

District Court, Arapahoe County, Colorado Arapahoe County Courthouse 7325 S. Potomac St., Centennial, CO 80112	JUN - 8 2013 COURT USE ONLY
THE PEOPLE OF THE STATE OF COLORADO, Plaintiff v. JAMES HOLMES, Defendant	Case No. 12CR1522 Redacted Division 26
DOUGLAS K. WILSON, Colorado State Public Defender Daniel King (No. 26129) Tamara A. Brady (No. 20728) Chief Trial Deputy State Public Defenders 1300 Broadway, Suite 400 Denver, Colorado 80203 Phone (303) 764-1400 Fax (303) 764-1478 E-mail: state.pubdef@coloradodefenders.us	
MOTION TO PRECLUDE FINGERPRINT COMPARISON TESTIMONY, PURSUANT TO CRE 702 AND 403, DUE PROCESS, AND PEOPLE V. SHRECK, 22 P.3D 68 (COLO. 2001) [D-107]	

CERTIFICATE OF CONFERRAL

The District Attorney states that they object to the motion, and that they will file a response.

Mr. Holmes moves this Court for a hearing on, and/or an order precluding, fingerprint comparison testimony, and states:

1. The prosecution has endorsed witnesses who have authored reports regarding fingerprint comparisons in this case. Mr. Holmes objects to the admission of any and all opinion testimony concerning fingerprint comparisons that the prosecution intends to introduce at trial. Mr. Holmes objects under CRE 702, 403, and *People v. Shreck*, 22 P.3d 68 (Colo. 2001); *Kumho Tire. Co. v. Carmichael*, 526 U.S. 137 (1995); *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993); and the state and federal due process clauses. U.S. Const. amends. V, XIV; Colo. Const. art. II, sec. 25.

General Legal Principles

2. Admissibility of expert testimony is governed by CRE 403, 702 and other pertinent evidentiary rules. The reliability of expert testimony (or lack thereof) also implicates due process. U.S. Const. amends. V, XIV; Colo. Const. art. II, sec. 25. The Colorado Supreme

Court has explained how a trial court must evaluate proposed expert testimony under CRE 702 and CRE 403:

We hold that CRE 702, rather than [*Frye v. United States*, 293 F. 1013(D.C. Cir. 1923)] is the appropriate standard for determining the admissibility of scientific evidence in Colorado. We hold that under this standard, the focus of a trial court's inquiry should be on whether the scientific evidence is reasonably reliable and whether it will assist the trier of fact, and that such an inquiry requires a determination as to (1) the reliability of the scientific principles, (2) the qualifications of the witness, and (3) the usefulness of the testimony to the jury. We also hold that when a trial court applies CRE 702 to determine the reliability of scientific evidence, its inquiry should be broad in nature and consider the totality of the circumstances of each specific case. In doing so, a trial court may consider a wide range of factors pertinent to the case at bar. The factors mentioned in [*Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993)] and by other courts may or may not be pertinent, and thus are not necessary to every CRE 702 inquiry. In light of this liberal standard, a trial court should also apply its discretionary authority under CRE 403 to ensure that the probative value of the evidence is not substantially outweighed by unfair prejudice. Finally, we hold that under CRE 702, a trial court must issue specific findings as it applies the CRE 702 and 403 analyses.

People v. Shreck, 22 P.3d 68, 74 (Colo. 2001).

3. Courts have a responsibility to ensure that evidence admitted at trial is sufficiently reliable so that it may be of use to the finder of fact who will draw the ultimate conclusions of guilt or innocence. That concern implicates principles of constitutional due process. "Reliability [is] the linchpin in determining admissibility" of evidence under a standard of fairness that is required by the Due Process Clause of the Fourteenth Amendment. *Manson v. Brathwaite*, 432 U.S. 98, 114, 97 S. Ct. 2243, 2253, 53 L. Ed. 2d 140, 154 (1977); U.S. Const. amend. XIV; Colo. Const. art. II § 25.

4. In addition, Mr. Holmes asserts that in assessing this evidence, the Court should consider the heightened reliability required in this case under the Eighth Amendment and section II, article 20 of the Colorado Constitution. *See, e.g., Beck v. Alabama*, 447 U.S. 625, 637 (1980) (risk of unreliable conviction "cannot be tolerated" in case where defendant's life is at stake); *Herrera v. Collins*, 506 U.S. 390, 434 (1993) ("The decision in *Beck* establishes that, at least in capital cases, the Eighth Amendment requires more than reliability in sentencing. It also mandates a reliable determination of guilt."); *People v. Young*, 814 P.2d 834, 846 (Colo. 1991); *People v. Rodriguez*, 786 P.2d 1079 (Colo. 1989).

5. Further, where there is a question regarding the reliability of certain types of expert evidence, not just scientific, the courts need to determine outside the presence of the jury

whether the evidence is unreliable and should not be presented to the jury. *See e.g. People v. Shreck*, 22 P.3d 68 (Colo. 2001) (“The focus of a Rule 702 inquiry is whether the scientific evidence proffered is both reliable and relevant”); *see also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 142 (1999).

[T]he United States Supreme Court expanded *Daubert's* [*v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993)] general holding concerning the trial judge's gatekeeping function to testimony based not only on scientific knowledge, but also to testimony based on technical and "other specialized" knowledge. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 142 (1999).

People v. Shreck, 22 P.3d 68, 74 (Colo. 2001).

6. Under *Shreck, supra*, and CRE 702 where scientific, technical, or other specialized expert testimony and evidence is involved, a “trial court’s CRE 702 determination must be based upon specific findings on the record as to the helpfulness and reliability of the evidence proffered.” *Id.* at 78. The trial court must also make “specific findings” under CRE 403 as to whether the probative value of the proffered evidence is substantially outweighed by its prejudicial effect. *Id.* *Shreck* clearly requires the trial courts, before admission of expert testimony, to make “specific findings as it applies the CRE 702 and 403 analyses.” *Id.* at 70.

7. In *Goebel v. Denver Rio Grande Western Railroad Co.*, 215 F.3d 1083 (10th Cir. 2000) the district court denied the defendant’s request for a pretrial hearing under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), challenging the testimony of a medical doctor who said that the plaintiff’s brain damage was caused by exposure to diesel fumes. When the defendant objected to the testimony during trial, the district court said only “there is sufficient foundation here for the jury to hear this testimony.” *Goebel, supra*, at 1087.

8. On appeal, the Tenth Circuit reversed the case, finding that the district court failed to exercise its gatekeeping duties. The court distinguished between how the district court conducts its analysis under Rules 702 and 403, reviewed on appeal for abuse of discretion, and whether the district court fulfilled its gatekeeping function, reviewed on appeal de novo: “[w]hile the district court has discretion in the manner in which it conducts its *Daubert* analysis, there is no discretion regarding the actual performance of the gatekeeper function.” *Id.* Since the district court had never stated its reason for admitting the expert’s testimony, it could not be examined on appeal. The court held that “a district court, when faced with a party’s objection, must adequately demonstrate by specific findings on the record that it has performed its duty as gatekeeper.” *Id.* at 1088.

Fingerprint Comparison Testimony

9. Fingerprint evidence does not meet the standards required by the Colorado Supreme Court in *Shreck* or CRE 702 and 403 for a number of reasons. First, there are no known error rates for either the techniques used in performing fingerprint analysis or the labs and technicians conducting the testing. As the National Institute for Justice has found, “procedures

must be tested statistically in order to demonstrate that following the stated procedures allows analysts to produce correct results with acceptable error rates. This has not yet been done.” See National Institute of Justice, *Solicitation: Forensic Ridge (Fingerprint) Examination Validation Studies* (March 2000). Error rates were a key consideration for the United States Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

10. Furthermore, there are documented instances of erroneous fingerprint identifications. See *State v. Caldwell*, 322 N.W.2d 574 (Minn. 1982) (cited in Michael Mears and Therese M. Day, *The Challenge of Fingerprint Comparison Opinions in the Defense of a Criminally Charged Client*, 19 Ga. St. U.L. Rev. 705 (2003)).¹ One of the most notorious instances involved Brandon Mayfield who was implicated in the March 11, 2004, Madrid bombing which killed 191 people. An FBI Senior Fingerprint Examiner found that the verified fingerprint “match” was a “100% identification.” The FBI later retracted the identification as the Spanish National Police attributed the partial latent print to someone else altogether. See Simon A. Cole, *More than Zero: Accounting for Error in Latent Fingerprint Identification*, *The Journal of Criminal Law & Criminology*, Vol. 95, No. 3, pp. 985-986.

11. An independent agency conducted reliability tests in 1995 with relation to crime lab proficiency exams. The results of the exam were described by a leading law enforcement fingerprint examiner as “chilling” and “alarming.” See David L. Grieve, *Possession of Truth*, 46 J. Forensic Identification 521, 523 (1996).²

12. Second, there are no validation studies addressing the individuality of friction ridge analysis. There has never been a study to determine the validity of the premise that underlies all fingerprint comparisons: that no two fingerprints are alike. See National Institute of Justice, *Solicitation: Forensic Ridge (Fingerprint) Examination Validation Studies* (March 2000). Additionally, the procedures for identification have not been validated. Again in other scientific fields, validation is a necessary and crucial component of reliability.

13. There is no database and no way to determine population frequency. As a result, there is no way to verify the conclusion that is often made that no two people have the same fingerprint. In the area of DNA analysis, where large population databases exist, experts cannot testify that DNA is unique to certain individuals. Therefore, there is no basis for that opinion to be made and testified to by a fingerprint examiner. Without population studies and databases, no conclusion can be made by a fingerprint expert.

¹ In *Caldwell*, a fingerprint “expert” testified and a second confirmed that the fingerprint at issue in the case belonged to the defendant. However, after the defendant was convicted, it was proven that the fingerprint “experts” had erred. *State v. Caldwell*, 322 N.W.2d 574, 586 (Minn. 1982).

² Of the 156 examiners who were tested, only 44% were able to correctly recognize the five latent prints that were to be identified. Furthermore, 22% of the examiners made erroneous identifications on one or more of the prints. See David L. Grieve, *Possession of Truth*, 46 J. Forensic Identification 521, 523 (1996). A similar test was repeated in 1998 with the same type of erroneous identifications. See *Collaborative Testing Services, Inc., Report No. 9809, Forensic Testing Program: Latent Prints Examination 2 (1998)*.

14. Third, identification of fingerprints is subjective. There are no set standards for identification of fingerprints that would make the testing objective. This is especially important because the lack of objective standards leaves the question of what constitutes a sufficient basis to make a positive fingerprint identification unanswered. In fact, the International Association for Identification's official position is that there is no minimum number of corresponding points of identification, but rather this is left entirely to the subjective judgment of the individual examiner. See Simon Cole, *What Counts for Identity? The Historical Origins of the Methodology of Latent Fingerprint Identification*, 12 SCI. IN CONTEXT 139, 141043 (1999). Furthermore, fingerprint examiners are not in agreement as to what specifically they are looking for when comparing fingerprints, as there are varying opinions as to the number, nomenclature and frequency of the standard ridge characteristics. See Robert D. Olsen & Henry C. Lee, *Identification of Latent Prints, Advances in Fingerprint Technology* 50 (Henry C. Lee & Robert E. Gadensslen, eds. 2nd ed. 2001) This lack of standards within the fingerprint identification community is apparent with respect to the "one dissimilarity doctrine." According to this doctrine, fingerprint examiners are supposed to rule out a positive comparison if two fingerprints contain one single point of dissimilarity. See John I. Thornton, *the One-Dissimilarity Doctrine in Fingerprint Identification*, 306 Int.'l Crim. Police Rev. 89 (1977). However, although this doctrine is widely accepted within the fingerprint examiner community, it has been commonly ignored in practice. *Id.* As a result, the uniform standards are lacking which is an important factor under *Daubert*.

15. Ultimately, fingerprint theory has never been tested to establish the reliability of the identifications made. Scientific methodology requires that in order for a theory to be considered reliable, it must be subjected to empirical testing. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 593 (1993). This lack of empirical testing has been acknowledged by the Department of Justice, which issued a solicitation for fingerprint validation studies. See National Institute of Justice, *Solicitation: Forensic Friction Ridge (Fingerprint) Examination Validation Studies* (March 2000) (*cited in United States v. Robert Turner*, 285 F.3d 909 (10th Cir. 2002)). The Solicitation requests "basic" research conducted to provide scientific foundation for forensic friction ridge identification with in relation to the *Daubert* standards. The implications of this solicitation are enormous. The Department of Justice has essentially admitted that fingerprint analysis fails the testing and reliability requirement of *Daubert*. There have never been any controlled studies to determine the reliability of fingerprint theory. Thus, it cannot satisfy the requirements mandated in *Shreck* and CRE 702.

16. In addition to the unproven reliability of fingerprint comparisons generally, the prosecution must establish that the actual procedures used are reliable *and* that the "experts" who made the comparison in this case are qualified to render an expert opinion. This depends upon whether the proposed expert utilized procedures recognized as reliable in the field of fingerprint testing, and whether relevant personnel are properly trained and tested.

17. Mr. Holmes asserts that such scientific, technical and specialized techniques, and any opinions derived therefrom, must be determined to be reliable and admissible pursuant to *Shreck* and CRE 702 and 403 prior to any testimony related to such techniques and resulting opinions being presented to the jury. Admission of unreliable evidence and opinion testimony

would not only violate the rules of evidence but also Mr. Holmes' constitutional right to due process of law under the state and federal constitutions. Further, this Court must determine whether any opinions derived from such techniques – if those techniques are determined to be reliable - are actually helpful to the jury under CRE 702 and admissible pursuant to CRE 403. Without such determinations, this Court should enter an order precluding the admission of any such expert testimony at trial.

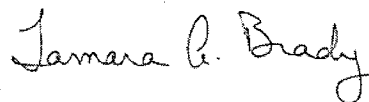
Request for a Hearing

18. Mr. Holmes moves for an evidentiary hearing on this motion.

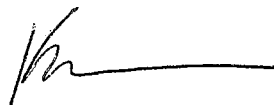
Mr. Holmes files this motion, and makes all other motions and objections in this case, whether or not specifically noted at the time of making the motion or objection, on the following grounds and authorities: the Due Process Clause, the Right to a Fair Trial by an Impartial Jury, the Rights to Counsel, Equal Protection, Confrontation, and Compulsory Process, the Rights to Remain Silent and to Appeal, and the Right to be Free from Cruel and Unusual Punishment, pursuant to the Federal and Colorado Constitutions generally, and specifically, the First, Fourth, Fifth, Sixth, Eighth, Ninth, Tenth, and Fourteenth Amendments to the United States Constitutions, and Article II, sections 3, 6, 7, 10, 11, 16, 18, 20, 23, 25 and 28 of the Colorado Constitution.



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Dated: June 3, 2013

District Court, Arapahoe County, Colorado Arapahoe County Courthouse 7325 S. Potomac St., Centennial, CO 80112	σ COURT USE ONLY σ
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DOUGLAS K. WILSON, Colorado State Public Defender Daniel King (No. 26129) Tamara A. Brady (No. 20728) Chief Trial Deputy State Public Defenders 1300 Broadway, Suite 400 Denver, Colorado 80203 Phone (303) 764-1400 Fax (303) 764-1478 E-mail: state.pubdef@coloradodefenders.us	Case No. 12CR1522 Division 26
ORDER RE: MOTION TO PRECLUDE FINGERPRINT COMPARISON TESTIMONY, PURSUANT TO CRE 702 AND 403, DUE PROCESS, AND PEOPLE V. SHRECK, 22 P.3D 68 (COLO. 2001) [D-107]	

Defendant's motion is hereby GRANTED _____ DENIED _____.

BY THE COURT:

_____ JUDGE

_____ Dated

I hereby certify that on June 3rd, 2013, I

mailed, via the United States Mail,

faxed, or

hand-delivered

a true and correct copy of the above and foregoing document to:

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