

# Oklahoma Law Review

---

Volume 53 | Number 3

---

1-1-2000

## Federal Rules of Evidence: Raising the Bar on Admissibility of Expert Testimony: Can Your Expert Make the Grade after *Kumho Tire v. Carmichael*

Douglas B. Maddock Jr.

Follow this and additional works at: <https://digitalcommons.law.ou.edu/olr>



Part of the [Evidence Commons](#)

---

### Recommended Citation

Douglas B. Maddock Jr., *Federal Rules of Evidence: Raising the Bar on Admissibility of Expert Testimony: Can Your Expert Make the Grade after Kumho Tire v. Carmichael*, 53 OKLA. L. REV. 507 (2000), <https://digitalcommons.law.ou.edu/olr/vol53/iss3/6>

This Note is brought to you for free and open access by University of Oklahoma College of Law Digital Commons. It has been accepted for inclusion in Oklahoma Law Review by an authorized editor of University of Oklahoma College of Law Digital Commons. For more information, please contact [darinfox@ou.edu](mailto:darinfox@ou.edu).

# Federal Rules of Evidence: Raising the Bar on Admissibility of Expert Testimony: Can Your Expert Make the Grade After *Kumho Tire Co. v. Carmichael*?

## I. Introduction

Expert testimony has long played an important role in both civil and criminal trials. In many instances, an expert's testimony means the difference between winning and losing the case. Lawyers continue to debate the proper criteria for determining whether an expert's testimony should be admitted at trial. For most of the twentieth century, admission of expert testimony in the federal court system was based upon the "general acceptance" standard laid down by the Court of Appeals of the District of Columbia in *Frye v. United States*.<sup>1</sup> But in the 1993 landmark case of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,<sup>2</sup> the U.S. Supreme Court established that expert testimony regarding scientific evidence must be both reliable and relevant as a precondition to admissibility.<sup>3</sup> The Court went on to identify several factors that may assist the trial judge in determining admissibility. The Court's ruling in *Daubert*, however, left many questions unanswered, the most significant being whether the criteria established by the Court for determining the reliability of testimony by scientific experts also applies to the much broader realm of nonscientific expert testimony. The Court's recent decision in *Kumho Tire Co. v. Carmichael*<sup>4</sup> answered this question in the affirmative.

This note examines the *Kumho* decision in light of precedent and also ponders the ramifications of the decision for today's trial lawyers. *Kumho's* clarification of the ruling in *Daubert* is likely to have a significant effect on the selection and preparation of experts in both civil litigation and criminal trials. Part II briefly discusses the development of the law pertaining to the admissibility of expert testimony in federal courts, focusing on the disagreement among the United States courts of appeal on the applicability of *Daubert* to nonscientific expert testimony. The Tenth Circuit was among those courts that had applied *Daubert* only to scientific testimony.<sup>5</sup> Part III explores the Court's decision in *Kumho*. Part IV examines the decision's likely impact in both the civil and criminal arenas and looks at the judge's role as "gatekeeper." Finally, Part V addresses the recent amendment to Federal Rule 702 concerning expert testimony and what it means in light of the prior Supreme Court decisions.<sup>6</sup> In addition, Part V compares the recent

---

1. 293 F. 1013 (D.C. Cir. 1923); see discussion *infra* Part II.A.

2. 509 U.S. 579 (1993).

3. See *id.* at 589-91.

4. 526 U.S. 137 (1999).

5. See *Compton v. Subaru of Am., Inc.*, 82 F.3d 1513 (10th Cir. 1996).

6. The Advisory Committee amended Rule 702 in response to *Daubert* and the cases that followed.

amendment to the different approach proffered by the authors of a recent amendment to Rule 702 of the Uniform Rules of Evidence.

## II. A Brief History of the Admissibility of Expert Testimony in Federal Courts

### A. *Frye v. United States*

The *Frye* test, or "general acceptance" test, for expert testimony originated in the appeal of a murder conviction in the District of Columbia.<sup>7</sup> The 1923 decision concerned the admissibility of expert testimony regarding a systolic blood pressure deception test. The test, an early version of the modern polygraph examination, measured changes in blood pressure and was based on a theory that lying requires a conscious effort that produces a corresponding change in blood pressure. Before trial, the defendant had taken the test and passed. His attorney sought to admit the results through the testimony of the scientist who conducted the examination. The trial court sustained an objection by the government. On appeal, the court held that the test had not gained "general acceptance" among authorities in that particular field sufficient to justify admission.<sup>8</sup> Specifically, the court found that the deception test had "not yet 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."<sup>9</sup> Thereafter, for the next seventy years, the "general acceptance" test was the standard by which most courts determined the admissibility of novel scientific evidence at trial.<sup>10</sup> With the advent of the Federal Rules of Evidence in 1975, however, many questioned *Frye's* continuing validity. In *United States v. Downing*,<sup>11</sup> the Third Circuit found that the "general acceptance" test in *Frye* may be inconsistent with the Federal Rules. The court reasoned that some scientific testimony that has not yet become "generally accepted" may nevertheless comply with Rule 702<sup>12</sup> if it meets the basic relevancy requirement of Rule 401<sup>13</sup> and assists the trier of fact in determining facts at issue.<sup>14</sup> The fate of the *Frye* test was decided by the Supreme Court in *Daubert*.

---

7. See *Frye v. United States*, 293 F. 1013, 1013 (D.C. Cir. 1923).

8. *Id.*

9. *Id.*

10. See *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 585 (1993).

11. 753 F.2d 1224 (3d Cir. 1985).

12. Rule 702 was recently amended effective December 1, 2000. The rule formerly provided: "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." FED. R. EVID. 702 (prior to recent amendment).

13. FED. R. EVID. 401.

14. See *Downing*, 753 F.2d at 1234-35.

*B. Daubert v. Merrell Dow Pharmaceuticals, Inc.*

In *Daubert*, two minor children and their parents sued Merrell Dow Pharmaceuticals alleging that the prenatal drug ingested by the mother and manufactured by Merrell Dow caused serious birth defects in the children.<sup>15</sup> Merrell Dow submitted the testimony of a well-credentialed expert on the risks of chemical exposure. The expert reviewed all the literature on the drug and numerous published studies, finding that the drug was not a risk factor for human birth defects. The plaintiffs responded by producing testimony from eight well-credentialed experts who concluded after reviewing animal and pharmacological studies that the drug could cause birth defects.<sup>16</sup> The district court granted summary judgment for Merrell Dow after concluding that the evidence proffered by plaintiffs' experts did not satisfy the "general acceptance" test because their opinions were not based on epidemiological evidence.<sup>17</sup> The Ninth Circuit affirmed. The Court granted certiorari to determine the proper standard for admissibility of expert testimony.

The plaintiffs challenged the "general acceptance" test on grounds that *Frye* was superseded by the enactment of the Federal Rules of Evidence in 1975.<sup>18</sup> Rule 702 provided guidance regarding expert testimony but did not mention "general acceptance" as the criterion for admissibility.<sup>19</sup> For this reason, and because the Justices felt that an exclusive "general acceptance" test was inconsistent with the liberal approach of the Federal Rules concerning opinion testimony, the Court determined that *Frye* did not merge into the Federal Rules.<sup>20</sup> Turning its attention to Rule 702, the Court held that the rule requires that an expert's testimony regarding scientific knowledge must be both reliable and relevant.<sup>21</sup> The Court further determined that under Rule 104(a), the trial judge must make a preliminary assessment regarding reliability and relevancy.<sup>22</sup> This requirement represented a major departure from *Frye* where the courts had deferred to the scientific community to assess reliability. The emphasis for trial judges thus expanded from determining relevancy — whether the expert's knowledge could assist the trier of fact in determining a fact in issue — to also include a determination on reliability.

To assist trial judges with this "gatekeeping" responsibility, the Court made four general observations that trial judges should consider: (1) whether the scientific theory or technique has been tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether there are known or potential rates of error with the technique; and (4) whether the theory or technique has

---

15. See *Daubert*, 509 U.S. at 579.

16. See *id.* at 582-83.

17. The plaintiffs' experts had relied upon animal-cell and live-animal studies rather than human statistical studies. See *id.* at 583-84.

18. See *id.* at 587.

19. See *supra* note 12 and accompanying text.

20. See *Daubert*, 509 U.S. at 588.

21. See *id.* at 589-91.

22. See *id.* at 592-93.

achieved "general acceptance" within the scientific community.<sup>23</sup> Thus, the *Frye* test lives on but only as one factor that a court should consider in determining reliability.

Chief Justice Rehnquist agreed that *Frye* was superseded by the Federal Rules but he did not join that part of the Court's opinion that discussed the factors that courts may use in determining admissibility.<sup>24</sup> He opposed offering such general guidance in the abstract when the factors are not being applied to particular expert testimony.<sup>25</sup> Moreover, the Chief Justice asked the question left unanswered until *Kumho* — do the admissibility factors also apply to nonscientific expert testimony? He expressed concern that imposing the responsibility on trial judges to make preliminary assessments regarding reliability places them in the position of having to become "amateur scientists."<sup>26</sup>

### C. *Compton v. Subaru of America, Inc.*

In *Compton*, the Tenth Circuit reached the issue of whether the *Daubert* factors apply when expert testimony is based solely upon experience or training.<sup>27</sup> *Compton* involved a product liability action against an auto manufacturer and its distributor for injuries sustained when the vehicle's roof collapsed in a rollover accident. Four teenagers had been drinking heavily and were out joyriding when one of the passengers grabbed the steering wheel causing the vehicle to skid across the road into a ditch. The plaintiff, a backseat passenger, was paralyzed during the rollover when the roof and one side of the vehicle caved in on him, injuring his spinal cord.<sup>28</sup> The plaintiff alleged that the automobile's defective design caused the roof and side of the vehicle to collapse excessively. The defendants objected to the plaintiff's design expert on the ground that his background as an aerospace and mechanical engineer did not qualify him to testify about roof designs.<sup>29</sup> The court allowed the testimony. The expert identified areas where the roof structure required additional support. He also proposed new headroom requirements based upon his experience in examining other accident vehicles and his review of various publications in the automotive industry. In the end, the jury found the defendants partially liable for the plaintiff's injuries.<sup>30</sup>

The Tenth Circuit held that *Daubert* applies only when an expert relies upon a certain principle or methodology. The court found that the plaintiff's expert formulated his conclusions based upon "general engineering principles and his 22 years of experience as an automotive engineer."<sup>31</sup> Though the expert had never participated in rollover tests to determine the roof strength of automobiles, the court

---

23. See *id.* at 593-94.

24. See *id.* at 598 (Rehnquist, C.J., concurring in part and dissenting in part).

25. See *id.*

26. See *id.* at 600-01.

27. See *Compton v. Subaru of Am., Inc.*, 82 F.3d 1513, 1518 (10th Cir. 1996).

28. See *id.* at 1516.

29. See *id.*

30. See *id.* at 1516-17.

31. *Id.* at 1518-19.

concluded that his testimony was admissible because he was "within the reasonable confines of his subject area."<sup>32</sup> In addition to his aerospace and mechanical engineering experience, the expert had worked at Ford Motor Company for many years where he was involved in a roof design project, and later as a consulting engineer, analyzing roof designs on various vehicles.<sup>33</sup>

The Tenth Circuit's holding that *Daubert* did not apply to nonscientific expert testimony reflected the view of roughly half of the circuit courts.<sup>34</sup> The remaining circuit courts applied *Daubert* to a variety of situations.<sup>35</sup> As a result of the split among the lower courts, the Supreme Court granted certiorari in *Kumho* to determine the scope of *Daubert*.<sup>36</sup>

### III. *Kumho Tire Co. v. Carmichael*

A tire on a minivan driven by Patrick Carmichael blew out, resulting in an accident that killed one family member and severely injured several others. The Carmichaels brought a diversity suit against the tire manufacturer and distributor, jointly referred to as Kumho Tire Company, alleging that the tire was defective.<sup>37</sup> The Carmichaels' tire expert, Dennis Carlson, concluded that a defect in the tire caused the tread to separate from the inner steel-belted carcass resulting in the blow out. This conclusion was based upon three propositions: (1) a separation not caused by "overdeflection"<sup>38</sup> ordinarily results from a tire defect; (2) if the tire has overdeflected sufficient to cause a separation, this should be indicated by four specific characteristics;<sup>39</sup> and (3) if two of the four characteristics are not present

32. *Id.* at 1520.

33. *See id.* at 1519-20.

34. *See, e.g., Carmichael v. Samyang Tire, Inc.*, 131 F.3d 1433, 1436 (11th Cir. 1997) (holding that tire failure expert's testimony was based on experience, not science, so *Daubert* standards do not apply); *United States v. Cordoba*, 104 F.3d 225, 230 (9th Cir. 1996) (noting that testimony of government expert on modus operandi of cocaine traffickers is "specialized" knowledge and thus beyond the scope of *Daubert*); *Benedi v. McNeil-P.P.C., Inc.*, 66 F.3d 1378, 1384 (4th Cir. 1995) (finding testimony by liver toxicity expert based on sound methodology); *Iacobelli Constr., Inc. v. County of Monroe*, 32 F.3d 19, 25 (2d Cir. 1994) (admitting nonscientific findings of geotechnical and underground construction consultants).

35. *See, e.g., Surace v. Caterpillar, Inc.*, 111 F.3d 1039, 1055-56 (3d Cir. 1997) (electromechanical engineer); *United States v. Kayne*, 90 F.3d 7, 12 (1st Cir. 1996) (coin dealers); *United States v. 14.38 Acres of Land*, 80 F.3d 1074, 1078-79 (5th Cir. 1996) (civil engineer and real estate appraiser); *Den Norske Bank AS v. First Nat'l Bank*, 75 F.3d 49, 57 (1st Cir. 1996) (banking industry expert); *United States v. Velasquez*, 64 F.3d 844, 850-52 (3d Cir. 1995) (handwriting expert); *Cook v. American Steamship Co.*, 53 F.3d 733, 739 (6th Cir. 1995) (metal product tester); *Habecker v. Clark Equip. Co.*, 36 F.3d 278, 290 (3d Cir. 1994) (accident reconstruction expert); *Joy v. Bell Helicopter Textron, Inc.*, 999 F.2d 549, 569-70 (D.C. Cir. 1993) (income/investment analyst).

36. *See Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 146 (1999).

37. *See id.* at 141.

38. "[O]verdeflection . . . consists of underinflating the tire or causing it to carry too much weight, thereby generating heat that can undo the chemical tread/carcass bond . . ." *Id.* at 144.

39. Carlson's four symptoms included: (1) tread wear on the shoulder of the tire that is greater than in the center; (2) signs of "bead groove," an indicator that the steel wire loops holding the flexible cords together at the bottom edges have been pushed too hard against part of the wheel assembly located inside

in the tire, either a manufacturing or design defect caused the separation.<sup>40</sup> Carlson conceded that the tire showed some of the characteristics, but he did not find sufficient symptoms of overdeflection.<sup>41</sup> Kumho claimed that Carlson's methodology did not satisfy the requirement for reliability under Rule 702 established in *Daubert*.

The district court excluded Carlson's testimony after finding that it did not satisfy any of the *Daubert* reliability factors.<sup>42</sup> The Carmichaels moved for reconsideration, claiming that the court was too stringent in its application of *Daubert*. The court agreed that the *Daubert* factors are not exclusive, thus allowing for consideration of other factors, but it affirmed its earlier ruling based upon a concern over Carlson's methodology. The Eleventh Circuit reversed, concluding that *Daubert* was explicitly limited to scientific evidence.<sup>43</sup>

The Supreme Court determined that the language of Rule 702 does not distinguish between "scientific" knowledge and "technical" or "other specialized" knowledge.<sup>44</sup> *Daubert* referred only to scientific knowledge because that was the type of testimony at issue in that case. The Court expressed concern over any interpretation of Rule 702 that would require a judge to determine whether testimony was "scientific" or "technical" or "other specialized" knowledge because there are no clear dividing lines among the three areas.<sup>45</sup> Re-emphasizing that the *Daubert* factors are not a "definitive checklist," the Court nevertheless found that some of the factors might apply to testimony based on experience. Moreover, the Court concluded that a trial court is given "the same broad latitude when it decides how to determine reliability as it enjoys with respect to its ultimate reliability determination."<sup>46</sup> The Court also determined that the "gatekeeping" requirement of *Daubert* requires that an expert apply the same "intellectual rigor" in court that he would apply if he were working in the relevant field.<sup>47</sup>

Applying *Daubert*, the Court found that Carlson's methodology was impliedly based upon the premise that he could determine from a visual and tactile inspection whether the tire had been abused. The Court questioned the reliability of any inspection method that could determine tire abuse with some degree of certainty, but could not determine with any certainty how many miles the tire had traveled.<sup>48</sup> The

---

the tire's rim; (3) discoloration, an indication the sidewalls have deteriorated; and (4) marks on the tire's rim flange. *See id.*

40. *See id.*

41. *See id.*

42. *See id.* at 146.

43. *See Carmichael v. Samyang Tire, Inc.*, 131 F.3d 1433, 1435 (11th Cir. 1997).

44. *Kumho*, 526 U.S. at 147.

45. *Id.* at 146-47. Technical knowledge covers the range between scientific and other specialized knowledge and often is indistinguishable from them. For example, engineering is an area of technical knowledge, but science plays a key role in the field. *See EXPERT EVIDENCE: A PRACTITIONER'S GUIDE TO LAW, SCIENCE AND THE FJC MANUAL 51* (Bert Black & Patrick W. Lee eds., 1997).

46. *Kumho*, 526 U.S. at 152.

47. *Id.*

48. Carlson could not determine whether the tire had traveled less than 10,000 miles or more than 50,000 miles. He opined that it had traveled at least 6000 miles. *See id.* at 154-55.

Court agreed with the district court's determination that Carlson's testimony did not satisfy any of the *Daubert* factors for reliability.<sup>49</sup> No other experts in that field used the "two-factor" test or relied as much as Carlson had on small differences in tread depth between the shoulder and center of the tire. Nor had any expert on tire testing validated Carlson's methodology.<sup>50</sup> Ultimately, the Court found no abuse of discretion in the exclusion of Carlson's testimony. In a concurring opinion, Justice Scalia cautioned that though the *Daubert* factors are not a "holy writ," a trial court's failure to apply the factors in certain cases might constitute an abuse of discretion.<sup>51</sup>

#### IV. Analysis

##### A. The General Impact of *Kumho*

Though the decision in *Kumho* is merely a clarification of the Court's earlier decision in *Daubert*, it may have far-reaching consequences for trial lawyers in civil litigation and, to some extent, criminal cases. For one thing, before *Kumho*, the differing views on *Daubert* among the circuits concerning the applicability of the *Daubert* reliability factors to technical and specialized knowledge may have encouraged forum shopping. Plaintiffs could seek out a jurisdiction that espoused a narrow interpretation of "science," while defense counsel preferred those courts that took a broader view of the subject in order to bring the expert within the scope of *Daubert*.<sup>52</sup>

Moreover, the broad discretion judges now have in screening all types of experts will likely cause increased uncertainty among lawyers regarding the admissibility of expert testimony. This in turn may lead to more extensive pre-trial discovery and a significant increase in *Daubert* challenges through motions in limine aimed at excluding the opposition's expert.<sup>53</sup> Professor Edward Imwinkelried believes that applying *Daubert* to nonscientific expert testimony will bring an increased reliance on *Daubert*'s "general acceptance" factor.<sup>54</sup> Ironically, he points out, reliance would be the exact opposite of admissibility determinations made under *Frye* prior to *Daubert* when most courts applied the "general acceptance" test to scientific testimony but exempted nonscientific testimony.<sup>55</sup> Additionally, with *Daubert* now applicable to all types of expert testimony, the incentive no longer exists to call

---

49. *See id.* at 157.

50. *See id.*

51. *Id.* at 159 (Scalia, J., concurring).

52. *See* Nicholas Targ & Elise Feldman, *Courting Science: Expert Testimony After Daubert and Carmichael*, 13 NAT'L RESOURCES & ENV'T 507, 510-11 (1999).

53. *See Supreme Court Decisions Will Affect Discovery, Work Product, ENVTL. COMPLIANCE & LITIG. STRATEGY*, July 1999, at 4.

54. *See* Edward J. Imwinkelried, *The Next Step After Daubert: Developing a Similarly Epistemological Approach to Ensuring the Reliability of Nonscientific Testimony*, 15 CARDOZO L. REV. 2271, 2286 (1994).

55. *See id.*



experts with technical or other specialized knowledge rather than those having scientific knowledge in a tactical move to avoid *Daubert's* reach.

In a similar way, *Kumho* closes the loophole that allowed experts to describe their testimony as based on experience and training rather than science in an effort to avoid scrutiny under *Daubert*.<sup>56</sup> This loophole existed in Oklahoma under *Compton*.<sup>57</sup> This is not to say that an expert can never be qualified based upon experience alone. In *Kumho*, Justice Breyer stated that "trial court[s] should consider the specific factors identified in *Daubert* where they are reasonable measures of the reliability of expert testimony"<sup>58</sup> and that the judge's preliminary inquiry must correspond to the facts of the case at bar. The clear message of Justice Breyer is that the *Daubert* reliability factors are not the only relevant factors a court should consider when evaluating an expert.

A comparison of *Compton* and the Ninth Circuit case of *Thomas v. Newton International Enterprises*<sup>59</sup> illustrates this point. In *Compton*, the Tenth Circuit admitted the expert's testimony because it was based on general engineering principles and years of experience in automotive engineering.<sup>60</sup> The court applied *Daubert* only when a witness's testimony was based upon a particular methodology or technique.<sup>61</sup> In this instance, the court found that because the expert's testimony was not based on any particular methodology, *Daubert* was inapplicable.<sup>62</sup> In *Thomas*, a longshore employee fell through the opening to a lower deck of a cargo ship and sustained injuries. The employee brought a negligence action against the vessel's owner for leaving the opening unguarded.<sup>63</sup> The Ninth Circuit reversed the district court's decision to exclude the testimony of a longshore worker with twenty-nine years experience in the industry who testified that leaving a deck opening uncovered was extremely unusual and hazardous. The court found that his many years of experience in various industry jobs laid the minimal foundation of knowledge, skill, and experience necessary to testify as an expert on the working conditions of longshore employees.<sup>64</sup>

Is the absence of the *Daubert* test more significant in *Compton* than in *Thomas*? The analysis performed by the roof design expert in *Compton* clearly involved a methodology that should have been validated by other industry experts. Determining how many pounds of force a vehicle's roof should be able to withstand requires the application of engineering principles and other technical data and is likely subject to known or potential rates of error. The plaintiff's expert had never conducted

---

56. See 'Kumho Tire' Clarifies Use of 'Daubert': Supreme Court Says Case Is Not Limited to Scientific Testimony, NAT'L L.J., Apr. 5, 1999, at B1.

57. *Compton v. Subaru of Am., Inc.*, 82 F.3d 1513 (10th Cir. 1996).

58. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999) (emphasis added).

59. 42 F.3d 1266 (9th Cir. 1994).

60. See *Compton*, 82 F.3d at 1519.

61. See *id.*

62. See *id.*

63. See *Thomas*, 42 F.3d at 1268.

64. See *id.* at 1269-70.

rollover tests.<sup>65</sup> His theory had not been peer-reviewed or tested, nor was it generally accepted in the industry.<sup>66</sup> Moreover, the district judge expressed doubts about the expert's credibility, noting that scientific knowledge was involved, but he nevertheless admitted the testimony, finding that it would help the jury determine whether the roof design was defective.<sup>67</sup> In contrast, the expert in *Thomas* testified that in his experience, vessels normally have manhole covers or some type of barricade over any opening and that not even an experienced employee would have anticipated an uncovered area.<sup>68</sup> In both cases, the court admitted the expert's testimony on the basis of experience. Yet, the admission of the expert testimony in *Compton* is more troublesome because more than general experience in automotive engineering is necessary to analyze technical data regarding "roof crush."<sup>69</sup> Because an expert's testimony does not have to satisfy the *Daubert* factors in every case, the expert in *Thomas* may have survived scrutiny under *Daubert* on the basis of experience alone.<sup>70</sup> The longshore worker's testimony was relevant in that it assisted the trier of fact in determining the fact of consequence in the action — whether the owner of the vessel was negligent. Though the experienced-based testimony did not lend itself to application of the four *Daubert* criteria, the court could find it reliable due to the direct connection between the expert's years of working around cargo vessels and his resulting knowledge of industry customs. Ultimately, the trial judge must determine, based on the particular facts of the case, when experience is sufficient to qualify a witness and when something more is needed.

### B. The Judge as "Gatekeeper"

Though much has been said about the four criteria set forth in *Daubert*, the criteria were announced in dicta.<sup>71</sup> The decision in *Kumho* emphasizes that the heart of the "gatekeeping" requirement is the need to ensure the reliability and relevancy of expert testimony.<sup>72</sup> But how should judges perform this role? Michael

---

65. See *Compton*, 82 F.3d at 1520.

66. See *id.* at 1517.

67. See *id.*

68. See *Thomas*, 42 F.3d at 1269.

69. See *Compton*, 82 F.3d at 1516.

70. Some commentators claim that the *Daubert* test does not work with nonscientific testimony because the testimony cannot be validated in the same manner as scientific testimony. For example, when a molecular biologist tests blood samples for a DNA match, a second molecular biologist can obtain new samples from the same sources and use the same test to verify the results. In contrast, if an attorney testifies in a legal malpractice action that the defendant attorney's conduct met the standard of care of other attorneys in that area, a second attorney cannot repeat the first attorney's experiences, nor can he test the first attorney's claim using special techniques. See Imwinkelried, *supra* note 54, at 2284-85. While these hypotheticals illustrate the difference between scientific and nonscientific testimony, this author does not believe they show that *Daubert* does not work with nonscientific testimony. Instead, the *Daubert* inquiry is a flexible one.

71. See *General Elec. Co. v. Joiner*, 522 U.S. 136, 151 n.2 (1997) (Stevens, J., concurring in part and dissenting in part).

72. See *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999).

H. Gottesman, who represented the plaintiffs in both *Daubert* and *General Electric Co. v. Joiner*<sup>73</sup> before the Supreme Court, places significant emphasis on the "prestige factor." He believes that when a highly qualified scientist testifies within a specialized field in which he works out of court, his opinions should be admitted without further inquiry.<sup>74</sup> He finds it "preposterous" for judges to assert that they know better than the experts that their methodology is unreliable.<sup>75</sup> In Gottesman's view, *Daubert* indicates that the Court has lost confidence in the ability of juries to "separate the wheat from the chaff."<sup>76</sup> In the dissenting part of his *Daubert* opinion, Chief Justice Rehnquist expressed similar concerns. He opined that Rule 702 does not impose upon judges "either the obligation or the authority to become amateur scientists in order to perform [the gatekeeping] . . . role."<sup>77</sup>

Does the "gatekeeper" role place too much responsibility on judges who are in many cases unfamiliar with the specialized field of knowledge at issue? Justice Breyer took up this point in his concurring opinion in *Joiner*. Breyer noted that while judges must ensure that expert testimony is both relevant and reliable, they can overcome the difficulty in making admissibility determinations by: (1) using pretrial conference authority to narrow the disputed scientific issues; (2) conducting pretrial hearings where the court can examine potential experts; and (3) appointing special masters and specially trained law clerks.<sup>78</sup> Justice Breyer further noted that Rule 706 allows judges to appoint independent experts and that established scientific organizations could recommend reputable experts for this purpose.<sup>79</sup>

Federal District Judge Robert E. Jones took a unique approach to determining the admissibility of expert testimony in a multidistrict product liability case involving silicone breast implants. In *Hall v. Baxter Healthcare Corp.*,<sup>80</sup> Judge Jones conducted a Rule 104 preliminary hearing on the admissibility of the scientific evidence.<sup>81</sup> Assisted by a physician, the court searched for technical advisors with expertise in epidemiology, immunology, toxicology, rheumatology, and chemistry. The physician screened dozens of individuals, selecting four "totally unbiased and

---

73. 522 U.S. 136 (1997). In *Joiner*, the Supreme Court granted certiorari to determine the appropriate standard of review for appellate courts reviewing a trial court's decision to admit or exclude scientific evidence under *Daubert*. The Court held that the proper standard of review is abuse of discretion as in other evidentiary rulings. *See id.* at 146. In doing so, the Court rejected the plaintiff's argument that because the granting of summary judgment in the case was "outcome determinative," the exclusion of evidence should have received a more stringent review. *Id.* at 142-43. The Court found that trial judges should receive appropriate deference under the abuse of discretion standard whether they admitted or excluded the expert testimony. *See id.* at 143.

74. Michael H. Gottesman, *Admissibility of Expert Testimony After Daubert: The "Prestige" Factor*, 43 EMORY L.J. 867, 878 (1994).

75. *Id.* at 882.

76. *Id.* at 880.

77. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 601 (1995) (Rehnquist, C. J., concurring in part and dissenting in part).

78. *See Joiner*, 522 U.S. at 150 (Breyer, J., concurring).

79. *See id.*

80. 947 F. Supp. 1387 (D. Or. 1996).

81. *See id.* at 1392.

uncommitted experts" who were subsequently appointed by the court.<sup>82</sup> To avoid subjecting the technical advisors to depositions and testifying at trial as additional witnesses, the judge appointed them under Rule 104 rather than Rule 706.<sup>83</sup> The advisors reviewed the parties' materials in preparation for the hearing and the parties stipulated to the experts' qualifications under Rule 702. No evidentiary objections were permitted. During the four-day hearing, counsel, the court, and the advisors questioned the parties' experts.<sup>84</sup> Following the testimony, the advisors submitted a report in response to five questions submitted by the court and those of the parties.<sup>85</sup> After the court received the reports, the parties had one more opportunity to question the advisors. In the end, the court granted the defendant's motion in limine to exclude the plaintiff's expert testimony regarding causation of systemic disease by the breast implants.<sup>86</sup> The cost for these technical advisors was borne by the parties — to the tune of \$76,000. The judge's request for federal funding was denied.<sup>87</sup> While this serves as a good example of a judge who took great lengths to ensure an unbiased examination of the expert testimony, it is noteworthy that this was a multidistrict product liability case and the parties had the resources to fund such an undertaking. This type of hearing is the exception and not the rule.

### C. The Impact on Tort Claims

*Kumho* potentially could have a significant impact on tort claims. Justice Breyer's concurrence in *Joiner* discusses the need for society to encourage the creation of

---

82. *Id.* at 1392-93.

83. *See id.* at 1393 n.8. Rule 706(a) provides in pertinent part:

The court . . . may appoint expert witnesses of its own selection . . . . 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).

84. *See Hall*, 947 F. Supp. at 1393.

85. The court submitted the following questions:

1. Is the expert's opinion supported by scientific reasoning and methodology that is generally accepted in the expert's particular scientific community or otherwise qualified as stated in *Daubert II* . . . ?

2. Is the expert's opinion based upon scientifically reliable data?

3. If epidemiological studies have not been done or are inconclusive, what other data, such as animal studies, biophysical data, clinical experience in the field, medical records, differential diagnosis, preliminary studies, general scientific knowledge, and medical literature can justify, to a reasonable medical probability, a conclusion concerning the cause of the syndrome or disease at issue?

4. Do the methodology and data support the expert's conclusions?

5. Does the scientific data relied upon by the expert apply to the syndrome or disease in issue in these cases? For instance, are epidemiological studies directed at other typical or classical diseases relevant to an atypical disease?

*Id.* at 1393-94 (footnotes omitted).

86. *See id.* at 1394.

87. *See id.* at 1393. Significantly, the prevailing party could not recover the fees as "costs" because the advisors were not appointed under Rule 706. *See id.* at 1393 n.9.

new products in such areas as the pharmaceutical industry. He wrote that judges have a responsibility to ensure that the "powerful engine of tort liability" is directed at harmful substances, and not at beneficial ones.<sup>88</sup> With *Daubert* now applicable to all expert testimony, the nonscientific expert testimony that has helped fuel this "engine" will face the scrutiny of the *Daubert* test in all federal courts and most state courts.

The most significant impact of *Kumho* will likely occur in product liability cases. Unlike the experience-based testimony of the longshore worker in *Thomas*, expert testimony in product liability cases will likely have to survive application of the four *Daubert* factors. What does it take to survive *Daubert*? The plaintiff in *Stanczyk v. Black & Decker, Inc.*<sup>89</sup> found out the hard way in a decision that plaintiffs might find increasingly common in the aftermath of *Kumho*.

Decided shortly after *Daubert*, the case involved a product liability action against Black & Decker alleging that a design defect in a mitre saw guard resulted in the plaintiff's sustaining injuries from the exposed blade.<sup>90</sup> The plaintiff's expert, Donald Clark, claimed he could design a guard that would significantly reduce the portion of the blade that was exposed. Clark possessed the credentials — he was a mechanical engineer and an experienced designer of saws — but his entire analysis consisted of thinking about the concept for about one hour.<sup>91</sup> He conducted no engineering analysis. Subsequently, Black & Decker's expert demonstrated that Clark's design was not feasible because it limited key uses of the saw, such as the type of cuts and the size of wood pieces that could be cut.<sup>92</sup> Clark's concept had been neither peer-reviewed nor published. The court found that Clark's theory was "tested" to some degree, but that Clark's theory failed the test when Black & Decker's expert presented diagrams and charts exposing the flaws in Clark's proposed design.<sup>93</sup> The court ultimately determined that Clark did not satisfy any of the *Daubert* criteria and excluded the testimony.<sup>94</sup> The court may have viewed Clark as a "hired gun" who developed his theory solely for purposes of the litigation.<sup>95</sup>

To survive the *Daubert* test, it is critical that an expert demonstrate the reliability of his theory. Consequently, every lawyer should keep the *Daubert* factors in mind when selecting an expert. Attorneys James A. Young and Richard S. Margulies have several ideas for helping litigators "*Daubert*-proof" their experts.<sup>96</sup> First, they emphasize the importance of demonstrating that the methodology used by the expert

---

88. *General Elec. Co. v. Joiner*, 522 U.S. 136, 148-49 (1997) (Breyer, J., concurring).

89. 836 F. Supp. 565 (N.D. Ill. 1993).

90. *See id.* at 566.

91. *See id.* at 566-67.

92. *See id.*

93. *See id.* at 567.

94. *See id.* at 567-68.

95. *See supra* note 47 and accompanying text.

96. James A. Young & Richard S. Margulies, *How to Daubert-Proof Your Witnesses*, PROD. LIAB. L. & STRATEGY, Dec. 1998, at 1.

is recognized and used by others in the laboratory or in field tests.<sup>97</sup> Second, they recommend identifying in the expert report any peer-reviewed publications that support the expert's theory or techniques, even if it is a minority view.<sup>98</sup> If the client can afford it, they also suggest obtaining a *Daubert* "certificate," which is essentially an affidavit from an independent, qualified expert in that field which addresses how the expert satisfies the *Daubert* reliability factors.<sup>99</sup> The emphasis is clearly on building a complete record, one strong enough to persuade the trial judge and to withstand appellate review.

A word of caution is appropriate here. Peer review is often a strong indicator of reliability, but professional experts are now creating their own peer-reviewed publications to benefit from the emphasis many courts give to peer review and publication.<sup>100</sup> The lesson: peer review is only as good as the peers performing the review.

The *Stanczyk* case raises another significant issue that looms large after *Kumho*. The plaintiff in *Stanczyk* argued that the scrutiny of his expert placed him in the position of having to pay the expert \$20,000 to \$40,000 to create a new design for the saw — an expense he could not afford. The court acknowledged the plaintiff's dilemma but stated, "*Daubert* . . . requires these expenditures. Proof of any kind is often expensive to gather. Scientific reliability and validity in our times is seldom cheap, but at least when once established it can be used again and again at little marginal cost."<sup>101</sup>

Have *Daubert* and its progeny raised the cost of reliable expert testimony beyond the reach of most plaintiffs? Clearly, in many instances it will be difficult for plaintiffs to survive summary judgment in product cases if their expert's testimony is inadmissible. Recall, however, the remarks of Justice Breyer in his concurring opinion in *Joiner* that society benefits to a large degree from the many products on the market today that have been produced for our convenience and comfort.<sup>102</sup> While manufacturers must develop products that are as safe as possible, public policy should also prevent the recovery of high-dollar damage awards from sympathetic juries by requiring a showing that a plaintiff's expert relied upon theories and techniques that are reliable and supported by others in that field. Otherwise, the cost of developing and producing such beneficial products will lead to skyrocketing prices for consumers. Following *Daubert* and *Kumho*, the days when courts "let all the experts in and the jury can sort them out" are over.

#### D. The Impact on Criminal Cases

Most of the focus on *Kumho's* impact will be on civil cases; however, the ruling applies equally to prosecutors and criminal defendants. Criminal defense attorneys

---

97. *See id.*

98. *See id.*

99. *See id.*

100. *See* 2 STEPHEN A. SALTZBURG ET AL., FEDERAL RULES OF EVIDENCE MANUAL 1060 (6th ed. 1994).

101. *Stanczyk v. Black & Decker, Inc.*, 836 F. Supp. 565, 568 (N.D. Ill. 1993).

102. *See* *General Elec. Co. v. Joiner*, 522 U.S. 136, 148 (1997) (Breyer, J., concurring).

hope that *Kumho* will open the door for them to block the testimony of government expert witnesses on nonscientific topics. One commentator believes *Kumho* may give trial judges the opportunity to evaluate and possibly exclude experts in such fields as ballistics, forensic pathology, as well as testimony from police officers who profess expertise in areas of criminal methodology, e.g., the usual methods of drug traffickers, the meaning of gang signals, etc.<sup>103</sup> The wider latitude given to criminal defendants in presenting evidence at trial may indicate that judges will have a tendency to construe *Kumho* more strictly against the prosecution.<sup>104</sup> At the same time, others claim that *Kumho* is unlikely to harm most defendants' cases because so many of them are indigent and represented by legal aid attorneys who do not have sufficient funds to hire experts.<sup>105</sup>

So far, *Kumho* has had a mixed impact on federal prosecutions. Since the March 1999 decision, federal appellate courts have upheld, for example, the admissibility of an FBI expert's testimony on the methodology of child molesters<sup>106</sup> and a police captain's testimony on drug trafficking modus operandi.<sup>107</sup> Additionally, at least one district court has admitted a police officer as an expert on the use of field sobriety tests.<sup>108</sup> In the first two instances, the court found that such testimony would be helpful to the jury but did not explain how the testimony satisfies *Daubert*.<sup>109</sup> The court allowed the officer to testify on field sobriety tests based on his specialized experience in that area and because the tests he used were widely regarded as reliable.<sup>110</sup> On the other hand, the Tenth Circuit recently reversed a conviction in a child sex abuse case, finding that the district court failed to make the reliability determination required by *Kumho* as to the testimony of a pediatrician and a psychologist, two key prosecution experts.<sup>111</sup> Similarly, two federal district courts have excluded as unreliable the testimony of handwriting and text analysis experts regarding the authorship of questioned writings.<sup>112</sup>

Handwriting analysis is an area of expert testimony that has been the subject of much debate. The following two cases illustrate how courts have viewed the subject differently. Interestingly, both involve the same defense expert and each appellate court took a different view of the expert's exclusion from trial by the district judge. In *United States v. Velasquez*,<sup>113</sup> the prosecution used a well-qualified handwriting

---

103. See *Kumho Could Affect Criminal Cases*, NAT'L L.J., Apr. 12, 1999, at A5.

104. See *id.*

105. See *id.*

106. See *United States v. Romero*, 189 F.3d 576, 584-85 (7th Cir. 1999).

107. See *United States v. Molina*, 172 F.3d 1048, 1056-57 (8th Cir. 1999).

108. See *Volk v. United States*, 57 F. Supp. 2d 888, 895 (N.D. Cal. 1999).

109. See *Romero*, 189 F.3d at 584-85; *Molina*, 172 F.3d at 1056.

110. See *Volk*, 57 F. Supp. 2d at 895.

111. See *United States v. Velarde*, 214 F.3d 1204, 1211-12 (10th Cir. 2000).

112. See *United States v. Rutherford*, 104 F. Supp. 2d 1190, 1192-93 (D. Neb. 2000) (finding that handwriting analysis testimony on unique identification lacks the validity and reliability of other forensic evidence such as fingerprint or DNA evidence); *United States v. Van Wyk*, 83 F. Supp. 2d 515, 523 (D. N.J. 2000) (questioning the reliability of FBI forensic stylistic expert's testimony as to authorship of threatening letters).

113. 64 F.3d 844 (3d Cir. 1995).

expert from the U.S. Postal Inspection Service to testify that the handwriting on a mailing label used to ship drugs was that of the defendant's alleged accomplices. The defense called Mark Denbeaux, a law professor and critic of handwriting analysis, to refute the expert's methodology.<sup>114</sup> The district court excluded Denbeaux's testimony noting a lack of formal training and practical experience in the field of handwriting analysis.<sup>115</sup> The Third Circuit reversed, concluding that Denbeaux's testimony would have assisted the jury in weighing the testimony of the government's expert.<sup>116</sup> Applying *Daubert* to Denbeaux's testimony, the Third Circuit distinguished the qualifications necessary to conduct handwriting analysis from those sufficient to criticize the standards used by handwriting analysts. The court found that Denbeaux had acquired enough specialized knowledge to criticize the standards and error rate in the field and that his views had been tested, published, and subjected to peer review.<sup>117</sup>

Four years later in *United States v. Paul*,<sup>118</sup> another criminal defendant sought to admit Denbeaux's testimony to rebut the government's expert. The district court excluded Denbeaux's testimony finding that it would confuse the jury.<sup>119</sup> This time the appellate court found no abuse of discretion. The Eleventh Circuit reasoned that Denbeaux did not have any "skill, experience, training, or education in the field of handwriting analysis," and his experience as a lawyer was no substitute.<sup>120</sup> The court further reasoned that Denbeaux's previous research of the literature on handwriting analysis did not make him any more qualified than a lay person who

---

114. The government's expert described her method as that commonly used by other experts in the field:

First, the expert determines whether a questioned document contains a sufficient amount of writing and enough individual characteristics to permit identification. After determining that the questioned document is identifiable, the expert examines the submitted handwriting specimens in the same manner. If both the questioned document and the specimens contain sufficient identifiable characteristics, then the expert compares those characteristics, e.g., the slant of the writing, the shapes of the letters, the letter connections, the height of letters, the spacing between letters, the spacing between words, the 'i' dots and 't' crosses, etc. . . . After making these comparisons, the expert weighs the evidence, considering both the similarities and differences in the handwriting and determines whether or not there is a match.

*Id.* at 846 n.3.

115. Denbeaux was not a member of any professional organization and had never given opinions regarding the authorship of documents. *See id.* at 847. He researched handwriting analysis for eight years, reading almost all the literature on the subject. He helped create a test for the certification of handwriting analysts and validation of their work and co-authored a law review article that questioned the validity of handwriting analysis based upon what he perceived were inadequate standards. *See id.* at 847 n.4; *see also* D. Michael Risinger et al., *Exorcism of Ignorance as a Proxy for Rational Knowledge: The Lessons of Handwriting Identification "Expertise"*, 137 U. PA. L. REV. 731 (1989).

116. *See Velasquez*, 64 F.3d at 848.

117. The only reference to publication was the law review article Denbeaux coauthored. *See id.* at 851.

118. 175 F.3d 906 (11th Cir. 1999).

119. *See id.* at 909.

120. *Id.* at 912.



had read the same articles.<sup>121</sup> Also significant in the court's view was the fact that Denbeaux had not done any research or writing on handwriting expertise in the ten years since he coauthored a law review article on the subject.<sup>122</sup>

The different outcomes of these two cases demonstrate key points that trial lawyers should note. First, lawyers should ensure that the expert chosen is current in his or her field. Resting on the expert's past accomplishments can be fatal to a client's case. Second, different judges may take diametrical points of view about the qualifications of a particular witness. The broad discretion granted to the trial judge as "gatekeeper" under *Daubert* and *Kumho* means, in practical terms, that whether an expert gets admitted at trial will in many cases depend on which judge is assigned to the case. Finally, lawyers should follow a court's prior *Daubert* rulings closely to determine, for example, whether a particular judge places an emphasis on publication, peer-review, testing, or perhaps training and experience. In many cases, the witness's field of expertise will help determine which factors are most important.

#### V. Key Changes to Federal and Uniform Rules of Evidence

Until recently, the language of Federal Rule 702 and Uniform Rule 702 was identical.<sup>123</sup> In 1999, significant changes were made to both. The Advisory Committee on the Federal Rules of Evidence referred the final draft of a proposed amendment to Federal Rule 702 to the Judicial Conference's Standing Committee, which approved it in September 1999. The amendment took effect on December 1, 2000. Similarly, the National Conference of Commissioners on Uniform State Laws has approved a major revision of its version of Rule 702.

First proposed in 1998, the revised Federal Rule 702 incorporates much of the case law from *Daubert* through *Kumho*. The amended rule provides:

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, *if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.*<sup>124</sup>

---

121. *See id.*; *see also supra* note 115 and accompanying text.

122. The court reasoned:

At the time of the trial, Denbeaux had done virtually no further research or writing on the subject of the reliability of handwriting expertise since the University of Pennsylvania published his law review article in 1989. During cross-examination, he admitted that he was not a questioned documents examiner, had received no formal training in the field, had never attended seminars on handwriting analysis, had never worked in a questioned documents laboratory and was not a member of any professional organizations in the field.

*Paul*, 175 F.3d at 912.

123. *See supra* note 12 and accompanying text.

124. FED. R. EVID. 702 (emphasis added).

The rule codifies the "gatekeeping" role of judges set forth in *Daubert* and, consistent with *Kumho*, the admissibility criteria applies to all types of expert testimony.<sup>125</sup> Recognizing that the *Daubert* reliability factors are not an exclusive list and in some cases may not be applicable at all, the Advisory Committee Note identifies additional factors used by the Supreme Court and circuit courts since *Daubert*.<sup>126</sup> The Committee emphasizes that *Daubert* was not intended as a sweeping change in evaluating the testimony of experts and that the amended rule should not be viewed as an "automatic challenge to the testimony of every expert."<sup>127</sup> Parties must show the judge only by a preponderance of evidence that their expert's opinion is reliable.<sup>128</sup> Significantly, the Committee adds, "The evidentiary requirement of reliability is lower than the merits standard of correctness."<sup>129</sup> This statement may prove helpful in admitting an expert who represents a minority view. The Advisory Committee added three conditions for admissibility to the existing rule, using the Committee Note to explain their meaning. Interestingly, the example used by the Committee to illustrate the third condition for admissibility is testimony by law enforcement agents regarding the use of code words by drug dealers during transactions.<sup>130</sup> The Committee states that if the agent's experience is reliable, the testimony should be admitted. The inclusion of this example in the Committee Note may have been in response to concerns expressed by some in the law enforcement community after *Kumho*. Not surprisingly, then, the Committee also emphasizes that in some instances experts may be qualified on experience alone. In such situations, the expert must explain how his experience led him to his conclusion, why that experience is sufficient to draw the conclusion, and how his experience reliably applies to the case.<sup>131</sup> This recent amendment is unlikely to change the post-*Kumho* evidentiary landscape because the new rule simply reflects the existing federal case law on expert testimony.

In contrast, the Uniform Rules Drafting Committee has restructured its version of Rule 702,<sup>132</sup> adding well-defined presumptions and enumerating seven reliability

125. FED. R. EVID. 702 advisory committee's note.

126. The additional factors include: (1) whether the proposed testimony is the result of research conducted independent of the litigation; (2) whether the expert's conclusion is reasonable given the accepted premise; (3) whether the expert has considered alternative causes; (4) whether the expert is exercising the same care in testifying as an expert working in that field; and (5) whether the field of expertise is known to be reliable. *See id.*

127. *Id.*

128. *See id.*

129. *Id.*

130. *See supra* notes 103, 107 and accompanying text.

131. *See* FED. R. EVID. 702 advisory committee's note.

132. Uniform Rule 702 provides:

(a) General rule. If a witness's testimony is based on scientific, technical, or other specialized knowledge, the witness may testify in the form of opinion or otherwise if the court determines the following are satisfied:

(1) the testimony will assist the trier of fact to understand evidence or determine a fact in issue;

(2) the witness is qualified by knowledge, skill, experience, training, or education as an expert in the scientific, technical, or other specialized field;

factors that, if relevant, courts must consider.<sup>133</sup> The amendment provides for a presumption of reliability regarding an expert's principle or method if the principle or method has substantial acceptance within the relevant field. Conversely, a principle or method that lacks substantial acceptance raises a presumption of unreliability.<sup>134</sup>

Alan Tamarelli, a proponent of the presumption approach adopted by the Drafting Committee, believes the use of rebuttable presumptions retains the strength of the *Frye* "general acceptance" test while allowing experts to determine reliability without automatically excluding theories because they have not been widely tested.<sup>135</sup> Allowing the experts to determine reliability avoids placing judges in the role of "amateur scientist," a concern Tamarelli shares with Chief Justice Rehnquist.<sup>136</sup> Instead, the new rule places on the party challenging the reliability or unreliability of

(3) the testimony is based upon principles or methods that are reasonably reliable, as established under subdivision (b), (c), (d), or (e);

(4) the testimony is based upon sufficient and reliable facts or data; and

(5) the witness has applied the principles or methods reliably to the facts of the case.

(b) Reliability deemed to exist. A principle or method is reasonably reliable if its reliability has been established by controlling legislation or judicial decision.

(c) Presumption of reliability. A principle or method is presumed to be reasonably reliable if it has substantial acceptance within the relevant scientific, technical, or specialized community. A party may rebut the presumption by proving that it is more probable than not that the principle or method is not reasonably reliable.

(d) Presumption of unreliability. A principle or method is presumed not to be reasonably reliable if it does not have substantial acceptance within the relevant scientific, technical, or specialized community. A party may rebut the presumption by proving that it is more probable than not that the principle or method is reasonably reliable.

(e) Other reliability factors. In determining the reliability of a principle or method, the court shall consider all relevant additional factors, which may include:

(1) the extent to which the principle or method has been tested;

(2) the adequacy of research methods employed in testing the principle or method;

(3) the extent to which the principle or method has been published and subjected to peer review;

(4) the rate of error in the application of the principle or method;

(5) the experience of the witness in the application of the principle or method;

(6) the extent to which the principle or method has gained acceptance within the relevant scientific, technical, or specialized community; and

(7) the extent to which the witness's specialized field of knowledge has gained acceptance within the general scientific, technical or specialized community.

UNIF. R. EVID. 702 (copy on file with the *Oklahoma Law Review*), available in <<http://www.law.upenn.edu/bll/ulc/ure/evid1200.htm>>.

133. The four *Daubert* factors are included. See *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 593-94 (1993).

134. See *supra* note 132.

135. See UNIF. R. EVID. 702 reporter's notes (Proposed Official Draft 1999) (quoting Alan W. Tamarelli, Jr., *Daubert v. Merrell Dow Pharmaceuticals: Pushing the Limits of Scientific Reliability — The Questionable Wisdom of Abandoning the Peer Review Standard for Admitting Expert Testimony*, 47 VAND. L. REV. 1175, 1199-1201 (1994)) (copy on file with the *Oklahoma Law Review*), available in <<http://www.law.upenn.edu/bll/ulc/ure/evidam99.htm>>; see also *supra* note 14 and accompanying text.

136. See UNIF. R. EVID. 702 reporter's notes (Proposed Official Draft 1999) (copy on file with the *Oklahoma Law Review*), available in <<http://www.law.upenn.edu/bll/ulc/ure/evidam99.htm>>; see also *Daubert*, 509 U.S. at 600-01 (Rehnquist, C.J., concurring in part and dissenting in part).

the methodology both the burden of producing evidence and the burden of persuasion that it is more probable than not that the methodology is reliable or unreliable.<sup>137</sup> If a party challenges one of the presumptions, the court will examine the seven reliability factors.<sup>138</sup> The factors include not only a consideration of whether the principle or method has gained wide acceptance but also whether the witness's specialized field of knowledge itself is widely accepted.<sup>139</sup>

The procedural difference between the two rules is noteworthy. Under the Uniform Rule approach, the primary indicator of reliability should be peer review and acceptance, which is intended to relieve the trial judge of the responsibility to play "amateur scientist."<sup>140</sup> The burden then rests upon the party challenging the expert to produce evidence and ultimately persuade the court of the methodology's unreliability. Clearly, the judge's "gatekeeper" role under *Daubert* is modified somewhat under the amended Uniform Rule. However, under our adversarial system one can argue that it is appropriate that the parties retain more of the responsibility for admitting or excluding expert testimony. The deference given to peer review under the Uniform Rule approach may tend to favor plaintiffs because of its emphasis on the "general acceptance" test which was the standard for so many years. Conversely, the amended Federal Rule 702 may favor defendants because of its emphasis on the more rigorous *Daubert* factors. In any event, once an expert's testimony is challenged under the Uniform Rule, the procedure under both rules for determining admissibility is quite similar.

## VI. Conclusion

After *Kumho*, the requirements for admitting expert testimony are more clearly defined, but lawyers are still left wondering in many cases whether their experts' credentials and methodologies will survive the scrutiny. In the civil arena, there is likely to be an increase in *Daubert* motions filed by defense counsel, which in turn puts added pressure on plaintiffs to find solid, qualified experts to support their claims. Criminal defense lawyers are likely to make similar challenges regarding the prosecution's experts. Moreover, the wide latitude granted trial judges under *Joiner* renders it unlikely that admissibility determinations will be reversed on appeal, despite the warning given by Justice Scalia in *Kumho* that "[t]hough . . . the *Daubert* factors are not a holy writ, in a particular case the failure to apply one or another of them may be unreasonable, and hence an abuse of discretion."<sup>141</sup>

---

137. See UNIF. R. EVID. 702 reporter's notes (Proposed Official Draft) (copy on file with the *Oklahoma Law Review*), available in <<http://www.law.upenn.edu/bll/ulc/ure/evidam99.htm>>.

138. See *id.*; see also *supra* note 132.

139. See UNIF. R. EVID. 702 reporter's notes (Proposed Official Draft) (copy on file with the *Oklahoma Law Review*), available in <<http://www.law.upenn.edu/bll/ulc/ure/evidam99.htm>>. Note that, consistent with *Daubert*, the factors identified in subdivision (e) are not exclusive. See *id.*; see also *supra* note 132.

140. See UNIF. R. EVID. 702 reporter's notes (Proposed Official Draft 1999) (copy on file with the *Oklahoma Law Review*), available in <<http://www.law.upenn.edu/bll/ulc/ure/evidam99.htm>>.

141. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 159 (1999) (Scalia, J., concurring).

Notwithstanding the likely changes in strategy among lawyers, the trial judges' wide discretion may nevertheless allow them to rule in a manner consistent with *Kumho* while adhering to their pre-*Kumho* philosophy. For example, judges in those circuits that previously did not apply the *Daubert* factors to nonscientific testimony are still free to admit testimony based upon the expert's experience or training alone if they find that the experience or training provides an adequate foundation of relevancy and reliability. In short, the judge has the role of "gatekeeper" but he also has the freedom to widen or narrow the "gate" based upon his particular judicial philosophy. The question then becomes: when is the failure to apply one or more of the *Daubert* factors "unreasonable?"<sup>142</sup> Until the answer to that question is more evident, attorneys should place increased emphasis on the *Daubert* factors in order to ensure an expert's testimony will be admissible. For trial lawyers, the post-*Kumho* message is clear — choose *every* expert carefully. Can your expert make the grade?

*Douglas B. Maddock, Jr.*

---

142. See *supra* note 141 and accompanying text.