dahood</u>, 148 N.H. at 723, the legislature enacted RSA 516:29-a, which provides:

- I. A witness shall not be allowed to offer expert testimony unless the court finds:
  - (a) Such testimony is based upon sufficient facts or data;
  - (b) Such testimony is the product of reliable principles and methods; and
  - (c) The witness has applied the principles and methods reliably to the facts of the case.
- II. (a) In evaluating the basis for proffered expert testimony, the court shall consider, if appropriate to the circumstances, whether the expert's opinions were supported by theories or techniques that:
  - (1) Have been or can be tested;
  - (2) Have been subjected to peer review and publication;
  - (3) Have a known or potential rate of error; and
  - (4) Are generally accepted in the appropriate scientific literature.
  - (b) In making its findings, the court may consider other factors specific to the proffered testimony.

The trial court relied upon subsection (c) of RSA 516:29-a, I, in excluding Corson's testimony. The State contends that the trial court misconstrued the scope of RSA 516:29-a, I(c). Specifically, the State asserts that section I of this statute "codifies the <u>Daubert</u> Court's description of the analysis under Rule 702, [requiring] a preliminary assessment of whether th[e] reasoning or methodology is scientifically valid and of whether that reasoning or methodology can be applied to the facts in issue." <u>See Daubert</u>, 509 U.S. at 592-93. It submits that RSA 516:29-a, I(c) is properly interpreted as limiting the trial court to "determin[ing] whether the science underlying the expert's

testimony is reliable in the abstract, and whether those principles are applicable to an issue in th[e] case, and are of assistance to the fact-finder." Thus, the State argues that the trial court "stepped beyond its gate-keeping function" by construing RSA 516:29-a, I(c) "to require a detailed assessment of whether Ms. Corson properly followed the ACE-V methodology in reaching her conclusion."

In matters of statutory interpretation, we are the final arbiters of the legislative intent as expressed in the words of the statute considered as a whole. Petition of State of N.H. (State v. Johanson), 156 N.H. 148, 151 (2007). When examining the language of the statute, we ascribe the plain and ordinary meaning to the words used. Id. We interpret legislative intent from the statute as written and will not consider what the legislature might have said or add language that the legislature did not see fit to include. Id. Further, we interpret a statute in the context of the overall statutory scheme and not in isolation. Bendetson v. Killarney, Inc., 154 N.H. 637, 641 (2006).

Section II of RSA 516:29-a unambiguously codifies the four <u>Daubert</u> factors we applied in <u>Baker Valley</u>, 148 N.H. at 614, 616, and section I(b) codifies <u>Daubert</u>'s requirement that the court preliminarily assess "whether the reasoning or methodology underlying the testimony is scientifically valid," <u>Daubert</u>, 509 U.S. at 592-93. Contrary to the State's assertion, however, it is not clear that section I(c) also merely codifies principles outlined in <u>Daubert</u>. <u>Cf. Note, The Weight Versus Admissibility Dilemma: Daubert's Applicability to a Method or Procedure in a Particular Case</u>, 1998 U. Ill. L. Rev. 231, 236 (1998) ("in <u>Daubert</u>, the Supreme Court did not specifically address a judge's gate-keeping role concerning the application of a scientific technique or methodology"). Therefore, we conduct a closer examination of section I(c).

As the State correctly notes, section I of RSA 516:29-a mirrors part of the current version of Federal Rule of Evidence 702 (FRE 702). In response to <a href="Daubert">Daubert</a> and its progeny, in 2000, Congress amended FRE 702 to its present version. <a href="Fed.R. Evid.">Fed. R. Evid.</a> 702 advisory committee's note (amend. 2000); <a href="See also Kumho Tire Co.">see also Kumho Tire Co.</a>, <a href="Ltd.">Ltd.</a> v. Carmichael, 526 U.S. 137 (1999); <a href="General Electric Co.">General Electric Co.</a> v. <a href="Joiner">Joiner</a>, 522 U.S. 136 (1997). <a href="FRE 702">FRE 702</a> provides:

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.

The third requirement for admissibility at issue here is based in large part upon In re Paoli R.R. Yard PCB Litigation, 35 F.3d 717, 745 (3d Cir. 1994), cert. denied, 513 U.S. 1190 (1995). See Fed. R. Evid. 702 advisory committee's note (amend. 2000).

In that case, the Federal Court of Appeals for the Third Circuit explained:

[A]fter Daubert, we no longer think that the distinction between a methodology and its application is viable. To begin with, it is extremely elusive to attempt to ascertain which of an expert's steps constitute parts of a "basic" methodology and which constitute changes from that methodology. . . . Moreover, any misapplication of a methodology that is significant enough to render it unreliable is likely to also be significant enough to skew the methodology. As suggested, Daubert inters any need for us to make such a distinction, for Daubert's requirement that the expert testify to scientific knowledge -- conclusions supported by good grounds for each step in the analysis -- means that any step that renders the analysis unreliable under the Daubert factors renders the expert's testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology.

<u>In re Paoli</u>, 35 F.3d at 745-46. The Third Circuit noted, however, that "if a court finds that an expert has employed a methodology only slightly different from a methodology that the court thinks is clearly reliable, the court should be more likely to accept the altered methodology than if it was evaluating that methodology as an original matter." <u>Id</u>. at 745 n.14. It concluded:

Thus, . . . we think that the primary limitation on the judge's admissibility determinations is that the judge should not exclude evidence simply because he or she thinks that there is a flaw in the expert's investigative process which renders the expert's conclusions incorrect. The judge should only exclude the evidence if the flaw is large enough that the expert lacks "good grounds" for his or her conclusions.

<u>Id.</u> at 746 (emphasis added); <u>see also Amorgianos v. Nat'l Railroad Passenger Corp.</u>, 303 F.3d 256, 267 (2d Cir. 2002) (applying Third Circuit's approach).

The Federal Court of Appeals for the Eighth Circuit has adopted a similar approach: "[W]hen the application of a scientific methodology is challenged as unreliable under Daubert and the methodology itself is otherwise sufficiently reliable, outright exclusion of the evidence in question is warranted only if the methodology was so altered by a deficient application as to skew the methodology itself." United States v. Gipson, 383 F.3d 689, 697 (8th Cir. 2004) (quotations and brackets omitted). In adopting this approach, the Eighth Circuit interpreted "the reliability inquiry set forth in Daubert . . . [as] extend[ing] beyond simply the reliability of the principles and methodologies in the abstract" because Daubert requires the trial court to "ensure that any and all scientific testimony or evidence admitted is . . . reliable." United States v. Martinez, 3 F.3d 1191, 1197, 1198 (8th Cir. 1993), cert. denied, 510 U.S. 1062 (1994) (quotation omitted). Thus, the Eighth Circuit understood <u>Daubert</u> as requiring a court to "conclude that the [scientific] testimony was derived from the application of a reliable methodology or principle in the particular case" before finding the testimony admissible. Id.

However, the court emphasized <u>Daubert</u>'s focus upon "the differing functions of judge and jury"; specifically, <u>Daubert</u>'s notation that "vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burdens of proof are the traditional and appropriate means of attacking shaky but admissible evidence." <u>Id</u>. (quotation and brackets omitted). Accordingly, the Eighth Circuit concluded that a trial court "should make an initial inquiry into the particular expert's application of the scientific principle or methodology in question," by "requir[ing] the testifying expert to . . . attest[] that he properly performed the protocols" at issue. <u>Id</u>. "If the opponent of the evidence challenges the application of the protocols in a particular case, the district court must determine whether the expert erred in applying the protocols, and if so, whether such error <u>so infected the procedure as to make the results unreliable</u>." <u>Id</u>. (emphasis added). The Eighth Circuit emphasized:

[T]his inquiry is of necessity a flexible one. Not every error in the application of a particular methodology should warrant exclusion. An alleged error in the application of a reliable methodology should provide the basis for exclusion of the opinion only if that error negates the basis for the reliability of the principle itself.

Id.

We find the Eighth Circuit's approach instructive to our interpretation of RSA 516:29-a, I(c). RSA 516:29-a, I(c) requires a trial court to determine

whether "[t]he witness <u>has applied</u> the principles and methods <u>reliably</u> to the facts of the case." (Emphases added.) Contrary to the State's assertion, the statute does not limit the trial court to preliminarily assessing only whether the principles or methods "are applicable to an issue in th[e] case, and are of assistance to the fact-finder." Rather, RSA 516:29-a, I(c) extends further to require the court to examine whether a witness has in actuality reliably applied the methodology to the facts of the case before admitting the witness's testimony.

In the evidentiary context, however, the term "reliable" does not mandate correctness; it signifies a much lower standard, to wit, trustworthiness. <u>See J. Weinstein & M. Berger, Weinstein's Federal Evidence</u> §§ 702.05[1][a], [2][a], at 702-72, 77 (J. McLaughlin, ed., 2d ed., 2008). The overall purpose of Rule 702 and RSA 516:29-a is simply to ensure that a fact-finder is presented with reliable and relevant evidence, not flawless evidence. <u>Dahood</u>, 148 N.H. at 727; <u>see also In re Paoli</u>, 35 F.3d at 746.

Indeed, it would be unreasonable to interpret section I(c) as requiring that a single flaw or even multiple flaws in an expert's application of a particular methodology in all instances renders inadmissible the expert's entire testimony. Cf. Cayten v. N.H. Dept. of Envtl. Servs., 155 N.H. 647, 653 (2007) ("[W]e will not interpret statutory language in a literal manner when such a reading would lead to an absurd result."). Errors in the application of a methodology cannot in every circumstance contaminate the reliability of an expert's conclusions. Still, there may be rare instances where a single error or multiple errors by the expert in applying the methodology might result in an unreliable opinion or conclusion. Thus, RSA 516:29-a, I(c) must be interpreted and applied with some flexibility to encompass the multitude of scenarios that may be presented and to maintain the division in function between the fact-finder and gatekeeper.

The Eighth Circuit's approach sufficiently addresses these concerns by requiring the flaws in application to "so infect[] the procedure as to make the results unreliable." Martinez, 3 F.3d at 1198. Accordingly, under RSA 516:29-a, I(c), "when the application of a scientific methodology is challenged as unreliable under Daubert and the methodology itself is otherwise sufficiently reliable, outright exclusion of the evidence in question is warranted only if the methodology was so altered by a deficient application as to skew the methodology itself." Gipson, 383 F.3d at 697 (quotations and brackets omitted). Where errors do not rise to the level of "negat[ing] the basis for the reliability of the principle itself," Martinez, 3 F.3d at 1198, the adversary process is available to highlight the errors and permit the fact-finder to assess the weight and credibility of the expert's conclusions. United States v. Morrow, 374 F. Supp. 2d 51, 68 (D.D.C. 2005) ("If actual or potential human errors do not rise to th[e] level" of so altering the methodology as to make the test

inadmissible, "they simply go to the weight of the . . . evidence proffered." (citation omitted)); see also Gipson, 383 F.3d at 697. We emphasize that "as long as an expert's scientific testimony rests upon good grounds, . . . it should be tested by the adversary process -- competing expert testimony and active cross-examination -- rather than excluded from jurors' scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies." United States v. Vargas, 471 F.3d 255, 265 (1st Cir. 2006) (quotations and brackets omitted).

III

The State argues that the trial court erred in finding Corson's application of the ACE-V methodology unreliable. The trial court based its finding of unreliability upon two alleged errors: (1) Corson's failure to take bench notes memorializing how she adhered to the ACE-V methodology; and (2) NHSPFL's failure to employ blind verification. With respect to bench notes, the trial court explained that it "require[d] something more than testimony that established protocols were followed" because "the [S]tate has more opportunities to present evidence . . . that [the] ACE-V [methodology] was reliably applied." "[R]eview of those notes w[ould] assist [it] in determining whether a particular identification is based on reliable application of the ACE-V methodology." The trial court required blind verification "not as a means of assuring the credibility of the result, but rather as a check and balance on the application of the methodology." It noted that Corson's application of the ACE-V methodology would be reliable if either of these alleged errors was corrected.

We first address Corson's failure to take bench notes. In light of the competing testimony, we assume for the purposes of this discussion that NHSPFL protocols required Corson to take bench notes documenting her application of the ACE-V methodology to the latent print at issue. We find, however, that it was an unsustainable exercise of discretion for the trial court to find Corson's testimony inadmissible based upon this error. During the Daubert hearing, Corson testified that she followed all other protocols in applying the ACE-V methodology to the latent print. Using an enlarged image of the latent print, she also detailed precisely how she applied the ACE-V methodology to the latent print, testifying that she analyzed the latent print first, observed its characteristics, then examined the known impression, observed its characteristics, then compared the prints, evaluated them, and submitted her conclusion for verification. Essentially, Corson repeated her application of the ACE-V methodology on the stand. The defendant had the opportunity to cross-examine Corson to uncover potential errors in her application of ACE-V to this case; cf. United States v. Davis, 40 F.3d 1069, 1075 (10th Cir. 1994), cert. denied, 514 U.S. 1029 (1995), and 514 U.S. 1088 (1995); and a second expert could easily have reviewed Corson's deposition or

<u>Daubert</u> hearing testimony and identified specific deficiencies in Corson's application of the ACE-V methodology. <u>See Morrow</u>, 374 F. Supp. 2d at 67-68.

In this context, while bench notes may have demonstrated that Corson correctly applied the ACE-methodology or have served to refresh Corson's recollection on the stand, they were not necessary to determining whether she applied the methodology reliably to the facts of the case. Cf. Vargas, 471 F.3d at 265-66 (concluding that fingerprint examiner's testimony was "more than sufficient" to support a finding that the examiner reliably applied ACE-V methodology to the case); Martinez, 3 F.3d at 1198 (requiring expert to "attest" that he performed DNA protocols reliably). If anything, Corson's failure to take bench notes serves only to undermine her credibility and the weight of her testimony. Cf. Vargas, 471 F.3d at 263, 265-66 (explaining that deficiencies in examiner's testimony better tested by the adversary process than by exclusion from the jury's scrutiny). It did not so infect the procedure as to negate the basis for the reliability of the ACE-V methodology itself, as the State demonstrated through Corson's testimony that she had good grounds for her opinion. Accordingly, the trial court exceeded its gatekeeping function by finding Corson's testimony unreliable because she failed to take bench notes.

We next address NHSPFL's failure to employ blind verification. While the FBI may have recently implemented blind verification for single latent prints and SWGFAST may potentially recommend blind verification for such prints, as Starrs testified, in the fingerprint community, the "blind verification process is a new thing entirely." Indeed, the trial court found that, "in general, ACE-V is a reliable method for analyzing latent fingerprints." "[F]ederal courts have [also] found ACE-V to be reliable under Daubert, while noting that verification in the ACE-V may not be blinded." <u>United States v. Mahone</u>, 453 F.3d 68, 72 (1st Cir. 2006) (citations omitted). While we acknowledge that a small number of misidentification cases using ACE-V methodology do exist, it is undisputed that ACE-V methodology has been reliably applied in countless cases without the use of blind verification. Further, as the testimony of Starrs and Ostrowski demonstrates, the fingerprint community is currently debating whether blind verification actually leads to more accurate results. To be sure, while blind verification may ensure with a higher level of certainty that an identification is correct, the record contains no indication that non-blind verification is unreliable.

Given the uncertainties still existing in the fingerprint community concerning whether blind verifications are required or even recommended, <u>cf.</u> <u>id.</u> at 72-73, and the small number of misidentification cases, the trial court unsustainably exercised its discretion by requiring as a prerequisite to admissibility that NHSPFL blindly verify Corson's identification in this case. The record contains no indication that NHSPFL's failure to blindly verify Corson's conclusions negated the basis for the reliability of the ACE-V

methodology itself. At best, this failure affects the weight to be given Corson's testimony, not its admissibility. <u>Id</u>. at 72-73.

Accordingly, the trial court unsustainably exercised its discretion in excluding Corson's testimony.

## Reversed and remanded.

BRODERICK, C.J., and DALIANIS, GALWAY and HICKS, JJ., concurred.