

Admissibility of Expert Scientific Testimony

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INTRODUCTION

The admissibility of expert scientific testimony has been a focal point of the tort reform movement in recent years.¹

Lawyers and academicians have argued all aspects of the issue, and federal and state courts nationwide have written on the admissibility of expert scientific testimony, including the standards for admissibility of that evidence and whether proffered evidence meets those standards or is merely "junk science."

The Federal Judicial Center has published its *REFERENCE MANUAL ON SCIENTIFIC EVIDENCE* to assist judges in determining the admissibility of expert scientific evidence.²

The United States Congress has considered legislation to revise the Federal Rules of Evidence to restrict the admissibility of expert scientific testimony.³

In consequence of the tort reform debate, the United States Supreme Court issued its opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*⁴ in 1993 setting forth the standards for admissibility of expert scientific testimony in federal courts under the Federal Rules of Evidence. The Texas Supreme Court followed in June 1995 with its decision in *E.I. DuPont de Nemours & Co. v. Robinson*⁵ adopting the *Daubert* test and establishing, for the first time, the standards for admissibility of expert scientific testimony in civil cases in Texas.

This article discusses the guidelines applicable to the admissibility of expert scientific testimony in federal courts and Texas state civil courts following the *Daubert* and recent *Robinson* cases. Following this

paper is a summary of selected case law from other states adopting or rejecting the *Daubert* test as the standard for admissibility of expert scientific testimony in their respective states.

EXPERT TESTIMONY UNDER THE EARLY COMMON LAW

The use of expert knowledge in the legal system is a creature of the common law. In the early years, courts utilized expert knowledge by empaneling a jury of persons having knowledge through experience of the type of facts at issue in the case being tried or by seeking the advice of a skilled person whose opinion the court could adopt or reject.⁶

Examples of the former instance were the trade disputes of the 13th, 14th and 15th centuries in which the English courts would empanel a jury of supervisors of a trade guild to determine whether the defendant had violated the regulations of that guild.

Examples of the latter instance were the courts' summoning of experts in the language arts to assist in interpreting the parties' pleadings, and the courts' obtaining the opinions of merchants concerning the effect their rulings would have upon trade.

Continued development of the common law through the eighteenth and nineteenth centuries found an increase in the use of expert witnesses retained by a party to testify on that party's behalf with a concomitant decrease in the use of special juries and court advisory experts. Additionally, this continued development found retained experts being accepted somewhat more willingly by courts, and in their being treated increasingly like fact witnesses but given greater freedom to provide their personal opinions.⁷

FRYE V. UNITED STATES

Probably the most significant case from the early twentieth century concerning the standards for admissibility of expert scientific testimony was *Frye v. United States*.⁸ In that case, the defendant was charged with murder. He sought to submit expert testimony at trial about the results of a systolic blood pressure deception test—an early lie detector test. The trial court refused and the defendant was convicted.

The Court of Appeals for the District of Columbia considered the admissibility of the proffered expert testimony involving the systolic blood pressure deception test. The defendant argued that expert testimony is admissible where inexperienced persons are unlikely to be able to form a correct judgment upon an issue because it involves a science, art or trade in which those persons do not have experience and where the question involved does not lie within the range of common experience or knowledge but, instead, requires special experience or knowledge.

While neither rejecting nor accepting that argument, the court of appeals stated that:

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.⁹

This is the so-called *Frye* test: a scientific principle or discovery must have gained “general acceptance” in the particular field in which it belongs before expert testimony thereon may be admitted into evidence.

The court of appeals then proceeded to reject the proffered expert testimony on the systolic blood pressure deception test because the test had not gained the requisite standing and recognition among the proper scientific authorities that would justify admitting expert testimony on its function and results. The defendant’s conviction was affirmed.

Until enactment of the Federal Rules of Evidence, *Frye’s* “general acceptance” test commonly served as the standard for determining the admissibility of expert testimony in the federal courts and in many state courts.

THE FEDERAL RULES OF EVIDENCE

In 1975, the Supreme Court adopted the Federal Rules of Evidence. Those rules included Rule 104(a) which provides that:

Preliminary questions concerning the qualification of a person to be a witness, the existence of a privilege, or the admissibility of evidence shall be determined by the court ... In making its determination it is not bound by the rules of evidence except those with respect to privileges.

Federal Rule of Evidence 402 provides that:

All relevant evidence is admissible except as otherwise provided by the Constitution of the United States, by Act of Congress, by these rules, or by other rules prescribed by the Supreme Court pursuant to statutory authority. Evidence which is not relevant is not admissible.

Federal Rule of Evidence 702, in turn, provides that:

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.

The Federal Rules of Evidence did not contain any express requirement under Rule 702 or otherwise that general acceptance in the scientific community was a condition for admissibility of expert testimony. Thus, following enactment of the Federal Rules of Evidence, the continued applicability of the *Frye* “general acceptance” test was vigorously debated and resulted in a division among the federal courts.¹⁰

DAUBERT AND THE ADMISSIBILITY OF EXPERT SCIENTIFIC TESTIMONY

• The District Court and The Ninth Circuit Followed *Frye*

In 1989, the first judgment in the *Daubert* case was entered by the U.S. District Court for the Southern District of California. In that decision, the district court followed *Frye* and entered a summary judgment for Merrell Dow on the plaintiffs’ claims for damages for

birth defects which they asserted arose from ingestion of Bendectin. The court rejected the plaintiffs' expert testimony because it did not satisfy the *Frye* requirement that scientific evidence be sufficiently established to have general acceptance in the field to which it belongs.¹¹ The Ninth Circuit Court of Appeals affirmed.¹²

• The Supreme Court Opinion

The Supreme Court reversed and remanded. In a unanimous opinion, the Supreme Court rejected any continued application of the *Frye* rule in federal court litigation and, instead, held that *Frye* was superseded by the Federal Rules of Evidence.¹³

In the remainder of the opinion, to which two justices dissented, the majority recognized that the demise of *Frye* did not mean that the Federal Rules of Evidence do not place limits on the admissibility of expert testimony. Rule 702 authorizes and, in fact, requires the court to act as a "gatekeeper" to screen expert testimony and ensure that such evidence is not only relevant but reliable.¹⁴

Under Federal Rule of Evidence 104(a), the trial court must determine, at the outset, whether the expert will testify to scientific knowledge that will assist the trier of fact to understand or determine a fact in issue as required by Federal Rule of Evidence 702. The Supreme Court provided four "general observations" to assist the lower courts in determining whether the expert's testimony will satisfy Rule 702's predicate: (1) whether the theory or technique can be and has been tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) the known or potential rate of error; and (4) general acceptance of the theory or technique. The foregoing general observations were expressly not definitive. Instead, the inquiry required by the Federal Rules of Evidence remains flexible. At all times, the focus of the court's critical review of the proffered expert testimony must remain solely on principles and methodology, not on the conclusions generated.¹⁵

Beyond Rule 702, expert testimony must also satisfy Federal Rule of Evidence 703 which admonishes that expert opinions based on otherwise inadmissible hearsay are to be admitted only if the facts or data are of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject.¹⁶

Because the inquiries of the trial court and the court of appeals were focused on *Frye's* general ac-

ceptance test, the Supreme Court remanded the case for further consideration of the plaintiffs' proffered expert testimony.

• The Ninth Circuit Opinion On Remand

On remand, the Ninth Circuit Court of Appeals re-evaluated the scientific evidence proffered by the plaintiffs in response to the defendant's motion for summary judgment. First, the court of appeals sought to determine whether the experts' testimony reflected "scientific knowledge", their findings were "derived by the scientific method" as required by Rules 702 and 703, and their work product amounted to "good science". Second, the court of appeals considered whether the proposed expert testimony was "relevant to the task at hand".¹⁷

The court of appeals once again affirmed the trial court's entry of summary judgment in favor of Merrell Dow based upon the lack of admissible evidence submitted by the plaintiffs that Bendectin caused the birth defects. None of the plaintiffs' experts' testimony was based upon work performed prior to being hired to testify in *Daubert* or any other Bendectin trial; none of the plaintiffs' experts published their work in a scientific journal or solicited formal review by colleagues; none of the plaintiffs' experts testified about the methodology they followed to reach their conclusions that Bendectin caused the birth defects and they did not identify any external source to validate that methodology; and none of the plaintiffs' experts' testimony established that Bendectin caused the birth defects or that Bendectin significantly increased the likelihood of the specific birth defect suffered by the plaintiffs. In fact, the court stated,

the only review the plaintiffs' experts' work has received has been by judges and juries, and the only place their theories and studies have been published is in the pages of federal and state reporters. ... It's as if there were a tacit understanding within the scientific community that what's going on here is not science at all, but litigation.¹⁸

The court of appeals also rejected the testimony of the plaintiffs' only expert who testified that Bendectin caused the birth defects in stating that he:

'does not testify on the basis of the collective view of his scientific discipline, nor does he take issue with his peers and explain the grounds for his differences. Indeed, no understandable scientific basis is stated. Per-

sonal opinion, not science, is testifying here.¹⁹

This opinion of the Ninth Circuit confirms that the Supreme Court's *Daubert* decision does not eliminate the ability of counsel or the courts to exclude junk science. Quite to the contrary, courts must exclude evidence that does not meet the *Daubert* standards, and even with a record based upon *Frye*, Merrell Dow was able to exclude the plaintiffs' expert testimony under the *Daubert* standards. Other appellate courts have also applied *Daubert* in rejecting expert testimony as being unreliable.²⁰

ROBINSON AND ADMISSIBILITY OF EXPERT SCIENTIFIC TESTIMONY

• Background to the Supreme Court's Decision In Robinson

In *E. I. DuPont de Nemours & Co. v. Robinson*, a divided Texas Supreme Court established the standard for admission of expert scientific testimony in state civil trials. Prior to that decision, the Supreme Court had not announced a standard by which to determine the admissibility of expert scientific testimony.

Before *Robinson*, Texas courts disagreed about the viability of *Frye's* general acceptance standard. The Austin Court of Appeals reluctantly followed *Frye's* general acceptance test in *Jones v. State*.²¹ There, the defendant was convicted of murdering a child by injecting the child with a muscle relaxant. On appeal, the defendant challenged the admission of certain test results which showed the presence of the muscle relaxant in the child's body. The court of appeals held that the test results satisfied *Frye's* general acceptance standard and, therefore, were properly admitted. However, the court of appeals criticized the *Frye* test at length and urged it be rejected.

Later, in *Kelly v. State*,²² the Texas Court of Criminal Appeals rejected *Frye* for all criminal cases stating:

First, there is no textual basis in Rule 702 for a special admissibility standard for novel scientific evidence. Second, as should be fairly obvious, scientific evidence may be shown reliable even though not yet generally accepted in the relevant scientific community.²³

According to the court, in order for evidence derived from a scientific theory to be considered reliable, the

proponent of the evidence must satisfy three criteria: "(a) the underlying scientific theory must be valid; (b) the technique applying the theory must be valid; and (c) the technique must have been properly applied on the occasion in question."²⁴ Other factors that could be considered by the trial court include:

- (1) the extent to which the underlying scientific theory and technique are accepted as valid by the relevant scientific community, if such a community can be ascertained;
- (2) the qualifications of the expert(s) testifying;
- (3) the existence of literature supporting or rejecting the underlying scientific theory and technique;
- (4) the potential rate of error of the technique;
- (5) the availability of other experts to test and evaluate the technique;
- (6) the clarity with which the underlying scientific theory and technique can be explained to the court; and
- (7) the experience and skill of the person(s) who applied the technique on the occasion in question.²⁵

The court also held that due to the difficulty lay persons have in evaluating the reliability of novel scientific evidence, the proponent's burden of persuasion should be enhanced from a preponderance of the evidence to clear and convincing evidence.²⁶

Though the Texas Court of Criminal Appeals established the standard for the admission of expert scientific evidence in criminal trials, the issue remained unresolved in civil cases. In civil cases prior to *Robinson*, the courts of appeals took varying positions on evaluating the admissibility of expert scientific testimony.

In one line of cases, the courts of appeals held that the trial court may consider only whether the witness possesses the minimal qualifications to testify as an expert witness. The jury decides the adequacy of the qualifications and whether the expert testimony should be believed.²⁷

A second line of cases held that the test for admissibility of expert scientific testimony is "whether the underlying technical or scientific principle is sufficiently reliable for the witness' testimony to be of assistance to the jury." The trial court may consider not only the expert's qualifications, but also the content of the proposed expert testimony.²⁸ At least one court of appeals initially extended that holding to state that the trial court should consider for itself whether the expert testimony was based upon some demonstrable underlying scientific data or logical inferences and was not simply based on unsubstantiated reports lacking sci-

entific methodology or controls and, therefore, was not to a reasonable medical or scientific probability despite testimony to the contrary.²⁹

The third position taken by a court of appeals concerning the admissibility of expert scientific testimony is a combined relevancy and reliability standard. That court held that expert scientific testimony must be relevant and sufficiently reliable to assist the jury, and the proposed expert witness must have the qualifications to provide that opinion testimony.³⁰

• **E. I. DuPont de Nemours & Co. v. Robinson**

In *E. I. DuPont de Nemours & Co. v. Robinson*,³¹ the Texas Supreme Court ended this debate over the proper test to be utilized in determining the admissibility of expert scientific testimony in state civil courts.

The plaintiffs asserted that the application of DuPont's Benlate fungicide, which they claimed was contaminated, damaged their pecan orchard. Based upon the defendant's pretrial motion to exclude the plaintiffs' expert's testimony, the trial court excluded the testimony after determining that the testimony was not reliable and directed a verdict for DuPont. The court of appeals reversed, holding that once a proponent establishes a witness' qualifications, the weight to be given the testimony and the credibility of the witness is to be determined solely by the trier of fact.

The Supreme Court first expressed concern over the increasing use of expert witnesses in litigation:

Professional expert witnesses are available to render an opinion on almost any theory, regardless of its merit. While many of these experts undoubtedly hold reliable opinions which are of invaluable assistance to the jury, there are some experts who 'are more than willing to proffer opinions of dubious value for the proper fee.'

Expert witnesses can have an extremely prejudicial impact on the jury, in part because of the way in which the jury perceives a witness labeled as an expert. . . .

Added to the potentially prejudicial influence of the term expert is the difficulty inherent in evaluating scientific evidence. Jurors are often expected to understand complex testimony regarding arcane scientific concepts and are even asked to resolve issues on

which the experts cannot agree. ... Consequently, some commentators believe that 'ostensibly scientific testimony may sway a jury even when as science it is palpably wrong.'³²

The Supreme Court then analyzed the admissibility of expert scientific testimony in looking at the requirements of the Texas Rules of Civil Evidence. First, Texas Rule of Civil Evidence 702 "contains three requirements for the admission of expert testimony: (1) the witness must be qualified; (2) the proposed testimony must be 'scientific . . . knowledge'; and (3) the testimony must 'assist the trier of fact to understand the evidence or to determine a fact in issue.' In order to constitute scientific knowledge which will assist the trier of fact, the proposed testimony must be relevant and reliable."³³

The relevancy requirement under Rule 702 incorporates the relevancy analysis under Texas Rules of Civil Evidence 401 and 402, such that relevancy is required both under Rule 702 and under Rules 401 and 402.³⁴

Among the factors the trial court may consider in determining whether scientific testimony is sufficiently reliable are:

- (1) the extent to which the theory has been or can be tested;
- (2) the extent to which the technique relies upon the subjective interpretation of the expert;
- (3) whether the theory has been subjected to peer review and/or publication;
- (4) the technique's potential rate of error;
- (5) whether the underlying theory or technique has been generally accepted as valid by the relevant scientific community; and
- (6) the non-judicial uses which have been made of the theory or technique.

These factors are non-exclusive and trial courts may consider other factors.³⁵

Once the trial court determines that proffered testimony is relevant and reliable, the trial court must also apply Rule 403 to determine whether the evidence should be excluded because its probative value is outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, or needless presentation of cumulative evidence.³⁶

In what appears to be a clear rejection of the line of cases allowing trial judges a very limited role in evaluating expert scientific testimony, the Supreme Court held that Texas Rule of Civil Evidence 104(a) charges the trial court with the responsibility of making the preliminary determination whether the proffered expert testimony meets the requirements of Rule 702, including whether the expert's opinion is relevant and whether the methods and research upon which it is based are reliable. In the instance of expert witnesses, that responsibility is heightened to ensure that the expert testimony shows some indicia of reliability.³⁷

The proponent of the proffered testimony bears the burden of proving that the testimony is reliable. Even where a party objects to the admissibility of the testimony, "the proponent [of the testimony] has the burden of demonstrating its admissibility."³⁸ Unlike the court in *Kelly*, which held that the proponent must demonstrate reliability by clear and convincing evidence, the Supreme Court did not explicitly state what level of proof is required.

Following this analysis, the Supreme Court held that the expert's opinion was not reliable and the trial court did not abuse its discretion in excluding the testimony. Accordingly, the Supreme Court reversed the judgment of the court of appeals and affirmed the judgment of the trial court, including the trial court's exclusion of the plaintiff's proffered expert scientific testimony.

Although not a subject of the *Robinson* case, expert scientific testimony must, in addition to all of these requirements, not be based on assumed facts that vary materially from the actual, undisputed facts.³⁹

At present, the only Texas appellate court decision applying *Robinson* is *Havner v. Merrell Dow Pharmaceuticals, Inc.*⁴⁰ In that case, the plaintiffs sued Merrell Dow claiming birth defects due to the mother's ingestion of Bendectin. The trial court entered judgment in favor of the plaintiffs based upon a jury verdict. Initially, the Corpus Christi Court of Appeals reversed and rendered judgment in favor of the defendant holding that, because the plaintiffs' proffered expert testimony was incompetent, the plaintiffs had submitted no testimony establishing a causal connection between the mother's ingestion of Bendectin and the birth defects.

On rehearing *en banc*, the Corpus Christi Court of Appeals reversed the panel decision and held that, upon following the procedure outlined in *Robinson*, the plaintiffs' expert testimony was competent and constituted sufficient evidence to support the plaintiffs' claims. The court of appeals held that the trial court did

not abuse its discretion in allowing the expert testimony.

Of some import is the court of appeals' statement that "in . . . seeking to exclude the Havners' experts pretrial, the burden was on Merrell."⁴¹ In that respect, the court of appeals appears to hold that a party moving to exclude expert testimony has the burden of demonstrating that the testimony is not reliable or that the expert witnesses are not qualified and their testimony is otherwise not admissible. Such a holding would be directly contrary to the Supreme Court's holding in *Robinson*.

Also of some import is the court of appeals' apparent dismissal of the Ninth Circuit Court of Appeals' evaluation of the same expert testimony. On remand in *Daubert*, the Ninth Circuit Court of Appeals rejected the same testimony by the same expert witnesses used in *Havner* stating that "what's going on here is not science at all, but litigation," and, with respect to the only expert who testified that Bendectin caused the plaintiffs' injuries, that the expert's testimony was his personal opinion, not science.⁴²

The Corpus Christi Court of Appeals upheld the admission of the same testimony by the same experts with the only comment being "that the evidence here appears to differ somewhat from the evidence considered in *Daubert* . . ." ⁴³ The dissent contradicts that holding in stating "that the evidence [in *Daubert*] is not only strikingly similar, but is essentially identical to the evidence in our case."⁴⁴

Both the plaintiffs and the defendant in *Havner* have filed motions for additional time in which to file motions for rehearing.

ADMISSIBILITY OF EXPERT SCIENTIFIC TESTIMONY IN OTHER STATES

Before the Supreme Court's decision in *Daubert*, the *Frye* "general acceptance" test was followed by a large number of the state courts. The state courts have split in their acceptance of *Daubert* as the test for admissibility of expert testimony, and so even today *Frye's* "general acceptance" test continues to serve as the basis for determining admissibility of expert testimony in a number of the state courts other than Texas.

Following this article are summaries of selected opinions from the state appellate courts which cite *Daubert*. These summaries indicate whether the court adopted or rejected *Daubert*, and how the court treated the evidence in following whichever test was employed.

CONCLUSION

Science in the courtroom is the subject of ongoing judicial ruling and legislation nationwide. Of particular importance to Texas practitioners are the United States Supreme Court's opinion in *Daubert*, particularly as applied on remand, and the Texas Supreme Court's opinion in *Robinson*, including as applied by the Corpus Christi Court of Appeals.

What effect these cases will have on the admissibility of expert scientific testimony is uncertain. Even so, the federal and state trial courts now have specific guidelines for determining the admissibility of expert scientific testimony and have been given the directive to examine critically all expert scientific testimony prior to admission. With these guidelines and the mandate to the courts, practitioners now have the ability to move to exclude junk science.

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ENDNOTES

1. *E.g.*, *Ruling will limit 'junk science' testimony*, Hou. Chron., July 30, 1995 at 33A, col. 2; *Rule against junk science in product liability cases is great for medicine*, Hou. Chron., Jan. 30, 1995 at 19A, col. 1; *Junk Science Junked*, Wall St. J., Jan. 19, 1995 at A16, col. 1; *Some States Spurn 'Junk-Science' Ruling*, Wall St. J., Dec. 29, 1993 at B7, col. 1; *Hauling Junk Science Out of the Courtroom*, Wall St. J., July 13, 1993, at A16, col. 2; Huber, *Junk Science in the Courtroom*, Forbes, July 8, 1991 at 68; *In a courtroom, anything will fly if a scientist testifies to it.*, advertisement (for Forbes magazine) in New York Times, July 16, 1991 at D20.
2. Federal Judicial Center, *Reference Manual on Scientific Evidence* (West 1994).
3. H.R. 10, 104th Cong., 1st Sess. § 102 (1995); H.R. 988, 104th Cong., 1st Sess. § 3 (1995); S. 300, 104th Cong., 1st Sess. § 11 (1995); S. 672, 104th Cong., 1st Sess. § 303 (1995).
4. 113 S. Ct. 2786 (1993).
5. 38 Tex. Sup. Ct. J. 852 (June 15, 1995), appl. for rehearing filed and still pending.
6. Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv. L. Rev. 40 (1901).
7. *Id.* at 43 and 50-55; see *Ferguson v. Hubbell*, 97 N.Y. 507, 514 (1884) (expert testimony in civil trials is entirely proper in certain cases but is not to be encouraged and "should be received only in instances of necessity").
8. 293 F. 1013 (D.C. Cir. 1923).
9. *Id.* at 1014 (emphasis added).
10. *Christophersen v. Allied-Signal Corp.*, 503 U.S. 912 (White, J. dissenting) (1992); *cf.*, *e.g.*, *Christophersen v. Allied-Signal Corp.*, 939 F.2d 1106 (5th Cir. 1991), *cert. denied*, 503 U.S. 912 (1992); *In re Paoli Railroad Yard PCB Litigation*, 916 F.2d 829 (3rd Cir. 1990), *cert. denied*, 499 U.S. 961 (1991), *on remand*, 35 F.3d 717 (3rd Cir. 1994); *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 951 F.2d 1128 (9th Cir. 1991), *reversed*, 113 S. Ct. 2786 (1993), *on remand*, 43 F.3d 1311 (9th Cir.), *cert. denied*, 64 U.S.L.W. 3245 (1995); *U.S. v. Smith*, 869 F.2d 348 (7th Cir. 1989).
11. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 727 F. Supp. 570, 572 (S.D. Cal. 1989) (quoting *United States v. Kilgus*, 571 F.2d 508, 510 (9th Cir. 1978) which, in turn, cited *Frye*).
12. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 951 F.2d 1128.
13. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S. Ct. at 2792-794.
14. *Id.* at 2798-799.
15. *Id.* at 2796-797; see *Dealing With Daubert: The Trial Judge's Role as a "Gatekeeper"*, For The Defense 30 (June 1994).
16. *Id.* at 2797-798.
17. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d at 1315.
18. *Id.* at 1318 (footnotes omitted).
19. *Id.* at 1319, quoting *Turpin v. Merrell Dow Pharmaceuticals, Inc.*, 959 F.2d 1349, 1360 (6th Cir.), *cert. denied*, 113 S. Ct. 84 (1992).
20. See *Wade-Greaux v. Whitehall Laboratories*, 874 F. Supp. 1441 (D.V.I.), *aff'd*, 46 F.3d 1120 (3rd Cir. 1994); *Bradley v. Brown*, 42 F.3d 434 (7th Cir. 1994).
21. 716 S.W.2d 142 (Tex. App.—Austin 1986, pet. for discretionary review ref'd).
22. 824 S.W.2d 568 (Tex. Crim. App. 1992).
23. *Id.* at 572.

24. *Id.* at 573.
25. *Id.*
26. *Id.*
27. ***Vogelsang v. Reece Import Autos, Inc.***, 745 S.W.2d 47, 49 (Tex. App.—Dallas 1987, no writ); ***Maritime Overseas Corp. v. Ellis***, 886 S.W.2d 780, 785-86 (Tex. App.—Houston [14th Dist.] 1994, appl. for writ pending).
28. ***Gannett Outdoor Co. of Texas v. Kubeczka***, 710 S.W.2d 79, 89 (Tex. App.—Houston [14th Dist.] 1986, no writ); ***Thompson v. Mayes***, 707 S.W.2d 951, 956 (Tex. App.—Eastland 1986, writ ref'd n.r.e.).
29. ***Havner v. Merrell Dow Pharmaceuticals, Inc.***, No. 13-92-540-CV, 1994 Tex. App. LEXIS 572 (Tex. App.—Corpus Christi, March 17, 1994), *rev'd on hearing en banc*, 1995 Tex. App. LEXIS 1829 (Aug. 10, 1995).
30. ***North Dallas Diagnostic Center v. Dewberry***, 900 S.W.2d 90, 94-5 (Tex. App.—Dallas 1995, writ denied).
31. 38 Tex. Sup. Ct. J. 852 (June 15, 1995). Note: Rehearing is still pending.
32. *Id.* at 855 (citations omitted).
33. *Id.* at 858 (citation omitted).
34. *Id.*
35. *Id.*
36. *Id.* at 859.
37. *Id.* at 855 and 858-60.
38. *Id.* at 859.
39. ***Burroughs Wellcome Co. v. Crye***, 38 Tex. Sup. Ct. J. 848, 849 (June 15, 1995); ***Schaefer v. Texas Employers' Ins. Ass'n***, 612 S.W.2d 199, 202-05 (Tex. 1980).
40. No. 13-92-540-CV, 1995 Tex. App. LEXIS 1829.
41. *Id.*
42. ***Daubert v. Merrell Dow Pharmaceuticals, Inc.***, 43 F.3d at 1318, 1319 and 1321.
43. ***Havner v. Merrell Dow Pharmaceuticals, Inc.***, No. 13-92-540-CV, 1995 Tex. App. LEXIS 1829 at n.12.
44. *Id.* (Seerden, C.J., dissenting).

SELECTED STATE COURT OPINIONS

Mattox v. State, 875 P.2d 763 (Alaska 1994). The Alaska Supreme Court reversed a summary judgment of paternity because the state failed to submit any evidence authenticating the DNA reports relied upon for the summary judgment, any evidence that the tests reflected by the DNA reports were scientifically accepted, or any evidence that the procedures necessary to make the DNA tests valid were followed. The court followed *Frye* in holding that general scientific acceptance is a requirement for admissibility of technical tests and scientific evidence, but cited *Daubert's* holding that *Frye* was superseded by the Federal Rules of Evidence.

State v. Bible, 175 Ariz. 549, 858 P.2d 1152 (1993), *cert. denied*, 114 S. Ct. 1578 (1994). The Arizona Supreme Court applied *Frye* in this murder, kidnapping and child molestation case and held that DNA sampling results were admissible. The probability estimates from that DNA testing were held not admissible, however, because the method used to derive those estimates was found not generally accepted in the relevant scientific community. The court declined to apply *Daubert*, and affirmed the defendant's conviction.

Jones v. State, 314 Ark. 289, 862 S.W.2d 242 (1993). The Arkansas Supreme Court affirmed the defendant's murder conviction and the trial court's refusal to allow the defendant's expert on eyewitness perception to testify. The expert's testimony was general, not specific, and there was evidence questioning the witness' identification of the defendant. In response to the defendant's argument that *Daubert* required his expert be allowed to testify, the Arkansas Supreme Court stated it had no criticism of *Daubert* and noted that it had earlier rejected *Frye* as the standard for relevancy of evidence under Arkansas Rule of Evidence 401. Still, *Daubert* was irrelevant because the expert's testimony would not assist the jury, not because his testimony was not generally accepted in the scientific community.

People v. Leahy, 8 Cal. 4th 587, 34 Cal. Rptr. 2d 663, 882 P.2d 321 (Cal. 1994). The California Supreme Court affirmed the court of appeals' reversal of the defendant's conviction for drunk driving and ordered the trial court to hold a hearing on whether the state's use of the horizontal gaze nystagmus test is generally accepted by a typical cross-section of the

relevant scientific community. In its decision, the court rejected *Daubert* and held that the *Frye* test as adopted by earlier California case law continues to represent the standard by which new scientific techniques should be measured before evidence obtained from those techniques may be admitted into evidence.

Fishback v. People, 851 P.2d 884 (Colo. 1993). The Colorado Supreme Court affirmed the defendant's criminal conviction based upon DNA matching evidence. The court rejected the defendant's challenge to that evidence and held that, under *Frye*, the evidence was generally accepted in the relevant scientific communities. The court expressly approved of *Frye* and rejected the argument that *Frye* was superseded by the rules of evidence.

State v. Sivri, 231 Conn. 115, 646 A.2d 169 (1994). The Connecticut Supreme Court reversed the defendant's conviction for murder and remanded the case for a new trial based, in part, upon the trial court's admission of expert testimony on statistical calculations. The court applied *Frye* but noted that *Daubert* rejected the *Frye* test under the Federal Rules of Evidence. Expert testimony on DNA statistical calculations was not properly admitted because there is substantial disagreement about the validity of the principles underlying those calculations; thus, the calculations are not generally accepted in the scientific community and do not satisfy the *Frye* test.

Nelson v. State, 628 A.2d 69 (Del. 1993). The Delaware Supreme Court affirmed the defendant's conviction and upheld the trial court's refusal to apply *Frye* in determining the admissibility of DNA testing. In Delaware, scientific evidence is governed by the rules of evidence, not *Frye*, and the rules of evidence applied by the Delaware courts are consistent with *Daubert*. DNA matching evidence is inadmissible without statistical interpretation of the significance of the match. In this case, however, the admission of the matching evidence without the statistical interpretation constituted harmless error.

Merrell Dow Pharmaceuticals, Inc. v. Oxendine, 649 A.2d 825 (D.C. 1994). The District of Columbia Court of Appeals reversed a judgment entered in favor of the plaintiff and remanded the case for consideration of post-trial evidence of Bendectin's safety. The Court of Appeals cited *Daubert* only in connection with its statement that "the very nature of science incorporates a view of even generally accepted explanations of phenomena as tentative truths, not settled certainties."

Flanagan v. State, 625 So. 2d 827 (Fla. 1993). The Florida Supreme Court issued this decision upon two certified questions. The court held that novel scientific evidence is admissible only if it meets *Frye*. *Frye* does not, however, apply to all expert testimony, including pure opinion testimony such as an expert's opinion that a defendant is incompetent. The court expressly rejected *Daubert* and reiterated its continued use of *Frye*. The defendant's conviction was affirmed.

People v. Watson, 257 Ill. App. 3d 915, 629 N.E.2d 634, appeal denied, 157 Ill. 2d 519, 642 N.E.2d 1299 (1994). The Illinois First District Appellate Court vacated the trial court's order excluding the results of DNA profiling and remanded the issue whether the probability calculation of the DNA profiling was generally accepted in the relevant scientific community. The court held that the *Frye* "general acceptance" test was the proper standard for admissibility of expert scientific testimony in Illinois, and refused to apply *Daubert*.

People v. Mehlberg, 249 Ill. App. 3d 499, 618 N.E.2d 1168, appeal denied, 153 Ill. 2d 566, 624 N.E.2d 813 (1993). The Illinois Fifth District Appellate Court affirmed the defendant's conviction for aggravated sexual assault. The court held that the trial court did not abuse its discretion in not holding a pretrial hearing before ruling that DNA testimony was generally accepted in the scientific community and that DNA testimony would be admissible into evidence. The trial court also did not abuse its discretion in admitting expert testimony of a match in the DNA testing. As in *People v. Watson*, the court recognized *Daubert's* rejection of *Frye* under the Federal Rules of Evidence, but held that *Daubert* was not applicable because the Illinois Supreme Court had not discontinued use of the *Frye* test.

Harrison v. State, 644 N.E.2d 1243 (Ind. 1995). The Supreme Court of Indiana held that the district court erred in not conducting a *Frye* hearing on the admissibility of DNA evidence in a murder case. The court cited *Daubert* for the proposition that a judge is to exercise more control over experts than lay witnesses under Rule 403. The court further stated that before expert scientific evidence may be admitted, the trial court must be satisfied that the scientific principles upon which the expert testimony rests are reliable, that the witness is qualified, and that the testimony's probative value is not substantially outweighed by the dangers of unfair prejudice.

Steward v. State, 1995 Ind. LEXIS 91. The Supreme Court of Indiana affirmed the defendant's conviction on one count of child molestation, reversed a conviction on a second count of child molestation, and remanded that second count for new trial. On appeal, the defendant challenged the trial court's admission of child sexual abuse syndrome, profile, or pattern evidence to prove that child abuse occurred. The court of appeals held that a trial court may consider such evidence, if based upon reliable scientific principles regarding the prevalence of the specific unexpected behavior within the general class of reported victims. The court cited *Daubert* as helpful authority, but did not accept it as binding upon the court.

Hutchison v. American Family Mutual Ins. Co., 514 N.W.2d 882 (Iowa 1994). The Iowa Supreme Court affirmed the trial court's entry of judgment in favor of the defendant and the admission of expert testimony by a psychologist that the plaintiff's head injuries were preexisting and not caused by the auto accident which was the subject of the case. The court did not discuss whether to adopt *Daubert* but, instead, held that Iowa Rule of Evidence 702 provided for liberal admission of expert testimony, consistent with *Daubert*. Under Rule 702 and consistent with *Daubert*, the court upheld the trial court's admission of the defendant's expert testimony.

Cecil v. Commonwealth, 888 S.W.2d 669 (Ky. 1994). The Kentucky Supreme Court affirmed the defendant's conviction for murder and upheld the trial court's admission of testimony from the court-appointed clinical psychologist who stated that in his opinion the defendant acted intentionally. The court did not discuss whether to adopt or reject *Daubert*, but cited *Daubert* with approval in stating that the expert testimony rested on a reliable foundation and was vitally relevant to the task at hand.

State v. Foret, 628 So. 2d 1116 (La. 1993). In this child sexual assault case, the Louisiana Supreme Court adopted *Daubert* as the guide for determining admissibility of expert scientific testimony. *Frye's* "general acceptance" test had previously been rejected as the only test for admissibility of expert testimony, and Louisiana Rule of Evidence 702 was identical to Federal Rule of Evidence 702. Applying *Daubert*, the court rejected the state's expert's testimony based upon Child Sexual Abuse Accommodation Syndrome because that testimony was of "highly questionable scientific validity" and failed "to unequivocally pass the *Daubert* threshold test of scientific

reliability." Use of the Child Sexual Abuse Accommodation Syndrome to diagnose sexual abuse has not been generally accepted in the community even after peer review and, therefore, fails the *Frye* requirement of *Daubert*. Additionally, it is irrefutable, there is a 32% margin of error, it is not scientifically reliable, and it is highly unlikely to be useful to a jury.

Keene Corp. v. Hall, 96 Md. App. 644, 626 A.2d 997, cert. granted, 332 Md. 741, 633 A.2d 102 (1993). The Maryland Court of Special Appeals reversed a judgment in favor of the plaintiffs in this asbestosis case on the basis that the plaintiff's expert testimony should not have been admitted under the *Frye* test. The plaintiff's expert testified that he was able to determine that the plaintiff's cancer was caused by exposure to asbestos because he could identify asbestos fibers in the tissue at the site of the tumor. The Court of Special Appeals rejected the testimony because it was not generally accepted in the scientific community. The decision in *Daubert* was noted, but the court declined to adopt that standard and further held that the plaintiff's expert's testimony would still fail the *Daubert* standard because it was not reliable.

Commonwealth v. Lanigan, 419 Mass. 15, 641 N.E.2d 1342 (1994). The Massachusetts Supreme Judicial Court affirmed the defendant's criminal conviction. In so doing, the court adopted *Daubert* as providing the basis for determining the admissibility of expert testimony. *Frye's* general acceptance test will continue to be the primary (and often only) factor to be considered under *Daubert*, but reliability of a scientific theory or process may be established without establishing general acceptance. The court upheld admission of DNA testimony.

People v. Haywood, 209 Mich. App. 217, 530 N.W.2d 497 (1995). The Michigan Court of Appeals affirmed the defendant's conviction of second degree murder. The defendant challenged the admission of a geometric blood stain interpretation. The court of appeals held that Michigan law included use of the *Frye* test, that the *Frye* test is applicable only to novel scientific techniques or principles, and that the blood stain interpretation evidence was not novel scientific techniques or principles and was, therefore, admissible whether or not it satisfied *Frye*. The admission of the blood stain interpretation evidence was upheld. The court noted that *Daubert* rejected the *Frye* test, but held that this case did not require it to consider the continued applicability of *Frye* under Michigan law.

State v. Hodgson, 512 N.W.2d 95 (Minn. 1994). The Minnesota Supreme Court affirmed the defendant's murder conviction and upheld the admission of expert testimony by a forensic odontologist that there were similarities between a bite mark on the defendant's arm and the pattern of the victim's teeth. The trial court had refused to allow the expert to testify about her opinion whether the bite mark and the victim's teeth pattern matched. After citing *Daubert*, the Supreme Court held that bite-mark analysis by a recognized expert is not a novel or emerging type of scientific evidence and, in fact, is routinely used in criminal trials. The court declined to address what impact *Daubert* should or will have in Minnesota.

State v. Klawitter, 518 N.W.2d 577 (Minn. 1994). The Minnesota Supreme Court affirmed the defendant's conviction for driving while under the influence and upheld the testimony of a state trooper on the defendant's drug use. The court held that the trooper's testimony was not about a scientific technique but, rather, was for the most part a list of things that a trained police officer should consider before formulating an opinion whether a suspect is under the influence of a controlled substance. The testimony concerning horizontal and vertical nystagmus and convergence are not emerging scientific techniques and, anyway, satisfied the *Frye* test. The court expressly declined to address the effect of *Daubert* on the use or application of the *Frye* test in Minnesota.

Callahan v. Cardinal Glennon Hospital, 863 S.W.2d 852 (Mo. 1993). The Missouri Supreme Court affirmed a judgment in favor of the plaintiff based upon a claim of medical malpractice. The court rejected the defendant's argument that the plaintiffs' experts' testimony should have been excluded or given little or no weight when their testimony failed to satisfy the requirements of *Frye* since the defendant never objected to the testimony. In response to the plaintiffs' argument, the court declined to decide whether the *Frye* rule in Missouri should be rejected consistent with *Daubert's* holding that the Federal Rules of Evidence superseded *Frye*.

State v. Moore, 268 Mont. 20, 885 P.2d 457 (1994). The Supreme Court of Montana affirmed defendant's homicide conviction. The court held that DNA test results are sufficiently reliable for forensic use. The court also held that the defendant, who successfully moved to exclude statistical testimony, could not claim on appeal that DNA evidence was inadmissible without statistical evidence. The court concluded that the guidelines set forth in *Daubert*

were consistent with existing Montana law such that the court should adopt the *Daubert* standard for the admission of scientific expert testimony.

State v. Dean, 246 Neb. 869, 523 N.W.2d 681 (1994), *cert. denied*, 115 S. Ct. 2229 (1995). The Nebraska Supreme Court affirmed the defendant's conviction for murder and upheld the admission of a laser trajectory analysis indicating the path of the bullet that killed the victim. The state's expert testified that use of lasers to reconstruct bullet trajectories is accepted among firearms examiners, it is common knowledge that a laser travels in a straight line, aiming a laser through bullet holes to reconstruct a bullet's path is no less reliable than inserting dowels into bullet holes to demonstrate its path, several states, including Nebraska, have used lasers, dowels, rods or strings through bullet holes to demonstrate a bullet's path, and laser trajectory analysis is not a type of novel scientific evidence of questionable reliability or validity. The court declined to adopt *Daubert* and its more flexible reliability standard, stating that "[t]he increasing prevalence of expert evidence cautions against the admission of scientific evidence which is still the subject of dispute and controversy in the relevant scientific communities.

State v. Cressey, 137 N.H. 402, 628 A.2d 696 (1993); **State v. Chamberlain**, 137 N.H. 414, 628 A.2d 704 (1993); **State v. Luce**, 137 N.H. 419, 628 A.2d 707 (1993). In this series of cases, the New Hampshire Supreme Court considered expert testimony on child sexual abuse. In each case, the court reversed the conviction where a psychologist provided expert testimony based upon a psychological evaluation of the child that the child was sexually abused. Such evidence did not meet the threshold level of reliability under New Hampshire Rule of Evidence 702 to be admissible. The court in each case cited *Daubert* in contrast to that requirement, but did not decide whether *Frye* was superseded by adoption of the New Hampshire Rules of Evidence.

State v. Alberico, 116 N.M. 156, 861 P.2d 192 (1993). The New Mexico Supreme Court affirmed the sexual assault conviction of one defendant and reversed and remanded the sexual assault conviction of another defendant upon considering the admissibility of testimony on post-traumatic stress disorder in criminal sexual assault cases. The court held that, under the New Mexico Rules of Evidence as interpreted consistently with *Daubert*, a properly qualified mental health professional may opine that an alleged victim of sexual abuse suffers from post-traumatic

stress disorder and that the victim's symptoms are consistent with those suffered by someone who has been sexually abused. The expert may not, however, opine about the victim's truthfulness or the identity of the alleged perpetrator. The court also rejected *Frye* as a standard of admissibility of expert testimony independent of the New Mexico Rules of Evidence.

People v. Wesley, 83 N.Y.2d 417, 611 N.Y. Supp. 2d 97, 633 N.E.2d 451 (1994). The New York Court of Appeals affirmed the defendant's criminal conviction and held that DNA evidence was generally accepted by the relevant scientific community and, therefore, was properly admitted at trial. The court followed *Frye* and rejected *Daubert* as the test for admissibility of expert testimony.

City of Fargo v. McLaughlin, 512 N.W.2d 700 (N.D. 1994). The North Dakota Supreme Court upheld the defendant's conviction for driving while under the influence of alcohol and held that the trial court properly admitted testimony concerning the results of a horizontal gaze nystagmus test performed by the police officer on the defendant. *Frye* was held inapplicable, and no scientific foundation by expert testimony was required because the only scientific principles of the horizontal gaze nystagmus test were undisputed such that the trial court could take judicial notice of those facts, and the remaining elements of the test concerned only the weight to be given to the testimony. The court noted the holding in *Daubert* that *Frye* had been superseded by the Federal Rules of Evidence.

State v. Martens, 90 Ohio App. 3d 338, 629 N.E.2d 462 (1993), *juris. motion overruled*, 68 Ohio St. 3d 1451, 626 N.E.2d 692 (1994). The Ohio Court of Appeals affirmed the defendant's conviction for sexual assault and upheld the trial court's admission of expert testimony on post-traumatic stress disorder. Expert testimony is admissible in Ohio where the evidence is relevant and material to the issue in the case, the subject of the expert testimony is not within the understanding of the jury, the theory relied upon by the expert is commonly accepted in the scientific community, and its probative value outweighs its prejudicial impact. The court held *Daubert* did not require general acceptance as a precondition to the admissibility of scientific evidence, but did not otherwise accept or reject *Daubert*.

State v. Gersin, No. 93-L-025, slip op., 1994 WL 652622 (Ohio App., Nov. 10, 1994), *appeal allowed*, 71 Ohio St. 3d 1502, 646 N.E.2d 1126 (1995).

The Ohio Court of Appeals reversed the defendant's conviction for child abuse, but upheld a physician's expert testimony that the child was sexually assaulted. The physician was qualified, she examined the child and based her testimony upon her examination, and her testimony would assist the trier of fact to understand the evidence and reach a decision. The guidelines in *Daubert* were not applicable in Ohio and, even if they were, *Daubert* was satisfied because the defendant had an opportunity to examine the expert and present contrary evidence.

Taylor v. State, 889 P.2d 319 (Okla. Crim. App. 1995). The Oklahoma Court of Criminal Appeals affirmed defendant's burglary, rape, sodomy and robbery convictions based on DNA evidence. The court abandoned the *Frye* test and adopted the *Daubert* standard for admission of scientific evidence. The court cited several state court opinions criticizing *Frye* for causing delays in the admission of reliable evidence because the scientific community had not yet accepted it. According to the court, "the *Daubert* reliability approach provides a uniform method of addressing the admissibility of expert testimony on all types of scientific evidence. Our adoption of the *Daubert* approach will provide structure and guidance to what has until now been a potentially confusing and sparsely defined area of legal analysis in our state jurisdiction."

State v. O'Key, 321 Or. 285 (1995). The Supreme Court of Oregon reversed an interlocutory order of the trial court excluding evidence of the results of an horizontal gaze nystagmus test. The court found *Daubert* persuasive and adopted the *Daubert* standards as part of existing Oregon law on admissibility of expert scientific testimony. The court further held that horizontal gaze nystagmus evidence is scientific evidence that must meet the standard for admissibility of expert scientific testimony under *Daubert* and existing Oregon law.

Commonwealth v. Crews, 536 Pa. 508, 640 A.2d 395 (1994). The Pennsylvania Supreme Court affirmed the defendant's murder conviction and held that the trial court properly admitted DNA matching evidence and properly excluded DNA statistical evidence. Pennsylvania courts apply *Frye* as the test for determining admissibility of new scientific evidence. The DNA matching tests are routine and generally accepted in the scientific community. The record in this case did not, however, support a finding that statistical calculations involving the DNA matching were equally generally accepted. The court declined

to apply *Daubert* because it was not mandatory authority and the Pennsylvania courts already had adopted *Frye*, and further declined to decide whether *Daubert's* rationale would supersede or modify the *Frye* test as applied in Pennsylvania.

Soares v. Vestal, 632 A.2d 647 (R.I. 1993). The Rhode Island Supreme Court affirmed the trial court's directed verdict for the defendant in this medical malpractice case. The court also held that the trial court did not abuse its discretion in excluding testimony by the plaintiff's expert because the expert was not certified in either emergency medicine or family practice and his board certifications in neurology and internal medicine did not qualify him as an expert under state law. The court also stated that it did not need to reach the issues presented by *Daubert*.

South Dakota v. Hofer, 512 N.W.2d 482 (S.D. 1994). The South Dakota Supreme Court affirmed the defendant's conviction for driving while under the influence and held that the intoxilyzer test results and the foundational evidence were properly admitted at trial. The court rejected the defendant's challenges to the intoxilyzer test results impliedly based upon *Frye* and held that the general scientific principles underlying the intoxilyzer are beyond scientific dispute, the defendant was allowed to present testimony challenging the applicability of the test to him and the potential inaccuracies in the test results, and the test results and foundational evidence could assist the trier of fact. Thus, the testimony satisfied *Daubert*. As a result of this decision, the court impliedly adopted *Daubert* as the standard for admissibility of expert scientific testimony.

See also *Department of Social Services v. McCarty*, 506 N.W.2d 144 (S.D. 1993) (The South Dakota Supreme Court reversed a finding of paternity, but upheld admission of the results of DNA matching tests stating that *Daubert* does not require a consensus in the medical community on DNA testing and, anyway, DNA test results are admissible by statute. The court did not expressly adopt *Daubert*, but did cite the decision with approval).

State v. Smith, No. 03-C-01-9312-CR-00398, slip op., 1994 WL 361851 (Tenn. Crim. App., July 11, 1994), appeal denied (Nov. 7, 1994). The Tennessee Court of Criminal Appeals affirmed the defendant's murder conviction and upheld the trial court's excluding as unreliable the results of the victim's urine test indicating the presence of traces of cocaine. Evidence of the presence of a trace of cocaine may be

irrelevant where, as here, there is no evidence of when the drug was ingested or when the individual may have been under the influence of the drug. Additionally, there was no abuse of discretion by the trial court in excluding the test results and, even if there were, the exclusion of the evidence was harmless error given the evidence that the victim was intoxicated. The court cited *Daubert* as authority for the statement that all scientific testimony or evidence must be relevant and reliable.

Dikeou v. Osborn, 881 P.2d 943 (Utah App. 1994). The Utah Court of Appeals affirmed a summary judgment in favor of the defendant in this medical malpractice case and upheld the trial court's exclusion of the plaintiff's expert's affidavit since the expert failed to establish in his affidavit that he had sufficient knowledge regarding the appropriate standard of care for cardiology, or that the standard of care for emergency room physicians (his specialty) is the same as for cardiologists (the defendant's specialty). The court found *Daubert* unpersuasive since it was not mandatory authority, and further held that the expert's testimony would be excluded even under *Daubert* because its probative value was substantially outweighed by the danger of unfair, prejudice, confusion of the issues, or misleading the jury.

State v. Brooks, 643 A.2d 226 (Vt. 1993). The Vermont Supreme Court reversed the trial court's exclusion of the results of alcohol breath tests because the state failed to comply with administrative regulations requiring agency approval of the breath analysis methods. The court agreed that the evidence could not be admitted under the regulation's presumption of validity since the agency's rulemaking was not completed. However, general suppression of the test results was improper, and the state should not be precluded from proving the reliability and accuracy of the breath test by expert testimony. In connection with efforts to establish the breath test results by expert testimony, the court declined to follow *Frye* and, instead, held *Daubert* was to serve as the basis for admission of scientific evidence because the Vermont Rules of Evidence are essentially the same as the Federal Rules of Evidence on admissibility of scientific evidence.

Washington v. Riker, 123 Wash. 2d 351, 869 P.2d 43 (1994). The Washington Supreme Court affirmed the defendant's conviction for possession and delivery of cocaine and upheld the trial court's exclusion of the defendant's expert's testimony concerning battered person syndrome. The admission of

scientific evidence in Washington involves two related inquiries: first, whether the scientific theory or principle from which the evidence is derived garnered general acceptance in the relevant scientific community under *Frye* and second, whether the expert testimony is properly admissible under Evidence Rule 702. While battered person syndrome is generally accepted, it has previously been admitted only in cases in which the assailant and the victim have developed a strong relationship. There was no such relationship here, and extension of the syndrome to this case would have been novel and not generally accepted within the field. *Daubert* was rejected in favor of *Frye*, but many of the 'general observations' in *Daubert* could be of use to trial courts in making the threshold *Frye* determination.

Wilt v. Buracker, 191 W. Va. 39, 443 S.E.2d 196 (1993), cert. denied, 114 S. Ct. 2137 (1994). The West Virginia Supreme Court reversed a civil judgment in favor of the plaintiff and remanded this automobile accident case for a new trial. The court also overruled the trial court's admission of evidence of hedonic damages incurred by the plaintiffs as a result of their personal injuries. In instances where a scientific test is generally accepted, the test can be judicially noticed and the expert need not demonstrate its scientific validity. Where, however, the scientific or technical basis for the expert testimony cannot be judicially noticed, *Daubert* should be followed in analyzing the admissibility of the expert testimony. Here, the court was not convinced that the testimony on hedonic damages had any relevance to a calculation of damages for loss of enjoyment of life and held that the testimony was improperly admitted.

State v. Donner, 192 Wis. 2d 305, 531 N.W.2d 369 (Wis. App. 1995). The Wisconsin Court of Appeals affirmed the defendant's conviction of operating a motor vehicle while under the influence of an intoxicant. The defendant cited to *Daubert* and argued that the state's expert was not qualified to testify about alcohol metabolism and that the trial court improperly allowed the expert to testify that all persons are physically impaired to some extent at a blood alcohol content of .09%. The court of appeals stated that the Wisconsin courts had never adopted *Frye* and held that it was required to follow existing standards set by the Wisconsin Supreme Court on the admissibility of expert testimony and, thus, could not adopt *Daubert*. The court held that the state's expert was fully qualified to testify about alcohol metabolism and that the trial court properly exercised its discretion in admitting the expert opinion testimony.

Springfield v. State, 860 P.2d 435 (Wyo. 1993). The Wyoming Supreme Court affirmed the defendant's sexual assault conviction and upheld the trial court's admission of DNA matching and statistical calculations into evidence. The court had previously held that the Wyoming Rules of Evidence (and not *Frye*) governed the admissibility of scientific evidence, and in this case added that the method of analysis in that prior decision was consistent with *Daubert*. ■

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