Much Ado about Nothing - The Supreme Court Still Fails to Solve the General Acceptance Problem Regarding Expert Testimony and Scientific Evidence

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Chemists employed by the police can do remarkable things with blood. They can find it in shreds of cloth, in the interstices of floor boards, on the iron of a heel, and can measure it and swear to it and weave it into a rope to hang a man.

Margery Allingham
The Tiger in the Smoke, 1952

But evidence drawn empirically from facts, though it may justify the action of the practical man, is not scientifically conclusive.

Beatrice Potter Webb
The Economics of Factory Legislation
Socialism and National Minimum, 1909

I. INTRODUCTION

Although it has been said that "[c]hallenging an expert and questioning his expertise is the lifeblood of our legal system," the courts are still at a loss when it comes to deciding what testimony can be heard so that we may put our belief in the expert. This problem is indicated by 70 years of the courts' using different admissibility standards regarding what is considered valid scientific evidence

and the expert testimony related to it. The courts have created these standards in attempts to ensure that only valid, supportable and accepted scientific evidence is admitted at trial, and novel theories, which are less supportable and have less acceptance within the community, are not admissible as evidence.

A plethora of tests have been advanced since the decision in the 1923 seminal case, *Frye v. United States*, which originally established the criteria required in order for the evidence and its supporting testimony to be admitted at trial. Although these tests attempted to define more clearly what constituted valid testimony, they merely added additional requirements that were essentially the same as the sole requirement under the original test. Nevertheless, even with all the different criteria established by the courts, a uniform test still remains to be either created or accepted by them.

In 1992, the Supreme Court granted certiorari in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* for the sole purpose of establishing one consistent test in order to eliminate the discrepancies among the federal courts. Nevertheless, after discussing in depth what should be the threshold test for the admissibility of scientific testimony, and setting forth several factors trial courts must weigh in determining whether to admit the testimony, the Court's decision has the effect of mere reaffirmation of the original test.

This paper will discuss and analyze the problem of scientific evidence and expert testimony from *Frye v. United States* to the new grounds for admissibility established by the Supreme Court of the United States in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* This note will specifically focus on some of the changes made by the courts to the common law rule and follow its transformation to a more liberal standard within the federal court system. The paper will conclude that the courts have not really changed their position on the admissibility of scientific evidence and that their current criteria still are tantamount to the old general acceptance standard.

II. EXPERT TESTIMONY

A. The Expert

According to Black’s Law Dictionary, an expert is

[(o)ne who by reason of education or special experience has knowledge respecting a subject matter about which persons having no particular training are incapable of forming an accurate opinion or making a]

2 See infra pp. 4-6, 10-21 delineating the different tests used by various courts.

3 293 F. 1013 (D.C. Cir. 1923).


5 293 F. 1013.

correct deduction; [o]ne who by habits of life and business has peculiar skill in forming opinion on subject in dispute.\(^7\)

Experts are usually involved in cases in which the subject-matter is generally beyond the scope of the average lay-person's knowledge. The expert is used in order to assist the trier of fact in his or her understanding of the evidence presented at trial so that the trier of fact will more easily be able to render a decision regarding the dispute.\(^8\)

Although experts are generally viewed as being helpful to the resolution of the dispute presented at trial, some judges still have varying concerns regarding the use of expert testimony at trial.\(^9\) These concerns include "fears that experts will give opinions they would be unwilling to submit for peer review, that juries will be unable to determine the scientific issues without resorting to speculation, and that juries will reach emotional decisions based on the plight of the plaintiffs."\(^10\) Moreover, although courts and commentators agree that greater control over (the use of) expert witnesses is needed, they continue to disagree about how to achieve it.\(^11\)

7Black's Law Dictionary 578 (6th ed. 1990). See also Webster's Third New International Dictionary of the English Language Unabridged 800 (1961) (defining an expert as: "one who has acquired special skill in or knowledge of a particular subject through professional training or practical experience: [an] authority, [a] specialist; one having skill or knowledge not possessed by mankind in general.").

8"Whether the situation is a proper one for the use of expert testimony is to be determined on the basis of assisting the trier.... When opinions are excluded, it is because they are unhelpful and therefore superfluous and a waste of time." Fed. R. Evid. 702 advisory committee's note.


10Id. at 352 (footnotes omitted). Experts have also been criticized for "giving professional opinions that others in their own professions characterize as 'far-fetched,' unreliable, and lacking in objectivity." Edward V. Di Lello, Note, Fighting Fire with Firefighters: A Proposal for Expert Judges at the Trial Level, 93 Colum. L. Rev. 473, 474 (March 1993). (footnotes omitted).

11McCarthy, supra note 9, at 352-53 (citing Margaret A. Berger, A Relevancy Approach to Novel Scientific Evidence, 115 F.R.D. 89 (1987) (proposing that Rule 702 be amended and include the Rule 403 balancing test); Paul C. Giannelli, Scientific Evidence: A Proposed Amendment to Federal Rule 702, 115 F.R.D. 102 (1987) (proposing an amendment to Rule 702 whereby expert testimony would not be admissible unless the proponent gave advance written notice of his intent to use the testimony to the adverse party); Frederic I. Lederer, Resolving the Frye Dilemma - A Reliability Approach, 115 F.R.D. 84 (1987) (proposing that Rule 702 be amended to provide for 'reliable' evidence); James E. Starrs, Frye v. United States Restructured and Revitalized: A Proposal to Amend Federal Evidence Rule 702, 115 F.R.D. 92 (1987) (proposing an amendment to Rule 702 which requires that "the theory or technique in question [be] scientifically valid for the purposes for which it is tendered"); see also Bert Black, A Unified Theory of Scientific Evidence, 56 Fordham L. Rev. 595, 611 n.80 (1988) (proposing a modification of Rule 702 that combines the proposals of Professors Lederer, Berger and Starrs which focus on reliability, relevancy and validity, respectively). Commenting on the "need for judicial review and control"
The courts are additionally concerned that experts will say whatever attorneys direct them to say. For the right price, somewhere, there is an expert for hire who will support whatever theory an attorney and his client need in order to obtain a favorable verdict. This can, and often does, result in a battle of the experts at trial, with the trier of fact being the ultimate decision-maker. Nonetheless, the trier of fact needs to be cognizant of the real purpose behind the testimony of the expert and not be easily misled by the eloquent rhetoric of the expert.

B. The "Frye Rule"

_Frye v. United States_, decided on December 3, 1923, created the standard for determining the admissibility of scientific evidence and its supporting expert testimony. James Alphonzo Frye was convicted of second degree murder and appealed the decision. His sole assignment of error was the trial court's sustaining of an objection by the United States concerning the admissibility of the testimony regarding a deception test performed on him. The Appellate

Black notes that "there is no consensus on how to achieve these objectives." _Id._ at 598. See also McCarthy at 351 n.1 (citing _Judges' Opinions on Procedural Issues: A Survey of State and Federal Trial Judges Who Spend at Least Half Their Time on General Civil Cases_, 69 B.U. L. REV. 731, 738-41 (1989)) ("Survey evidence indicates that 21% of federal judges think 'the rules relating to the qualifications and use of expert witnesses ... should be made more restrictive.' In complex cases (including toxic torts), 33% of the federal judges favor making special rules as to who is qualified to testify, while 32% favor special rules as to what evidence - for example, what statistical evidence - is acceptable.")

12Chaulky by Murphy v. Volkswagen of America, Inc., 808 F.2d 639, 644 (7th Cir. 1986) (Posner, J., dissenting) ("There is hardly anything, not palpably absurd on its face, that cannot now be proved by some so-called 'experts'." [quoting Keegan v. Minneapolis & St. Louis R.R., 78 N.W. 965, 966 (Minn. 1899)]. See also Peter Huber, _Safety and the Second Best: The Hazards of Public Risk Management in the Courts_, 85 COLUM. L. REV. 277, 333 (1985) ("[A] Ph.D. can be found to swear to almost any 'expert' proposition, no matter how false or foolish.")

13Michael H. Graham, _Expert Witness Testimony and the Federal Rules of Evidence: Insuring Adequate Assurance of Trustworthiness_, 1986 U. ILL. L. REV. 43, 45 ("Today practicing lawyers can locate quickly and easily an expert witness to advocate nearly anything the lawyers desire."); Jack B. Weinstein, _Improving Expert Testimony_, 20 U. RICH. L. REV. 473, 482 (1986) ("An expert can be found to testify to the truth of almost any factual theory, no matter how frivolous .... Juries and judges can be, and sometimes are, misled by the expert-for-hire.")

14See, e.g., United States v. Addison, 498 F.2d 741, 744 (D.C. Cir. 1974) ("[S]cientific proof may in some instances assume a posture of mystic infallibility in the eyes of a jury of laymen."); United States v. Amaral, 488 F.2d 1148, 1152 (9th Cir. 1973) (expert testimony has an "aura of special reliability and trustworthiness.")

15293 F. 1013.

16Id.

17This test is described as the systolic blood pressure deception test. It is claimed that a person's blood pressure is influenced by and reflects his emotions. It was alleged
Court for the District of Columbia held that the test had not "gained such standing and scientific recognition among physiological and psychological authorities as would justify the courts in admitting expert testimony deduced from the discovery, development, and experiments thus far made" and therefore affirmed the trial court's decision.

In rendering its decision, the appellate court recognized that it is difficult to determine exactly when scientific principles or theories become valid. Nevertheless, it stated that "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."

In other words, once a scientific theory or principle becomes generally accepted within the scientific community, it would be considered valid and would therefore be admissible into evidence at a trial. However, if the theory or principle was not generally accepted, it would be deemed novel or "junk science" and would not be admissible as evidence. Thus, the theory of general acceptance, which withstood criticisms, debates and trials for over the next 70 years, was created.

Frye is a brief opinion. Aside from stating the often quoted general acceptance requirement and holding that the blood pressure deception test had not attained general acceptance with the proper authorities, the Frye court did not elaborate on the reasoning behind its decision. The Frye rule was most likely created to establish a threshold reliability test for the courts to use in determining the admissibility of scientific evidence. Nevertheless, the rule has come to be used or interpreted by the courts as a way of keeping "junk science" out of the courtroom.

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18 Id.

19 19293 F. at 1014.

20 Id.

21 "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 ...." Id.

22 Id.

23 There does not seem to be a precise definition of "junk science." See Peter W. Huber, Galileo's Revenge: Junk Science in the Courtroom 214 (1991). Nevertheless, some examples of junk science are: breast cancer being caused by a fall from a streetcar and cancer being aggravated or caused by lifting a box of cheese. Id. at 1. Huber's book contains a detailed analysis of the evolution and use of novel scientific testimony and "junk science" in the courtroom. See pages 2 and 3 of his book for a comparison of "junk science" and real science and "junk science" and liability science, respectively.
It has been stated that one of the reasons why the "general acceptance" standard may have been established was to keep supposed "junk science" and novel scientific theories upon which plaintiffs would base their recoveries out of the courtroom. Another may have been an attempt to prevent, or at least inhibit, plaintiffs from obtaining sympathy from triers of fact in order to recover under a "deep-pockets" or a "someone must pay for the injury" theory. Although these two theories may not have been conceptualized by the Frye court, it appears as if subsequent decisions by other courts have interpreted Frye in this manner and have used it as a broad shield in order to keep cases based on novel scientific theories or techniques out of the courtroom.

The principle established by Frye became the basis by which all scientific evidence and testimony would be measured to determine its admissibility in court—it became the standard everywhere. The Frye rule was applied in a number of cases and was the subject of many articles. Although Frye's "general acceptance" standard was lauded by some courts and commentators for "its ability to assess novel scientific evidence, [it was also criticized by others for] its vagueness, its tendency to exclude potentially useful evidence, its inability to guarantee reliability, and its too generalized focus." Furthermore, Frye's requirement for general acceptance was criticized for causing delays in the admissibility of potentially reliable evidence. Some even argued that by directing all attention to whether a technique had been generally accepted, the important issue of whether the analyst applied the proper testing procedure was lost.

24 Id. at 182-83.
25 Id. at 41, 188.
26 HUBER, supra note 23.
27 Edward J. Imwinkelreid, The 'Bases' of Expert Testimony: The Syllogistic Structure of Scientific Testimony, 67 N.C. L. Rev. 1, 18 (November 1988) ("Frye was the controlling test in at least forty-five states") (citing Note, Changing the Standard for the Admissibility of Novel Scientific Evidence: State v. Williams, 40 Ohio St. L.J. 757, 769 (1979)).
28 Di Lello, supra note 10, at 475 (footnotes omitted).
C. The Federal Rules Of Evidence

1. Generally

The Federal Rules of Evidence, enacted in 1975, liberalized the common law "general acceptance" standard as established in Frye. In order for a piece of evidence to be considered admissible under the Federal Rules, it must be relevant under Rule 401.4 The relevancy test is typically the first hurdle evidence must clear before it may be admitted at trial. Nevertheless, "problems of relevancy call for an answer to the question whether an item of evidence, when tested by the processes of legal reasoning, possesses sufficient probative value to justify receiving it in evidence."5

Notwithstanding the above, relevant evidence may still be excluded on the grounds of prejudice, confusion or waste of time. Circumstances involving evidence, its relevancy and possible prejudicial effect "call for balancing the probative value of and need for the evidence against the harm likely to result from its admission." While Rule 401 is the first hurdle an item of evidence must clear before it can be admitted, Rule 403 "provides for judicial scrutiny

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33McCarthy, supra note 9, at 354 (citing Michael H. Graham, supra note 13, at 43). See also Faust F. Rossi, Modern Evidence and the Expert Witness, 12 Litig. 18 (Fall 1985) ("The welcome mat was rolled out in 1975, when Congress enacted Federal Evidence Rules 702 through 705. These four provisions, comprising only six sentences, confirmed the judicial trend toward expanded admissibility of expert testimony.").

34Relevant evidence, defined in Rule 401 of the Federal Rules of Evidence, is "evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Rule 402 of the Federal Rules of Evidence states: "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."

35Fed. R. Evid. 401 advisory committee's note. The Federal Rules of Evidence establish the standard by which evidence is determined to be admissible, while the Advisory Committee Notes interpret this standard and set an outer limit on how broad this standard may be applied.

36Fed. R. Evid. 403. Rule 403 states: "[a]lthough 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." "Unfair prejudice," as used in Rule 403, is "an undue tendency to suggest decision on an improper basis, commonly, though not necessarily, an emotional one." Fed. R. Evid. 403 advisory committee's note. This rule was created because of the risks of having a decision be made on a purely emotional basis, at the one end, to merely wasting time, at the other. Id. See also In re "Agent Orange" Prod. Liab. Litig., 611 F. Supp. 1223, 1256 (E.D.N.Y. 1985) (stating that exclusion of the testimony under Rule 403 will prevent an extended trial.), aff'd on other grounds, 818 F.2d 187 (2d Cir. 1987), cert. denied, 487 U.S. 1234 (1988).

37Fed. R. Evid. 403 advisory committee's note.
prior to the admission of otherwise relevant evidence. Although "[t]he court's consideration of the reliability of the evidence in determining its probative value" is one of the most difficult parts of Rule 403 to apply, that consideration is imperative when dealing with expert testimony.

Rule 403 is a powerful rule when dealing with the concept of admissibility of expert testimony and scientific evidence. This is evidenced by the fact that some courts have used it to exclude expert testimony that was otherwise admissible. One court, which used a combination of Rule 403 and Rule 703 in order to exclude evidence, stated that "lack of reliable support may render [the evidence] more prejudicial than probative." Nevertheless, some courts have stated that Rule 403 should not always be used; but when it is, caution should be exercised.

2. The Expert

Under the Federal Rules of Evidence, if a person is testifying as an expert, he may give his opinion if his testimony contains "scientific, technical, or other specialized knowledge [that] will assist the trier of fact to understand the evidence or to determine a fact in issue ...." A person may be considered an expert by his "knowledge, skill, experience, training, or education ...." The rule is broadly phrased to encompass not only experts in the strictest sense (e.g., physicians, architects), but also those who are sometimes called "skilled" witnesses (e.g., bankers, mechanics, [real estate entrepreneurs]).

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41 Id. at 422.

42 Id. at 421.

43 United States v. McRae, 593 F.2d 700, 707 (5th Cir.) (stating that "the application of Rule 403 must be cautious and sparing"), cert. denied, 444 U.S. 862 (1979); see also DeLuca v. Merrell Dow Pharmaceuticals, 911 F.2d 941, 957 (3d Cir. 1990) (stating that Rule 403 is an unlikely basis for exclusion if testimony survives Rule 702 and Rule 703).

44 FED. R. EVID. 702. On the other hand, a lay witness may generally only testify in the form of an opinion or otherwise if the opinion or inference is "a) rationally based on the perception of the witness and b) helpful to a clear understanding of the witness's testimony or the determination of a fact in issue." FED. R. EVID. 701.

45 FED. R. EVID. 702.

46 FED. R. EVID. 702 advisory committee's note.
The expert may base his opinion on "facts or data . . . perceived by or made known to the expert at or before the hearing." 47 These facts or data may be derived from either "firsthand observation, evidence at trial, . . . facts presented to the expert outside of the courtroom . . . [or] even inadmissible hearsay, if other experts would rely on that type of data in forming an opinion." 48

It is important to note that Rule 703 does not, by its language, require that the evidence upon which the expert bases his or her testimony be "generally accepted" by the scientific community. 49 It merely states that "[i]f 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." 50 Furthermore, the comments to the Rule provide that:

\[ \text{[T]he rule is designed to broaden the basis for expert opinions beyond that current in many jurisdictions and to bring the judicial practice into line with the practice of the experts themselves when not in court. Thus[,] a physician in his own practice bases his diagnosis on information from numerous sources and of considerable variety . . . [from which] [t]he physician makes life-and-death decisions . . . His validation, expertly performed and subject to cross-examination, ought to suffice for judicial purposes.} \]

Later in the same comment, it is stated that "[i]f it be feared that enlargement of permissible data may tend to break down the rules of exclusion unduly, notice should be taken that the rule requires that the facts or data 'be of a type reasonably relied upon by experts in the particular field.'" 52 This hints towards the general acceptance standard as set forth in Frye. 53

47 FED. R. EVID. 703.
48 Skaggs, supra note 38, at 1190. (footnote omitted).
49 This is, on the face of the rule, in direct contrast to the general acceptance requirement set forth in Frye.
50 FED. R. EVID. 703 (emphasis added).
51 FED. R. EVID. 703 advisory committee's note.
52 Id.
53 The comment concludes with a reference to an example in which the testimony of an "accidentologist" regarding the point of impact in an automobile accident would not be permitted if it was based on the comments of bystanders because experts would not reasonably rely on this type of information. Id. This seems logical since the accidentologist would be making a determination and stating his opinion on evidence conveyed from the bystanders instead of studying the accident scene himself. It is rare that an expert would even base an opinion on comments from others without doing his own study and investigation.
D. Does Frye Still Exist?

A debate continues among both commentators and judges as to whether the Frye rule is still in existence under the Federal Rules. The fact that Frye and its "general acceptance standard" is not mentioned anywhere in the Federal Rules of Evidence or the Advisory Committee Notes adds further fuel to the fire. Instead, the Federal Rules appear to use a relevancy approach. Some commentators argue that the omission of Frye from the Federal Rules is "tantamount to the abandonment of the general acceptance standard," while others argue that because Frye is not expressly overruled by the Federal Rules, its "general acceptance" standard remains steadfast. The question of Frye's existence also remains unanswered in the federal courts. Nevertheless, there appears to be a movement away from the Frye test and towards the Federal Rules of Evidence.

E. The Movement By The Courts Away From Frye

Although the exact case in which the courts first deviated from Frye is not easily determinable, once the Federal Rules of Evidence were enacted, a greater

54 See Di Lello, supra note 10 and accompanying text. See also supra note 29 and accompanying text.


56 Skaggs, supra note 38, at 1188.

57 David Bernstein, Out of the Fryeing Pan and into the Fire: The Expert Witness Problem in Toxic Tort Litigation, 10 Rev. Litig. 117, 126 n.59 (Fall 1990) (quoting 3 J. Weinstein & M. Berger, Weinstein's Evidence § 702[03], at 702-36 (1990)).

58 Skaggs, supra note 38, at 1188. See also Giannelli, supra note 29, at 1229.


60 Altman, supra note 29, at 215-22.
number of courts began to create new standards by which evidence would be determined to be admissible.61

United States v. Williams62 was one of the first cases to deviate from the Frye rule and establish its own test regarding the admissibility of scientific evidence. This case, decided three years after the enactment of the Federal Rules of Evidence, demonstrated a growing discontent with the Frye rule and the need for an improved admissibility standard.63

Williams64 involved a challenge to the admissibility of spectrographic voice identification.65 In the course of rendering its opinion, the court recognized that "[t]here is no clearly defined, universal, litmus test for the general admissibility of all 'scientific' evidence."66 Nevertheless, in affirming the admission of the spectrography evidence,67 the court formulated a five-part test that it used to determine the reliability and admissibility of the voice analysis.68 These indicators were: 1) "the potential rate of error" of spectrography analyses;69 2) "the existence and maintenance of standards" used in the examination process;70 3) "the care and concern with which a scientific technique has been

61 See, e.g., United States v. Williams, 583 F.2d 1194 (2d Cir. 1978), cert. denied, 439 U.S. 1117 (1979); Downing, 753 F.2d 1224; Christophersen 939 F.2d 1106; Jakobetz, 955 F.2d 786.

62583 F.2d 1194.

63 See, e.g., Jakobetz, 955 F.2d 786 (applying the test in Williams, 583 F.2d 1194, under which the Frye rule was held to have been superseded by the Federal Rules of Evidence); Andrews v. Florida, 533 So.2d 841 (Fla. Dist. Ct. App. 1988) (refusing to follow Frye, and favoring the relevancy standard from Downing); State v. Brown, 687 P.2d 751 (Or. 1984) (rejecting the Frye standard in favor of the Oregon Evidence Code for admissibility standards for expert testimony); State v. Walstad, 351 N.W.2d 469 (Wis. 1984) (rejecting the Frye rule in favor of the Wisconsin Rules of Evidence governing admissibility of evidence); Springfield v. State, 860 P.2d 435 (Wyo. 1993) (stating the correct approach for evaluating scientific evidence is through the Wyoming Rules of Evidence rather than Frye).

64583 F.2d 1194.

65 Id. at 1195. This was the first time this type of evidence had been challenged in this circuit. Id. Since the appeal of the co-defendant, Manning, does not have to do with the admissibility of the voice analysis, it will not be addressed in this Note.

66 Id. at 1197. In a footnote, the court also acknowledged that the fourth and sixth circuits have admitted spectrographic voice analysis while the sole circuit finding otherwise has been questioned. In addition, the court added that the government's brief listed 19 district courts in favor, and one against, and nine state courts in favor, and four against. 583 F.2d at 1197 n.6.

67 Id. at 1201.

68 Id. at 1198-99.

69 Id. at 1198.

70583 F.2d at 1198.
employed, and whether it appears to lend itself to abuse;"71 4) "its analogous relationship with other types of scientific techniques, and their results, routinely admitted into evidence;"72 and 5) "the presence of 'failsafe' characteristics" in the testing procedure.73 This test set the relevancy standard by which the admissibility of evidence would be measured by many courts.74

Another case which formulated a new admissibility standard was United States v. Downing,75 in which the defendant was convicted for mail fraud, wire fraud and interstate transportation of stolen property.76 The sole issue raised by the defendant on appeal was that the trial court erred in excluding the proffered expert testimony regarding the unreliability of eyewitness identification.77 Although the appellate court agreed, it added that the admission of such testimony is not automatic, but rather conditional on fulfilling certain requirements.78 These requirements are that the evidence must: 1) survive a preliminary screening by the district judge through an in limine proceeding, using Rule 702 of the Federal Rules of Evidence to determine if the evidence will assist the trier of fact and not overwhelm or mislead it, and 2) "fit," that is, show that part of the scientific evidence does indeed reveal that the identifications involved may have been inaccurate.79

In the course of rendering its decision, the court criticized the Frye rule and subsequently rejected its general acceptance requirement as the sole criterion upon which evidence would be deemed admissible.80 Furthermore, it stated that the extent to which a theory or technique is accepted within the scientific community would only be one factor that would be considered in deciding whether to admit the evidence.81

71ld. at 1199.
72ld.
73ld.
75753 F.2d 1224.
76ld. at 1227.
77ld. at 1226. The appellate court stated that the case presented an issue of first impression for that circuit and phrased the issue as: "Whether Fed. R. Evid. 702 permits a defendant in a criminal prosecution to adduce, from an expert in the field of human perception and memory, testimony concerning the reliability of eyewitness identifications." Id.
78753 F.2d at 1226.
79ld.
80ld. at 1237.
81ld. (emphasis added).
In addition, the court stated that "[t]he language of Fed. R. Evid. 702, the spirit of the Federal Rules of Evidence in general, and the experience with the Frye test" gave rise to a need for a more flexible approach towards the admissibility of scientific evidence. The court then proceeded to set forth its own admissibility test for scientific evidence, using Rule 702 as its basis. The court's test would guide the lower courts on how to apply the preliminary screening process. It advocated, although not exclusively,

a preliminary inquiry focusing on 1) the soundness and reliability of the process or technique used in generating the evidence, 2) the possibility that admitting the evidence would overwhelm, confuse, or mislead the jury, and 3) the proffered connection between the scientific research or test result to be presented, and particular disputed factual issues in the case.

Moreover, the court added that in cases in which scientific evidence is not generally accepted or does not have a "track record," there are additional factors that the court may consider in determining the reliability of the evidentiary testimony. Among these factors are:

the 'novelty' of the new technique, . . ., [t]he existence of a specialized literature dealing with the technique, . . ., [t]he qualifications and professional stature of expert witnesses, . . . the non-judicial uses to which the scientific technique are put, . . ., [t]he frequency with which a technique leads to erroneous results, . . ., the type of error generated by a technique, . . . [and] tak[ing] judicial notice of expert testimony that has been offered in earlier cases to support or dispute the merits of a particular scientific procedure.

The court concluded that the district court erred in not applying a proper test to determine the admissibility of the expert testimony concerning the unreliability of eyewitness identification and therefore vacated and remanded the decision to the district court so that it could properly determine the evidence's admissibility.

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82753 F.2d at 1237.
83Id.
84Id.
85Id. at 1238.
86753 F.2d at 1238.
87Id. at 1238-39.
88Id. at 1232.
89Id. at 1244.
Christophersen v. Allied-Signal Corporation,90 established yet a third admissibility standard91 by combining the Federal Rules of Evidence with the test set forth in Frye.92 The court broke down the guidelines into a four-part test:

1) whether the witness is qualified to express an expert opinion; 2) whether the facts upon which the expert relies are the same type as are relied upon by other experts in the field; 3) whether in reaching his conclusion the expert used a well-founded methodology; and 4) assuming the expert’s testimony has passed Rules 702 and 703, and the Frye test, whether under Fed. R. Evid. 403 the testimony’s potential for unfair prejudice substantially outweighs its probative value.93

The court added that these were only suggested questions to be asked by the trial court; they were not to be applied "mechanically."94

In elaborating on its new test, the court stated that the first three steps were threshold requirements which all expert testimony needed to meet before it would be determined to be admissible.95 In addition, the court stated that the fourth requirement "provides an overlay— a final mechanism for screening out otherwise admissible testimony whose potential for prejudice substantially outweighs its probative value."96 The court applied its test to the facts of the case and affirmed the district court’s exclusion of the expert testimony regarding plaintiff’s attempt to establish medical causation since the testimony was either not sufficiently reliable or more prejudicial than probative.97

One of the most recent formulations of a new admissibility standard was created in United States v. Jakobetz,98 which dealt with the admissibility of DNA profiling evidence.99 The DNA analysis was performed by the Federal Bureau of Investigation by comparing a blood sample of the defendant with a semen sample taken from a vaginal swab of the female victim allegedly raped and

90939 F.2d 1106.
91Id. at 1110.
92Id. (Commenting that a combination of the two "provide[s] a framework for trial judges struggling with proffered expert testimony.") The court also acknowledged that "[t]he signals are not neatly-cabined categories, and we disentangle them only to accent the independent significance of each." Id.
93939 F.2d at 1110. (citations omitted).
94Id.
95Id.
96Id.
97939 F.2d at 1108.
98955 F.2d 786.
99Id. at 789. Although Jakobetz was convicted of kidnapping, it appears as though the DNA analysis was conducted in order to determine whether the defendant was the man who allegedly raped and kidnapped the victim.
killed by him. A pretrial hearing on a motion in limine was conducted in order to determine the admissibility of the DNA profiling evidence. After eight days and testimony from nine experts, five for the prosecution and four for the defense, the judge credited the testimony of the government's witnesses and determined that the evidence was sufficiently reliable to be presented to the jury. The defendant was subsequently convicted of kidnapping and appealed the admissibility of the DNA evidence.

In analyzing the district court's opinion, the circuit court noted that the district court first looked to the Williams test, and then took other factors into consideration before rendering its decision. These additional factors included:

1) the experts' qualifications and stature; 2) the existence of specialized literature; 3) the novelty of the technique and its relationship to more established areas of scientific analysis; 4) whether the technique has been generally accepted by experts in the field; 5) the nature and breadth of the inference adduced; 6) the clarity with which the technique may be explained; 7) the extent to which basic data may be verified by court and jury; 8) the availability of other experts to evaluate the technique; and 9) the probative significance of the evidence.

Stating that the district court did a very thorough analysis regarding the admissibility of the evidence and did not err in rendering its decision, the circuit court applied its test and held that it was proper to admit the DNA profiling evidence.

In three of these cases the scientific evidence was admitted, while in only one was it not admitted. In each case, the court deviated from the Frye rule in an apparent attempt to create a more thorough test to apply in determining the admissibility of scientific evidence. Nevertheless, even with these more liberal standards, one court would not admit the scientific evidence. Moreover, there was not one set standard or test by which the courts determined whether the evidence would be admissible. Each court created its own admissibility test or

100 Id.
101 Id.
102 955 F.2d at 789.
103 Id.

104 Id. This was not the sole issue raised on appeal by the defendant, but it is the one which deals with the subject matter of this note.
105 Id. at 797.
106 955 F.2d at 797-98.
107 Id. at 799.
108 Id. at 789.
derived its test from another decision. This fact notwithstanding, a close reading and comparison of the four tests in the aggregate shows that all of the tests are essentially the same.

In essence each of the tests formulated by the courts in Williams, Downing, Christophersen, and Jakobetz attempted to address identical concerns. Each court made an effort to ensure the intrinsic reliability of the technique, both in terms of its falsifiability as well as the conduct of the specific test in question.

Furthermore, the courts in Williams and Downing indicated that the technique would be judged in part by its analogy to techniques admitted in other cases, a traditional legal analysis that can be assumed to underlie the reasoning in Christophersen and Jakobetz as well. Additionally, two of the courts explicitly mentioned legal relevance as a consideration and three of the courts directed the lower court's attention to prejudice to the jury. Again, these latter two concerns are raised with the admission of any evidence, expert or otherwise, and hence add very little to the Frye rule. It must be assumed that the Frye court in 1923 was equally concerned with precedent, legal relevance and undue prejudice to the jury's decision-making process.

Finally, Downing, Christophersen, and Jakobetz enumerated general acceptance within the scientific community as a requirement to admissibility. Downing and Jakobetz additionally referred to "the existence of specialized literature" on the technique while Christophersen discussed the requirements that the expert's testimony be based upon a "well-founded methodology" and facts which are usually relied on by experts in the field.

The conclusion is inescapable that, whatever these courts say about the viability of Frye, and however they choose to frame the test they wish the lower courts to use, they in fact are engaging in an attempt to make the Frye rule work, while reminding the trial courts that there are additional, perhaps equally important, factors to be considered.

Furthermore, even though the Frye rule was specifically mentioned in some of the tests, it was and is being used less and less frequently by the courts. In some cases, it was even explicitly ignored or rejected. This gives the impression that Frye is falling out of favor with the courts and that a new test is desired when a determination has to be made on whether scientific evidence is admissible.

F. Daubert v. Merrell Dow Pharmaceuticals, Inc.

The fact that each federal court had formulated its own test for admissibility of scientific evidence resulted in the Supreme Court's granting certiorari in Daubert v. Merrell Dow Pharmaceuticals, Inc. By deciding this case, the

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109 See, e.g., Jakobetz, 955 F.2d 786; Springfield, 860 P.2d 435.

110 See, e.g., Andrews, 533 So.2d 841; Brown, 687 P.2d 751.

111 113 S. Ct. 320.

112 113 S. Ct. 2786.
Supreme Court hoped to establish a proper standard by which scientific testimony would be judged and thereby eliminate such divisions and discrepancies among the circuits as currently existed.113

*Daubert* was one of a group of cases brought against a number of manufacturers of the drug *Bendectin*.114 In *Daubert*, Petitioners claimed that *Bendectin* was a teratogen115 that caused birth defects in children if it was ingested by their mothers during pregnancy. In the district court, Respondent, Merrell Dow, moved for summary judgment claiming that the drug did not cause birth defects and that Petitioners would be unable to come up with any admissible proof that it did.116 In support of its motion, Merrell Dow submitted an affidavit from its expert witness117 which stated that upon his review of literature and studies on the matter, he did not find *Bendectin* to be a teratogen.118

In response, Petitioners submitted testimony of eight experts119 each of whom concluded that *Bendectin* did cause birth defects.120 These conclusions

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115 A teratogen is "an agent or factor that causes the production of physical defects in the developing embryo." *Dorland's Illustrated Medical Dictionary* 1672 (27th ed. 1988).

116 113 S. Ct. at 2791.

117 Doctor Lamm, who received both his master's and doctor of medicine degrees from the University of Southern California, has served as a consultant in birth defect epidemiology and has published numerous articles. *Id.* at 2791 n.1.

118 *Id.* at 2791.

119 Petitioner's experts consisted of a licensed and accredited veterinarian; a specialist in developmental biology; a medical doctor with specialties in pediatrics, clinical pharmacology and toxicology; an epidemiologist and biostatistician; a specialist in biostatistics, epidemiology and biometry; an associate professor of pediatrics and pharmacology and toxicology; a specialist in pathology and pharmacology; and a professor of pharmacology. 727 F. Supp. at 574-75. For a complete discussion of these experts, refer to the aforementioned pages of the decision.

120 113 S. Ct. at 2791.
were based upon "in vitro" (test tube) and "in vivo" (live) animal studies, pharmacological studies and the "reanalysis" of previously published epidemiological\textsuperscript{121} (human statistical) studies.\textsuperscript{122}

The district court granted Merrell Dow's motion, concluding that Petitioners' evidence was not "sufficiently established to have general acceptance in the field in which it belongs."\textsuperscript{123} The court reasoned that since there was a plethora of epidemiological data regarding Bendectin,\textsuperscript{124} expert opinion testimony that is not based on epidemiological evidence is not admissible to establish causation.\textsuperscript{125} It further reasoned that epidemiological evidence is the best evidence of causation in areas such as the one at hand.\textsuperscript{126}

The court continued that expert opinion which is not based on epidemiology is not admissible since it is insufficient under the foundation requirements of Rule 703 of the Federal Rules of Evidence.\textsuperscript{127} In addition, the court stated that Petitioners' evidence was not admissible because the recalculations upon which their experts based their opinions had neither been published nor subjected to peer review.\textsuperscript{128} Furthermore, it was determined that the animal-cell studies, live-animal studies, and chemical-structure analyses could not by themselves raise a reasonably disputable jury issue concerning causation.\textsuperscript{129}

The circuit court affirmed\textsuperscript{130} citing \textit{Frye} and declaring that expert opinion testimony "based on a methodology that diverges 'significantly from the procedures accepted by recognized authorities in the field ... cannot be shown to be 'generally accepted as a reliable technique.'"\textsuperscript{131} The court reasoned that Petitioners' reanalysis evidence significantly diverged from the traditional

\textsuperscript{121}Epidemiology is "the science concerned with the study of the factors determining and influencing the frequency and distribution of disease, injury, and other health-related events and their causes in a defined human population for the purpose of establishing programs to prevent and control their development and spread." \textit{Dorland's Illustrated Medical Dictionary, supra} note 112, at 566.

\textsuperscript{122}113 S. Ct. at 2791-92.

\textsuperscript{123}Id. at 2792 (citing 727 F. Supp. at 572 [quoting United States v. Kilgus, 571 F.2d 508, 510 (9th Cir. 1978)]).

\textsuperscript{124}This is the information upon which Respondent's expert relied. 113 S. Ct. at 2791.

\textsuperscript{125}Id. at 2792.

\textsuperscript{126}727 F. Supp at 575.

\textsuperscript{127}Id.

\textsuperscript{128}113 S. Ct. at 2792.

\textsuperscript{129}Id.

\textsuperscript{130}951 F.2d 1128.

\textsuperscript{131}Id. at 1130 (quoting United States v. Solomon, 753 F.2d 1522, 1526 (9th Cir. 1985)).
general acceptance process and furthermore, was "unpublished, not subjected to the normal peer review process and generated solely for use in litigation."132 Moreover, the court concluded that Petitioners' evidence did not provide sufficient support to permit the testimony of its experts that the drug caused the birth defects, and therefore, Petitioners would not be able to satisfy their burden of proving causation at trial.133

Before the Supreme Court, Petitioners did not argue that the Frye rule was misapplied, but rather that it was superseded by the enactment of the Federal Rules of Evidence and, therefore, the Court should apply a more liberal standard when determining the admissibility of scientific evidence.134 The Court agreed with this contention,135 created its own test for admissibility,136 and vacated and remanded the decision to the district court for further proceedings consistent with the Court's opinion.137

In reaching its decision, the Court stated that "the Rules occupy the field"138 and, although the common law could aid in the application of the Rules, "[i]n principle, under the Federal Rules no common law of evidence remains. 'All relevant evidence is admissible, except as otherwise provided. . . .'"139 It appears as if the Court is being inconsistent with that statement in light of 1) previous federal court decisions using the common law general acceptance test and 2) the Court's own decision in Daubert, which still permits general acceptance as one of the standards that may be met, despite the existence of the Federal Rules of Evidence.

Moreover, the Court noted that there was a specific rule that applied to the issue presented in Daubert—Rule 702.140 It added that neither the Rules nor their Notes mention the Frye rule or "general acceptance" as a requirement for admissibility.141 Finally, the Court stated that there was no mention of Frye in the drafting history of the Rules and "a rigid 'general acceptance' requirement would be at odds with the 'liberal thrust' of the Federal Rules and their 'general approach of relaxing the traditional barriers to 'opinion' testimony.'"142

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132951 F.2d at 1131.
133Id.
134113 S. Ct. at 2793.
135Id. at 2793, 2794 n.6.
136Id. at 2796-97.
137Id. at 2799.
138113 S. Ct. at 2794 (citing United States v. Abel, 469 U.S. 45, 49 (1984)).
139113 S. Ct. at 2794 (citing (Professor Cleary) Abel, 469 U.S. at 51).
140113 S. Ct. at 2794.
141Id.
142Id. (citing Beech Aircraft Corp. v. Rainey, 488 U.S. 153, 169 (1988) [citing Rules 701 to 705]).
The Court then proceeded through an exhaustive analysis of Rule 702,143 and noted that there are no certainties in science.144 However, the Court stated that

in order to qualify as "scientific knowledge," an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation—i.e., "good grounds," based on what is known. . . . [T]he requirement that an expert's testimony pertain to "scientific knowledge" establishes a standard of evidentiary reliability.145

After indicating that in cases involving scientific evidence, the evidentiary reliability would be based on scientific validity,146 the Court stated that its general observations concerning the admissibility of the evidence were not intended to be a "definitive checklist or test."147 Rather, these factors were intended to bear on the inquiry into the admissibility of the evidence.148

The Court enumerated four considerations in determining the admissibility of the evidence. First, a court must ask whether the scientific theory or technique "can be (and has been) tested."149 Second, a court must ask "whether the theory or technique has been subjected to peer review and publication."150 Third, in cases involving a particular scientific technique, an inquiry needs to be made regarding "the known or potential rate of error" and "the existence and maintenance of standards controlling the technique's operation."151 Finally, "general acceptance" can (still) have a bearing on the examination.152

Even though the Court created this four-part evidence admissibility test, it left the application of it to the district court on remand. The district court should not have a difficult time in applying the test since it is fairly straightforward and relatively easy to do. Given the information that appears in the Daubert opinions from the district court to the Supreme Court, the application of the four part test to the facts of the case should result in the evidence being admitted. The Petitioners' theory/technique was tested; it was subject to peer

143113 S. Ct. 2795-96.
144Id. at 2795.
145Id. In a footnote, the Court distinguished between validity, whether "the principle supports what it purports to show," and reliability, whether "application of the principle produces consistent results." Id. n.9.
146113 S. Ct. at 2795 n.9.
147Id. at 2796.
148Id.
149Id.
150113 S. Ct. at 2797.
151Id.
152Id.
review, but not publication; an inquiry may be made regarding the potential rate of error and the standards used in controlling the technique's operation; and, it has been generally accepted (by at least eight experts).

While the Court's decision finally put to an end the question of whether the Frye rule still existed in the federal court system, and although the court stated that the list of factors was not exclusive, it is not completely clear if all four of the conditions need to be satisfied or if it would be sufficient to fulfill one or two of them. It appears as if the Court attempted to clarify the old general acceptance standard as set forth in Frye, but failed to do so. Rather than having just one requirement that must be met, the Court created four guidelines to be used by the lower courts in rendering their decisions. Essentially, all four of the new standards constitute general acceptance by the scientific community. In order for a scientific theory or method to be generally accepted by the scientific community, it would seem logical that the elements set forth in Daubert would have been met in the first place.

G. Post-Daubert

Although Daubert is a recent decision, a number of courts have cited it in their opinions, particularly in those cases dealing with expert testimony and scientific evidence.¹⁵³

In United States v. Bonds,¹⁵⁴ the defendants were convicted of conspiracy and federal firearms offenses.¹⁵⁵ The circuit court upheld the district court's admission of the DNA evidence used to prove the conspiracy.¹⁵⁶ The court applied Daubert to determine that the DNA evidence and expert testimony met the test adopted by the Supreme Court.¹⁵⁷ The court held that 'the expert testimony meets the 'relevance' prong of the admissibility test: that the evidence or testimony 'assist the trier of fact to understand the evidence or to

¹⁵³See, e.g., Porter v. Whitehall Laboratories, Inc., 9 F.3d 607 (7th Cir. 1993) (deciding that even though the district court did not use Daubert, it anticipated it, and the district court made the correct decision regarding expert testimony based on the Daubert standards); Virgin Islands v. Penn, 838 F. Supp. 1054 (V.I. 1993) (applying the teachings of Daubert in deciding that DNA profiling process is relevant, reliable and admissible); Datskow v. Teledyne Continental Motors Aircraft Products, 826 F. Supp. 677 n.1 (W.D.N.Y. 1993) (stating that Daubert supported the court's decision to admit the expert testimony); State v. Foret, 628 So.2d 1116 (La. 1993) (adopting the Daubert considerations in rendering its decision on expert testimony); State v. Futch, 860 P.2d 264 (Or. Ct. App. 1993) (deciding that its analysis is consistent with the holding of Daubert). But see State v. Bible, 888 P.2d 1152 (Az. 1993) (leaving the application of Daubert for another day and instead applying the Frye rule), cert. denied, 114 S. Ct. 1578 (1994).

¹⁵⁴12 F.3d 540 (6th Cir. 1993).

¹⁵⁵Id. at 546.

¹⁵⁶Id. at 547.

¹⁵⁷Id. at 557.
determine a fact in issue." In addition, the court rejected the defendant's contention that a different result would have been reached using the DNA analysis had a different method been used. The court disposed of that argument by stating that since "Daubert requires only scientific validity for admissibility, not scientific precision," the methodology applied was proper.

Throughout the course of its analysis, the circuit court repeatedly cited to Daubert and the Supreme Court's rationale in rendering its decision. It applied the non-exclusive four-prong test set forth in Daubert to the facts before it and determined that the test was satisfied. The court concluded that the "methodology was valid in that it 'result[ed] from sound and cogent reasoning,' was 'well grounded or justifiable [and] applicable to the matter at hand,'" and thus "clearly had 'a grounding in the methods and procedures of science' and was based on 'more than subjective belief or unsupported speculation.'"

Interestingly, the Bonds decision would remain the same regardless of the standard used to determine the admissibility of the evidence. First, DNA evidence has been held admissible in prior cases and second, the Bonds court referred to and agreed with Williams, Downing, and Jakobetz and their respective tests in the course of rendering its opinion. The only case not mentioned was Christophersen, but it may be inferred that since the evidence would probably have been admitted under Downing, it would have also been admitted under Christophersen.

In United States v. Amador-Galvan, the defendants raised on appeal the question whether the district court erred in denying their motion to admit expert testimony regarding the unreliability of eyewitness testimony. The Amador-Galvan court, in reversing the trial court, determined that that court did not consider whether the proffered expert testimony met the requirements set forth in Daubert. The court stated that the "[t]estimony attacking the reliability of eyewitness testimony is clearly relevant to [the]... defense, [since] it is his main line of defense." Although the Amador-Galvan court did not itself apply Daubert, it did recognize that the exclusion of the expert testimony

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158 12 F.3d at 557.
159 Id. at 558.
160 Id.
161 Id. at 554-68.
162 12 F.3d at 565.
163 Id. (citations omitted).
164 See, e.g., Jakobetz, 955 F.2d 786.
165 9 F.3d 1414 (9th Cir. 1993).
166 Id. at 1417.
167 Id.
168 Id. at 1418.
under the *Frye* test was error on the part of the district court. On remand, the district court "should decide whether such testimony is relevant, and if so, whether the theory propounded is trustworthy and scientifically valid" and therefore admissible under the *Daubert* standard.

Even in the absence of *Daubert*, the circuit court's decision in *Amador-Galvan* would remain the same since the facts of that case are similar to those in *Downing*, a pre-*Daubert* case, which found the expert testimony concerning the reliability of eyewitness identification to be admissible into evidence. Furthermore, if the expert testimony would have been admissible under *Downing*, it would have been admissible regardless of which test was used.

### III. Conclusion

As these cases indicate, *Daubert* is becoming the standard by which courts determine whether or not to admit expert testimony. Nevertheless, *Daubert* still raises some questions regarding the admissibility of scientific evidence and expert testimony.

An initial concern deals with the first consideration set forth by the Court—whether the scientific theory or technique "can be (and has been) tested." It is not clear whether the Court is stating that the theory or technique need only be testable (falsifiable) or that the theory actually be tested. This question is not answered in the decision. The Court appears to either leave the resolution of this ambiguous requirement to the trial courts or postpone its decision until later. One can only guess as to how other courts will interpret this. The failure of the Court to explicitly state a concrete requirement shows that it is hesitant to make a final decision regarding admissibility standards.

Furthermore, although general acceptance is not the sole criterion for admissibility under the new standards, it remains as one of the conditions that may be satisfied in order for evidence to be admissible. This appears to directly contradict the Court's statement that the "austere standard" of making "general acceptance the exclusive test for admitting expert scientific testimony" as required under *Frye*, "should not be applied in federal trials" since it is both not included in, and incompatible with, the Federal Rules of Evidence.

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1699 F.3d at 1418.

170Id.

171113 S. Ct. at 2796.

172Nevertheless, the Court did elaborate on the second requirement and expand on its meaning. It stated that "[p]ublication... is not a sine qua non of admissibility; it does not necessarily correlate with reliability," and recognized that some theories or techniques will be "too particular, too new, or of too limited interest to be published." *Id.* at 2797. In addition, it stated that submitting the proposition to the scientific community is a key element of "good science" since it "increases the likelihood that substantive flaws in methodology will be detected." *Id.* This will give the lower courts an indication of what the Supreme Court was attempting to convey in its decision.

173Id. at 2794.
Notwithstanding that fact, what would happen in a trial if the general acceptance condition was the only one satisfied? Since the Court has stated that the four-part test established in *Daubert* was not exhaustive, one would believe that evidence which only satisfies the general acceptance requirement should be admitted. If this is true, *Daubert* is only one more attempt to clarify the *Frye* rule.

In addition, since general acceptance is still permitted as one of the guidelines by which expert scientific testimony may be admitted, a question arises as to whether *Daubert* really solved the problem of defining general acceptance. The Court merely circumvented the issue. General acceptance is neither clearly defined in the Court's decision nor discussed in any detail.\(^{174}\) The Court simply states that it "can yet have a bearing on the inquiry."\(^{175}\) But what is general acceptance and when does it occur in the mind of the Supreme Court? The Court has failed to articulate a concrete answer to this question. Furthermore, the Court has left unresolved whether the scientific evidence has to be accepted by five, ten or one hundred scientists. Or whether it has to be accepted in one country, two countries, or worldwide. As is evident from the above, the problem surrounding general acceptance still exists. The problem with *Daubert* is that the Court was attempting to address and solve a dilemma, yet it did not address anything at all.

JOSEPH B. SPERO\(^{176}\)

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174 *But see Bonds*, 12 F.3d at 561 (stating "general acceptance exists when a substantial portion of the pertinent scientific community accepts the theory, principles, and methodology underlying scientific testimony because they are grounded in scientific principles").

175 113 S. Ct. at 2797.

176 The author would like to express his gratitude to Professor Deborah Klein for her unyielding assistance and advice in the writing and editing of this Note.