EXPLORING THE INCONSISTENCIES OF SCRUTINIZING EXPERT TESTIMONY UNDER THE FEDERAL RULES OF EVIDENCE

Consistency and uniformity are desirable goals in applying the Federal Rules of Evidence. In fact, the purpose of codified rules of evidence is to ensure consistency, uniformity and fairness throughout the judicial system.[1] Despite the desirability of uniformity, discrepancies among jurisdictions in interpreting the Federal Rules of Evidence continue to plague courts.[2] Grave inconsistencies among jurisdictions and heated debates among judges, commentators and practitioners have arisen over the degree of discretion trial judges may exercise in scrutinizing the basis for expert testimony when determining admissibility under the Federal Rules of Evidence.[3]

Expert testimony can be valuable in explaining scientific, technical or other specialized knowledge to a jury. The difficulty arises when the basis for an expert's opinion lies at the periphery of methodologies or theories accepted in the expert's field.[4] A trial judge

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1. *See* Gold, *Limiting Judicial Discretion to Exclude Prejudicial Evidence*, 18 U.C. DAVIS L. REV. 59, 60 (1984).

2. *Compare* Lynch v. Merrell-National Laboratories, Inc., 830 F.2d 1190, 1196 (1st Cir. 1987) (Dr. Done's testimony connecting the drug Bendectin to birth defects excluded as too speculative to be admissible.) *and* Viterbo v. Dow Chem. Co., 826 F.2d 420, 422 (5th Cir. 1987) (Court excluded an expert's opinion, finding no reliable basis to support the conclusion that exposure to a chemical herbicide caused health problems.) *with* Osburn v. Anchor Laboratories, Inc., 825 F.2d 908, 914-15 (5th Cir. 1987) (Court allowed an expert opinion asserting a link between leukemia and a veterinary drug.), *cert. denied*, 485 U.S. 1009 (1988) *and* Oxendine v. Merrell Dow Pharmaceuticals, Inc., 506 A.2d 1100, 1108 (D.C. 1986) (Dr. Done allowed to testify that drug Bendectin caused birth defects.).

3. *See* Brock v. Merrell Dow Pharmaceuticals, Inc., 874 F.2d 307, 310-11 (5th Cir. 1989) (advocating careful judicial inspection of expert testimony), *cert. denied*, ____ U.S. ____, 110 S. Ct. 1511, 108 L. Ed. 2d 646 (1990); Ferebee v. Chevron Chem. Co., 736 F.2d 1529, 1534-35 (D.C. Cir.) (allowing the jury to assess the weight of expert testimony), *cert. denied*, 469 U.S. 1062 (1984). *See generally* Foster, *Expert Testimony, Prevalent Complaints and Proposed Remedies*, 11 HARV. L. REV. 169 (1897) (condoning the use of expert testimony).

4. *See* 736 F.2d at 1535. Federal Rule of Evidence 703 states that the basis of expert opinion testimony need not be admissible "[i]f of a type reasonably relied upon by experts in the particular field." FED. R. EVID. 703. Assuming an expert's sources for his opinion are inadmissible, a court must look at the methodologies supporting his opinion to determine if the basis of the opinion is of the type similar experts would use to form an opinion. *See, e.g.*, Lynch v. Merrell-National Laboratories, Inc., 646 F. Supp. 856, 866 (S.D.N.Y. 1986) (The court ruled that the highly speculative nature of the evidence did not "comport with the

faces a dilemma in determining whether an expert's opinion is reliable enough to be presented to a jury.[5] If the judge admits testimony of questionable reliability, she runs the risk that the jury will be awed by the expert and render a decision without a reasonable basis.[6] Conversely, if the judge does not admit the opinion testimony, she may usurp the jury's role of weighing all the evidence by incorrectly suppressing evidence that is essential to a party's claim or defense.[7]

This Comment focuses on the controversy regarding the degree of discretion a trial judge may exercise in admitting or excluding expert opinion testimony under the Federal Rules of Evidence and the resulting inconsistency among courts despite the application of like rules to similar circumstances. The inconsistency is exemplified by recent conflicting Fifth Circuit decisions as well as inharmonious rulings among the circuits.[8] This Comment will explore the evolution of the procedures dealing with expert witnesses from common law to the adoption of the Federal Rules of Evidence,[9] and will examine potential remedies and encourage the adoption of workable guidelines to resolve the controversy and minimize inconsistency.[10]

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requirements of Rule 703."), *aff'd*, 830 F.2d 1190 (1st Cir. 1987). The inquiry is similar to the *Frye* test used for scrutinizing the admissibility of novel scientific evidence such as voice prints. *See* Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923); United States v. Williams, 583 F.2d 1194, 1197-99 (2d Cir. 1978), *cert. denied*, 439 U.S. 1117 (1979). The *Frye* test requires the scientific basis of the evidence to be "sufficiently established to have gained general acceptance in the particular field in which it belongs." 293 F. at 1014. Although the *Frye* test is similar to the criteria expressed in Federal Rule of Evidence 703, courts have utilized the standard expressed in Rule 703 without mentioning *Frye*. *See* 646 F. Supp. at 866.

5. *See* FED. R. EVID. 403.

6. *See* Graham, *Expert Witness Testimony and the Federal Rules of Evidence: Insuring Adequate Assurance of Trustworthiness* 1986 U. ILL. L. REV. 43, 62.

7. *See, e.g.*, Mid-State Fertilizer Co. v. Exchange Nat'l Bank, 877 F.2d 1333, 1339-40 (7th Cir. 1989) (excluding the affidavit of an expert as insufficient to raise a genuine issue of material fact and affirming the grant of summary judgment for the defendant).

8. *Compare* Richardson *ex rel.* Richardson v. Richardson-Merrell, Inc., 857 F.2d 823, 829 (D.C. Cir. 1988) (Court excluded an expert's opinion that the drug Bendectin caused Carita Richardson's birth defects.), *cert. denied*, ____ U.S. ____, 110 S. Ct. 218, 107 L. Ed. 2d 171 (1989) *and* Viterbo v. Dow Chem. Co., 826 F.2d 420, 421-22 (5th Cir. 1987) (Court, after finding no reliable bases supporting a conclusion that exposure to a chemical herbicide caused health problems, excluded an expert's opinion.) *with* Osburn v. Anchor Laboratories, Inc., 825 F.2d 908, 914-15 (5th Cir. 1987) (Court allowed an expert opinion asserting a link between leukemia and a veterinary drug.), *cert. denied*, 485 U.S. 1009 (1988) *and* Ferebee v. Chevron Chem. Co., 736 F.2d 1529, 1535-36 (D.C. Cir.) (Court allowed a medical expert's opinion linking toxic chemicals to human disease.), *cert. denied*, 469 U.S. 1062 (1984).

9. *See infra* sections I-III.

10. *See infra* section IV-V.

I. EVOLUTION OF EXPERT TESTIMONY

At common law, expert witnesses were allowed to testify, with some limitations, when the jury required assistance on matters not within the common experience of lay persons.[11] Expert witnesses were prohibited, however, from expressing opinions regarding the ultimate issue of a case.[12] Decisions upon the ultimate issue were viewed as solely the jury's province, and experts were forbidden to invade the jury's role in deciding the ultimate issue.[13] Moreover, common law courts required the basis for an expert's opinion to be disclosed to the jury before admitting the opinion.[14] The admittance of expert testimony at common law also limited an expert to render an opinion on an evidentiary-based set of hypothetical circumstances when conflicting facts, data or opinions in the case were not within the personal knowledge of the expert.[15]

In adopting the Federal Rules of Evidence in 1975, the drafters retained the common law's basic foundation of allowing experts to testify, while modifying the requirements.[16] The Federal Rules of Evidence allow qualified experts to express opinions if their testimony is likely to aid the trier of fact.[17] The Rules, unlike common law, do not have the further requirement that expert opinions be based on experience uncommon to lay persons.[18] Additionally, the Federal Rules of Evidence allow expert opinions to embrace the ultimate issue of a case.[19] The rationale for the departure from common law was based on an observation that the exclusion of opinions on ultimate issues was often difficult to administer and only deprived the jury of useful information.[20] The drafters also abandoned the common law requirement that the basis of an expert's opinion be disclosed prior to admittance.[21] At common law, the requirement was complex, time consuming, and unnecessary because cross-examination

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11. *See* Graham, *supra* note 6, at 48-49.
12. *Id.* at 49.
13. *Id.*
14. *Id.* at 59.
15. *See id.*
16. *See id.* at 43.
17. *See* FED. R. EVID. 702; FED. R. EVID. 702 advisory committee's note.
18. *See* Graham, *supra* note 6, at 49.
19. *See* FED. R. EVID. 704.
20. *See* FED. R. EVID. 704 advisory committee's note.
21. *See* FED. R. EVID. 704; Ladd, *Expert Testimony*, 5 VAND. L. REV. 414, 418 (1952).

allowed the expert's basis to be adequately explored.[22] Overall, the drafters of the Federal Rules of Evidence appear to have modified common law practices in admitting expert testimony in an attempt to increase judicial efficiency and maintain adequate safeguards against procedural abuse.[23]

II. BASIC ESSENTIALS UNDER THE FEDERAL RULES

The Federal Rules of Evidence allow witnesses who are qualified as experts to express an opinion if their testimony will help the trier of fact to understand issues that are complex, scientific or require specialized knowledge.[24] An expert, unlike a lay witness,[25] may state an opinion based upon his experience or education.[26] The opinion, however, must be more likely to assist jurors than to misguide them.[27] Consequently, a trial judge must determine whether the expert's opinion is more likely to aid or hinder the jury.[28] A trial judge is given broad discretion over whether or not to admit the opinion testimony,[29] and her decision may be reversed only upon a showing that it was "manifestly erroneous."[30]

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22. *See* FED. R. EVID. 705; FED. R. EVID. 705 advisory committee's note.

23. *See id.*

24. Federal Rule of Evidence 702 states, "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. The advisory committee's note to Rule 702 states that the scope of the rule is not limited to experts such as doctors, but also includes "'skilled' witnesses, such as bankers or landowners testifying to land values." FED. R. EVID. 702 advisory committee's note.

25. Federal Rule of Evidence 701 asserts,

> If the witness is not testifying as an expert, the witness' testimony in the form of opinions or inferences is limited to those opinions or inferences which are (a) rationally based on the perception of the witness and (b) helpful to a clear understanding of the witness' testimony or the determination of a fact in issue.

FED. R. EVID. 701.

26. *See* FED. R. EVID. 702.

27. Federal Rule of Evidence 403 states, "Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." FED. R. EVID. 403.

28. *See* Salem v. United States Lines Co., 370 U.S. 31, 35 (1962).

29. *Id.*

30. *Id.*; *see* Smogor v. Enke, 874 F.2d 295, 297 (5th Cir. 1989). The court in reviewing the trial court's failure to admit expert testimony concluded that simply because it would not have been erroneous to admit the testimony does not mean that excluding the evidence was "manifestly erroneous" and should be disturbed on appeal. *Id.*

III. Discretion Created Dichotomy

Allowing trial judges to determine the admissibility of opinion testimony has caused varied results on similar issues among courts.[31] Judges disagree about the intensity with which expert opinion testimony should be scrutinized.[32] Two divergent viewpoints have emerged. "Judicial activism" proponents support the careful screening of expert testimony and its basis before allowing a jury to be exposed and influenced by potentially biased, unfounded or mystifying technical opinions.[33] Conversely, "judicial restraint" proponents advocate less judicial interference and would allow a jury to assess the relative weight and credibility of each expert's opinion.[34] The implications of these divergent viewpoints may be illustrated by examining issues relevant in determining the admissibility of expert testimony under the Federal Rules of Evidence. The issues include the integrity of experts, the reliability of the opinion offered, and the capacity of a jury to weigh the opinion testimony objectively.

A. Expert Integrity

While expert testimony has become indispensable in explaining the intricacies of sophisticated subject matter to lay jurors unexposed to complex and technical concepts,[35] the integrity of experts often has been questioned.[36] Judicial activism proponents maintain that lawyers consistently seek experts willing to support advocated positions for compensation.[37] Activism proponents raise a question re-

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31. *See, e.g.*, Washington v. Armstrong World Indus., Inc., 839 F.2d 1121, 1123-24 (5th Cir. 1988) (excluding doctor's expert testimony that attempted to link asbestos to cancer); Ferebee v. Chevron Chem. Co., 736 F.2d 1529, 1535-36 (D.C. Cir.) (allowing medical expert's opinion that linked toxic chemicals to human disease), *cert. denied*, 469 U.S. 1062 (1984).

32. *See, e.g.*, *In re* Air Crash Disaster, 795 F.2d 1230, 1234 (5th Cir. 1986) (advocating zealous pursuance of carefully screened expert testimony); 736 F.2d at 1535 (openly allowing jury to weigh expert credibility).

33. *See* Graham, *supra* note 6, at 62, 89. The author advocates that courts take a more active rule to ensure the trustworthiness of experts and protect the jury from being improperly influenced by scientific expertise. *Id.*

34. *See* 736 F.2d at 1535. The court noted that weighing and crediting expert testimony is the jury's province and that testimony should not be suppressed. *Id.*

35. *See* Ladd, *supra* note 21, at 417.

36. *See* Epstein & Klein, *The Use and Abuse of Expert Testimony in Product Liability Actions*, 17 Seton Hall L. Rev. 656, 657 (1987). *See also* Graham, *supra* note 6, at 46 (pointing out that the instance of employment can make even a conscientious expert biased).

37. *See* Foster, *supra* note 3, at 171.

garding the expert's integrity due to the possibility that her opinion is simply available to the highest bidder.[38] Further, the venality of some experts could discourage scrupulous experts from testifying, thereby undermining the integrity of the judicial system.[39]

Proponents of judicial restraint, on the other hand, assert that experts, like attorneys, are entitled to disagree with their colleagues and earnestly advocate their own theories.[40] According to this view, the existence of a differing viewpoint should not be presumed to be unauthentic. They believe that because experts are professionals, they deserve remuneration for their time and effort.[41] The existence of a monetary relationship, therefore, does not in itself indicate contemptible behavior.[42]

B. Judicial Quandary

When a party proffers expert testimony concerning the scientific cause of an alleged harm, the judge must consider the credibility of the opinion and the potential impact of the testimony on the jury.[43] Judicial activism proponents favor the careful dissection of experts' opinions in order to screen for any error in the underlying basis.[44] Proponents of judicial activism fear that jurors will be unable to distinguish an unfounded opinion from one based on sound methodologies.[45] Accordingly, they are concerned with the possibility that a jury's decision might reflect an inaccurate understanding of the cause of the alleged harm.[46]

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38. *See In re* Air Crash Disaster, 795 F.2d 1230, 1234 (5th Cir. 1986); Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277, 333 (1985). The author states that the "scientific community is large and heterogeneous, and a Ph.D. can be found to swear to almost any 'expert' proposition, no matter how false or foolish." *Id.*

39. *See* Graham, *supra* note 6, at 45.

40. *See* Foster, *supra* note 3, at 171, 174.

41. *Id.* at 185.

42. *Id.*

43. *See In re* Air Crash Disaster, 795 F.2d 1230, 1233 (5th Cir. 1986). The Fifth Circuit stated that giving trial judges discretion "reflects the superior opportunity of the trial judge to gauge both the competence of the expert and the extent to which his opinion would be helpful to the jury." *Id.*

44. *See id.*

45. *See* Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 HARV. L. REV. 40, 55 (1901). The concern is that jurors will be unable to distinguish between scientific "truths" based on extensive research and those being espoused merely for the sake of the law suit. *Id.*

46. *See* Graham, *supra* note 6, at 62.

Judicial restraint proponents, on the other hand, question whether judges have a greater capacity than a jury to determine which scientific opinions are sound and which are not.[47] Restraint proponents argue that determination of the credibility of expert testimony and its basis should not be a question of admissibility for judges.[48] Instead, they believe the credibility of expert testimony should be weighed by the jury.[49]

Judicial activism proponents emphasize the pervasive use of expert testimony by litigants to prove or disprove the cause of the alleged harm.[50] They assert that judges must make a careful threshold determination of whether an expert's testimony will be more likely to aid or mislead a jury.[51] For an expert's opinion to assist a jury, it must be believable as well as relevant to the underlying controversy; therefore, both the type and amount of evidence supporting the opinion must be examined.[52] Courts have held, for example, that medical experiments connecting chemicals to diseases in animals are not the *type* of evidence sufficient to sustain a jury inference that the chemical would have the same effect on humans.[53] Under this view, an expert opinion based solely on experiments with animals would likely be excluded.[54] However, if the expert opinion is based on another type of evidence in conjunction with animal experiments, the court must determine if the *amount* of evidence makes the conclusion of causation believable enough to warrant admissibility.[55]

Expert opinions must have a foundation sufficient to make the evidence more probative than prejudicial according to Federal Rule

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47. *See* Ferebee v. Chevron Chem. Co., 736 F.2d 1529, 1534 (D.C. Cir.), *cert. denied*, 469 U.S. 1062 (1984). The court asserted that in resolving complex scientific issues judges have no special competence. Further, it is for the jury to decide to rely on the advice of experts. *Id.*

48. *See id.*

49. *See id.*

50. *See, e.g.*, Washington v. Armstrong World Indus., Inc., 839 F.2d 1121, 1124 (5th Cir. 1988) (opinion evidence submitted by a claimant to attempt to link asbestos exposure with colon cancer).

51. *See, e.g., In re* Air Crash Disaster, 795 F.2d 1230, 1233 (5th Cir. 1986).

52. *See generally* Oxendine v. Merrell Dow Pharmaceuticals, Inc., 506 A.2d 1100, 1104 (D.C. 1986) (noting that trial judges must examine type and amount of data).

53. *In re* "Agent Orange" Prod. Liab. Litig., 611 F. Supp. 1223, 1241 (E.D.N.Y. 1985).

54. *See id.*

55. *See* Lynch v. Merrell-National Laboratories, Inc., 830 F.2d 1190, 1194-97 (1st Cir. 1987). The court considered the admissibility of animal experiments in conjunction with chemical studies and concluded that neither was sufficient to prove causation. *Id.*

of Evidence 403.[56] The standard requires judges to look at the kind of evidence and methodologies which support an expert's assertions.[57] Judicial activism proponents argue that when an expert's opinion is based upon suspect or questionable methodologies, judges should refuse to admit the testimony.[58] They contend that admitting opinions based on questionable methodologies could result in jury speculation,[59] and theoretical speculation cannot sustain a claimant's burden of causation.[60]

Unsubstantiated scientific evidence used in the courtroom to prove causation has been termed "junk science" by promoters of judicial activism.[61] They believe that reliance upon inconclusive sci-

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56. Viterbo v. Dow Chem. Co., 826 F.2d 420, 422 (5th Cir. 1987); *see* FED. R. EVID. 403. Utilizing rule 403 raises other significant questions and problems, including the definition of "unfair prejudice." *See* Gold, *supra* note 1, at 60. The author states that rule 403 was designed to allow "discretionary exclusion of evidence when admission would undermine accurate factfinding and procedural fairness." *Id.* Gold observes that rule 403 does not meet its intended purpose. *Id.* at 61-62. Instead, the rule has become a "ritualistic incantation" resulting in unprincipled and ad hoc determinations by courts in admitting or excluding evidence. *Id.* at 61-63. The author concludes that "in applying [rule 403] the court must predict whether admission of evidence will induce the jury to employ inferential processes that are likely to advance or detract from the accuracy of factfinding." *Id.* at 63. The conclusion may be applied to expert witness admissibility decisions as well. Judges determining whether or not to admit expert testimony must decide if the admission is likely to result in accurate fact-finding and, therefore, comports with rule 403.

57. *See* 826 F.2d at 422.

58. *Id.* Sound methodologies are those "concededly relied upon generally by physicians in diagnosing etiology of a particular patient's disease." Osburn v. Anchor Laboratories, Inc., 825 F.2d 908, 916 (5th Cir. 1987), *cert. denied*, 485 U.S. 1009 (1988). Therefore, reliance upon animal studies to prove the causation of disease in humans is not a sound methodology on which to base the determination because animal studies are used to discover "a dose-response relationship, while epidemiological studies show an association between exposure and disease." *In re* "Agent Orange" Prod. Liab. Litig., 611 F. Supp. 1223, 1241 (E.D.N.Y. 1985). Epidemiological evidence may constitute a sound methodology on which to base a conclusion of causation because the very purpose of the evidence is linking a disease to its cause. *See id.* However, because the purpose of animal studies is merely dose related, reliance on them to prove causation constitutes an unsound methodology. *See id.*

59. *See* Brock v. Merrell Dow Pharmaceuticals, Inc., 874 F.2d 307, 315 (5th Cir. 1989), *cert. denied*, ____ U.S. ____, 110 S. Ct. 1511, 108 L. Ed. 2d 646 (1990).

60. Richardson *ex rel.* Richardson v. Richardson-Merrell, Inc., 857 F.2d 823, 829 (D.C. Cir. 1988), *cert. denied*, ____ U.S. ____, 110 S. Ct. 218, 107 L. Ed. 2d 171 (1989). In utilizing Federal rule of Evidence 703, the court concluded that the expert's opinion did not have a basis "'reasonably relied upon by experts in the particular field.'" *Id.* (quoting FED. R. EVID. 703). Therefore, the expert's opinion did not provide "substantially probative evidence" enabling a jury verdict to be sustained. *Id.* The court found the expert's reliance on chemical, in vitro and in vivo studies insufficient to provide a basis for the conclusion that the drug Bendectin caused Carita Richardson's birth defects. *Id.* at 830.

61. Epstein & Klein, *supra* note 36, at 656.

entific evidence to prove causation has become far too common and has led to growing skepticism of the judicial system's ability to deal with technical concepts in a coherent and rational manner.[62]

Although the use of "junk science" can indeed result in unsupported verdicts, what constitutes "real science" remains unclear. Because scientific evidence must be supported by a reasonable degree of certainty to be admissible,[63] the difficulty arises in defining what is reasonably certain and to whom. Legal sufficiency does not equate to scientific certainty, and it is therefore inconsequential that the scientific community would require more research before definitively resolving the issue in question.[64] Although courts are leery of admitting opinion testimony when the basis for the testimony has not been thoroughly scrutinized by other experts in the field,[65] this does not mean that only the opinions accepted by a majority of experts in the discipline are admissible.[66] A minority opinion is admissible if it is based on sound methodologies.[67] For example, if an expert's opinion is based upon methods other experts would use, such as blood tests or tissue samples, the fact that her conclusion differs from those reached by other experts is irrelevant.[68] Finally, what comprises a sound methodology is not always clear. The number of published articles or in-depth studies required to comprise a concrete methodology which can sustain a finding of causation may vary depending on the circumstances.

Judicial restraint proponents believe that some of the problematic questions of admissibility should be resolved by simply allowing the jury to assess the weight and credibility of each expert.[69] The Fifth

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62. *Id.* at 656-57. The authors attributed the use of unsubstantiated scientific testimony to "the ominous development[s] in current tort law" and the inability to obtain tort liability insurance. *Id.* at 656.

63. Wells v. Ortho Pharmaceutical Corp., 788 F.2d 741, 745 (11th Cir.), *cert. denied*, 479 U.S. 950 (1986).

64. *Id.*

65. *See In re* Air Crash Disaster, 795 F.2d 1230, 1234 (5th Cir. 1986). The court expressed a concern that experts are sometimes willing to testify to things they would not subject to peer review. *Id.*

66. Graham, *supra* note 6, at 61.

67. Osburn v. Anchor Laboratories, Inc., 825 F.2d 908, 916 (5th Cir. 1987), *cert. denied*, 485 U.S. 1009 (1988); *see* Graham, *supra* note 6, at 61; Viterbo v. Dow Chem. Co., 826 F.2d 420, 424 (5th Cir. 1987). The *Osburn* court also noted that an expert is not required to negate every other possible cause to assert an opinion about one possible cause. 825 F.2d at 916.

68. 825 F.2d at 914.

69. *See* Christophersen v. Allied-Signal Corp., 902 F.2d 362, 364 (5th Cir.), *en banc reh'g*

Circuit in *Viterbo v. Dow Chemical Co.*[70] stated that "[a]s a general rule, questions relating to the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility and should be left for the jury's consideration."[71] According to this view, choosing sides in the battle of experts is the jury's province, and judges should not interfere.[72] The Court of Appeals for the District of Columbia Circuit addressed the domain of jurors in evaluating expert opinions in proclaiming that judges "have no special competence to resolve the complex and refractory causal issues raised by the attempt to link . . . toxic chemicals with human disease. . . . [I]f experts are willing to testify that such a link exists, it is for the jury to decide whether to credit such testimony."[73]

Judicial activism proponents, on the other hand, assert that the proposition raises its own set of problems. It leaves the judicial system without any mechanism to ensure that the jury will not be improperly influenced by scientific experts exceptionally proficient in "the art of expert witness advocacy."[74] Further, they do not believe that a jury of lay persons can realistically be expected to resolve complex issues of causation that even the most astute experts cannot definitively decide.[75] When this burden is placed on a jury, activism proponents argue that fact-finding requires the kind of flagrant speculation that cannot sustain sound verdicts.[76]

An additional risk associated with allowing a jury to evaluate experts and their opinions concerns the influence of extraneous factors such as compassion and confusion.[77] Although some studies show that a jury does not consciously yield to emotion when they

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granted, 914 F.2d 66 (5th Cir. 1990); Dixon v. International Harvester Co., 754 F.2d 573, 580 (5th Cir. 1985).

70. 826 F.2d 420 (5th Cir. 1987).

71. *Id.* at 422. However, the court concluded that the expert's source carried such little weight that it could not assist the jury in reaching a sound verdict. *See id.* at 424.

72. *See* 902 F.2d at 366. The Fifth Circuit reprimanded the lower court for choosing sides in a battle of experts. *See id.*

73. Ferebee v. Chevron Chem. Co., 736 F.2d 1529, 1534 (D.C. Cir.), *cert. denied*, 469 U.S. 1062 (1984).

74. *See* Graham, *supra* note 6, at 62, 74.

75. *See* Brock v. Merrell Dow Pharmaceuticals, Inc., 874 F.2d 307, 309 (5th Cir. 1989), *cert. denied*, ____ U.S. ____, 110 S. Ct. 1511, 108 L. Ed. 2d 646 (1990).

76. *See id.* The court found medical science unable to determine the cause of birth defects; therefore, asking a jury to decide the issue would require speculation. *See id.*

77. *See* Richardson *ex rel.* Richardson v. Richardson-Merrell, Inc., 857 F.2d 823, 832 (D.C. Cir. 1988), *cert. denied*, ____ U.S. ____, 110 S. Ct. 218, 107 L. Ed. 2d 171 (1989).

know that emotion is not a proper basis for a factual determination,[78] juries are much more likely to unconsciously yield to emotion when the evidence presented is confusing. For example, in a Fifth Circuit case involving expert testimony regarding the cause of birth defects, the court noted that the "sight of a helpless mutilated youngster may evoke emotion [which] could render a jury 'unable to arrive at an unbiased judgment.'"[79] Although Federal Rule of Evidence 703 was designed to expand the acceptable foundations supporting expert opinions[80] and to favor the party proffering the expert,[81] this does not mean that opinion testimony is admissible any time an expert supports a position.[82]

Despite the complexity involved in determining what constitutes a sound methodology in support of an expert proposition as well as the potential impact the proposition might have upon a jury, judges still have the burden of initially determining the admissibility of expert testimony.[83] The dichotomy between judicial activism and judicial restraint illustrates the vast inconsistency which may result when one judge takes an active role in screening expert opinion testimony while another judge, when confronted with similar issues, allows the jury to weigh the reliability of expert testimony. For example, in *Osburn v. Anchor Laboratories, Inc.*,[84] the Fifth Circuit found that a controversial medical opinion stating that a veterinary drug administered by Osburn, which caused his cancer, was properly assessed by the jury.[85] In the same year, the Fifth Circuit in *Viterbo v. Dow Chemical Co.*[86] excluded an expert's testimony asserting that exposure to a pesticide caused Viterbo's illness and, therefore, granted summary judgment in favor of Dow Chemical Company.[87] In many

78. *See, e.g.*, Gold, *supra* note 1, at 83 (citing H. KALVEN & H. ZEISEL, THE AMERICAN JURY 149-62 (1966)).

79. Lynch v. Merrell-National Laboratories, Inc., 830 F.2d 1190, 1196 (1st Cir. 1987) (quoting *In re* Richardson-Merrell, Inc. "Bendectin" Prods. Liab. Litig., 624 F. Supp. 1212, 1224 (S.D. Ohio 1987)). The case involved a claim attempting to connect the drug Bendectin with birth defects. *Id.*

80. 857 F.2d at 829.

81. *See* Graham, *supra* note 6, at 74.

82. Richardson *ex rel.* Richardson v. Richardson-Merrell, Inc., 857 F.2d 823, 829 (D.C. Cir. 1988), *cert. denied*, ___ U.S. ___, 110 S. Ct. 218, 107 L. Ed. 2d 171 (1989).

83. *In re* Air Crash Disaster, 795 F.2d 1230, 1233-34 (5th Cir. 1986).

84. 825 F.2d 908 (5th Cir. 1987), *cert. denied*, 485 U.S. 1009 (1988).

85. *See id.* at 915-16.

86. 826 F.2d 420 (5th Cir. 1987).

87. *See id.* at 424.

cases, the determination of admissibility is the decisive factor in ascertaining whether or not a claimant can prove causation and recover damages for the alleged harm.[88] Due to the fact that one of the purposes of codifying the Federal Rules of Evidence was to achieve consistency,[89] a solution is clearly needed to ensure that comparable treatment of a claim is received regardless of which court is applying the Federal Rules of Evidence.

IV. INEFFECTUAL SOLUTIONS

Judge Learned Hand noted the practical defects with the admission of expert testimony ninety years ago.[90] Since that time, no acceptable alternative for dealing with expert witnesses has been devised. However, many unique proposals for a new and improved system have been explored by scholars.[91]

One proposal imitates the practice utilized in Germany around the turn of the century.[92] The German system required the state to appoint a permanent board of experts with no regular salary other than compensation for time lost from their fields.[93] A judge could appoint one of the experts to decide the technical issues in a case.[94] Additional experts could be appointed upon the judge's own initiative or by agreement of the parties, but the permanent expert alone decided issues within his line of business.[95] Although this system would alleviate some of the previously illustrated uncertainties regarding the admission or exclusion of expert testimony,[96] the cost of certainty would be too great. The German system of compulsory

88. *See, e.g.*, Mid-State Fertilizer Co. v. Exchange Nat'l Bank, 877 F.2d 1333, 1338-40 (7th Cir. 1989) (excluding the affidavit of an expert as insufficient to raise a genuine issue of material fact and affirming the grant of summary judgment for the defendant).

89. *See* Gold, *supra* note 1, at 83.

90. *See* Hand, *supra* note 45, at 53-56. Hand stated, "I shall therefore try to point out the practical defects . . . in the present system . . . . The serious objections are, first, that the expert becomes a hired champion of one side; second, that he is the subject . . . of contradiction by other experts." *Id.* at 53.

91. *See* Foster, *supra* note 3, at 179-86.

92. *Id.* at 180.

93. *Id.*

94. *Id.*

95. *Id.*

96. *See supra* notes 43-68 and accompanying text.

appointments would deny a party the constitutional right to call witnesses of her own choosing.[97] Further, the compulsory expert under the German system, who is mandated to decide all issues within his field, could not possibly be the most informed expert for every facet within an entire technological area.[98]

One aid enacted in the hope of solving some of the vexing difficulties associated with the admissibility of expert testimony is rule 706 of the Federal Rules of Evidence.[99] Rule 706 allows the court to select and appoint expert witnesses in addition to any experts offered by counsel.[100] The advisory committee for the Federal Rules noted a deep concern for the potential abuse of utilizing expert witnesses, and asserted that the mere possibility of a judge appointing an expert would exert a sobering effect upon the experts and parties.[101] However, the actual appointment of experts by the court is highly infrequent,[102] and the rule does not appear to have significantly improved the overall system. Moreover, the use of a court appointed expert could foster an aura of indelible persuasiveness irresistible to the common juror.[103]

A panel of expert jurors has also been proposed to help alleviate the possible bewildering effects that specialized knowledge can have on jurors unfamiliar with particular subject matter.[104] While this proposal may sound appealing, two new difficulties arise. The first concerns how the expert jurors would be selected, and the second

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97. Foster, *supra* note 3, at 180; *see* Washington v. Texas, 388 U.S. 14, 19 (1967). The court explained that the right to offer the testimony of witnesses is one of the most basic ingredients of due process of law and a fair trial. *Id.*

98. *See* Foster, *supra* note 3, at 180. For example, a doctor who is the compulsory expert would be the only expert allowed to testify on every medical issue from dermatology to brain surgery.

99. *See* FED. R. EVID. 706.

100. *Id.* Rule 706 provides, in relevant part, "The court may appoint any expert witnesses agreed upon by the parties, and may appoint expert witnesses of its own selection." *Id.*

101. *See* FED. R. EVID. 706 advisory committee's note. Rule 706 provides that a witness summoned by the court may be called to testify and be subject to cross-examination by either party. *Id.*

102. *Id.* The advisory committee stated that the mere possibility that a judge might call an expert encourages the parties and the experts not to abuse the process and, therefore, does not frequently necessitate the actual use of the appointed expert. *Id.*

103. *See* Foster, *supra* note 3, at 184. The appointment of an expert by a court could be interpreted by a jury to mean that the court endorses everything that the expert asserts. *Id.* This might put an inordinate amount of weight on the court appointed expert's testimony. *Id.*

104. *Id.* at 183-85.

relates to whether the experts would "be any more likely to agree in the jury box than on the witness stand?"[105] Formulating criteria for choosing a panel of experts would be a difficult task. For example, in a case involving a head injury, must all members of a panel be doctors, surgeons, or neurosurgeons? A determination of who should select the panel must also be made. Should the determination be left to the judge, the parties, or some administrative body created to randomly designate experts? Even if a satisfactory panel of experts could be chosen, the experts would still have differing viewpoints. Must their decision be unanimous, or will a simple majority be sufficient? Clearly, the complications with the proposal are troublesome, if not insurmountable, and would likely outweigh any perceived benefits.

The foregoing proposed remedies appear largely ineffectual with respect to solving the perplexities of the current system of determining the admissibility of expert opinions, or in formulating a less problematic system. However, this does not mean that a solution should not be pursued. Judge Higginbotham recently recognized the need for reforming the current method of screening expert witness testimony in his dissent from the Fifth Circuit's refusal to rehear *Brock v. Merrel Dow Pharmaceuticals, Inc.*[106] The judge supported an en banc rehearing because he preferred "a direct confrontation with one of the more vexing problems currently facing the federal courts—the role of experts."[107] He further noted that the drafters of the Federal Rules of Evidence could not have foreseen the impact their changes in the rules for expert witnesses would have on the dynamics of a trial.[108] Finally, Judge Higginbotham observed that only by establishing a "guiding principle" will the current inconsistency of the Federal Rules of Evidence in the area of expert opinion testimony be remedied.[109]

V. Recommended Remedy

Although the Federal Rules of Evidence have been very effective in dealing with the diversities and nuances of most types of evidence,

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105. *Id.* at 183.

106. 874 F.2d 307 (5th Cir. 1989), *cert. denied*, ___ U.S. ___, 110 S. Ct. 1511, 108 L. Ed. 2d 646 (1990).

107. Brock v. Merrell Dow Pharmaceuticals, Inc., 884 F.2d 167, 168 (5th Cir. 1989), *denying en banc reh'g to* 874 F.2d 307 (5th Cir. 1989), *cert. denied*, ___ U.S. ___, 110 S. Ct. 1511, 108 L. Ed. 2d 646 (1990) (Higginbotham, J., dissenting).

108. *Id.* at 168 n.1 (Higginbotham, J., dissenting).

109. *Id.* at 168-69 (Higginbotham, J., dissenting).

handling expertise in a rational manner may require a modification of the rules governing expert testimony. The workable foundation of the rules should not be discarded, however, simply because reform is desirable in one specific area.

The present method of determining expert testimony admissibility has proven effective in two distinct situations. In the first situation, a claimant proffers an expert to testify against a well-established scientific principle and the proffered expert's assertion is clearly baseless.[110] In such a case, summary judgment remains appropriate commensurate with settled precedent.[111] In the second situation, both parties produce experts whose methodologies and opinions are clearly supported by other experts in their field.[112] In such a case, the admissibility threshold has been met, and the opinion testimony is appropriate for jury determination.[113] A third situation involves the case which falls between these distinct scenarios. The procedure for dealing with the "indeterminate case" has been plagued by controversy and inconsistency and is in need of reform.

In an effort to achieve consistency and bridge the gap between judicial activism and judicial restraint proponents, a compromise is proposed. The proposal initially involves allowing either party to request a pretrial hearing to decide if the case in controversy is an indeterminate case. To prove an indeterminate case, the party requesting the hearing should be required to show that causation is sought to be proved or disproved by an expert whose opinion is based on novel theories or methodologies not wholly unsubstantiated, but nevertheless questionable. Additionally, the judge, upon his own motion, could determine that the dispute in controversy is an indeterminate case. This procedure would be needed because indeterminate cases are those which judicial activism and judicial restraint proponents under the current system would dispute.[114] Under the proposed system, once a judge has ruled the matter to be an inde-

110. *See, e.g.*, Mid-State Fertilizer Co. v. Exchange Nat'l Bank, 877 F.2d 1333, 1338-40 (7th Cir. 1989) (Expert testified that a bank acted irrationally and stated no basis for the opinion.).

111. *See id.*

112. *See, e.g.*, Peteet v. Dow Chem. Co., 868 F.2d 1428, 1432-33 (5th Cir.) (Expert testified about the scientific article of another expert.), *cert. denied*, ____ U.S. ____, 110 S. Ct. 320, 107 L. Ed. 2d 318 (1989).

113. *See id.*

114. For example, a judge might determine that a case is indeterminate when it involves an expert testifying that a cause-effect relationship exists based on extensive experimentation, but that the relationship has not yet been substantiated by other experts in the field.

terminate case, the amended Federal Rules of Evidence would require the court to call its own expert to testify. The court appointed expert would testify in addition to experts called by the parties, thereby upholding the right of the parties to call witnesses of their choosing.[115]

The proposed process would alleviate many of the problems created by the current system. Utilizing a rule mandating a court appointed expert in indeterminate cases would enable more cases to be decided by a jury as advocated by judicial restraint proponents. However, the proposed reform would also provide an adequate procedural safeguard against misleading a jury with questionable and mystifying expert opinions. The potential for misleading a jury is the main criticism judicial activism proponents cite for not allowing suspect technical opinions to be heard by a jury.[116] Providing a jury with an unbiased court appointed expert likely would emphasize the uncertain nature of the suspect opinion.[117] Therefore, the proposal would allow a compromise to be reached between judicial activism and judicial restraint proponents.

An important attribute of the proposed system is the mandatory use of court appointed experts. The initial determination by a judge that the case at hand is an indeterminate case requiring the court to appoint an expert should be an appealable issue. The judge's determination should be subject to an interlocutory appeal[118] to prevent the frequency of new trials, thereby preserving judicial resources. The threat of being reversed on appeal would appear to supply the needed incentive for judges to utilize the court appointed expert.

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115. *See supra* note 97 and accompanying text. Essentially a decision that an indeterminate case is at bar makes the use of Federal Rule of Evidence 706 mandatory. *See* FED. R. EVID. 706. Currently, rule 706 allows a judge discretion to appoint an expert. *Id.* Under the proposed system, the judge would be required to appoint an expert in an indeterminate case. The failure of the judge to appoint an expert could result in a reversal of the decision on appeal.

116. *See* Graham, *supra* note 6, at 62.

117. The addition of the court appointed expert would more clearly illustrate the weaknesses of the suspect opinion, thereby making jury reliance on questionable and mystifying opinions less likely.

118. Congress would have to explicitly provide for interlocutory appeal because the determination is not likely to be a final decision under Title 28 of the United States Code granting appellate courts jurisdiction for review. *See* 28 U.S.C. § 1291 (1988); Catlin v. United States, 324 U.S. 229, 233 (1945). Congress could grant jurisdiction to appellate courts for the interlocutory appeal by including indeterminate cases in § 1292 of Title 28, which enumerates other circumstances when parties are entitled to an interlocutory appeal. *See* 28 U.S.C. § 1292(a)(2) (1988).

The proposed system is not perfect. There is always a chance that jurors will be mislead by charismatic experts with questionably based opinions. Even a court endorsed expert has the potential to be unduly persuasive. Nevertheless, the proposed system provides a workable procedure for curbing the inconsistency inherent in the present system. Perhaps these guidelines may be a beginning point in initiating the much needed modification of the Federal Rules of Evidence in the area of indeterminate cases.

VI. CONCLUSION

While the Federal Rules of Evidence require a threshold scrutiny of expert opinion by trial judges,[119] the rules have not guided judges to consistent conclusions. The numerous inconsistencies among courts in determining the admissibility of expert testimony stems from serious unresolved questions regarding the proper application of the Federal Rules of Evidence. Who should evaluate expert testimony—judges or juries? Should there be a threshold level of believability before an expert's opinion reaches a jury? What guidelines should govern the inquiry?

By agreeing to rehear *Christophersen v. Allied-Signal Corp.*,[120] the Fifth Circuit currently has the opportunity to address the illustrated problems. The Fifth Circuit is urged to take the opportunity to create a workable judicial procedure, or at least encourage legislative modification to deal with the problem of expert testimony in federal courts. Although the Fifth Circuit does not have explicit

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119. *See* FED. R. EVID. 403.

120. 902 F.2d 362 (5th Cir.), *en banc reh'g granted*, 914 F.2d 66 (5th Cir. 1990). The case involved a wrongful death action based on a claim that nickel, cadmium or a combination of the two caused cancer resulting in the death of Christophersen. *Id.* at 363. The District Court for the Western District of Texas excluded expert testimony on causation, finding it unreliable, and therefore granted summary judgment in favor of Allied-Signal Corporation. *See id.* at 363-64. On appeal, the Fifth Circuit reversed the district court and held that the lower court erred in excluding the expert testimony. *Id.* at 368. The Fifth Circuit has now agreed to hear the case en banc. 914 F.2d at 67. Based on the court's decision to rehear the case en banc and Judge Higginbotham's urging in *Brock v. Merrell Dow Pharmaceuticals, Inc.* to adopt guiding principles to deal with expert testimony in the federal courts, the possibility exists that the Fifth Circuit will address the problem of expert testimony admissibility in *Christophersen v. Allied-Signal Corp. See* 902 F.2d 362 (5th Cir.), *en banc reh'g granted*, 914 F.2d 66 (5th Cir. 1990); Brock v. Merrell Dow Pharmaceuticals, Inc., 884 F.2d 167, 168-69 (5th Cir. 1989) (Higginbotham, J., dissenting), *denying en banc reh'g to* 874 F.2d 307 (5th Cir. 1989), *cert. denied*, ____ U.S. ____, 110 S. Ct. 1511, 108 L. Ed. 2d 646 (1990).

power to amend the Federal Rules of Evidence, the court could initiate a congressional revision of the Rules as the proposed remedy suggests. While the remedy may not be perfect, it can serve as a basis for a solution which will achieve the level of uniformity the Federal Rules of Evidence were designed to inspire.

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