

## Junk Science Revisited: The Exclusion of Expert Testimony

Albon O. Head, Jr., Esq.  
Gregory P. Crinion, Esq.

(Editor's Note: From 1995 Special Litigation Conference V at Park City-Deer Valley, here is the fine written handout presented by Albon Head and Greg Crinion of Jackson & Walker at Fort Worth, Texas—817/334-7230. Note its valuable summary of selected state court decisions that either adopt or reject *Daubert*.)

"Junk science." A decade ago, this term was unknown. Today, it has obtained notoriety within the legal community and, because we are in the midst of a war over the admissibility of junk science in the courtroom, it is a frequent topic in the mass media.<sup>1</sup>

What is junk science? It has been characterized as the testimony of "scientific cranks and iconoclasts who peddle their stange diagnostics and quack cures not at country fairs but in courtrooms across the land."<sup>2</sup> Yet junk science is more than scientific testimony: it includes all expert testimony, whether on scientific matters or otherwise, not based upon sound scientific principles or premised upon valid factual bases.

All defense counsel agree that purveyors of junk science include the alchemist, the astrologer, the clinical ecologist, and the hedonic damages expert. Junk science is also foisted upon the courts by otherwise well-credentialed professionals such as physicians, economists, and engineers, and by the real estate appraiser who estimates the value of real property without having conducted the investigation mandated by his profession<sup>3</sup> and the "corrosion expert" who opines that a gasoline storage tank was leaking due to corrosion but who knows none of the facts required to determine whether corrosion actually occurred.<sup>4</sup>

A direct result of this war on junk science as conducted in the federal courts was the U.S. Supreme Court's 1993 decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*<sup>5</sup> that set guidelines for determining the admissibility of expert testimony under the Federal Rules of Evidence.

The state appellate courts, however, have only recently begun to consider the issue of junk science seriously and have shown too little support for their trial courts in excluding junk science. Similarly, too few state trial courts have been willing to take responsibility for their role on the issue and conduct the critical review of expert testimony necessary to separate competent expert testimony from junk science.

The outcome of the war on junk science is yet to be decided. Whether the

resolution will come from judicial rule-making, legislative action, or society's simply closing its eyes to the fraud is yet to be determined. In the meantime, however, defense counsel must act aggressively and challenge all attempts to introduce junk science into evidence.

*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 in two ways: first, by empaneling a jury of persons having knowledge through experience of the type of facts at issue in the case being tried; second, by seeking the advice of a skilled person whose opinion the court could adopt or reject.<sup>6</sup>

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.<sup>7</sup>

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.<sup>8</sup> Rule 706 of the Federal Rules of Evidence authorizes the continued use of this type of expert knowledge.<sup>9</sup>

Continued development of the common law through the eighteenth and nineteenth centuries found expert witnesses being treated increasingly like fact witnesses, with the exception that the expert witnesses were given greater freedom to provide their personal opinions. Parties increasingly retained expert witnesses to testify on their behalf, while at the same time there was a decreased use of special juries and court advisory experts. This movement to the use of "hired champions"<sup>10</sup> was strongly criticized by the New York Court of Appeals in 1884 when, in reversing a judgment based upon improperly admitted expert testimony, it stated that

Better results will generally be reached by taking the impartial, unbiased judgments of twelve jurors of common sense and common experience than can be obtained by taking the opinions of experts, if not generally hired, at least friendly, whose opinions cannot fail generally to be warped by a desire to promote the cause in which they are enlisted.<sup>11</sup>

This use of hired experts was also distressing to at least one renowned American jurist, Justice Learned Hand, who wrote that the increasing admission of expert testimony on behalf of litigants was an anomaly, and there is "no legal anomaly which does not work evil, because, forming an illogical precedent, it becomes the mother of other anomalies and breeds chaos in theory and finally litigation."<sup>12</sup>

Justice Hand believed that the function of expert testimony is to explain general truths derived from the specialized experience of the expert.<sup>13</sup> Yet, if the jury were to believe the expert, the expert would have usurped the jury's function of deciding the facts; and if the jury were not to believe the expert, the expert's testimony would not have been relevant and should not have been admitted.<sup>14</sup>

Additionally, where opposing experts do not agree, then there was no matter of general truth on which to obtain enlightening expert testimony such that the purpose of obtaining the expert testimony was lost and, furthermore, the jury would be deciding matters that admittedly require specialized experience which the jury does not have and on which even the experts do not agree. "The jury is not a competent tribunal" in such matters.<sup>15</sup>

Notwithstanding these concerns, courts continued (and continue today) to admit expert testimony with ever-increasing willingness, especially on matters of science and medicine.

### *Frye v. United States*

Probably the most significant case from the early twentieth century that highlighted some of Justice Hand's concerns over the growing use of expert testimony was *Frye v. United States*.<sup>16</sup> 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.

The court of appeals did not express disagreement with that argument, but 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.<sup>17</sup>

Thus was born 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 rejected 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 conviction was affirmed.

Still, the court of appeals recognized that courts should allow significant latitude in admitting expert testimony. The court of appeals did not debate or criticize the general admissibility of expert testimony, nor did it suggest that the admissibility of expert testimony should be limited in any way other than requiring that it satisfy the general acceptance requirement.

Until enactment of the Federal Rules of Evidence, *Frye's* "general acceptance" test served as the basis for determining the admissibility of expert testimony in the federal courts.

**The Federal Rules of Evidence and Daubert**

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.<sup>18</sup> Thus, following enactment of the Federal Rules of Evidence, the continued application of the *Frye* "general acceptance" test was vigorously debated and resulted in a division among the federal courts.

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* requirements that scientific evidence be sufficiently established to have general acceptance in the field to which it belongs.<sup>19</sup> The Ninth Circuit Court of Appeals affirmed.<sup>20</sup>

The Supreme Court reversed and remanded. In a unanimous opinion, the 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.<sup>21</sup>

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.<sup>22</sup>

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 a 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.<sup>23</sup> 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.<sup>24</sup>

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.<sup>25</sup> Finally, under Federal Rule 403, relevant evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury.<sup>26</sup>

Because the inquiries of the trial court and the court of appeals were focused on *Frye*'s general acceptance test, the Supreme Court remanded the case for further consideration of the plaintiffs' proffered expert testimony.

#### *The Future of Expert Testimony—Federal Court*

*Daubert* is not the end of the debate on junk science. Rather, while it set guidelines for admissibility of expert testimony under the Federal Rules of Evidence, the impact of the courts' use of those guidelines is uncertain.<sup>27</sup> One point of view is that *Daubert* "opened courtroom doors to the winds of fresh scientific ideas..."<sup>28</sup> Another point of view is that *Daubert* may result in a greater exclusion of evidence because of the far greater scrutiny of expert testimony required by *Daubert*,<sup>29</sup> while a third point of view is that *Daubert* will have little substantive effect on the admissibility of expert testimony.<sup>30</sup>

The Ninth Circuit's opinion on remand of *Daubert* may prove instructive on the future of junk science under the Federal Rules of Evidence.<sup>31</sup> The 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 reflects "scientific knowledge," their findings are "derived by the scientific method" as required by Rules 702 and 703, and their work product amounts to "good science." Second, the court of appeals considered whether the proposed expert testimony is "relevant to the task at hand."<sup>32</sup>

The court of appeals 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 that:

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.<sup>33</sup>

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. Personal opinion, not science, is testifying here.'<sup>34</sup>

This opinion of the Ninth Circuit confirms that the Supreme Court's *Daubert* decision does not eliminate the ability of defense counsel to exclude junk science. Even with a record based upon *Frye*, Merrell Dow was able to exclude the plaintiffs' expert testimony under the *Daubert* standards.<sup>35</sup> The plaintiffs have filed a motion for rehearing.<sup>36</sup>

#### *The Future of Expert Testimony—The State Courts*

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.

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.

These state court opinions reflect the consideration that some of the state appellate courts are beginning to give to the issue of junk science in the courtroom. Still, not all of the highest state courts have established their test for admission of expert testimony, and too few trial courts scrutinize the validity of expert testimony prior to its being admitted into evidence.

#### *Reference Manual on Scientific Evidence*

Another result of *Daubert* and the large number of federal court opinions applying the decision is the publication by the Federal Judicial Center of a Reference Manual on Scientific Evidence to be provided to every federal judge.<sup>37</sup>

The manual has been praised by many, but has attracted strong criticism from the plaintiffs' bar (including ATLA) as misinterpreting *Daubert* and being unfair and biased in favor of defendants.<sup>38</sup> The manual may also prove instructive

to state courts in evaluating expert testimony under applicable state law.

Conclusion

Junk science and the use of expert testimony in civil litigation is at the core of the national tort reform debate. Supporters of tort reform argue that junk science is prostrating the tort system, while tort reform opponents assert the attack on junk science is an attack on "cutting edge" scientific opinion solely to reduce jurors' roles in the tort system, thereby creating "junk justice" for all.<sup>39</sup> These opponents also charge that a more stringent review of expert scientific testimony "will not remove unnecessary handicaps from industry, but rather will handicap tort law in the pursuit of its valuable aims."<sup>40</sup>

As a result of the Supreme Court's decision in *Daubert* and the tort reform movement, the issue of admissibility of expert testimony has been pushed closer than ever to the fore.<sup>41</sup> The use of motions to strike experts or motions *in limine* to exclude junk science have, however, lagged the tort reform debate and the flood of case law on admissibility of expert testimony. Notwithstanding *Daubert* and the tort reform movement, trial courts and defense counsel continue to allow junk science to be admitted into evidence without scrutiny or challenge.<sup>42</sup>

With the publicity given junk science and the frequency of judicial opinions analyzing the admissibility of expert testimony, defense counsel have been given an opportunity to stem the injustice of junk science. Defense counsel should critically scrutinize all expert testimony being proffered and be more aggressive in challenging testimony not founded upon scientific principles or premised upon sound factual bases.

Failure to continue the war against incompetent expert testimony will further erode our system of justice and the public's confidence in it.

- 
1. E.g., *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. Jl., Jan. 19, 1995 at A16, col. 1; *Some States Spurn 'Junk-Science' Ruling*, Wall St. Jl., Dec. 29, 1993 at B7, col. 1; *Hauling Junk Science Out of the Courtroom*, Wall St. Jl., 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. P. Huber, *Galileo's Revenge: Junk Science in the Courtroom* ix-x (1991).
  3. *Anderson/LaForge Joint Venture v. Exxon Corporation*, No. 92-04856 (14th Dist. Ct., Dallas County, Tex.).
  4. *Key v. Crow*, No. 141 129840 90 (141st Dist. Ct., Tarrant County, Tex.).
  5. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S.Ct. 2786 (1993).
  6. *Learned Hand, Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv.L.Rev. 40 (1901).
  7. *Id.* at 41.
  8. *Id.* at 43.
  9. Fed.R.Evid. 706; *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S.Ct. at 2798. Rule 706 provides, in part, as follows:
    - (a) Appointment. The court may on its own motion or on the motion of any party enter an order to show cause why expert witnesses should not be appointed, and may request the parties to submit nominations. The court may appoint any expert witnesses agreed upon by the parties, and may appoint expert witnesses of its own selection. An expert witness shall not be appointed by the court unless the witness consents to act. A witness so appointed shall be informed of the witness' duties by the court in writing, a copy of which shall be filed with the clerk, or at a conference in which the parties shall have

opportunity to participate. A witness so appointed shall advise the parties of the witness' findings, if any; the witness' deposition may be taken by any party; and the witness may be called to testify by the court or any party. The witness shall be subject to cross-examination by each party, including a party calling the witness.

Fed.R.Evid. 706(a).

10. Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv.L.Rev. at 53.
11. *Ferguson v. Hubbell*, 97 N.Y. 507, 514 (1884) quoted in P. Huber, *Galileo's Revenge: Junk Science in the Courtroom* at 13 n.6. The court of appeals agreed that expert testimony in civil trials was entirely proper in certain cases. The use of expert testimony, however, was not to be encouraged and "should be received only in instances of necessity." *Id.* In this case, the expert testimony concerned issues of common experience (starting of a fire) on which a jury would be sufficiently competent to form an opinion without expert testimony.
12. Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 Harv.L.Rev. at 50 and 52.
13. *Id.* at 54.
14. *Id.* at 52.
15. *Id.* at 54-5.
16. *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).
17. *Id.* at 1014 (emphasis added).
18. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S. Ct. at 2792-794.
19. *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*.
20. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 951 F.2d 1128 (9th Cir. 1991).
21. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S.Ct. at 2792-794.
22. *Id.* at 2798-799.
23. *Id.* at 2796-797; see *Dealing With Daubert: The Trial Judge's Role as a "Gatekeeper"*, For The Defense 30 (June 1994).
24. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S.Ct. at 2796-797.
25. *Id.* at 2797-798. Fed.R.Evid. 703 provides that:  
The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence.
26. Fed.R.Evid. 403 provides that:  
Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.
27. See cases cited in Hoffman, *Expert Testimony Since Daubert: A Major Shift*, Toxics L. Rep. 252 (Aug. 3, 1994) and Mack, *Scientific Testimony After Daubert: Some Early Returns from Lower Courts*, Trial 23 (Aug. 1994).
28. Greenstone, *Junk Science, Junk Justice*, 36 ATLA L. Rep. 263, 265 (Sept. 1993).
29. Hoffman, *Expert Testimony Since Daubert: A Major Shift*, Toxics L. Rep. at 252; Imwinkelried, *The Daubert Decision: Frye is Dead, Long Live the Federal Rules of Evidence*, Trial 60, 64 (Sept. 1993).
30. Mack, *Scientific Testimony After Daubert: Some Early Returns from Lower Courts*, Trial at 24.
31. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, No. 90-55397, slip op. (9th Cir., Jan. 4, 1995), reported at 95 Daily JI. D.A.R. 230 (Jan. 5, 1995), motion for rehearing pending.
32. *Id.*, 95 Daily JI. D.A.R. at 231.
33. *Id.*, 95 Daily JI. D.A.R. at 233.
34. *Id.*, 95 Daily JI. D.A.R. at 234, quoting *Turpin v. Merrell Dow Pharmaceuticals, Inc.*, 959 F.2d 1349, 1360 (6th Cir. 1992).
35. See also *Wade-Greaux v. Whitehall Laboratories*, No. 94-7199, slip op., 1994 U.S.App.LEXIS 37093 (3rd Cir., Dec. 15, 1994), and *Bradley v. Brown*, No. 94-2467, slip op., 1994 U.S.App.LEXIS 34763 (7th Cir., Dec. 13, 1994) (appellate courts applied *Daubert* in rejecting the plaintiffs' expert scientific testimony as being unreliable), reported in Toxics L. Rep. 808 and 810 (Jan. 4, 1995).



36. Toxics L. Rep. 896 (Jan. 25, 1995).
37. *New Judicial Manual on Scientific Evidence Stirs Controversy*, 20 *Litigation News* (ABA) 1 (Oct. 1994); *Federal Judicial Center Readies Manual on Expert Scientific Evidence For Judges*, Toxics L. Rep. 387 (Sept. 7, 1994); December 15, 1994 letter from the Federal Judicial Center. The manual is available to the public from private publishers. See, e.g., *Reference Manual on Scientific Evidence* (West 1995).
38. *New Judicial Manual on Scientific Evidence Stirs Controversy*, 20 *Litigation News* (ABA) 1; *Federal Judicial Center Readies Manual on Expert Scientific Evidence For Judges*, Toxics L. Rep. at 387-89.
39. Greenstone, *Junk Science, Junk Justice*, 36 *ATLA L. Rep.* at 263.
40. Bell, *Strict Scrutiny of Scientific Evidence: A Bad Idea Whose Time Has Come*, Toxics L. Rep. 1014 (Jan. 22, 1992).
41. Hoffman, *Expert Testimony Since Daubert: A Major Shift*, Toxics L. Rep. at 252.
42. See, e.g., *Maritime Overseas Corp. v. Ellis*, 886 S.W.2d 780 (Tex. App.—Houston [14th Dist.] 1994, writ requested) and *Merrill Dow Pharmaceuticals, Inc. v. Hawner*, No. 13-92-540-CV, slip op. (Tex. App.—Corpus Christi, Mar. 17, 1994, rehearing pending) (in both cases, the court stated that no objection was made to the competency of the expert testimony at trial).

## Appendix

### 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, there was evidence questioning the witness's identification of the defendant, and the trial court did not abuse its discretion in not allowing the expert to testify. In response to the defendant's argument that *Daubert* required that his expert be allowed to testify, the Arkansas Supreme Court held 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*, No. S035250, slip op., 1994 Cal.LEXIS 5373 (Oct. 27, 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 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. Trial courts may in the future take judicial notice of the general acceptance of the DNA testing without re-litigation of the issue. The decision was issued before the U.S. Supreme Court's

decision in *Daubert* was released. Nonetheless, 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 the final judgment entered in favor of the plaintiff and remanded the case for the court to consider post-trial evidence of Bendectin's safety. The trial court abused its discretion in refusing to consider any of the post-trial studies on Bendectin. 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 from the court of appeal. 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. Such testimony does not have to meet *Frye*. 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 Appellate 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.

See also *People v. Bynum*, 257 Ill.App.3d 502, 629 N.E.2d 724 (1994) (*Daubert* holds that foundation proof is necessary under Illinois Rule of Evidence 703 because admission of any scientific evidence must be both relevant and reliable).

*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*, No. 92-SC-508-MR, slip op., 1994 WL 587875 (Ky., Oct. 27, 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 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 civil judgment in favor of the plaintiffs in an 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.

*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 the 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*.

*Hart-Albin Co. v. McLees Inc.*, 264 Mont. 1, 870 P.2d 51 (1994). The Montana Supreme Court affirmed in part and reversed in part the trial court's judgment and, in particular, upheld the trial court's admission of the plaintiff's human factors expert's testimony. The defendant objected that the testimony was junk science and failed to satisfy *Frye*. The expert testified that he held a Ph.D in industrial engineering and was employed in the field of product safety warnings and instructions, and that in his opinion warnings or instructions should have been provided with the product. The court noted *Daubert* had rejected the general acceptance standard under *Frye*, but did not expressly adopt or reject *Daubert*.

*State v. Dean*, 246 Neb. 869, 523 N.W.2d 681 (1994). 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.

See also *State v. Anderson*, 118 N.M. 284, 881 P.2d 29 (1994) (New Mexico Supreme Court admitted DNA typing and statistical calculations into evidence based upon New Mexico Rules of Evidence and *Daubert* standards).

*People v. Wesley*, 83 N.Y.2d 417, 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*, but 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 noted that *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). 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.

*Mitchell v. State*, 884 P.2d 1186 (Okla. Crim. App. 1994). The Oklahoma Court of Criminal Appeal affirmed the defendant's conviction and, in relevant part, held that the defendant failed to preserve error on the trial court's failure to conduct a *Frye* hearing before admitting DNA evidence. The defendant did not object to the testimony and never requested a *Frye* hearing. The court noted that, under *Daubert*, the Federal Rules of Evidence employ a more relaxed standard than under *Frye* for admissibility of evidence and that, regardless, the court had not determined whether it would continue to use the *Frye* standard or adopt *Daubert*.

*Paxton v. State*, 867 P.2d 1309 (Okla. Crim. App.), cert. denied, 115 S.Ct. 227 (1994). The Oklahoma Court of Criminal Appeals affirmed the defendant's murder conviction and upheld the trial court's refusal to admit the results of a polygraph test. In so holding, the court cited *Daubert* in stating that *Frye* has been superseded by the Federal Rules of Evidence and then stated that, while earlier Oklahoma authority addressing the admissibility of lie detector tests was based in part upon *Frye*, the trial court did not err in excluding the polygraph results since it was not presented with any evidence to overcome the presumption of unreliability of those tests.

*State v. Futch*, 123 Or.App. 176, 860 P.2d 264 (1993), review allowed, 319 Or. 406, 879 P.2d 1284 (1994). The Oregon Court of Appeals affirmed the defendant's conviction for sodomy and murder and upheld the trial court's admission of DNA evidence. In so holding, the court cited *Daubert* and held that the analysis undertaken concerning the admissibility of DNA evidence was consistent with the holding in *Daubert*.

*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 statute. 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.

*Maritime Overseas Corp. v. Ellis*, 886 S.W.2d 780 (Tex. App.—Houston [14th Dist.] 1994, writ requested). The Texas Court of Appeals in Houston affirmed, in relevant part, the trial court's judgment in favor of the plaintiff and upheld the admission of the plaintiff's experts' testimony that exposure to diazinon caused the plaintiff's injuries. The court rejected *Frye* and held that *Daubert* was inapplicable since the defendant failed to object to the experts' testimony at trial.

*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.

See also *Reese v. Stroh*, 74 Wash. App. 550, 874 P.2d 200, review granted, 124 Wash.2d 1018, 881 P.2d 253 (1994) (The Washington Court of Appeals reversed a directed verdict for the defendant in a medical malpractice action and held the trial court improperly excluded the plaintiff's expert testimony. The court held that *Frye* does not apply to expert testimony in civil cases and, instead, followed *Daubert* and used Washington Rules of Evidence 702 and 703 to determine the admissibility of expert testimony. The plaintiff's expert's testimony was held to be admissible, and the case remanded for trial).

*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.

*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*.