

STATE OF MARYLAND * IN THE
v. * CIRCUIT COURT
BRYAN ROSE * FOR
* BALTIMORE COUNTY
* Case No.: K06-0545

* * * * *

MEMORANDUM DECISION RE RECONSIDERATION

In October, the Court granted Defendant’s Motion to Exclude Testimony of Forensic Fingerprint Examiner (hereafter “Def. Motion”) over the State’s objection. The Court declines to change its prior ruling because:

The State’s sole witness who was not a scientist and did not have scientific training did not prove that the ACE-V method is generally accepted by the scientific community at this time; and

The evidence in this case demonstrated that the ACE-V method is neither perfect nor perfectly applied to partial latent print identifications although the State’s sole witness testified to a 0% error rate.

In this case, the Defendant demonstrated there are no studies of the ACE-V method to determine the reliability of the methodology.

Fingerprinting is a valuable police tool. No one has suggested it be discontinued. Other than fingerprint examiners, however, no one believes that latent print identifications are perfect. Other forensic techniques, such as DNA identification, have a known error rate. Experts present the known error rate to

the jury to consider with all of the other evidence. Latent print identifications are the **only** area where experts testify to a zero error rate.

The State does not cite a Maryland Rule in its Motion nor in the Memorandum in support of the Motion. The Defendant correctly points out that the State has failed to offer any reason to reconsider its decision other than disagreement with the result. While the Defendant's request that the State's Motion be summarily denied is appealing, because the issue is crucial to the State, the Court will discuss its reasons for denying the State's Motion after careful study and consideration.

A. Burden of Proof

In its Memorandum in Support of State's Motion for Reconsideration (hereafter referred to as ("State Mot."), the State appears to believe that the Court applied a new, or different, burden of proof in the prior fingerprint ruling by including at the outset of the Memorandum Decision a section entitled "Death is Different." That section did not discuss the burden of proof. Rather, the standard was set forth on page 22 (hereafter referred to as "Mem. Dec.):

In utilizing the *Frye* test, the burden is on the proponent of the evidence to prove the reliability of the general acceptance of both the underlying scientific principle(s) and the testing procedures used to apply that principle(s) to the facts of the case at hand. The general acceptance under the *Frye-Reed* test must be established by a preponderance of the evidence.

The State does not appear to disagree that this standard is the appropriate one to be used.¹ Inexplicably, the State's Motion makes no mention of any kind of the reference cited above.

The State incorrectly argues that the Court adopted "a two-tiered test" for admission of evidence. Nowhere has this Court suggested such a test.

It would be folly to suggest that capital cases are not different from other criminal cases. At least seventy motions have already been filed in this case, although the majority of criminal cases have only one motion. *Frye-Reed* hearings are not requested in most criminal cases; and, they are held in even fewer cases that they are requested. It is unusual for a trial judge to write an opinion in a criminal case. In many respects, this case – like other capital cases – is different. The State concedes on page 1 "it is certainly true that a unique jurisprudence has taken shape with regard to the imposition of the death penalty." The difference in these cases is not just the imposition of the penalty, however. The jury who will decide whether or not the defendant is guilty is selected differently, for example.

In any event, the Court never suggested a different evidentiary standard should be applied to consideration of fingerprint evidence. No new or different standard was applied. Rather

the proof presented by the State in this case regarding

¹ Nowhere in its Motion does the State mention the preponderance of the evidence standard it appears to advocate. "Preponderance of the evidence" appears to be the correct standard. *Roberts v. United States*, 916 A.2d 922, 929 (D.C. 2007); *see also Sabatier v. State Farm Mutual Automobile Ins. Co.*, 323 Md. 232, 235-36 (1991); *but cf. Cobey v. State*, 73 Md. App. 233, 238 (1987) ("[w]hether the State, in a criminal trial, must prove the general acceptance of a new scientific technique beyond a reasonable doubt or merely by a preponderance of the evidence is not clear from prior cases.")

the ACE-V methodology of latent fingerprint identification showed that it was more likely so, than not so, that ACE-V was the type of procedure *Frye* was intended to banish, that is, a subjective, untested, unverifiable identification procedure that purports to be infallible.

Dec. p.31. The language in the Conclusion, i.e., “more likely so, than not so,” refers to the preponderance of evidence standard used. Use of the appropriate standard is made clear by the last sentence of the fingerprint ruling:

In this case, the State did not show by a **preponderance of the evidence** that a fingerprint examiner can reliably identify a fingerprint to an individual to the exclusion of all others using the ACE-V method.

Dec. p. 31 (emphasis added).

B. Expert Opinion Testimony

MD Rule 5-702 provides in pertinent part:

Expert testimony may be admitted, in the form of an opinion or otherwise, if the court determines that the testimony will assist the trier of fact to understand the evidence or to determine a fact in issue

The Rule is crystal clear that the court must first make a determination. Despite the State’s suggestion that opinion testimony should be directly presented to the jury to consider, the Rule requires first that a court make a determination. Such has long been the law. In *Reed v. State*, 283 Md. 374 (1978) the Court of Appeals determined that juries should not decide scientific controversies because they don’t have the necessary expertise. In addition, the appellate court was concerned there would be a lack of uniformity and that different juries would reach different verdicts on the same evidence. Whether or not the basis for the *Reed* Court’s conclusions are valid, that is the law in Maryland.

Once the Court scheduled a hearing on Defendant's Motion to Exclude the testimony of the Forensic Fingerprint Examiner, both sides had the opportunity to present whatever testimony or evidence necessary concerning the reliability *vel non* of latent fingerprint identification. "[B]efore a scientific opinion will be received as evidence at trial, the basis of that opinion must be shown to be generally accepted as reliable within the expert's particular scientific field." *Reed v. State*, 283 Md. 374, 381 cited by the State on pg. 5, adopting *Frye v. United States*, 293 F. 1013 (D.C.Cir. 1923).² The State describes this requirement thusly:

The *Reed* test is deceptively simple. For scientific or technical evidence to be admitted, it must be generally accepted in the scientific community.

State Mot. p.5. Although the State argues that the test is "simple," in 2007, the Honorable Glenn T. Harrell, Jr. wrote concerning certain evidence:

Based on our research, no studies currently available to the public have been subjected to **rigorous analysis** under the *Frye-Reed* standard in order to determine the scientific reliability of the

² The State refers to the Court's statement that "*Frye-Reed* is a more stringent standard than *Daubert*", Mem. Dec. p. 28, noting the Court did not supply a citation for this assertion. See *Owens Corning v. Bauman*, 125 Md. App. 454, 497 (1999), *abrogated by John Crane, Inc. v. Scriber*, 369 Md. 369 (2002) ("despite the United States Supreme Court's enunciation of a more liberal admissibility test in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* . . . Maryland courts consistently have utilized the *Frye/Reed* rule of general acceptance within the field"). See also *Daubert v. Merrell Dow Pharmaceuticals, Inc.* 509 U.S. 579, 588 (1993):

[t]he drafting history [of the Federal Rules] makes no mention of *Frye*, and a rigid 'general acceptance' requirement would be at odds with the 'liberal thrust' of the Federal Rules and their 'general approach of relaxing the traditional barriers to 'opinion' testimony.'

(quoting *Beech Aircraft Corp. v. Rainey*, 488 U.S. 153, 169 (1988)). It is odd that the State refers to Judge Michael's dissent in *United States v. Crisp*, 324 F.3d 261 (4th Cir. 2003) as a "holding." State Mot. p.7. If the State asserts that the *Frye/Reed* standard is less stringent than *Daubert*, no precedent is cited for that assertion.

methodology, principles and resultant conclusions of the foregoing studies for the purposes of evidentiary admissibility.

Conaway v. Deane, 401 Md.219 n.57(2007) (emphasis added) (citations omitted). In this case the Defendant demonstrated there are no studies of the ACE-V method subjected to rigorous analysis to determine the scientific reliability of the methodology, principles and resultant conclusions for the purposes of evidentiary admissibility.

The State argues that there is “binding precedent” from Maryland appellate courts with respect to fingerprint evidence establishing general acceptance. State Mot. pp. 7-8. Again, the State cites from the *Reed* case, 283 Md. at 380, with regard to judicial notice of reliability for “ballistics tests, fingerprint identification, blood tests.” State Mot. p.6. Not surprisingly, the Defendant agrees with the Court’s original opinion noting the *Reed* decision was published in 1978, and that with the passage of time, circumstances have changed regarding certain evidence including certain ballistics evidence and fingerprint identification from partial latent prints. To demonstrate how circumstances can change regarding previously accepted evidence, it is useful to look at recent developments in one type of ballistic evidence since ballistic evidence is also mentioned in the *Reed* case.

For many years, the FBI employed a technique called “comparative bullet-lead analysis,” or CBLA, among other names. The FBI claimed it could compare the chemical composition of a bullet recovered from a crime scene with bullets remaining in a box of ammunition, (typically found in a defendant’s possession),

to argue that the crime scene bullet came from the specific box. Michael O. Finkelstein & Bruce Levin, *Compositional Analysis of Bullet Lead as Forensic Evidence*, 13 J. L. & POL'Y 119, 125 (2005). The assumptions underlying the FBI's claim regarding CBLA, i.e., "that each batch of lead that produces bullets is unique and that no two batches will ever have similar or identical chemical signatures. . ." had rarely, if ever, been substantiated by any significant research." Craig M. Cooley, *The Death Penalty in America: Reforming the Forensic Science Community to Avert the Ultimate Injustice*, 15 STAN. L. & POL'Y REV. 381. 429 (2004). Consequently, in *Clemons v. State*, 392 Md. 339, 359 (2006), the Maryland Court of Appeals concluded that CBLA "is not generally accepted within the scientific community as valid and reliable." Before the *Clemons* case, however, individuals were convicted in trials where CBLA evidence was accepted as reliable.

The State incorrectly asserts that:

This Court stands alone in American jurisprudence in ruling that fingerprint Identification is not reliable enough to be admitted.

State Mot. 4. In *Jacobs v. Virgin Islands*, 53 F. Appx. 651, 652 (3rd Cir. 2002), the Third Circuit Court of Appeals upheld the trial court's exclusion of a fingerprint expert's testimony on the grounds that the Government failed to establish "that the methodology of its expert was reliable. . . ." Moreover, in *United States v. Parks*, No. CR-91-358-JSL (C.D. Cal. Dec. 10, 1991), the United States District Court for the Central District of California rejected fingerprint evidence:

Having conducted a searching inquiry for the 'science' of fingerprints, the district court in *Parks* properly deter-

mined that no such science exists and that the government's fingerprint evidence did not possess sufficient reliability to warrant admission.

Robert Epstein, *Fingerprints Meet Daubert: The Myth of Fingerprint "Science" Is Revealed*, 75 S. CAL. L. REV. 605, 656 (2002).³

In a 2007 decision, a defendant's Motion in Limine to Exclude a latent print identification by a Police Criminalist was granted. *State of New Hampshire v. Richard Langill*, No. 05-5-1129 (Sup.Ct. Rockingham Jan. 19, 2007). After a two day hearing, the court found that "in general," ACE-V is a reliable method of analyzing latent fingerprints," but that "the accuracy of the methodology is dependent on accurate application by the practitioner." *Id.* at pp.14-15. Because the witness "did not document her analysis, and the [New Hampshire Department of Safety Forensic Laboratory] does not employ a blind verification procedure for single latent prints" the New Hampshire trial court excluded the fingerprint identification "until such time that [the] Court is satisfied that the NHDSFL has conducted a methodically reliable analysis on the latent print found on [the victim's] bureau." *Id.* at 15. This Court declines to fashion a procedure for latent print analysis for this case as did the New Hampshire court. It is up to the State to meet its burden of proof as it believes is proper.

C. General Acceptance in Scientific Community

While the State agrees that "general acceptance" must be shown in the scientific community, see State Mot. p. 5, the parties disagree as to what

³ While admitting the evidence, other courts have rejected the "perfection" of ACE-V. In *United States v. Sullivan*, 246 F.Supp.2d 700, 703 (E.D.Ky 2003), the Federal District Court Judge wrote "[t]he court shares the defendant's skepticism that the ACE-V methodology enjoys a 0% error rate, making it effectively a perfect art." Ultimately, the Court rejected the "claim of a 0% error rate."

comprises the scientific community. The relevant “community” for assessing the validity of a particular scientific technique includes anyone

whose scientific background and training are sufficient to allow them to comprehend and understand the process and form a judgment about it.

Reed, 283 Md. at 382. The Court in *Reed* rejected the notion that a technique’s practitioners are the only people whose opinions about the technique’s validity should be taken into account. Such a restrictive approach, the Court held, would defeat the point of the *Frye-Reed* test by “allow[ing] a court to ignore the informed opinions of a substantial segment of the scientific community which stands in opposition to the process in question.” *Id.* at 399.

In determining whether voice-print technology was generally accepted, for example, the *Reed* court refused to “restrict[] the relevant field of experts to those who have performed voice print experiments,” and considered “the opinions of those scientists in the field of speech and hearing, as well as related fields, who, by training and education, are competent to make professional judgments concerning experiments undertaken by others.” *Id.* (quotation marks omitted). Similarly, in *Akonom v. State*, 40 Md.App. 676, 682 (1978), the Court of Special Appeals held, “it is clear under *Reed* that the relevant ‘field’ in which the polygraph belongs is not limited to those who practice the science (or art) of polygraphy, but extends into the larger scientific community as well.”

The State does not cite any legal authority for its argument that only the opinions of latent fingerprint examiners concerning the “perfect” methodology

they use should be accepted. The Defendant argues that restricting the evidence to only the people who earn a living examining fingerprints

would be like determining the scientific validity of ESP by relying on the testimony only of self-proclaimed psychics, or assessing the predictive powers of tarot cards by polling only wandering bands of fortune tellers.

Def. Mem. p.12. Whether scientific or technical expert testimony is reliable requires objective, independent validation of the expert's methodology as the "expert's bald assurance" of "validity is not enough." *United States v. Sullivan*, 246 F.Supp.2d 700, 701 (E.D.Ky. 2003) (citations omitted) (quoting *Smelser v. Norfolk Southern Ry. Co.*, 105 F.3d 299, 303 (6th Cir. 1997)).⁴

Although the State was free to call as many witnesses as necessary to prove the general acceptance of latent print identification in the "scientific community," the State called one witness. That witness admitted he had no college degree. His testimony revealed no scientific training; he did not profess to be a scientist.⁵ This Court will not question the State's strategy in this regard. Perhaps it is possible that someone without a science background can testify about "general acceptance in the scientific community." The witness in this case was unable to do so. It is equally possible that the State could demonstrate general acceptance in the scientific community of the perfection of the latent print identification methodology known as ACE-V; the State did not do so in this case.

⁴ In *Sullivan*, the court concluded based on the documentation submitted by the Government in that record (which did not include the OIG report admitted in this case without objection by the State), the fingerprint identification testimony would be permitted.

⁵ Mr. Meagher's credentials in the area of fingerprint examination were not questioned; and, he was qualified to testify as an expert in that area.

The testimony and evidence at the hearing in this case revealed that in the scientific community, little experimental investigation or testing has been performed in the area of latent print identification. The scientific testing which has been performed questioned the validity of the ACE-V methodology used by the State in this case.

The State also sought to show general acceptance of latent print identification in courts; but, the judicial community is not the scientific community. See *United States v. Sullivan*, 246 F.Supp.2d at 703 (historical acceptance of fingerprint evidence in courts does not qualify as general acceptance for *Daubert.*). Moreover, this Court cannot take judicial notice of “general acceptance in the scientific community” when the State failed to demonstrate such acceptance.

In the Memorandum Decision on p. 27, the Court mentioned that the Defendant did not dispute that latent fingerprint identifications had in the past been admitted or generally accepted. The Court's statement was inartful. The Defendant's Motion argued that ACE-V latent fingerprint analysis “[u]ntil recently . . . has generally been accepted without question or critical review.” Def. Mot. at 1-2. The Defendant has made clear his disagreement in opposing the State's Motion for Reconsideration, “the State's empirically false assertion that latent fingerprint identification is generally accepted by anyone other than the narrow subset of people who earn their living by applying this technique.” Def.Opp. at

n.8.⁶

The State also sought to show the general acceptance of latent print identification by fingerprint examiners. State Mot.p 5. Its sole witness, however, testified that fingerprint examination is not a science. Consequently, general acceptance of latent print identification by its practitioners does not constitute general acceptance by the “scientific community” as required by the *Frye-Reed* test. The argument that the community of fingerprint examiners can avoid scrutiny by the scientific community unlike other forensic evidence is particularly disturbing because fingerprint examiners declare their identifications under the ACE-V methodology to be 100% certain.

As surprising as it was to this Court that the State was not able to meet its burden of proof in this case, it has been shocking to the community. With serious questions raised as to the reliability of latent print identification, the question has been raised whether the reliability of x-rays would be questioned next.

This Court can note, however, the obvious difference between the scientific foundation for x-ray technology and the almost complete lack of scientific testing of the latent print identification methodology known as the ACE-V method in the record in this case.

Shortly after the discovery of the x-ray by Professor Wilhelm Conrad Rontgen in 1895, an x-ray photograph was admitted into evidence in the case of *Bruce v. Beall*, 99 Tenn. 303 (1897). In *Bruce*, the reviewing court found no error in admitting the x-ray evidence stating:

⁶ “Def. Opp.” refers to Defendant Bryan Keith Rose’s Opposition to the State’s Motion for Reconsideration. Def. Motion refers to Defendant’s Motion to Exclude Testimony of Forensic Fingerprint Examiner.

New as this process is, experiments made by scientific men, as shown in this record, have demonstrated its power to reveal to the natural eye the entire structure of the human body. . . .”

99 Tenn. At 307. Cited in *Reed*, 283 Md. at 398. No such experiments by scientist demonstrating the power of partial latent print identifications were identified by the State in this case. Nowhere in this record is there any indication that x-ray technology depends on subjective determinations without standards or guidelines.

Moreover, experts in other disciplines do not claim their methods are infallible as do fingerprint examiners.⁷ Experts with science training testify to a “reasonable degree of medical probability” of opinions such as an Orthopedic Surgeon, see *American Airlines Corp. v. Stokes*, 120 Md. App. 350, 353, 362 (1998), or a Urological Oncologist or Clinical Pharmacist, see *Rite Aid Corp. v. Levy-Gray*, 162 Md. App. 673, 711 (2005) or a Medical Technologist or Professor of Microbiology and Immunology, see *T-UP, Inc. v. Consumer Protection Div.*, 145 Md. App. 27, 54-55 (2002) or a Chemist, see *Cole v. State*, 378 Md. 42, 69 (2003), or a Medical Doctor, see *Harris v. Board of Educ. of Howard County*, 375 Md. 21, 26 (2003). The list of other scientific opinions expressed to a “reasonable degree” include the areas of Forensic Psychiatry, Forensic Chemistry, Forensic Pathology, Clinical Pathology, Nursing and Obstetrics/Gynecology and Psychiatry. See *Attorney Grievance Com’n. of Maryland v. Christopher*, 383 Md.

⁷ The International Association for Identification, to which the State’s expert witness in this case belongs, states that any expert giving testimony of possible, probable or likely [fingerprint] identification shall be deemed to be engaged in conduct unbecoming. 1979 IAI Resolution cited in *NewScientist.com.news* 19 September 2005 and discussed by the State’s witness in this case.

624, 635 (2004); *Rivers v. State*, 393 Md. 569, 590-92 (2006); *Attorney Grievance Com'n of Maryland v. Alsafty*, 379 Md. 1, 11 n.15 (2003); *Andrews v. State*, 372 Md. 1, 12 (2002); *Maryland State Bd. Of Physicians v. Eist*, 176 Md. App. 82, 101 (2007); *Dixon v. Crete Medical Clinic, P.C.*, 498 F.3rd 837, 849 (8th Cir. 2007). Opinions in other disciplines and areas are also expressed to a "reasonable degree," such as Engineering, *Fox v. Dannenberg*, 906 F.2d 1253, 1255 (1990), Meteorology, *Compagnano v. Highgate Manor of Rensselaer, Inc.*, 299 A.D.2d 714, 715 (N.Y.A.D. 2002); Industrial Hygiene, *John Crane, Inc. v. Puller*, 169 Md.App. 1, 14 (2006) and even Municipal Planning, *Zografos v. Mayor and City Council of Baltimore*, 165 Md. App. 80, 92 (2005).

The Defendant points out, Def. Opp. pp. 12-13, that the State could demonstrate that the ACE-V method is considered valid:

by members of any scientific fields who possess the training, experience, and expertise necessary to offer opinions on [sic] issue. This category includes (among others) criminologists, criminalists, forensic scientists, biologists, cognitive scientists, psychologists, perception specialists, statisticians, and clinical researchers.

While not expressing any opinion as to any of the scientific fields suggested by the Defendant, it is clear that the burden was on the State to prove, by a preponderance of evidence, the general acceptance of latent print identification by the ACE-V method with the testimony of someone familiar with the relevant scientific community and the general acceptance by that community of the perfection of the ACE-V method.

D. Reliability

Reliability under the *Frye-Reed* test, an expert's scientific opinion is admissible at trial only if the basis for the opinion is "shown to be generally accepted as reliable within the expert's particular scientific field." *Reed*, 283 Md. at 381; accord *Montgomery Mut. Ins. v. Chesson*, 399 Md. 314, 327 (2007). The *Frye-Reed* test applies to the methodologies underlying expert testimony. *Giddens v. State*, 148 Md. App. 407, 413 (2002). If a methodology's "validity is in controversy in the relevant scientific community . . . then expert testimony based upon its validity cannot be admitted into evidence." *Reed*, 283 Md. at 381. The *Frye-Reed* test "was deliberately intended to interpose a substantial obstacle to the unrestrained admission of evidence in criminal cases. . .". *Sabatier v. State Farm Mut. Auto. Ins. Co.*, 323 Md. 232, 249 (1991).

Maryland Rule 5-702(3) provides that expert testimony is admissible only if "a sufficient factual basis exists to support [it]." Such testimony must be "the product of reliable principles and methods." *Giant Food Inc. v. Booker*, 152 Md. App. 166, 183-85 (2003) see also *CSX Transp., Inc. v. Miller*, 159 Md. App. 123, 203 (2004) ("[A]n expert opinion must provide a sound reasoning process for inducing its conclusion from the factual data.").

The testimony of the State's witness and the evidence admitted did not demonstrate that expert opinion testimony concerning partial latent fingerprint identification relies on generally accepted techniques nor rests upon a sufficient factual foundation. As argued by Defendant:

First, the so-called ACE-V process is methodologically unsound and scientifically unacceptable because it does

not require examiners to base their extrapolations or conclusions on any empirical data or statistical analysis concerning natural variability in human fingerprint patterns. Second, there have not been any statistical studies or controlled experiments demonstrating the validity or reliability of the ACE-V process. Third, the process is methodologically unsound because virtually every step of the process is standardless, arbitrary, and wholly subjective, without any rules or guidelines for examiners to follow. Finally, substantial disagreement has developed among criminalists, criminologists, forensic scientists, biologists, cognitive scientists, psychologists, perception specialists, statisticians, and clinical researchers concerning the validity of the methodology underlying the ACE-V process for latent fingerprint identification.

The latent print and law enforcement communities repeatedly have called for empirical research to provide a factual foundation for examiners' conclusions.⁸

The ACE-V method described by the State's witness has never been subjected to controlled scientific testing to determine whether it is reliable or to ascertain its error rate. Most fields of science can pull from the shelf dozens, or hundreds, of studies testing their various hypotheses and contentions over a period of years. MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY 358 (David L. Faigman, et al. eds., 1997). The lack of study of latent fingerprint identification is under attack because of the lack of study done on the accuracy of examiners.⁹ Mr. Meagher's testimony that the error rate is zero was

⁸ SEE U.S. DEP'T JUSTICE, OFFICE OF INSPECTOR GENERAL, A REVIEW OF THE FBI'S HANDLING OF THE BRANDON MAYFIELD CASE 197 (2006); Michael Mears & Therese M. Day, *The Challenge of Fingerprint Comparison Opinions in the Defense of a Criminally Charged Client*, 19 GA. ST. U.L. REV. 705, 730-31 (2003); DEPARTMENT OF JUSTICE, NAT'L INST. OF JUSTICE, SOLICITATION, FORENSIC FRICTION RIDGE (FINGERPRINT) EXAMINATION VALIDATION STUDIES 4 (MAR. 2000).

⁹ Tamara F. Lawson, *Can Fingerprints Lie?: Re-Weighing Fingerprint Evidence in Criminal Trials*, 31 AM. J. CRIM. L. 1, 65 (2003); see also Sandy L. Zabell, *Fingerprint Evidence*, 13 J.L. & POL'Y 143, 178 (2005) ("The problem is that we have no true idea of the underlying error rate for ACE-V".)

not credible since without testing there is no way to know what the error rate is

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The State's Motion for Reconsideration nowhere mentions, much less tries to support, this claim of perfection or the Court's findings in this regard.

The State's witness was examined on an effort by the FBI to demonstrate the reliability of the ACE-V method in the *United States v. Mitchell* case, 96-407 (E.D.Pa. Feb. 2000), a case with which Mr. Meagher was very familiar. There was no claim that this effort represented an independent or controlled scientific test. Nevertheless, the Government in *Mitchell* sought to bolster its fingerprint evidence by sending the two latent prints at issue and an exemplar of the defendant's (known) print to law enforcement agencies for analysis. Thirty-four agencies responded; nine (27%) reported they had not identified either one or both of the latent prints with any of the fingers on the defendant's ten print card. Epstein, *supra* at 629.

Because the State did not point to controlled, scientifically sound experiments that either validate the ACE-V method or establish its error rate, the State did not prove in this case that the process has a sufficient factual foundation nor did the State prove that the method is "generally accepted" in the scientific community.

In this case, the testimony and evidence showed that each key step of the ACE-V method is without objective standards or rules.

Analysis - Despite the wide range of problems that obscure latent

¹⁰ Simon A. Cole, *More Than Zero: Accounting for Error in Latent Fingerprint Identification*, 95 J. CRIM. L. & CRIMINOLOGY 985, 987, 990 (2005). Professor Cole has identified numerous well-known cases of fingerprint misattribution. See *id.* at 999-1017.

prints and degrade their quality, there are no rules, standards or guidelines to determine whether a latent print is of sufficient quality to be used.

Comparison - Once the examiner sees the (known) unblemished exemplar print the examiner can “adjust” the points identified in the Analysis phase for Comparison. The hazard in this reversible approach has been known for some time.

Examination - The amount of correspondence in friction ridge detail that is necessary for a match has not been established. because of this lack of objective criteria, there can be no assurance that different examiners will reach the same results.¹¹ One cannot review the work of the examiner because there is no requirement that notes be kept on the points used for the identification.

Verification - This stage is methodologically unsound because the second examiner is informed of the first examiner’s conclusions. Furthermore, a supervisor can select another “verifier” if the verifier declines to confirm the identification.

Whatever ultimately happens to this case, the pressure is building for latent print identification’s error rate to be scientifically established.

CONCLUSION

Based on the foregoing, the State’s Motion for Reconsideration is denied.

February 21, 2008

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¹¹ Zabell, *supra* note 6, at 156 (“Any unbiased, intelligent assessment of fingerprint identification practices today reveals that there are, in reality, no standards.”) Simon A. Cole, *Fingerprinting: The First Junk Science*, 28 OKLA. CITY U.L. REV. 73, 84 (2003).

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