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Gatekeeping in Texas: The Practical Impact of Full Implementation of the Texas Rules of Civil Evidence Regarding Experts.

Suzanne B. Baker

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"GATEKEEPING" IN TEXAS: THE PRACTICAL IMPACT OF FULL IMPLEMENTATION OF THE TEXAS RULES OF CIVIL EVIDENCE REGARDING EXPERTS

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I. Introduction	238
II. Traditional Texas Expert Practice: Qualification as Predicate.....	241
III. The Winds of Change: <i>Daubert, E-Z Mart Stores, Inc., and Kelly</i>	243
IV. Full Implementation of the Texas Rules: <i>Du Pont</i> and Its Aftermath	247
A. The Texas Supreme Court's Opinion in <i>Du Pont</i> : Emphasis on Rules 702 and 403.....	247
B. The <i>Crye</i> Concurrence	254
C. <i>North Dallas Diagnostic Center v. Dewberry</i>	256
D. <i>Merrell Dow Pharmaceuticals, Inc. v. Havner</i>	257

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E.	The Motion for Rehearing in <i>Du Pont</i> and the Writ of Error in <i>Havner</i>	262
V.	Pragmatics: Preparing to Defend and Challenge Experts in the Context of Gatekeeping	267
A.	The Current State of Texas Law on Experts	267
B.	Points That Are Persuasive to Gatekeepers	269
C.	Preparing an Expert to Survive Gatekeeping	273
D.	Suggestions for Challenging an Expert	276
1.	Procedures for Invoking Gatekeeping	276
2.	Substantive Preparation for Challenging an Expert	280
VI.	Preserving Error When an Expert Is Excluded	283
VII.	Types of Testimony Opened to Gatekeeper Scrutiny by Full Implementation of the Texas Rules	288
A.	Predetermined Theory Experts	289
B.	Duty Experts	291
C.	Experts on Subjective States and Other Technical Experts Whose Methodologies Cannot Be Substantiated	293
VIII.	Conclusion	294

I. INTRODUCTION

For over a decade, the admissibility of expert testimony in Texas civil trials theoretically has been conditioned on the proponent's establishment of the complex predicate required by Rules 702, 703, and 704 of the Texas Rules of Civil Evidence.¹ Like the Federal Rules of Civil Evidence on which they were modeled,² the Texas

1. See Supreme Court of Texas Order of Nov. 23, 1982, eff. Sept. 1, 1983 (adopting Texas Rules of Civil Evidence, including Rules 702, 703, and 704), reprinted in TEX. RULES ANN. (Vernon special pamphlet 1995). The order was an exercise of powers delegated to the Texas Supreme Court by the Texas Constitution and the Rules of Practice Act, now codified in the Texas Government Code. TEX. GOV'T CODE ANN. § 22.004 (Vernon 1988 & Supp. 1995). For a complete discussion of the process that led to adoption of the Rules in 1983, see Kent Kaperton & Erwin McGee, *Background, Scope, and Applicability of the Texas Rules of Civil Evidence*, 30 HOUS. L. REV. 95, 96-104 (1993).

2. See *North Dallas Diagnostic Ctr. v. Dewberry*, 900 S.W.2d 90, 95 (Tex. App.—Dallas 1995, writ denied) (noting identical wording between federal and state rules on expert testimony). Although Rules 702, 703, and 704 were adopted verbatim from the Federal Rules of Evidence in 1983, Rule 703 was amended in 1990 to conform to terminology used in the Texas Rules of Civil Procedure by substituting “reviewed by the expert” for “made known to him.” See Supreme Court of Texas Order of Apr. 24, 1990, eff. Sept. 1, 1990

Rules allow expert testimony only if the witness is qualified by special knowledge and the testimony is relevant, reliable, and helpful to the jury.³ However, Texas trial courts historically have ignored the full text of the civil evidentiary rules and have determined *only* if a proffered expert is qualified,⁴ usually immediately before the expert's testimony.⁵ Texas courts have also taken a very liberal

(promulgating amendments to various procedural and evidentiary rules, including Rule 703), *reprinted in* TEX. RULES ANN. (Vernon special pamphlet 1995).

3. Rule 702 of the Texas Rules of Civil Evidence 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.

TEX. R. CIV. EVID. 702. Inadmissible facts or data can serve as a basis for such expert opinions only if of "a type reasonably relied upon by experts in the particular field." TEX. R. CIV. EVID. 703. Rule 703 of the Texas Rules of Civil Evidence provides:

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or reviewed by the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence.

Id.; *see also* TEX. R. CIV. EVID. 704 (providing that "[t]estimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact"). Further, all evidence, including expert testimony, is subject to exclusion if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, misleading the jury, delay, or needless cumulation. TEX. R. CIV. EVID. 403. The Rules also provide for pretrial determinations on complex evidentiary issues. TEX. R. CIV. EVID. 104.

4. *See* Heise v. Presbyterian Hosp. of Dallas, 888 S.W.2d 264, 266 (Tex. App.—Eastland 1994, writ granted) (finding that trial court incorrectly excluded emergency room doctor's testimony regarding plaintiff's head injury, and explaining how fact that doctor was not specialist went to his credibility with jury, not to admissibility of his testimony); Missouri Pac. R.R. v. Buenrostro, 853 S.W.2d 66, 77 (Tex. App.—San Antonio 1993, writ denied) (determining that nonattorney expert witness was not qualified to testify about terms of contract or federal statute); ITT Commercial Fin. Corp. v. Riehn, 796 S.W.2d 248, 250 (Tex. App.—Dallas 1990, no writ) (positing that "party who offers an expert's opinion has the burden to show that the witness is qualified"); Trailways, Inc. v. Clark, 794 S.W.2d 479, 483 (Tex. App.—Corpus Christi 1990, writ denied) (interpreting Rule 702 to find police officer, based on training and prior experience, qualified to testify as expert on speed of vehicle involved in accident); *see also* TEX. REV. CIV. STAT. ANN. art. 4590i, § 14.01 (Vernon Supp. 1995) (governing attacks on qualifications of experts based on standard of care in medical malpractice actions against doctors). A full discussion of qualification issues is beyond the scope of this Article. For a fuller discussion of qualification issues, *see* Cathleen C. Herasimchuk, *A Practical Guide to the Admissibility of Novel Expert Evidence in Criminal Trials Under Federal Rule 702*, 22 ST. MARY'S L.J. 1 *passim* (1990).

5. *See* DAVID A. SCHLUETER ET AL., TEXAS EVIDENTIARY FOUNDATIONS § 2-5(A), at 28 (1992) (characterizing voir dire as "restricted cross-examination during proponent's direct examination"); *see also* Thompson v. Mayes, 707 S.W.2d 951, 956 (Tex. App.—East-

view of the kinds of expert testimony that may assist the trier of fact, and have regularly held that issues regarding the basis for and reliability of expert opinion raise only credibility problems that the opponent can address in cross-examination.⁶ Accordingly, Texas courts have concluded that these issues affect the weight, not the admissibility, of opinion evidence.⁷ Against this background of liberal admissibility, however, recent appellate decisions, most notably the Texas Supreme Court's decision in *E.I. Du Pont De Nemours & Co. v. Robinson*,⁸ have profoundly changed the evaluation of expert opinion testimony required of Texas trial courts by mandating full implementation of the Texas Rules of Civil Evidence.

This Article assesses the current state of Texas evidentiary law in the wake of *Du Pont* and gives pragmatic suggestions for litigants making or countering challenges to the admissibility of expert testimony. Part II of this Article briefly discusses the traditional Texas practice of determining admissibility based solely on the expert's qualifications. Part III traces the cases leading up to *Du Pont*, including the United States Supreme Court's landmark decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*⁹ Part IV explores the Texas Supreme Court's decision in *Du Pont* and examines how the courts have applied *Du Pont* thus far. Part V assesses *Du Pont*'s impact on Texas evidentiary law and analyzes factors that could affect the admissibility of expert testimony. Part V also suggests tactics litigants can use to prepare their experts to survive evidentiary challenges and addresses procedural and substantive

land 1986, writ ref'd n.r.e.) (describing procedure in which plaintiff's attorney questioned defendant's expert on voir dire after learning nature of expert's opinion during trial and then objected to opinion after voir dire).

6. See *Texas Elec. Serv. Co. v. Wheeler*, 551 S.W.2d 341, 342-43 (Tex. 1977) (holding that lack of supporting data for expert's opinion went to weight and not admissibility of evidence because expert could be challenged by cross-examination); cf. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S. Ct. 2786, 2798 (1993) (explaining that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence").

7. See *Vogelsang v. Reece Import Autos, Inc.*, 745 S.W.2d 47, 49 (Tex. App.—Dallas 1987, no writ) (emphasizing that courts need only find that witness possesses minimal expert qualifications, and noting that jury thereafter must determine adequacy of expert's qualifications and whether expert's testimony should be believed).

8. 38 Tex. Sup. Ct. J. 852, 1995 WL 359024 (June 15, 1995).

9. 113 S. Ct. 2786 (1993).

considerations for litigants who challenge experts under the *Du Pont* standard. Part VI considers methods for preserving error on admissibility determinations under the new procedures for challenging experts. Part VII summarizes several types of experts whose testimony will be vulnerable to exclusion challenges under *Du Pont*. Finally, this Article concludes that the new approach to expert testimony announced in *Du Pont* will improve our civil justice system by excluding prejudicial or irrelevant testimony from jury consideration, thereby preventing wasteful expenditures of jury time in evaluating marginal testimony.

II. TRADITIONAL TEXAS EXPERT PRACTICE: QUALIFICATION AS PREDICATE

The traditional Texas approach to admission of expert testimony was demonstrated recently in the Beaumont Court of Appeals' opinion in *Albritton v. Union Pump Co.*¹⁰ The trial court in *Albritton* permitted an expert to testify about alleged pump failures based solely on his self-qualifying testimony that he was personally familiar with such pumps and their manufacturer because he was vice-president of a pump repair company.¹¹ Without citing any authority, the appellate court affirmed the trial court's exercise of discretion, noting that "it is Hornbook law that expert opinion raises issues and the weight thereof is to be passed upon by the [jury]."¹² The court neglected to discuss the adequacy of the expert's qualifications to provide the testimony, the reliability of the grounds supporting the expert's opinion, or the precise fit and relevance of the opinion to the issues in the case.

The *Albritton* court's simplistic approach to the admissibility of expert testimony is typical. Until recently, most of the Texas bench and bar have ignored the full scope of the Texas Rules of Civil Evidence in analyzing expert opinion issues.¹³ Texas courts have

10. 888 S.W.2d 833, 839 (Tex. App.—Beaumont 1994), *rev'd on other grounds*, 898 S.W.2d 773 (Tex. 1995).

11. *Albritton*, 888 S.W.2d at 839.

12. *Id.*

13. *See supra* note 4 and accompanying text. Some courts of appeal have paid lip service to the language of the Texas Rules of Civil Evidence, but their holdings are functionally similar to the holding in *Albritton*. For example, in *Guentzel v. Toyota Motor Corp.*, the appellate court reviewed a trial court's exclusion of opinion testimony provided by the surgeon who had treated children allegedly injured by seat belts. 768 S.W.2d 890,

regularly allowed experts with minimal qualifications to testify based on a finding that the testimony could be helpful to the jury under Rule 702.¹⁴ Thus, qualification to testify as an expert has been the primary, and often the only, standard for proponents of expert testimony, and even this standard has rarely been an exacting one.¹⁵

897 (Tex. App.—San Antonio 1989, writ denied). Although the surgeon had authored texts concerning lap belts in the context of emergency medicine, he was not trained in biomechanics, nor did he have any basis for determining the position in which the children's lap belts were fastened around their torsos at the time of the injury. *Id.* at 898. The *Guentzel* plaintiffs nevertheless proffered the surgeon's opinion that the injuries he observed would not have occurred had the children's seat belts remained below the iliac crest across their pelvic girdles. *Id.* Although the witness had no specific qualification for forming an opinion on biomechanical causation and could articulate no rational basis for his conclusion, the court held that the trial court abused its discretion in excluding his opinion on causation, notwithstanding a careful textual review of the pertinent rules. *Id.* at 897, 899. The court reasoned that, because the witness had extensive medical experience with the type of injury at issue, his testimony might assist the trier of fact in evaluating other evidence in the case. *Id.* at 899.

Only a few courts considering scientific evidence have held that the Texas Rules of Civil Evidence require inquiry into the reliability of the underlying scientific principle. *See Gannett Outdoor Co. of Tex. v. Kubeczka*, 710 S.W.2d 79, 89 (Tex. App.—Houston [14th Dist.] 1986, no writ) (choosing to analyze admissibility of expert's testimony under both reliability and qualification standards); *Thompson v. Mayes*, 707 S.W.2d 951, 956 (Tex. App.—Eastland 1986, writ ref'd n.r.e.) (holding that proffered expert testimony should be based on scientific, technical, or specialized knowledge to be considered reliable and of assistance to jury under Rule 702).

14. *See Glasscock v. Income Property Servs., Inc.*, 888 S.W.2d 176, 180 (Tex. App.—Houston [1st Dist.] 1994, writ dismissed) (stating that “the threshold issue in determining the admissibility of an expert's testimony is whether such testimony will be helpful to the trier of fact”); *Guentzel*, 768 S.W.2d at 899 (allowing medical doctor to testify on biomechanical causation issues, despite lack of engineering background, because doctor could provide jury with “medical viewpoint” of plaintiffs' injuries and actually operated on plaintiffs and saw extent of injuries).

15. *See Bormaster v. Henderson*, 624 S.W.2d 655, 658-59 (Tex. App.—Houston [14th Dist.] 1981, no writ) (holding that witnesses were qualified to testify as experts concerning cause of pet cockatoo's death even though experts were not veterinarians or pathologists and had not even examined bird); *Hardware Mut. Casualty Co. v. Wesbrooks*, 511 S.W.2d 406, 409 (Tex. App.—Amarillo 1974, no writ) (upholding admittance of expert's unequivocal opinion that plaintiff's heart attack was caused by employment-related overexertion, even though expert was not specialist in field, did not administer plaintiff's electrocardiogram, and, in fact, had never administered or interpreted electrocardiogram); *Williams v. General Motors Corp.*, 501 S.W.2d 930, 939 (Tex. App.—Houston [1st Dist.] 1973, no writ) (finding that automobile mechanic was qualified to testify about alleged design defects in steering system).

III. THE WINDS OF CHANGE:
DAUBERT, E-Z MART STORES, INC., AND KELLY

In 1993, the United States Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*¹⁶ forcefully addressed the standards for admission of expert opinions under the Federal Rules of Evidence.¹⁷ The narrow question before the Court was whether the standard for admissibility established in *Frye v. United States*¹⁸ had survived the enactment of the Federal Rules of Evidence.¹⁹ *Frye* previously excluded expert scientific opinions that were not based on a scientific technique generally accepted as reliable in the scientific community.²⁰

In holding that *Frye* was superseded by the Federal Rules, the *Daubert* Court carefully considered the language of the Rules²¹ and outlined the conditions under which a district court could exercise its discretion to admit expert testimony.²² Specifically, the Court held that the proponent of expert opinion testimony must show by a preponderance of proof²³ that the testimony reflects "knowledge"²⁴ and rests on "good grounds."²⁵ In other words, the proffered testimony must be based upon a sound, underlying meth-

16. 113 S. Ct. 2786 (1993).

17. *Daubert*, 113 S. Ct. at 2793.

18. 293 F. 1013 (D.C. Cir. 1923).

19. *Daubert*, 113 S. Ct. at 2793.

20. *Id.* (citing *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923)).

21. *See id.* at 2794 (finding no mention of *Frye* "general acceptance" test within text of Federal Rules of Evidence).

22. *See id.* at 2794-95 (stating that, despite dissolution of *Frye* test, trial judges still must ensure that only relevant and reliable scientific evidence is admitted).

23. *See Daubert*, 113 S. Ct. at 2796 n.10 (explaining standard applied to preliminary questions of admissibility under Rule 104(a)).

24. *See id.* at 2795 (holding that Rule 702 requires more than "subjective belief or unsupported speculation" for admission of scientific evidence). The Court acknowledged that "there are no certainties in science," but still required that scientific knowledge be supported by scientific methods and procedures. *Id.*

25. *See id.* (equating "good grounds" with "appropriate [scientific] validation"). For scientific evidence, the Court insisted that evidentiary reliability, or trustworthiness, be established by demonstrating scientific validity by answering affirmatively the question, "Does the principle support what it purports to show?" *Id.* at 2795 n.9. The factors suggested by the Court for evaluation of evidentiary reliability are best understood in the context of the precise expert opinion challenged in the case, which was a reinterpretation of data from published epidemiological studies allegedly demonstrating that the drug Bendectin causes birth defects. *See id.* at 2791-92 (discussing scientific studies upon which expert opinion was purportedly based). However, the published studies used as sources of data reflected a different conclusion. *Id.* at 2791.

odology or analysis that provides a guarantee of evidentiary reliability. To aid in the implementation of this holding, the Court suggested nonexclusive, flexible guidelines for federal district courts to use in assessing the evidentiary reliability of proposed expert testimony.²⁶

The Court also held that expert testimony must be relevant in that it assists the jury in understanding the pertinent issues in a lawsuit.²⁷ The Court recognized that unreliable expert testimony can be powerfully misleading to lay jurors²⁸ and directed federal trial judges to carefully evaluate the probative value of proffered expert testimony in light of its possible prejudicial effect under Rule 403.²⁹ Finally, the *Daubert* Court held that federal judges should exercise their discretion to bar untrustworthy and prejudicial opinions from the courtroom by "gatekeeping" in preliminary Rule 104 admissibility determinations.³⁰

The winds of change were blowing in Texas even before *Daubert* was decided. In 1992, Justice Cornyn, joined by Justice Hecht, wrote an articulate dissent in *Havner v. E-Z Mart Stores, Inc.*,³¹ a premises liability case involving the unsolved disappearance and murder of a convenience store clerk.³² In *E-Z Mart Stores*, police

26. *Id.* at 2796-97. The factors recommended in *Daubert* are: (1) whether the theory or technique has been or can be tested; (2) "whether the theory or technique has been subjected to peer review and publication"; (3) "the known or potential rate of error"; and (4) general acceptance of the technique in the relevant scientific community. *Id.*

27. See *Daubert*, 113 S. Ct. at 2796 (requiring expert testimony to have "scientific connection" to case to be admissible). The Court described the connection as one of "fit," meaning that evidence relevant to one issue may not be relevant to another issue. *Id.*

28. *Id.* at 2798 (citing Jack B. Weinstein, *Rule 702 of the Federal Rules of Evidence Is Sound; It Should Not Be Amended*, 138 F.R.D. 631, 632 (1991)).

29. *Id.* Specifically, *Daubert* directs the federal judiciary to exercise more stringent control over the admissibility of expert witness testimony. *Id.*

30. *Id.* at 2796; see also John M. Kobayashi, "Scientific" Expert Opinion Testimony: Qualification and Admissibility Standards upon and After *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, CA32 A.L.I.-A.B.A. 27, 54 (1995) (noting that courts often exclude "junk science" under *Daubert* reliability standard), available in Westlaw, JLR Database; Thomas A. Wiseman, Jr., *Judging the Expert*, 55 OHIO ST. L.J. 1105, 1105-07 (1994) (discussing increasing judicial responsibility for rejecting shoddy expert testimony and noting *Daubert's* role in encouraging this gatekeeping). Judge Wiseman noted the detrimental effects of allowing unreliable scientists into the courtroom, which include refusal of "serious scientists" to offer their testimony, higher product costs for consumers, and withdrawal of useful products from the market because of adverse judgments. Thomas A. Wiseman, Jr., *Judging the Expert*, 55 OHIO ST. L.J. 1105, 1105 (1994).

31. 825 S.W.2d 456 (Tex. 1992).

32. *E-Z Mart Stores, Inc.*, 825 S.W.2d at 457.

officers and a security consultant testified that the murder could have been prevented by adequate silent-alarm procedures.³³ A majority of the Texas Supreme Court found that this expert testimony was sufficient to support the judgment rendered against the owner, even though the testimony was based on an unfounded assumption that the clerk was not lured away and murdered by an acquaintance.³⁴

Justice Cornyn's dissent, however, urged full implementation of Rule 703 of the Texas Rules of Civil Evidence, which requires expert opinions to be based on "facts or data," as opposed to assumptions.³⁵ Justice Cornyn argued that the specialized knowledge of experts "is simply of no assistance to the trier of fact" if it is based on mere speculation.³⁶ Justice Cornyn also warned that the majority's decision would turn trials on disputed issues into trials on disputed expert opinions, which would leave experts open to corruption because of the fees paid for their testimony.³⁷ Chief Justice Phillips, joined by Justice Cook, echoed Justice Cornyn's concerns in a concurring opinion.³⁸

In the same year, the Texas Court of Criminal Appeals held in *Kelly v. State*³⁹ that scientific evidence offered pursuant to Rule 702 of the Texas Rules of Criminal Evidence must be relevant and reliable.⁴⁰ In *Kelly*, the trial court admitted expert testimony regarding DNA testing that implicated the defendant in the crime.⁴¹ The defendant argued that the DNA testing was not generally accepted in the relevant scientific community, and thus was inadmissible

33. *Id.* at 460.

34. *Id.* at 460–61. Even though the crime was unwitnessed, the majority felt that rejecting the strong circumstantial evidence available would not only make redress impossible for other families under similar circumstances, but would destroy the incentive created by potential tort liability for businesses to install adequate alarm systems to protect their employees. *Id.* at 461.

35. *Id.* at 465 (Cornyn, J., dissenting).

36. See *E-Z Mart Stores, Inc.*, 825 S.W.2d at 465 (stressing that jurors are equally qualified to speculate when expert testimony is based on unsupported assumptions).

37. *Id.* at 465–66.

38. See *id.* at 462 (Phillips, C.J., concurring) (sharing dissent's general concerns about "marginal" expert testimony, but nevertheless expressing view that evidence in case could support verdict).

39. 824 S.W.2d 568 (Tex. Crim. App. 1992).

40. *Kelly*, 824 S.W.2d at 572.

41. *Id.* at 570.

under the *Frye* test.⁴² The court of appeals affirmed, however, holding that the DNA testing results presented by the expert were scientifically reliable.⁴³

In an opinion that strikingly foreshadowed the *Daubert* opinion, the Texas Court of Criminal Appeals also affirmed.⁴⁴ The court rejected the *Frye* standard, reasoning that the court had never explicitly adopted the standard and that there was no textual basis for it in Texas Rule of Criminal Evidence 702.⁴⁵ The court further held that for expert testimony to assist the jury, as mandated by Rule 702, the testimony must be "sufficiently reliable and relevant to help the jury in reaching accurate results."⁴⁶ Applying this standard to the facts of the case at hand, the court determined that a number of factors supported the trial court's determination that the proffered expert testimony was reliable,⁴⁷ and concluded that the underlying principle and technique for the DNA testing was valid and properly applied.⁴⁸ Thus, Texas judges writing in *Kelly* and *E-Z Mart Stores* anticipated *Daubert* and initiated a more critical approach to expert opinion evidence in Texas practice even before the Supreme Court issued its landmark opinion.

42. *Id.*

43. *Id.* at 571.

44. *Kelly*, 824 S.W.2d at 574.

45. *Id.* at 572.

46. *Id.*

47. *See id.* at 573-74 (concluding that admission of evidence was reasonable after evaluating reliability factors). The *Kelly* factors for evaluating reliability are:

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

Id. at 573.

48. *Kelly*, 824 S.W.2d at 574.

IV. FULL IMPLEMENTATION OF THE TEXAS RULES:
DU PONT AND ITS AFTERMATH

A. *The Texas Supreme Court's Majority Opinion in Du Pont:
 Emphasis on Rules 702 and 403*

Encouraged by the holdings in *Kelly* and *Daubert*, and the concurring and dissenting opinions in *E-Z Mart Stores*, Texas litigants began demanding full implementation of the Texas Rules of Civil Evidence concerning expert testimony.⁴⁹ One such litigant, E.I. Du Pont De Nemours & Co., asked a trial court to conduct a full analysis under Rule 702 in *E.I. Du Pont De Nemours & Co. v. Robinson*,⁵⁰ an action brought against Du Pont by C.R. and Shirley Robinson.⁵¹ The Robinsons sought compensation for damage to their pecan orchard and alleged that the damage was caused by a contaminant in Benlate 50 DF, a fungicide manufactured by Du Pont and applied by the Robinsons to their pecan trees.⁵²

After deposing the Robinsons' sole expert on causation, Du Pont successfully moved, without challenging the expert's academic qualifications,⁵³ to exclude his testimony as unreliable.⁵⁴ At a bench trial, the Robinsons nevertheless sought to introduce the previously excluded testimony.⁵⁵ The trial court adhered to its ear-

49. See *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 907 S.W.2d 535, 550 (Tex. App.—Corpus Christi 1994, writ granted) (opinion on en banc reh'g Aug. 10, 1995) (noting litigant's numerous pretrial motions seeking to exclude expert's testimony); *Maritime Overseas Corp. v. Ellis*, 886 S.W.2d 780, 787 (Tex. App.—Houston [14th Dist.] 1994, writ requested) (rejecting as inconsistent with Texas law litigant's contention that expert testimony had to be reliable according to *Daubert* standard); see also *James v. Hudgins*, 876 S.W.2d 418, 420 (Tex. App.—El Paso 1994, writ denied) (discussing litigant's objection that opposing expert's testimony was "speculation"); cf. Cathleen C. Herasimchuk & John F. Sutton, Jr., *Opinions and Expert Testimony*, 30 HOUS. L. REV. 797, 842 (1993) (suggesting that *Kelly* decision could affect Texas Supreme Court's ruling on admissibility of scientific evidence under Rule 702).

50. 38 Tex. Sup. Ct. J. 852, 1995 WL 359024 (June 15, 1995).

51. See *Du Pont*, 38 Tex. Sup. Ct. J. at 854, 1995 WL 359024, at *2 (noting that Du Pont filed motion to exclude testimony of Robinsons' expert based on speculative and unreliable nature of testimony).

52. *Id.* at 853, 1995 WL 359024, at *1.

53. See *id.* at 854, 1995 WL 359024, at *3 (challenging expert's methodology as unscientific and alleging that his theories were not generally accepted by scientific community, but rather were based on his own subjective beliefs).

54. *Id.* at 854, 1995 WL 359024, at *2. The trial court concluded that the testimony was unreliable and would not help the jury understand the disputed facts and issues in the case. *Id.* at 854, 1995 WL 359024, at *3.

55. *Du Pont*, 38 Tex. Sup. Ct. J. at 854, 1995 WL 359024, at *3.

lier ruling and granted Du Pont a directed verdict⁵⁶ because the Robinsons were unable to offer any proof on their theories of liability and proximate causation.⁵⁷ The intermediate appellate court reversed, applying the customary analysis that once a proponent establishes a witness's qualifications, the trier of fact is responsible for determining the credibility of the witness and the weight to be given to the witness's testimony.⁵⁸

Du Pont appealed and, in a landmark decision, the Supreme Court of Texas reversed the court of appeals.⁵⁹ Writing for the five-to-four majority, Justice Gonzalez announced that Rule 702 of the Texas Rules of Civil Evidence requires expert testimony to be both relevant and reliable to be admissible.⁶⁰ The supreme court held that the proponent of expert testimony must establish its relevance and reliability by a preponderance of proof, in addition to establishing the expert's qualifications.⁶¹ Recognizing that experts can have an extremely prejudicial impact on juries because they are court-sanctioned authority figures,⁶² the court posited that trial judges have a "heightened responsibility" to ensure that expert testimony is accompanied by the "indicia of reliability so that its relative probity will outweigh its potential prejudicial impact, as required by Rule 403 of the Texas Rules of Civil Evidence."⁶³

56. *See id.* (granting motion after Robinsons offered bill of exceptions, which contained expert's testimony).

57. *See id.* at 853, 1995 WL 359024, at *1 (noting that excluded expert was Robinsons' sole expert on causation).

58. *See Robinson v. E.I. Du Pont De Nemours & Co.*, 888 S.W.2d 490, 492-93 (Tex. App.—Fort Worth 1994) (holding that trial court abused its discretion by excluding expert testimony because Du Pont objected to weight and credibility of witness, which is jury's domain, rather than to qualifications of witness), *rev'd* 38 Tex. Sup. Ct. J. 852, 1995 WL 359024 (June 15, 1995).

59. *Du Pont*, 38 Tex. Sup. Ct. J. at 852-53, 1995 WL 359024, at *1.

60. *Id.* at 852, 1995 WL 359024, at *1.

61. *Id.* at 858-59, 1995 WL 359024, at *8-9.

62. *See id.* at 855, 1995 WL 359024, at *4 (noting that expert's scientific testimony is accepted more readily by juries simply because of designation as expert).

63. *Du Pont*, 38 Tex. Sup. Ct. J. at 855, 1995 WL 359024, at *4. The usual indicia of reliability are not present in expert testimony, which need not reflect first-hand knowledge of the event in question and may be based on facts not in evidence. *See TEX. R. CIV. EVID.* 703 (allowing expert testimony based on inadmissible facts or data, so long as facts or data are of type relied on by other experts in given fields to form opinions and inferences); *see also Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S. Ct. 2786, 2796 (1993) (discussing Federal Rule of Evidence 703 and noting that experts have wide latitude to offer opinions, including opinions not based on observation or first-hand knowledge).

The *Du Pont* majority directed trial courts to discharge the responsibility of assuring the relevance, reliability, and relative probity of expert opinion admitted into evidence through gatekeeping determinations made pursuant to Rule 104 of the Texas Rules of Evidence when expert testimony is challenged.⁶⁴ The supreme court rejected the argument that granting a trial judge wide discretionary power to exclude such expert testimony violates the right to a jury trial by infringing on the jury's right "to assess the credibility of witnesses and the weight to be given their testimony."⁶⁵ The court wisely pointed out the difference between reliability and credibility, and warned of the perils of vetting experts based on qualifications alone:

An expert witness may be very believable, but his or her conclusions may be based on unreliable methodology. As *Du Pont* points out, a person with a degree should not be allowed to testify that the world is flat, that the moon is made of green cheese, or that the Earth is the center of the solar system.⁶⁶

64. See *Du Pont*, 38 Tex. Sup. Ct. J. at 858, 1995 WL 359024, at *8 (holding trial court responsible for preliminary determination of reliability of proffered testimony). The court relied on the reasoning in *Kelly* and *Daubert*. See *id.* (stating that reasoning in *Kelly* and *Daubert* was persuasive, and holding that trial courts should make preliminary determinations on admissibility of expert testimony). Rule 104 of the Texas Rules of Civil Evidence provides:

- (a) Questions of Admissibility Generally. Preliminary questions concerning the qualification of a person to be a witness, the existence of a privilege, or the admissibility of evidence shall be determined by the court, subject to the provisions of subdivision (b). In making its determination it is not bound by the rules of evidence except those with respect to privileges.
 - (b) Relevancy Conditioned on Fact. When the relevancy of evidence depends upon the fulfillment of a condition of fact, the court shall admit it upon, or subject to, the introduction of evidence sufficient to support a finding of the fulfillment of the condition.
 - (c) Hearing of the Jury. Hearings on preliminary matters shall be conducted out of the hearing of the jury when the interests of justice so require.
 - (d) Weight and Credibility. This rule does not limit the right of a party to introduce before the jury evidence relevant to weight or credibility.
- TEX. R. CIV. EVID. 104.

65. *Du Pont*, 38 Tex. Sup. Ct. J. at 859, 1995 WL 359024, at *10; see also TEX. CONST. art. V, § 10 (providing that civil litigants have right to trial by jury if jury is requested).

66. *Du Pont*, 38 Tex. Sup. Ct. J. at 860, 1995 WL 359024, at *10. The court also explained that the right to a jury trial extends only to "fundamental elements," and not to rote procedural issues. *Id.* at 859, 1995 WL 359024, at *10.

The court also listed nonexclusive reliability factors that Texas trial courts may consider in making threshold determinations of admissibility under Rule 702.⁶⁷ Suggested areas of consideration are:

- (1) [t]he extent to which the theory has been or can be tested;
- (2) the extent to which the technique relies upon the subjective interpretation of the expert;
- (3) whether the theory has been subjected to peer review and/or publication;
- (4) the technique's potential rate of error;
- (5) whether the underlying theory or technique has been generally accepted as valid by the relevant scientific community; and
- (6) the non-judicial uses which have been made of the theory or technique.⁶⁸

In applying the above principles, the court specifically challenged the technique underlying the opinion of the Robinsons' expert, who asserted that Du Pont had contaminated Benlate during the manufacturing process, probably with sulfonylurea, and that such contamination caused damage to the Robinsons' pecan trees.⁶⁹ The supreme court began by detailing the factors upon which the expert opinion was based. The court explained that the expert initially conducted a two-and-one-half-hour inspection of the Robinsons' pecan orchard at the request of the Robinsons' attorney.⁷⁰ This inspection included a close visual inspection of twenty-five percent of the trees, root inspections of "a few" trees, and a photographic recordation of trees that exemplified what the expert was "trying to show."⁷¹ However, this inspection did *not* include soil or tree tissue testing or an analysis of the remaining box of the Benlate used by the Robinsons.⁷² Next, the expert conducted a "comparative symptomology" analysis, in which abnormalities observed in the Robinsons' Texas pecan trees were compared with abnormalities observed in small plants grown in Florida that had been treated with Benlate.⁷³ The underlying

67. *Id.* at 858, 1995 WL 359024, at *8. The court emphasized that its suggested factors were not exclusive and that trial courts could consider other factors to aid in their determinations. *Id.* at 858, 1995 WL 359024, at *9.

68. *Id.* at 858, 1995 WL 359024, at *8-9.

69. *Id.* at 860, 1995 WL 359024, at *11.

70. *Du Pont*, 38 Tex. Sup. Ct. J. at 853, 1995 WL 359024, at *1.

71. *Id.*

72. *Id.*

73. *Id.* at 853, 1995 WL 359024, at *2.

study, however, had been conducted for litigation purposes and under Florida growing conditions.⁷⁴ The expert then tested ten boxes of Benlate, unrelated to the Benlate used by the Robinsons, for foreign substances.⁷⁵ These tests revealed the presence of five common foreign substances, but not the sulfonyleurea contaminants that the Robinsons claimed had damaged their trees.⁷⁶ Additionally, the expert reviewed various reports on plants treated with sulfonyleurea, including a report concerning the application of Benlate to cucumber plants.⁷⁷ Finally, the expert studied internal Du Pont documents concerning other claims of Benlate damage lodged against the company, and one prior recall of Benlate due to contamination from another herbicide.⁷⁸

This review of the expert's process led the court to conclude that the Robinsons' expert had no reliable basis for his opinion.⁷⁹ The court based this conclusion on four distinct observations. First, the court observed that the Robinsons' expert acknowledged during his deposition that the symptoms he noted could be due to a number of things, yet he failed to conduct tests to rule out alternative causes—a failure that “render[ed] his opinion little more than speculation” in the eyes of the court.⁸⁰ Second, the Robinsons' expert formed his conclusion without proof that the Robinsons' Benlate was contaminated with sulfonyleurea, without knowledge of the concentration of sulfonyleurea in the Robinsons' Benlate, and without knowledge of the concentration of Benlate necessary to damage pecan trees.⁸¹ Thus, the expert relied on the fact of damage for proof, in essence reasoning from the end result.⁸² Third,

74. *Du Pont*, 38 Tex. Sup. Ct. J. at 853, 1995 WL 359024, at *2. The Benlate used in the Florida study was unrelated to the Benlate used by the Robinsons. *Id.*

75. *Id.*

76. *Id.*

77. *Id.* at 854, 1995 WL 359024, at *2.

78. *Du Pont*, 38 Tex. Sup. Ct. J. at 854, 1995 WL 359024, at *2.

79. *See id.* at 860, 1995 WL 359024, at *11-12 (holding that trial court did not abuse its discretion in excluding testimony of Robinsons' expert because expert's opinion was not based on reliable foundation, and explaining four major factors that contributed to its holding).

80. *Id.* at 860, 1995 WL 359024, at *11.

81. *Id.*

82. *See Du Pont*, 38 Tex. Sup. Ct. J. at 860, 1995 WL 359024, at *11 (stating that, although scientists may initially form tentative hypotheses, Robinsons' expert nevertheless violated scientific principles by performing research solely aimed at locating support for conclusions he had already reached). The supreme court relied on two federal cases in its

the Robinsons' expert conducted his research and formed his opinions solely for the purpose of litigation.⁸³ Although this fact alone did not automatically render his opinion unreliable, it certainly increased the likelihood of bias.⁸⁴ Finally, the Robinsons' expert offered no proof, other than his "self-serving statements," that comparative symptomology was an accepted methodology in the relevant scientific community or that comparative symptomology had been subjected, as a method of study, to peer review.⁸⁵

Justice Cornyn, joined by Justices Hightower, Gammage, and Spector, delivered a lengthy dissenting opinion in *Du Pont*.⁸⁶ Like the majority, the dissent emphasized that a proffered expert witness must be qualified and must provide testimony that would assist the trier of fact.⁸⁷ Justice Cornyn also agreed that relevant, admissible expert testimony is subject to exclusion under Rule 403 if its probative value is outweighed by unfair prejudice, confusion, a tendency to mislead, needless delay, or cumulation.⁸⁸ The *Du Pont* dissent, however, parted company with the majority regarding the responsibility of trial courts to analyze the reliability of challenged expert testimony under Rule 702.⁸⁹ The dissent criticized the majority for requiring trial courts to invade the jury's province by judging expert witnesses' credibility and weighing their testimony.⁹⁰

In contrast to the *Du Pont* majority, which relied on Rule 702, the dissent urged full implementation of Rule 703 of the Texas

discussion of the Robinsons' expert's methodology. *See id.* (discussing *Sorensen v. Shaklee Corp.*, 31 F.3d 638, 649 (8th Cir. 1994), which criticized experts for "reason[ing] from an end result in order to hypothesize what needed to be known but what was not," and *Clair v. Burlington N. R.R.*, 29 F.3d 499, 502-03 (9th Cir. 1994), which noted that experts arrived at conclusion before conducting research).

83. *Id.* at 860, 1995 WL 359024, at *11.

84. *Id.*

85. *Id.* at 861, 1995 WL 359024, at *12. The court also emphasized that a rate-of-error analysis must be applied to the techniques or methodology used, not to the result. *Id.* Moreover, the fact that other organizations were studying Benlate's effect on plant life was insufficient to show general acceptance of the expert's theory or technique. *Id.*

86. *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *12 (Cornyn, J., dissenting).

87. *Id.* at 862, 1995 WL 359024, at *13.

88. *Id.* at 862 n.2, 1995 WL 359024, at *13 n.2.

89. *See id.* at 861, 1995 WL 359024, at *12 (criticizing majority's reliability standard as unworkable, cursory adoption of *Daubert's* vague dicta, which forces judges into roles as amateur scientists).

90. *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *13.

Rules of Evidence.⁹¹ The dissent asserted that Rule 703 envisions three separate sources of facts or data that may support an expert's testimony.⁹² As listed, those sources are (1) first-hand knowledge, (2) hypothetical questions based on admitted evidence, and (3) inadmissible data of a type that experts in the field reasonably rely upon to form opinions or inferences.⁹³

Relying on the language in Rule 703, the dissent argued that expert opinions must be based on data or facts of a type reasonably relied upon by experts' peers *only* when the underlying data or facts are inadmissible.⁹⁴ When an expert opinion is based on facts and data admitted into evidence, the dissent asserted that "sufficient guarantees of trustworthiness are ordinarily present" to justify admission of the opinion.⁹⁵ In that event, the dissent urged that the jury, not the court, must evaluate the weight of the admitted evidence and the credibility of the expert's conclusions based on the admitted evidence.⁹⁶ Apparently, the dissent assumed that an expert's unreasonable reliance on admitted facts and data that are not accepted by the expert's peers, or use of an unreliable methodology applied to admitted facts and data, can be successfully exposed in vigorous cross-examination.⁹⁷

If challenged expert testimony is based on facts or data not admitted into evidence, the *Du Pont* dissent would accept that testimony based on what the majority referred to as the expert's "self-

91. *See id.* at 862-63, 1995 WL 359024, at *14 (contending that Rule 702 imposes only general requirements on expert opinions, while Rule 703 imposes more substantial requirements by addressing bases of expert opinions).

92. *See id.* at 863, 1995 WL 359024, at *14 (extracting three component sources of data based on dissection of Rule 703 language).

93. *Id.*

94. *Du Pont*, 38 Tex. Sup. Ct. J. at 864, 1995 WL 359024, at *15.

95. *Id.* Justice Cornyn argued that because the Robinsons' expert based his opinions on facts or data already in evidence, such as the condition of the pecan trees and the type of soil, the court should have admitted the expert's testimony. *Id.* at 864-65, 1995 WL 359024, at *14-15.

96. *Id.* at 866, 1995 WL 359024, at *18.

97. *See id.* at 864, 1995 WL 359024, at *15 (advising that weight to be given to expert testimony is sole province of jury). As the majority noted, the jury is well-suited to gauge credibility, but a very credible witness may be applying a technically and scientifically unreliable analytical method. *Id.* at 860, 1995 WL 359024, at *10. A jury's collective common sense will not equip them to ferret out the unreliable analysis based on fairly reliable and admitted facts, as would be required under the approach suggested by the dissent. Stated differently, a qualified astronomer should not be allowed to testify that the moon is made of green cheese based on photographs in evidence that make the moon look like cheese.

serving statements” regarding the reasonableness of his reliance, unless those statements are successfully controverted.⁹⁸ Thus, the dissent would reverse the burden of proof that the majority placed on the party proffering the testimony.⁹⁹ The dissent would require the objecting party to prove through independent evidence that the data or facts which form the basis for the challenged testimony are not reasonably relied upon by experts in the field, thereby rendering the opinion inadmissible under Rule 703.¹⁰⁰

B. *The Crye Concurrence*

On the same day that *Du Pont* was handed down, Justice Gonzalez, joined by Justices Hecht and Owen, filed a concurring opinion in *Burroughs Wellcome Co. v. Crye*.¹⁰¹ This concurrence further demonstrates the operation of the principles espoused by the *Du Pont* majority.¹⁰² The judgment under review in *Crye* awarded damages to the estate of a woman who allegedly suffered frostbite after she treated diabetic ulcers on her feet with an antifungal spray manufactured by the defendant, Burroughs.¹⁰³ The majority reversed the judgment on the ground that the physician’s opinion attributing Crye’s injuries to frostbite was legally insufficient to support a jury finding on causation because the facts that the physician assumed varied materially from the actual, undisputed facts reflected in the record.¹⁰⁴ Because the judgment was reversed based on the insufficiency of the physician’s testimony in establish-

98. See *Du Pont*, 38 Tex. Sup. Ct. J. at 864, 1995 WL 359024, at *15 (urging courts to generally admit expert testimony based on inadmissible evidence so long as inadmissible evidence is of type relied upon by expert’s peers in forming their opinions); *id.* at 867 n.11, 1995 WL 359024, at *19 n.11 (contending that Texas law permits experts to establish validity of their opinions with their own testimony).

99. See *id.* at 867 n.11, 1995 WL 359024, at *19 n.11 (criticizing majority for placing burden of proof of admissibility on proponent of expert testimony after objection by opponent).

100. See *id.* at 867, 1995 WL 359024, at *19 (stating that “[b]ecause judges must logically rely on the information available from experts in the particular field to evaluate the admissibility of expert testimony, the party opposing a given expert witness’s testimony must controvert the expert’s claim of reasonable reliance”).

101. 907 S.W.2d 497 (Tex. 1995).

102. See *Crye*, 907 S.W.2d at 501 (Gonzalez, J., concurring) (applying *Du Pont* standard in determining admissibility of expert testimony).

103. *Id.* at 498–99.

104. See *id.* at 500 (reversing court of appeals’ judgment for Crye estate after finding no evidence to establish that Crye suffered frostbite injury).

ing causation, the majority did not evaluate the testimony of Crye's liability expert.¹⁰⁵

At trial, Crye had offered a report and related testimony on the so-called "pig's foot" study conducted by Crye's liability expert, a civil engineering professor.¹⁰⁶ Burroughs objected to the admission of the report and related testimony, claiming that the report and testimony were not relevant or helpful to the trier of fact, members of the medical field did not recognize the methodology for the pig's foot study, and the prejudicial effects of the report outweighed its probative value.¹⁰⁷ The trial court overruled the objections,¹⁰⁸ and the court of appeals affirmed because it concluded that the objections went to the credibility and weight of the evidence, not to its admissibility.¹⁰⁹

The concurring justices in *Crye* agreed with the majority that the judgment should be reversed for lack of causation evidence, but added that admission of the pig's foot study and related testimony violated the standards enunciated in *Du Pont* and possibly contributed to improper findings of causation.¹¹⁰ The concurrence noted the admissions of Crye's liability expert that the results underlying the expert's testimony were poorly recorded, the raw data were not well recorded, and the recorded "skin" temperatures were actually the temperatures of the metal thermocouples *on* the skin.¹¹¹ The concurrence found that these admissions destroyed the reliability of the pig's foot study and the expert's testimony, as did the study's

105. *Id.*

106. *See Crye*, 907 S.W.2d at 501 (Gonzalez, J., concurring) (addressing admissibility of expert testimony under newly released *Du Pont* standard and finding that trial court abused its discretion in admitting pig's foot study and corresponding testimony). The professor had engaged a graduate student to perform a study on the pigs' feet. *Id.* The student placed metal thermocouples for measuring the temperature on the pigs' skin and at two depths below the skin of the dead pigs' feet, and then sprayed the feet with five antibiotic sprays, including the spray manufactured by Burroughs. *Id.* Although the study indicated that Burroughs' spray caused a greater temperature reduction than the other sprays, the report on the studies also explicitly stated that its results could not be extrapolated to live human skin. *Id.*

107. *Id.*

108. *Id.*

109. *Id.*

110. *See Crye*, 907 S.W.2d at 501-02 (evaluating pig's foot study under Rule 403 and, as instructed by *Du Pont*, under Rule 702).

111. *Id.*

litigation purpose and lack of peer review.¹¹² The concurrence also determined, according to Rule 403 balancing, that the probative value of the evidence was substantially outweighed by the possibility of prejudice.¹¹³ Because some of the temperatures measured on the thermocouples placed on the skin of the pigs' feet were below freezing, the concurrence felt that the jury might easily interpret the test as evidence of causation of frostbite.¹¹⁴ The emphasis that the *Crye* concurrence placed on the reliability of the expert's methodology and its relative probity suggests the proper use of the *Du Pont* holding to challenge expert testimony.¹¹⁵

C. North Dallas Diagnostic Center v. Dewberry

While *Du Pont* and *Crye* were under consideration by the Texas Supreme Court, the Dallas Court of Appeals in *North Dallas Diagnostic Center v. Dewberry*¹¹⁶ also had occasion to consider the operation of Rule 702.¹¹⁷ In *North Dallas Diagnostic Center*, the court held that "the test for admission of an expert's opinion is whether the underlying technical or scientific principle used by the expert is sufficiently reliable for the expert's testimony to assist the jury."¹¹⁸ The court, relying on federal precedent, endorsed judicial gatekeeping¹¹⁹ and adopted the *Daubert* factors as nonexclusive factors for courts to consider in determining reliability.¹²⁰

The judgment under review in *North Dallas Diagnostic Center* was premised on expert testimony which concluded that the plaintiff's significant health problems were caused by an injection of iodinated radio contrast dye prior to a computed tomography

112. *Id.* at 502.

113. *Id.*

114. *Crye*, 907 S.W.2d at 502.

115. *See id.* at 501 (concluding that, under *Du Pont*, testimony based on pig's foot study was inadmissible because it was based on unreliable scientific technique and methodology).

116. 900 S.W.2d 90 (Tex. App.—Dallas 1995, writ denied).

117. *North Dallas Diagnostic Ctr.*, 900 S.W.2d at 94. The *North Dallas Diagnostic Center* opinion was noted in *Du Pont*. *See E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 857, 1995 WL 359024, at *7 (June 15, 1995) (noting that Dallas court adopted standard similar to that announced in *Daubert* for determining admissibility of expert testimony under Rule 702).

118. *North Dallas Diagnostic Ctr.*, 900 S.W.2d at 94.

119. *Id.* at 96.

120. *Id.* at 95. The court also reiterated that even reliable and relevant testimony is still subject to Rule 403 balancing. *Id.*

scan.¹²¹ This testimony was based on skin sensitivity tests that the expert performed on the plaintiff.¹²² During voir dire, the expert could not specify the conditions under which the skin sensitivity tests were performed, the existence of standards for the skin testing technique, the identity of the person who performed the technique, the relationship between the technique and the contrast dye, or whether the technique had been similarly used in the past.¹²³ Because the voir dire examination did not establish a threshold predicate of reliability and relevance for the expert's causation testimony, the court of appeals determined that its admission was harmful error¹²⁴ and, accordingly, reversed the judgment.¹²⁵ The supreme court subsequently denied an application for writ of error in *North Dallas Diagnostic Center*.¹²⁶

D. Merrell Dow Pharmaceuticals, Inc. v. Havner

The first Texas intermediate appellate decision to actually apply the standards set forth in *Du Pont* came from the Corpus Christi Court of Appeals in *Merrell Dow Pharmaceuticals, Inc. v. Havner*.¹²⁷ At trial, the Havners claimed that Mrs. Havner's ingestion of the antinausea drug Bendectin during pregnancy caused their child's birth defect.¹²⁸ Merrell Dow, like the defendant in *Du Pont*, filed pretrial motions seeking both summary judgment and exclusion of the plaintiffs' experts.¹²⁹ In moving for summary judgment, Merrell Dow assumed a burden of establishing that there was no genuine issue of fact by negating the essential causation component of the Havners' claim.¹³⁰ The trial court denied summary judgment.

121. *Id.* at 92.

122. *North Dallas Diagnostic Ctr.*, 900 S.W.2d at 96.

123. *Id.*

124. *Id.*

125. *Id.* at 97.

126. *North Dallas Diagnostic Ctr. v. Dewberry*, 39 Tex. S. Ct. J. 2 (Oct. 5, 1995).

127. 907 S.W.2d 535 (Tex. App.—Corpus Christi 1995, writ granted) (opinion on en banc reh'g Aug. 10, 1995).

128. *Havner*, 907 S.W.2d at 549.

129. *Id.* at 550-51.

130. *See id.* (noting that Merrell Dow had burden of proof in moving for summary judgment); *see also* *Rodriguez v. Naylor Indus., Inc.*, 763 S.W.2d 411, 412 (Tex. 1989) (reiterating that "[s]ummary judgment is proper only if the movant establishes that there [are] no genuine issues of material fact, and that he is entitled to judgment as a matter of law"); *Gibbs v. General Motors Corp.*, 450 S.W.2d 827, 828 (Tex. 1970) (stating that movant must not merely raise fact issue, but must establish "as matter of law that there is no genuine

ment,¹³¹ and Merrell Dow subsequently sought to exclude the Havners' experts by filing motions in limine and making trial objections.¹³² Applying the typical pre-*Du Pont* analysis, the *Havner* trial judge determined that the experts were qualified based on their education and experience, and concluded that their testimony would be helpful to the jury.¹³³

Merrell Dow appealed the subsequent judgment for the Havners,¹³⁴ challenging the admission of the expert testimony and the factual and legal sufficiency of that testimony to establish causation.¹³⁵ Initially, Merrell Dow obtained a reversal on the grounds that no evidence supported the jury verdict.¹³⁶ After the supreme court decided *Du Pont*, a superseding *Havner* opinion was issued following a rehearing en banc.¹³⁷ Even applying the supreme court's *Du Pont* analysis,¹³⁸ however, the court of appeals deter-

issue of fact" by producing evidence negating essential element of plaintiff's claim). See generally TEX. R. CIV. P. 166a (providing summary judgment guidelines). Merrell Dow's motion for summary judgment rested on the assertion that the expert's reanalysis of existing epidemiological studies and certain other expert opinions on which the *Havner* plaintiffs planned to rely was inadequate to prove a causal connection between a mother's ingestion of Bendectin during pregnancy and her child's birth defect. *Havner*, 907 S.W.2d at 550-51.

131. *Havner*, 907 S.W.2d at 551.

132. *Id.* The trial court held mini-hearings concerning witness qualifications and the basis for witness opinions. *Id.*

133. *Id.*

134. See *id.* at 549 (noting that jury found that Merrell Dow negligently caused child's birth defects and awarded \$3.75 million in actual damages and \$30 million in punitive damages). Merrell Dow unsuccessfully sought a judgment notwithstanding the verdict after the jury's verdict was returned. *Id.* at 550.

135. See *Havner*, 907 S.W.2d at 549-50 (noting that Merrell Dow was appealing legal and factual sufficiency of causation evidence, including its admissibility).

136. *Id.* at 547 (noting that court originally found no evidence to support judgment for Havners and, thus, reversed). The unpublished panel decision reversing the trial court was briefly referred to in *Du Pont* as an example of an appellate analysis of sufficiency issues raised by expert testimony. See *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 857, 1995 WL 359024, at *7 (June 15, 1995) (noting split in Texas appellate courts as to adoption of *Daubert*-type standard, and mentioning *Havner* court as appellate court viewing *Daubert* favorably).

137. See *Havner*, 907 S.W.2d at 547 (affirming trial court decision, except for award of punitive damages, after en banc hearing and oral arguments before court with substantially changed membership).

138. See *id.* at 550 (discussing *Du Pont*'s gatekeeping requirements for trial courts before applying *Du Pont*'s analysis to facts in case).

mined that the trial judge had not abused his discretion by admitting the expert testimony in question.¹³⁹

The *Havner* decision may have been skewed by the fact that the expert opinion issue was first raised in a summary judgment context.¹⁴⁰ The en banc court specifically noted that Merrell Dow had the burden of proof on its motion for summary judgment, in contrast to the burden *Du Pont* places on the proponent of expert testimony.¹⁴¹ Nonetheless, Merrell Dow specifically and correctly challenged the admissibility of proffered expert evidence according to Rule 104,¹⁴² which, under *Du Pont*, should have placed the burden of demonstrating its admissibility on the Havners as proponents.¹⁴³ Unfortunately, the Corpus Christi court affirmed the trial judge's ruling without even discussing whether the Havners met their burden.¹⁴⁴

In addition to its failure to reflect a proper placement of the burden of proof on admissibility issues, the *Havner* court's application of *Du Pont* has a number of other weaknesses. First, the court

139. *Id.* at 554. The court briefly explained that the Havners' experts testified on limb development during the gestation period and as to why they thought the limb defects of the Havners' child were caused by Bendectin, thereby making the experts' testimony relevant. *Id.* at 552. In finding the experts' testimony reliable, the court pointed out that: (1) the experts' opinions were not based on subjective interpretation; (2) although the Havners' experts were not well-published, neither were Merrell Dow's experts; (3) the underlying epidemiological data used in the reanalysis was the same data that all scientists use; (4) while both parties' epidemiological analysis was prepared for litigation, the data underlying the conflicting analyses was not; and (5) the data and methodology used by experts on both sides was used by similar experts. *Id.* at 552-53. The court concluded by asserting that, although science searches for "universal truths," the justice system only seeks to resolve disputes. *Id.* at 553-54. Therefore, the standard for expert testimony need not rise to the level of absolute scientific certainty. *See id.* (noting that ideas considered scientifically correct change constantly and that "[t]he purpose of the trial is to resolve the dispute, not to find universal truths").

140. *See id.* at 551 (stating that first pretrial hearing regarding Merrell Dow's attempt to exclude expert testimony pertained to motion for summary judgment).

141. *Havner*, 907 S.W.2d at 551.

142. *See id.* (stating that Merrell Dow filed motions in limine challenging admissibility of experts' testimony).

143. *See Du Pont*, 38 Tex. Sup. Ct. J. at 859, 1995 WL 359024, at *9 (stating that proponent of expert testimony bears burden of demonstrating its admissibility after opponent objects to its admission).

144. Although the court found that the experts met the admissibility requirements under *Du Pont*, the court did not mention the Havners' burden of proof. *See Havner*, 907 S.W.2d at 552-53 (determining only admissibility of experts' testimony); *see also id.* at 564 (Seerden, C.J., dissenting) (noting that "Havners failed to meet their burden of proof").

failed to consider the relevancy of the proposed expert testimony because it inadequately analyzed the fit between the specific qualifications of the Havners' experts and their ability, based on their qualifications, to give testimony on the disputed issues.¹⁴⁵ Rather than inquiring into whether the experts' specific education and experience enabled them to assist the jury with the disputed issues, the court reverted to prior Texas practice by accepting general scientific training and experience as sufficient qualification for expert testimony.¹⁴⁶

Second, the *Havner* court insisted that the expert testimony would help the jury because "a jury cannot determine scientific or medical causation in this type of case without the assistance of experts."¹⁴⁷ This analysis begs the question. Texas case law clearly requires that plaintiffs present expert testimony on causation to meet their burden of proof.¹⁴⁸ Under *Du Pont*, however, the question of whether such testimony assists the jury, as opposed to the plaintiff, requires an analysis of the precise fit of the expert's qualifications, the relevance of the expert's conclusions, and the reliability of the method reflected in those conclusions.¹⁴⁹

Finally, the court failed to clearly indicate whether the Havners presented any proof, other than the self-serving testimony of their experts, that would tend to validate the reliability of the experts' specific methodology.¹⁵⁰ The *Havner* opinion merely noted that both parties' experts relied on animal studies, in vitro studies, and

145. *See id.* at 552 (finding experts' testimony relevant based on content of testimony, without mentioning how experts' qualifications tied in with their ability to give testimony); *see also* Longoria v. United Blood Servs., 907 S.W.2d 605, 612-13 (Tex. App.—Corpus Christi 1995, n.w.h.) (concluding that expert's testimony regarding blood screening was adequate to withstand summary judgment even though expert was not medical doctor).

146. *See Havner*, 907 S.W.2d at 551 (finding that experts were qualified to testify under Rule 702 even though they were not primary researchers in field of Bendectin analysis).

147. *Id.* This same argument was made by the *Du Pont* dissent. *See Du Pont*, 38 Tex. Sup. Ct. J. at 866, 1995 WL 359024, at *18 (Cornyn, J., dissenting) (contending that Texas Rules of Civil Evidence "assume that scientific evidence in the form of opinions is helpful to the jury in resolving fact questions that require learning or reasoning that is beyond the competency of a lay jury").

148. *See Lenger v. Physician's Gen. Hosp., Inc.*, 455 S.W.2d 703, 708 (Tex. 1970) (requiring expert testimony to establish causation when jurors cannot ascertain causation from general experience and common sense).

149. *See supra* notes 60-61 and accompanying text.

150. *See Havner*, 907 S.W.2d at 553 (concluding that methodology of Havners' experts was reliable because data used by experts was developed by other scientists and reanalysis

reanalyses of epidemiological data, all types of inquiry often used in scientific investigation.¹⁵¹ The court did not examine the methodologies that the Havners' experts applied to the underlying data.¹⁵²

The issue that was probably most influential with the court in *Havner* was discussed only in connection with the court's legal sufficiency review of the evidence on causation. In evaluating Merrell Dow's arguments on sufficiency, the *Havner* court distinguished *Schaefer v. Texas Employers Insurance Ass'n*,¹⁵³ a case on which Merrell Dow predicated its attack on the experts' allegedly unwarranted use of the magic words "reasonable medical probability" to create evidence of causation.¹⁵⁴ The Texas Supreme Court held in *Schaefer* that even a qualified expert does not create "some evidence" of causation merely by testifying in terms of reasonable medical probability if the expert's testimony has no adequate basis.¹⁵⁵ In *Schaefer*, a specific laboratory test was available to conclusively detect the presence of a particular form of tuberculosis, but the plaintiff's expert did not utilize the test.¹⁵⁶ Accordingly, the *Schaefer* court held that the expert's opinion that the plaintiff was infected with that particular form of tuberculosis was legally insufficient, even though the opinion was couched in terms of reasonable medical probability.¹⁵⁷

The *Havner* court pointed out that the expert opinion proffered by the Havners differed from the opinion proffered in *Schaefer* because no conclusive test was available to demonstrate causation of birth defects by Bendectin.¹⁵⁸ Therefore, the court determined that the testimony of the Havners' experts, couched in terms of reason-

of data is used by several federal agencies to verify reports received from regulated community).

151. *Id.* at 552-53.

152. *See id.* at 553 (noting that both parties' experts relied on "same universe of material, although their interpretations of the meaning of the data differ[ed]").

153. 612 S.W.2d 199 (Tex. 1980).

154. *See Havner*, 907 S.W.2d at 557 (agreeing with Merrell Dow's contention that expert cannot create evidence by semantics); *see also Schaefer*, 612 S.W.2d at 204-05 (commenting that expert's use of words "reasonable medical probability" does not establish causation, especially when expert's opinion is speculative).

155. *Schaefer*, 612 S.W.2d at 205.

156. *See id.* at 203-04 (providing excerpts of expert's testimony in which he admitted that plaintiff was not specifically tested for rare tuberculosis bacteria).

157. *Id.* at 205.

158. *Havner*, 907 S.W.2d at 557.

able medical probability, constituted some evidence of causation.¹⁵⁹ The unarticulated policy argument underlying *Havner* appears to be that a plaintiff should not be denied the ability to establish causation if no conclusive test is available. It should be noted, however, that the *Du Pont* approach does *not* require the availability of a conclusive test validating an expert's conclusions to render those conclusions admissible. Instead, *Du Pont* requires a demonstration of the reliability and relevancy of the expert's entire methodology in reaching her conclusions.¹⁶⁰

The holding in *Havner* is surprising because the experts at issue were the same experts whose affidavits the Ninth Circuit rejected in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,¹⁶¹ following remand from the United States Supreme Court.¹⁶² Because the Texas Supreme Court's analysis in *Du Pont* was strongly influenced by the *Daubert* factors applied by the Ninth Circuit, it would appear that the *Havner* holding should have mirrored the Ninth Circuit's holding.¹⁶³ Given the difference in result, however, *Havner* suggests that the *Du Pont* holding, unless elaborated upon in future Texas Supreme Court opinions, may only have created a list of factors to be discussed, rather than a complete implementation of the Texas Rules of Civil Evidence.

E. *The Motion for Rehearing in Du Pont and the Writ of Error in Havner*

The Texas Supreme Court may have an opportunity relatively soon to elaborate on the holding in *Du Pont*. As this Article goes to press, a motion for rehearing in *Du Pont* is before the supreme

159. *See id.* (overruling challenge of legal sufficiency upon finding that Havners produced evidence that Bendectin caused child's birth defects).

160. *See Du Pont*, 38 Tex. Sup. Ct. J. at 858, 1995 WL 359024, at *8 (requiring that scientific techniques or principles be reliable and grounded in methods and procedures of science, rather than based on pure speculation). The supreme court did not mention any requirement of scientific absoluteness.

161. 43 F.3d 1311 (9th Cir.), *cert. denied*, 116 S. Ct. 189 (1995).

162. *Havner*, 907 S.W.2d at 564-65 (Seerden, C.J., dissenting); *see Daubert*, 43 F.3d at 1319 (rejecting experts' testimony because methodology of experts was supported only by their own trial and deposition testimony from other cases, and because experts could not explain or validate their methodology).

163. *See Havner*, 907 S.W.2d at 565 (Seerden, C.J., dissenting) (noting similarities between evidence presented in *Daubert* and evidence presented in *Havner*, and concluding that *Du Pont* decision dictates that majority should have interpreted Rule 702 in line with federal court's interpretation in *Daubert*).

court,¹⁶⁴ and an application for writ of error has been granted in *Havner*.¹⁶⁵ There is no reason for the supreme court to retreat from its original opinion in *Du Pont*, which adopted an objective and practicable solution to the problems presented by expert testimony, but both the pending motion and review of *Havner* offer an opportunity for the supreme court to further explain the gatekeeping process approved in *Du Pont*.¹⁶⁶

The Robinsons have argued in their motion for rehearing that the primary motivation for the exclusion of their expert was the trial court's belief, allegedly fostered by *Du Pont*, that not even state-of-the-art technology could detect the low levels of sulfonyleurea that might have been present in their Benlate.¹⁶⁷ The Robinsons seek rehearing in part because Benlate litigation in other states has suggested that *Du Pont* had access to a very sensitive test for detecting the presence of sulfonyleurea contamination in Benlate.¹⁶⁸ The Robinsons have suggested in their motion that

164. Respondents' Motion for Rehearing, *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852 (June 15, 1995) (No. 94-0843).

165. *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 907 S.W.2d 535 (Tex. App.—Corpus Christi 1994, writ granted).

166. The Robinsons' motion for rehearing raises issues concerning alleged misconduct of *Du Pont* in the Benlate litigation in an attempt to convince the Texas Supreme Court to reverse the outcome of the still-not-released *Du Pont* decision. See *infra* notes 167–69 and accompanying text. *Havner*, on the other hand, obviously presents a less controversial vehicle for elucidation of *Daubert*-type standards for the admissibility of expert testimony in Texas.

167. See Respondents' Motion for Rehearing at 13-14, *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852 (June 15, 1995) (No. 94-0843) (restating *Du Pont* court's concerns about excluded expert's failure to test Robinsons' leftover Benlate, and asserting that *Du Pont* wrongly allowed court and plaintiffs to operate under assumption that no determinative method was available to test for sulfonyleurea).

168. See *id.* at 8-11 (alleging that *Du Pont*, in another case involving Benlate, failed to reveal to Georgia federal district court that independent laboratory, allegedly with *Du Pont*'s financial backing, had developed sensitive test that could detect sulfonyleurea at very low levels). According to the Robinsons' motion, *Du Pont*, after learning of the positive detection of sulfonyleurea in the soil and water supplies of the plaintiffs criticizing Benlate in the Georgia case, increased the positive detection standard from 25 to 50 parts per trillion. *Id.* at 10. *Du Pont* then allegedly furnished its experts with copies of laboratory reports that showed no detection of sulfonyleurea at 50 parts per trillion, thereby enabling the expert to testify at deposition that there was no evidence of sulfonyleurea contamination. *Id.* at 10-11; see also Opinion and Order at 71-79, *E.I. Du Pont De Nemours & Co. v. Bush Ranch, Inc.*, No. 4:95-CV-36 (M.D. Ga. Aug. 21, 1995) (on file with the *St. Mary's Law Journal*) (imposing monetary sanctions after concluding that *Du Pont* "cheated" by withholding positive results of sulfonyleurea contamination from court and plaintiffs); Milo Geyelin, *Du Pont Faces U.S. Probe of Benlate DF*, WALL ST. J., Oct. 18, 1995, at B5 (re-

the trial court might not have excluded their expert if it had known that Du Pont could probably prove or disprove the presence of sulfonyleurea in the Benlate applied to their orchard.¹⁶⁹

The Robinsons' position is similar to the position adopted by the court of appeals in *Havner*. The Havners' experts' testimony, couched in terms of reasonable medical probability, was held to constitute some evidence of causation because no conclusive test or study was available to disprove the Havners' experts' theory that Bendectin causes birth defects.¹⁷⁰ Similarly, the Robinsons suggest that Du Pont should be required to conclusively prove or disprove the alleged Benlate contamination.¹⁷¹

The Robinsons' motion for rehearing in *Du Pont* and the current *Havner* opinion focus on the existence or nonexistence of tests or studies that prove or disprove the challenged expert's conclusions. These factors are immaterial unless the supreme court lifts the burden that *Du Pont* currently imposes on the proponents of expert testimony to prove the reliability of their expert's methodology, and imposes in its stead a burden on challengers to disprove the proffered expert's conclusions. Shifting the burden of proof from the proponent to the challenger, and changing the focus of the inquiry from methodology to conclusions, would require the trial courts to act as the triers of the falsity of expert conclusions in every case in which a proposed expert is challenged. Requiring a

porting that Du Pont was under criminal investigation by United States government for allegedly withholding and misrepresenting test results).

169. See Respondents' Motion for Rehearing at 13-14, E.I. Du Pont De Nemours & Co. v. Robinson, 38 Tex. Sup. Ct. J. 852 (June 15, 1995) (No. 94-0843) (suggesting that trial court and supreme court operated under incorrect assumptions when making decisions, and asserting that these assumptions were perpetuated by Du Pont to gain tactical advantage).

170. See *Havner*, 907 S.W.2d at 557 (finding expert testimony legally sufficient to establish causation because no tests were available to conclusively contradict experts' claims that Bendectin caused birth defects).

171. See Respondents' Motion for Rehearing at 13-14, E.I. Du Pont De Nemours & Co. v. Robinson, 38 Tex. Sup. Ct. J. 852 (June 15, 1995) (No. 94-0843) (suggesting that supreme court should grant rehearing because Du Pont allegedly withheld information on test that could conclusively detect low levels of sulfonyleurea). Of course, a distinction can be made between the two cases based on the way in which the courts viewed the absence of a conclusive test. Compare *id.* (arguing that trial court and supreme court excluded expert testimony in part because of absence of test to conclusively prove sulfonyleurea contamination in Robinsons' Benlate) with *Havner*, 907 S.W.2d at 557 (admitting expert testimony despite legal sufficiency challenge because no conclusive test was available to prove or disprove experts' testimony).

challenger to demonstrate the falsity of an expert's conclusions in order to exclude that expert would be contrary to the modern approach to the admissibility of expert testimony, as exemplified in *Daubert* and *Du Pont*, which focuses on the reliability of an expert's methodology, not the truth or falsity of the expert's conclusions.¹⁷² Under the current *Du Pont* majority opinion, if the proponent of expert testimony can convince the trial judge that a proffered expert's conclusions are based on a reasoned inquiry, the expert should be allowed to testify, provided her testimony is relevant and relatively more probative than prejudicial. The jury, not the court, should then weigh the evidence and resolve the factual disputes concerning the truth or falsity of the expert's conclusions.

The Robinsons wholly failed to demonstrate reliability at the trial court's gatekeeping hearing in *Du Pont*. The Robinsons' expert did not even attempt to test the leftover Benlate for sulfonyleurea or other contaminants.¹⁷³ Further, the Robinsons' failure to prove that their expert's methodology included sulfonyleurea testing was but one factor motivating the court to affirm the exclusion of the expert's testimony.¹⁷⁴ Other factors, as previously discussed, were equally influential.¹⁷⁵ The fact that *Du Pont* allegedly had the capacity to test for the presence of sulfonyleurea in Benlate, and thus prove or disprove the unsupported conclusion of the Robinsons' expert, should not excuse the Robinsons' utter failure to demonstrate the reliability of their expert's methodology at the gatekeeping hearing. Had the Robinsons been able to demonstrate that a careful inquiry supported their expert's conclusions, the expert would have been permitted to testify. *Du Pont* would have then been required to refute the expert's conclusions in any manner available to it and its experts, and the trier of fact would have made the final factual determination as to the truth or falsity of the Robinsons' expert's conclusions. The

172. See *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 859, 1995 WL 359024, at *9 (June 15, 1995) (stating that "Rule 702 envisions a flexible inquiry focusing solely on the underlying principles and methodology, not on the conclusions they generate") (citing *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S. Ct. 2786, 2797 (1993)).

173. See *id.* at 860-61, 1995 WL 359024, at *11-12 (explaining factors favoring exclusion, including expert's failure to test Robinsons' leftover Benlate).

174. See *id.* at 860, 1995 WL 359024, at *11 (listing failure to test for sulfonyleurea as one of several factors favoring exclusion of expert's testimony).

175. See *supra* notes 69-85 and accompanying text.

result in *Du Pont* cannot change without a substantial retreat from the wise approach currently espoused by the majority.

Similarly, perhaps due to confusion created by the disparate burdens of proof that summary judgment and gatekeeping imposed on Merrell Dow and the Havners, respectively, the current *Havner* opinion does not determine whether the Havners demonstrated the reliability of their experts' methodologies by a preponderance of proof. Rather, *Havner* focuses on Merrell Dow's failure to disprove the conclusion of the Havners' experts. Thus, the *Havner* opinion cannot be approved without a retreat from the current *Du Pont* majority opinion.

By evenly distributing the burdens and duties of the parties and the jury, *Du Pont* adopts a balanced approach for determining the admissibility of expert testimony. The *Du Pont* approach focuses on the reliability of the methods by which an expert reached specific conclusions, rather than on the truth or falsity of those conclusions.¹⁷⁶ Such an approach is fair and workable, not only in toxic exposure cases such as *Du Pont* and *Havner*, but in all civil litigation. Application of *Du Pont* will not make it impossible to present expert testimony in cases involving opinions from the frontiers of scientific knowledge. Rather, *Du Pont* will require experts in such cases to prepare for possible challenges by proceeding carefully with their investigations, documenting their methods, postponing the formation of opinions until they have ruled out sources of causation unrelated to the complaints raised in the case, and using all available means to test their final causation theories. Experts who proceed with such care will not only survive the rigors of trial court gatekeeping, but will also be more persuasive to a jury and less vulnerable to being discredited in cross-examination. Thus, the Texas Supreme Court should not abandon its approach in *Du Pont* in response to the Robinsons' motion for rehearing or the application for writ of error in *Havner*.

176. See *Du Pont*, 38 Tex. Sup. Ct. J. at 859, 1995 WL 359024, at *9 (maintaining that focus when determining admissibility of expert testimony should remain on experts' methodologies, not conclusions).

V. PRAGMATICS: PREPARING TO DEFEND AND CHALLENGE
EXPERTS IN THE CONTEXT OF GATEKEEPING

A. *The Current State of Texas Law on Experts*

Although the Texas Supreme Court's holding in *Du Pont* may be adjusted on rehearing or on review of *Havner*, it is already clear that the era of trial court gatekeeping on expert opinion testimony has begun in Texas.¹⁷⁷ Practitioners can expect fuller implementation of Rules 702 and 703 of the Texas Rules of Civil Evidence in the future. The three *Rs*—reliability, relevance, and relative probity—must now join “qualification” as threshold predicates for the admissibility of expert testimony.

Until the supreme court disposes of the motion for rehearing in *Du Pont* and the writ of error in *Havner*, it is worthwhile to review and consider the rationales of both the *Du Pont* majority and dissent when analyzing the current state of Texas law on experts. In *Du Pont*, five justices placed the burden of proving reliability on the proponent of expert testimony, indicating that the reliability predicate emanates from Rule 702's requirement that an expert provide specialized knowledge that will assist the jury.¹⁷⁸ The four dissenting justices would place the burden of disproving reliability on the party challenging a proffered expert¹⁷⁹ and would require, under Rule 703, that nonadmitted facts or data that serve as a basis for expert opinion be of a type reasonably relied upon by experts in the field.¹⁸⁰ All of the justices in *Du Pont* agreed, however, that expert testimony must be both qualified and relevant, and that even relevant testimony may be excluded in whole or in part

177. See, e.g., *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 858, 1995 WL 359024, at *8 (June 15, 1995) (directing trial courts to make preliminary determinations for admissibility of expert testimony under Rule 104 of Texas Rules of Civil Evidence); *id.* at 867-68, 1995 WL 359024, at *19-20 (Cornyn, J., dissenting) (arguing that judge should be able to exclude expert testimony under Rule 104 if opponent proves that testimony is scientifically unreliable); *North Dallas Diagnostic Ctr. v. Dewberry*, 900 S.W.2d 90, 96 (Tex. App.—Dallas 1995, writ denied) (stating that trial judge, under Rule 104, should determine reliability and admissibility of expert testimony).

178. See *Du Pont*, 38 Tex. Sup. Ct. J. at 858, 1995 WL 359024, at *8 (holding that Rule 702 requires proponent of expert testimony to demonstrate relevancy and reliability conjoined to specific qualifications necessary for proffered testimony).

179. *Id.* at 867 n.11, 1995 WL 359024, at *19 n.11 (Cornyn, J., dissenting).

180. *Id.* at 862-63, 1995 WL 359024, at *13-14.

through Rule 403 balancing.¹⁸¹ Further, nothing in *Du Pont* limits its applicability to novel scientific evidence, a point tacitly acknowledged by the dissent.¹⁸² Accordingly, *Du Pont* will undoubtedly affect every type of litigation in which expert testimony is important, which is effectively all litigation.¹⁸³

181. See *id.* at 859, 1995 WL 359024, at *9 (stating that after trial court determines that proffered expert testimony is reliable and relevant, court can still exclude it under Rule 403 balancing test); *id.* at 862 n.2, 1995 WL 359024, at *13 n.2 (Cornyn, J., dissenting) (noting that trial courts can exclude prejudicial or cumulative expert testimony under Rule 403 even though testimony is otherwise admissible).

182. See *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *13 (Cornyn, J., dissenting) (criticizing Texas Supreme Court's reliance on *Daubert* because *Daubert* was directed only at testimony regarding novel scientific evidence, and not at other types of expert testimony). A number of courts and commentators have interpreted *Daubert*, which *Du Pont* followed, as generally applicable to all types of expert testimony. See, e.g., *Clement v. Griffin*, 634 So.2d 412, 426-27 (La. Ct. App. 1994) (applying *Daubert* to testimony of tire-failure analyst); Rochelle C. Dreyfuss, *Is Science a Special Case?: The Admissibility of Scientific Evidence After Daubert v. Merrell Dow*, 73 TEX. L. REV. 1779, 1780 (1995) (arguing that *Daubert* should be interpreted as applying to all types of expert testimony, not just scientific evidence). *Daubert* spoke to scientific evidence because that was the issue before the Supreme Court. See *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 113 S. Ct. 2786, 2795 n.8 (1993) (acknowledging that Rule 702 also applies to "technical, or other specialized knowledge," but limiting discussion to scientific testimony because that was type of evidence at issue in case). *Daubert's* holdings on the Federal Rules of Evidence, however, are much more general. See *id.* at 2796 n.11 (noting that well-established propositions are less likely to be challenged than those that are novel); see also *Standards and Procedures for Determining the Admissibility of Expert Evidence After Daubert*, 157 F.R.D. 571, 571 (1994) (commenting on report prepared under auspices of American College of Trial Lawyers, which concluded that *Daubert* holdings "ought to be applied (and are being applied), at least generally, to admissibility analyses of nonscientific as well as scientific expert evidence"). The Fifth Circuit has already applied *Daubert* to evidence that does not fit in the "novel scientific" class. See *Marcel v. Placid Oil Co.*, 11 F.3d 563, 567 (5th Cir. 1994) (considering reliability and relevancy of economist's expert testimony). Other circuits and district courts have taken the same approach. See *Pries v. Honda Motor Co.*, 31 F.3d 543, 545 (7th Cir. 1994) (noting non-scientific nature of test performed by expert concerning feasibility of design effect and causation); *Joy v. Bell Helicopter Textron, Inc.*, 999 F.2d 549, 569-70 (D.C. Cir. 1993) (noting that expert's testimony on decedent's future earning ability was speculative and failed to meet *Daubert* standard for admissibility); *Duffee v. Murray Ohio Mfg. Co.*, 879 F. Supp. 1078, 1086 (D. Kan. 1995) (explaining that expert testimony must be reliable and relevant). But see *Du Pont*, 38 Tex. Sup. Ct. J. at 861 n.1, 1995 WL 359024, at *21 n.1 (Cornyn, J., dissenting) (citing several courts that have chosen to limit *Daubert* to certain types of scientific evidence).

183. See Thomas A. Wiseman, Jr., *Judging the Expert*, 55 OHIO ST. L.J. 1105, 1105 (1994) (commenting on increased use of experts in both federal and state courts, and noting that experts are now available to testify "on every conceivable subject"); see also Renee A. Forinash, Comment, *Analyzing Scientific Evidence: From Validity to Reliability with a Two-Step Approach*, 24 ST. MARY'S L.J. 223, 251 & n.130 (1992) (contending that expert testimony is essential for complex, technical cases).

B. *Points That Are Persuasive to Gatekeepers*

Because of the broad applicability of the current *Du Pont* opinion, litigants should be aware of some of the points that have been persuasive to gatekeepers. A survey of the factors that have persuaded Texas courts recently to exclude experts suggests certain constants that litigants can use in strategic planning. Although both *Du Pont* and *North Dallas Diagnostic Center* suggest factors that are functionally identical to the *Daubert* factors for courts to use in evaluating admissibility, the reasons the courts actually give for excluding expert testimony reveal other points that may be persuasive to both trial and appellate courts.

Recently, courts have excluded expert testimony as unreliable for several primary reasons. First, courts are inclined to view expert testimony as unreliable if the expert at deposition cannot recount a careful investigative process. For example, the *Crye* concurrence emphasized the expert's *admissions* of his research assistant's sloppy research technique.¹⁸⁴ Similarly, the *Du Pont* court was critical of the fact that the Robinsons' expert dug up only a few roots in his short inspection of the orchard and failed to test the Robinsons' leftover Benlate.¹⁸⁵ The court in *North Dallas Diagnostic Center* was also troubled by the plaintiff's expert's failure to document both the conditions of the testing on which he relied and the identity of the tester.¹⁸⁶

Second, courts have expressed concern with expert analysis that rushes to a conclusion without ruling out alternative causes.¹⁸⁷ The

184. See *Burroughs Wellcome Co. v. Crye*, 907 S.W.2d 497, 501-02 (Tex. 1995) (Gonzalez, J., concurring) (finding expert testimony unreliable because evidence on which testimony was based was poorly researched and documented).

185. See *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 853-54, 1995 WL 359024, at *2 (June 15, 1995) (describing Robinsons' expert's investigative process and focusing on expert's failure to fully inspect orchard and conduct all needed tests).

186. See *North Dallas Diagnostic Ctr. v. Dewberry*, 900 S.W.2d 90, 96 (Tex.App.—Dallas, 1995, writ denied) (concluding that expert's testimony was not based on valid scientific knowledge because he failed to adequately document testing conditions); see also Daniel Riesel, *Pre-Trial Discovery of Experts, Scientific Proof, and Examination of Experts in Environmental Litigation*, C127 A.L.I.-A.B.A. 209, 232 (1995) (advising attorneys to question opposing experts at deposition about persons who assisted them in research or testing), available in Westlaw, JLR Database.

187. See *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 758-59 (3d Cir. 1994) (upholding exclusion of proffered expert testimony because testimony was based on unreliable methodology and experts failed to consider alternate causes of illness), cert. denied sub nom. *General Elec. Co. v. Ingram*, 115 S. Ct. 1253 (1995); *Sorensen v. Shaklee Corp.*, 31

court in *Du Pont*, for example, emphasized that although the Robinsons' expert identified a number of possible causes for the yellowing of pecan leaves in the Robinsons' orchard, he made no effort to rule out those alternative causes.¹⁸⁸ Furthermore, the expert in *Du Pont* took pictures as exemplars of what he was "trying to show" during the first two-and-one-half hours of his work,¹⁸⁹ without later attempting to exclude other causes.¹⁹⁰ A failure to rule out alternative causes is a predictable consequence of result-oriented work, a "reasoning backward" approach in which the expert comes to a firm conclusion and then performs research to support it.¹⁹¹ The *Du Pont* court implicitly held that methodologies which reach premature conclusions, fail to rule out alternative causes, and focus principally on supporting the premature conclusions are unreliable as a matter of law.¹⁹²

Third, courts are unwilling to accept an expert's assurance that the expert's methodology is appropriate without independent supporting documentation. The court in *North Dallas Diagnostic Center* was critical of the expert's inability to cite testing standards or previous uses of his testing technique for detecting the plaintiff's

F.3d 638, 648-51 (8th Cir. 1994) (stating that failure to rule out causes for children's mental retardation, other than mother's ingestion of defendant's alfalfa tablets, rendered expert testimony inadmissible); *Conde v. Velsicol Chem. Corp.*, 24 F.3d 809, 813-14 (6th Cir. 1994) (holding that claimants failed to establish causal connection between illness and presence of chlordane in household); *Casey v. Ohio Medical Prods.*, 877 F. Supp. 1380, 1386 (N.D. Cal. 1995) (stating that proffered expert testimony was insufficient to establish causation); *Wade-Greaux v. Whitehall Lab., Inc.*, 874 F. Supp. 1441, 1475 (D.V.I.) (finding that expert testimony did not exclude other possible causes of birth defects), *aff'd*, 46 F.3d 1120 (3d Cir. 1994).

188. See *Du Pont*, 38 Tex. Sup. Ct. J. at 860, 1995 WL 359024, at *11 (positing that expert's failure to rule out alternative causes rendered his methodology "speculation").

189. *Id.* at 853, 1995 WL 359024, at *1.

190. See *id.* at 860, 1995 WL 359024, at *11 (emphasizing expert's lack of thorough testing before formulating opinion).

191. See *id.* (criticizing expert's methodology because expert concluded that Robinsons' orchard was damaged by contaminated Benlate without ruling out alternative causes, even though expert had neither proof that Robinsons' Benlate was contaminated nor knowledge of amount of herbicide contaminant needed to damage trees); see also *Sorenson*, 31 F.3d at 649 (stating that expert testimony which reasoned from end result was inadmissible); *Claar v. Burlington N. R.R.*, 29 F.3d 499, 502-03 (9th Cir. 1994) (declaring that conclusion without supporting research is diametrically opposed to scientific method).

192. See *Du Pont*, 38 Tex. Sup. Ct. J. at 860, 1995 WL 359024, at *11 (condemning opinions formed without ruling out alternative causes as speculative and describing premature conclusions as unscientific).

medical condition.¹⁹³ The court in *Du Pont* was likewise unwilling to accept the expert's "self serving statements" concerning his methodology, particularly in the absence of peer review or acceptance.¹⁹⁴

Finally, courts are more likely to scrutinize expert opinions specifically developed for litigation. The *Du Pont* court reasoned, for example, that "opinions formed for the purpose of testifying are more likely to be biased toward a particular result."¹⁹⁵ Although litigation-oriented opinions are not automatically considered unreliable, courts will likely probe deeper into an expert's methodology when there is a likelihood that the expert is acting more as an advocate than a scientist.¹⁹⁶

In addition to the new-found concern for reliability, *Du Pont* reemphasized that expert testimony must be relevant to be admissible.¹⁹⁷ To be relevant, expert testimony must be of assistance to the jury and have a relationship to issues in the case.¹⁹⁸ The majority in *Crye* implicitly applied this principle by finding medical causation testimony based on assumed facts that varied materially from the actual facts to be "no evidence."¹⁹⁹ Although the admissibility of medical causation testimony does not appear to have been before the court, the *Crye* court criticized the expert's testimony as being speculative.²⁰⁰

Post-*Du Pont* courts will also be more likely to exclude expert testimony because of legal relevance or "relative probity" concerns, which marks a departure from the previous practice of liber-

193. See *North Dallas Diagnostic Ctr.*, 900 S.W.2d at 96 (holding that expert's testimony was not admissible because expert failed to establish testing conditions and standards and prior uses of such tests to determine conditions similar to plaintiff's).

194. See *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *12 (refusing to accept reliability of expert's testimony because of lack of evidence supporting reliability of methodology, despite peer expert's testimony that conclusion on which testimony was based was, with 99% certainty, correct).

195. *Id.* at 860, 1995 WL 359024, at *11.

196. See *id.* (explaining that litigation-oriented expert testimony tends to suggest unreliability); see also *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1317-18 (9th Cir.) (requiring party proffering testimony based on research conducted for litigation purposes to provide objective evidence establishing that testimony is based on "scientifically valid principles"), *cert. denied*, 116 S. Ct. 189 (1995).

197. *Du Pont*, 38 Tex. Sup. Ct. J. at 858, 1995 WL 359024, at *8.

198. *Id.*

199. *Crye*, 907 S.W.2d at 499-500.

200. *Id.*

ally admitting any expert testimony that might assist the jury in understanding disputed issues. In *Du Pont*, the court emphasized that the expert is a potent authority figure whose testimony, if unreliable or of low relevance, may be very prejudicial,²⁰¹ despite adequate opportunity for cross-examination.²⁰² Thus, the court recognized that the life experiences of jurors, which are so effective in ferreting out noncredible testimony, are inadequate to enable them to evaluate unreliable testimony given by an expert who truly believes in her testimony.²⁰³ Accordingly, the potential prejudicial effect of such testimony should now be a prime factor favoring exclusion.²⁰⁴

With these observations from *Du Pont* and its progeny, attorneys can ensure that their own experts survive judicial gatekeeping and can also prepare strategies to challenge opposing experts. As the following sections indicate, attorneys and experts must now be more attentive to issues of reliability and relevance in proffering expert testimony. Because *Du Pont* cited *Daubert* with approval, and because the Texas rules mirror the federal rules, federal precedent will be helpful to litigants seeking or opposing gatekeeping until Texas courts develop their own jurisprudence.²⁰⁵ The *Du*

201. *Du Pont*, 38 Tex. Sup. Ct. J. at 855, 1995 WL 359024, at *4.

202. *See id.* at 859, 1995 WL 359024, at *10 (stating that many lawyers hesitate to cross-examine expert witnesses for fear of further confusing jury with complex issues); *see also* Bert Black et al., *Science and the Law in the Wake of Daubert: A New Search for Scientific Knowledge*, 72 TEX. L. REV. 715, 789 (1994) (asserting that even lawyers who can detect flaws in expert testimony may have difficulty explaining flaws to jury).

203. *Cf. Du Pont*, 38 Tex. Sup. Ct. J. at 855, 1995 WL 359024, at *4 (warning that jurors have difficulty evaluating complex technical evidence that even experts cannot agree on, which suggests that jurors may be swayed by ostensibly scientific testimony that is based on incorrect science).

204. *See id.* (positing that trial judges are responsible for excluding unreliable expert testimony, especially in light of extreme prejudicial effect of such testimony); *id.* at 862 n.2, 1995 WL 359024, at *13 n.2 (Cornyn, J., dissenting) (noting that trial court can exclude relevant testimony under Rule 403 balancing test, but refusing to further explore issue because trial court excluded evidence under Rule 702); *Crye*, 907 S.W.2d at 502 (Gonzalez, J., concurring) (favoring exclusion of expert testimony that was based on study because probative value was outweighed by danger of jury viewing study as evidence of causation of frostbite, rather than as evidence of spray causing greater reduction in skin temperature than other sprays).

205. For a recent review of post-*Daubert* federal and state court decisions, see John M. Kobayashi et al., "Scientific" Expert Opinion Testimony: Qualification and Admissibility Standards upon and After *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, CA32 A.L.I.-A.B.A. 27 (1995), available in Westlaw, JLR Database. In addition, the Federal Judicial Center has published a reference manual that may prove influential with trial courts and

Pont majority and dissenting opinions alone, however, provide surprisingly detailed grounds for challenging or defending experts in Texas.

C. *Preparing an Expert to Survive Gatekeeping*

Preparation to defend an expert during judicial gatekeeping should begin when the expert is first engaged. The ideal expert, of course, would be an academic who has independently reached helpful conclusions²⁰⁶ and published them in a peer-reviewed journal.²⁰⁷ Few attorneys will be lucky enough to locate such a witness.²⁰⁸ Attorneys can, however, substantially increase the chances of defending the reliability of an expert's work by closely working and communicating with the expert.

The attorney should begin by discussing with the expert the planned methodology and analytical process before the expert begins her work.²⁰⁹ The attorney should also locate independent reference sources validating the expert's planned process.²¹⁰ If

should be consulted by counsel. See FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE *passim* (1994) (providing guidance to practitioners and courts on competent management of various scientific evidence).

206. See *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 860, 1995 WL 359024, at *11 (June 15, 1995) (explaining that expert reports specifically prepared for litigation are more apt to be biased toward particular result than reports prepared by expert prior to hiring).

207. See *id.* at 861, 1995 WL 359024, at *12 (suggesting that absence of peer review makes it more difficult to evaluate appropriateness or reliability of methodology).

208. See Rochelle C. Dreyfuss, *Is Science a Special Case?: The Admissibility of Scientific Evidence After Daubert v. Merrell Dow*, 73 TEX. L. REV. 1779, 1786 (1995) (explaining that peer review can be problematic because scientific research that is valuable to litigants may not be of interest to scientists, which results in lack of articles discussing validity of research and experiments).

209. Cf. Holley D. Thames, Comment, *Frye Gone, but Not Forgotten in the Wake of Daubert: New Standards and Procedures for Admissibility of Scientific Expert Opinion*, 63 Miss. L.J. 473, 492 (1994) (advising attorneys to keep *Daubert* factors in mind when preparing experts for challenge and to discuss with expert her "qualifications to interpret the relevant data").

210. See *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *12 (holding that expert's "self-serving statements that his methodology was generally accepted . . . by other experts in the field are not sufficient to establish the reliability of the technique and theory underlying his opinion"); see also *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1316 (9th Cir.) (stating that experts' findings must be based on sound science and independently validated), *cert. denied*, 116 S. Ct. 189 (1995). But see *Developments in the Law—Confronting the New Challenges of Scientific Evidence*, 108 HARV. L. REV. 1481, 1516 (1995) (commenting that by requiring independent validation of expert's methodol-

validation through published materials is not possible, it may be necessary to engage a separate "validating expert."²¹¹ This validating expert may later be invaluable if the methodology of a testifying expert is challenged.²¹²

Once the expert has identified an appropriate and defensible analytical methodology, the attorney should encourage the expert to carefully document her adherence to the methodology so that she can effectively articulate a reliable basis for each critical opinion eventually developed.²¹³ To further encourage scrupulous documentation, the attorney should ask an expert from academia to approach the investigation as if an article were being prepared for peer review. All experts should be instructed to avoid premature conclusions, and to identify and rule out alternative causes.²¹⁴

ogy, courts abdicate their own gatekeeping responsibility to determine reliability of expert testimony).

211. See *Developments in the Law—Confronting the New Challenges of Scientific Evidence*, 108 HARV. L. REV. 1481, 1515 (1995) (noting that validation of scientific theories may differ according to person testing for validity).

212. See *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *12 (rejecting self-serving testimony of expert witness offered as validation for expert's methodology). The proper timing during the discovery process for identifying validating experts will now undoubtedly be subject to litigation and interpretation by Texas courts. Additionally, the law for designating any previously undisclosed experts is currently unclear. Texas Rule of Civil Procedure 166b(6) provides that expert witnesses must be disclosed to the opponent "as soon as is practical, but in no event less than thirty (30) days prior to the beginning of trial except on leave of court." TEX. R. CIV. P. 166b(6). While the 30-day period is clear, the Texas Supreme Court has not defined "as soon as practical." In *Mentis v. Barnard*, the supreme court held that the trial court abused its discretion by excluding testimony from an expert witness who was disclosed 32 days prior to trial. 870 S.W.2d 14, 16 (Tex. 1994). The court pondered the definition of "as soon as practical" before holding that the burden of proof for showing that a litigant did not timely disclose a witness more than 30 days prior to trial rested on the party seeking to exclude the testimony under Rule 166b(6). *Id.* The court further stated that a party seeking to exclude the testimony cannot carry its burden merely by advising the court of the length of time the case has been pending. *Id.*

213. See Wendy Fleishman & Russell Jackson, *Challenges to the Admissibility of Expert Testimony: What Works After Daubert?* (stating that common methodological error occurs when expert makes incorrect extrapolations from facts or data to reach conclusion), in *PROVING OR DEFENDING REPETITIVE STRESS INJURY, MEDICAL DEVICE, LEAD, PHARMACEUTICAL, AND CLOSED HEAD TRAUMA CASES: A SATELLITE PROGRAM* 121, 135 (PLI Commercial Law & Practice Course Handbook Series No. A-723, 1995); see also *Chikovsky v. Ortho Pharmaceutical Corp.*, 832 F. Supp. 341, 345 (S.D. Fla. 1993) (excluding expert's testimony that plaintiff's birth defects were caused by mother's use of Retin-A during pregnancy because expert did not know absorption rate of Retin-A, nor could he indicate how much Retin-A mother absorbed through her skin during pregnancy).

214. See Wendy Fleishman & Russell Jackson, *Challenges to the Admissibility of Expert Testimony: What Works After Daubert?* (asserting that failure to rule out alternative

Relevance, as well as reliability, demands attention. It is imperative to establish an adequate nexus between the litigated facts and issues and the opinions developed by the expert so that the opinions will fit the case.²¹⁵ Exposing the expert to primary evidentiary material, such as actual deposition testimony or interviews with actual witnesses, rather than just casual fact descriptions by the attorney, may help minimize any misunderstandings the expert might have about the facts of the case.²¹⁶ Moreover, a precise fit of the expert's opinion to the disputed issues amplifies the opinion's relative probative value when weighed against potential prejudicial effects under Rule 403 balancing.²¹⁷

Obviously, it is impossible to predict the precise challenges that any given expert will face if opposing counsel invokes Rule 104 gatekeeping. Careful attorney communication with an expert from the beginning of the engagement, however, should help develop a record that will support a threshold showing of the admissibility

causes is most common mistake experts make), in *PROVING OR DEFENDING REPETITIVE STRESS INJURY, MEDICAL DEVICE, LEAD, PHARMACEUTICAL, AND CLOSED HEAD TRAUMA CASES: A SATELLITE PROGRAM* 121, 133 (PLI Commercial Law & Practice Course Handbook Series No. A-723, 1995).

215. See Daniel Riesel, *Pre-Trial Discovery of Experts, Scientific Proof, and Examination of Experts in Environmental Litigation*, C127 A.L.I.-A.B.A. 209, 271 (1995) (stating that expert "must know the facts that are relevant to his testimony"), available in Westlaw, JLR Database; see also *Gier v. Educational Serv. Unit No. 16*, 845 F. Supp. 1342, 1350 (D. Neb. 1994) (questioning whether research done on abused, non-retarded children is applicable to retarded children), *aff'd*, 66 F.3d 940 (8th Cir. 1995); *Developments in the Law—Confronting the New Challenges of Scientific Evidence*, 108 HARV. L. REV. 1481, 1520 (1995) (acknowledging "importance of the interplay between the facts of a particular case and the methodology used by experts in assessing those facts").

216. See Ernest Reynolds III, *The Selection and Use of the Defense Expert* (advising counsel to educate experts about facts of case by exposing experts to documents such as petitions, depositions, and discovery pleadings, so that experts will not be made to look as though they do not have sufficient information upon which to base their opinions on cross-examination), in STATE BAR OF TEXAS, *EXPERTS IN LITIGATION: A PERFORMANCE ENHANCEMENT COURSE C-46* (1987).

217. See *United States v. Downing*, 753 F.2d 1224, 1242 (3d Cir. 1985) (defining "fit" as occasion when expert testimony is sufficiently tied to facts so as to aid jury); Cathleen C. Herasimchuk & John F. Sutton, Jr., *Opinions and Expert Testimony*, 30 HOUS. L. REV. 797, 843 (1993) (asserting that courts take into account Rule 403 balancing factors when determining whether expert testimony fits facts of case); see also Ernest Reynolds III, *The Selection and Use of the Defense Expert* (noting that Texas Rule of Civil Evidence 403 gives trial judge wide discretion in admitting or excluding relevant evidence), in STATE BAR OF TEXAS, *EXPERTS IN LITIGATION: A PERFORMANCE ENHANCEMENT COURSE C-3* (1987).

predicates by a preponderance of proof.²¹⁸ A side benefit of detailed gatekeeping preparation will undoubtedly be an actual improvement in experts' analyses of scientific, technical, and other specialized issues that arise in litigation.²¹⁹ Certainly, the rationale underlying *Du Pont* is that enforcement of the stringent standards for admissibility provided in the Texas Rules of Civil Evidence will improve the quality of expert testimony and, in turn, the quality of Texas justice.²²⁰

D. *Suggestions for Challenging an Expert*

1. Procedures for Invoking Gatekeeping

In addition to setting stricter standards for surviving gatekeeping, recent Texas opinions on expert testimony have also refocused the methods for excluding expert testimony. Although the *Du Pont* court cited Rule 104, which provides for preliminary judicial determinations on admissibility, as the source of the trial court's gatekeeping authority,²²¹ it did not provide guidance on specific procedures for invoking Rule 104 gatekeeping.²²² Thus, litigants must contend with some ambiguity in the proper methods for triggering gatekeeping and in the terms used to describe those methods.

218. See Ernest Reynolds III, *Selection and Use of the Defense Expert* (stating generally that litigants should begin searching for experts as soon as need becomes apparent, and suggesting that litigants "get to know expert as well as possible" to gauge expert's credibility and reliability), in STATE BAR OF TEXAS, *EXPERTS IN LITIGATION: A PERFORMANCE ENHANCEMENT COURSE* C-44 to C-45 (1987).

219. Cf. *Du Pont*, 38 Tex. Sup. Ct. J. at 855, 1995 WL 359024, at *4 (discussing abusive use of experts in litigation who will testify on any matter, no matter how meritless, for pay).

220. See *id.* at 856, 1995 WL 359024, at *5 (explaining that admissibility guidelines are necessary to "stem the flow of the use of 'junk science' and 'kitchen chemistry' in our courts").

221. See *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 858, 1995 WL 359024, at *8 (June 15, 1995) (holding that trial court, under Rule 104, "is responsible for making the preliminary determination of whether the proffered testimony meets the standards set forth").

222. Cf. Margaret A. Berger, *Procedural Paradigms for Applying the Daubert Test*, 78 MINN. L. REV. 1345, 1352-86 (1994) (recognizing that courts following *Daubert* gatekeeping must implement procedures for determining if pretrial hearings are needed, as well as procedures for conducting Rule 104 hearings).

Traditionally, experts in Texas have been qualified by voir dire examination at the beginning of their testimony.²²³ In *North Dallas Diagnostic Center*, the Dallas Court of Appeals wrote:

We recognize our decision may require parties to develop more evidence at the preliminary voir dire examination of an expert for the trial court to perform its "gatekeeping" role. While that may involve more time and expense in the litigation process, it also provides necessary safeguards against admitting testimony ungrounded in scientific validation.²²⁴

This language appears to assume that gatekeeping will occur during trial in an expanded voir dire examination of the witness.²²⁵ Initially, such an approach will probably seem more comfortable to attorneys and judges because they are familiar with the procedure.²²⁶

Du Pont's challenge to the Robinsons' expert, however, took place prior to trial.²²⁷ Pretrial gatekeeping of this sort can be triggered by a motion in limine, in which a challenger objects to an expert's qualifications or to the relevance, reliability, and relative probity of an expert's opinions.²²⁸ Such a challenge requires the trial court to make a tentative, preliminary determination on the

223. See DAVID A. SCHLUETER ET AL., TEXAS EVIDENTIARY FOUNDATIONS § 2-5, at 27-28 (1992) (noting that purpose of voir dire is to test competency of opponent's proffered witness, and observing that although Texas evidentiary rules do not explicitly mandate voir dire, it is traditionally recognized practice).

224. *North Dallas Diagnostic Ctr. v. Dewberry*, 900 S.W.2d 90, 96 (Tex. App.—Dallas 1995, writ denied).

225. See *id.* (examining evidence presented during voir dire in making gatekeeping determination of admissibility of expert testimony).

226. Under *Du Pont*, however, the proffered witness alone may not be able to establish the reliability of her methodology. See *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *12 (stating that self-serving statements are insufficient to gain admittance of expert testimony).

227. See *id.* at 854, 1995 WL 359024, at *2-3 (explaining that trial court excluded testimony after pretrial hearing on Du Pont's motion to exclude).

228. See Daniel Riesel, *Pre-Trial Discovery of Experts, Scientific Proof, and Examination of Experts in Environmental Litigation*, C127 A.L.I.-A.B.A. 209, 285-86 (1995) (explaining that although motions in limine have traditionally been used to exclude prejudicial evidence, they can also be used to exclude expert testimony under Federal Rules of Civil Procedure 702, 703, and 403), available in Westlaw, JLR Database; Holley D. Thames, Comment, *Frye Gone, but Not Forgotten in the Wake of Daubert: New Standards and Procedures for Admissibility of Scientific Expert Opinion*, 63 Miss. L.J. 473, 497-98 (1994) (stating that motions in limine are proper for requests to exclude expert testimony because Rule 104 provides that judges should make this determination prior to trial).

admissibility of the proffered opinion testimony.²²⁹ The court may then enter an order in limine forbidding all reference to the expert opinion until the final determination on admissibility is made at trial.²³⁰ When the expert witness is offered at trial, the court should make a final determination on whether the proponent has demonstrated by a preponderance of proof that the proffered testimony will meet the standards in *Du Pont*.²³¹

In addition to filing a motion in limine to exclude expert testimony, litigants may also request a preliminary hearing on admissibility under Rule 104(c), either before trial or at the time the expert's testimony is offered.²³² Like traditional motions in limine, Rule 104 hearings are conducted apart from the jury so that the jury will not hear inadmissible evidence.²³³ Therefore, if a Rule 104 hearing is conducted during trial, the jury should be excused before the hearing because the rules of evidence need not be enforced during such a hearing.²³⁴ Rule 104(d) clarifies the right of parties to then reintroduce evidence relevant to the weight or credibility of an expert's conclusions before the jury following the non-jury hearing.²³⁵

Yet another approach was illustrated in the *Du Pont* case. *Du Pont* initiated pretrial gatekeeping by filing a motion in limine and requesting a Rule 104 hearing.²³⁶ This method is probably best suited to a serious attempt to exclude a witness because it allows the litigants to resolve important issues that will affect the litigation planning well in advance of trial, assuming that the trial judge is

229. See *Du Pont*, 38 Tex. Sup. Ct. J. at 858, 1995 WL 359024, at *8 (mandating preliminary judicial determination of admissibility of evidence).

230. See MICHOL O'CONNOR, O'CONNOR'S TEXAS RULES: CIVIL TRIALS 600 (1994) (noting that order granting motion in limine prohibits party from introducing evidence during trial without first obtaining ruling on admissibility from court).

231. See *Du Pont*, 38 Tex. Sup. Ct. J. at 569, 1995 WL 359024, at *9 (stating that "once the party opposing the evidence objects, the proponent bears the burden of demonstrating its admissibility").

232. TEX. R. CIV. EVID. 104.

233. TEX. R. CIV. EVID. 104(c).

234. See TEX. R. CIV. EVID. 104(a) (indicating that courts are bound by rules of evidence only with respect to privileges when determining preliminary questions of qualifications of potential witness, existence of privilege, or admissibility of evidence).

235. See TEX. R. CIV. EVID. 104(d) (providing that "[t]his rule does not limit the right of a party to introduce before the jury evidence relevant to weight or credibility").

236. See *Du Pont*, 38 Tex. Sup. Ct. J. at 854, 1995 WL 359024, at *2 (noting that *Du Pont*'s motion to exclude expert testimony was followed by pretrial hearing on motion).

willing to hear the motion at that time.²³⁷ After deposing the Robinsons' expert, Du Pont filed a pretrial objection and motion to exclude, "detailing with specificity the bases for its motion."²³⁸ Du Pont's motion described and criticized the Robinsons' expert's explanation of his methodology at deposition.²³⁹ Du Pont's filing of this motion imposed a burden of establishing admissibility on the proponent at the subsequent hearing.²⁴⁰

The supreme court's approval of the trial court's action in *Du Pont* confirms that the party seeking to exclude expert testimony may obtain both a pretrial hearing and a firm ruling, rather than merely an order limiting reference to the expert until a final determination of admissibility is made at trial.²⁴¹ Both motions in limine and Rule 104 hearings allow courts to hear pretrial arguments on admissibility; thus, it is not surprising that the boundaries between the two are blurred. Final preliminary exclusions such as the one in *Du Pont*, however, may conserve litigation resources. For example, in *Du Pont*, a bench trial subsequent to the expert's exclusion led to a directed verdict.²⁴² Pretrial exclusion may also be followed by summary judgment.²⁴³ Nevertheless, because the contradictory burdens of proof required of the proponent of expert testimony and of the post-exclusion summary judgment movant confused the court of appeals in *Havner*, it is advisable to address preliminary exclusion and summary judgment in two separate steps.²⁴⁴

237. See THOMAS A. MAUET, *FUNDAMENTALS OF TRIAL TECHNIQUES* 334-35 (3d ed. 1992) (stating that pretrial motions to exclude or pretrial memorandums followed by pretrial conferences are usually preferred to motions in limine for objecting to evidence because they allow judicial determinations on admissibility well in advance of trial, as opposed to traditional motions in limine, which are usually filed "just before trial starts, during a recess, or just before a witness testifies").

238. *Du Pont*, 38 Tex. Sup. Ct. J. at 859, 1995 WL 359024, at *9.

239. See *id.* at 854, 1995 WL 359024, at *2 (observing Du Pont's allegation in its motion that expert's opinions were speculative and unreliable).

240. *Id.*

241. The proponent may have an equal interest in obtaining a hearing to aid in the discharge of its burden of proof, although it might be possible to prove reliability with affidavits because the rules of evidence do not apply to preliminary determinations.

242. *Id.* at 854, 1995 WL 359024, at *3.

243. See Margaret A. Berger, *Procedural Paradigms for Applying the Daubert Test*, 78 MINN. L. REV. 1345, 1376 (1994) (noting that after court excludes key expert testimony, "summary judgment follows as a matter of course").

244. See *supra* notes 140-44 and accompanying text.

2. Substantive Preparation for Challenging an Expert

Regardless of the procedures chosen to challenge an expert, painstaking substantive preparation is necessary to successfully exclude opinion testimony.²⁴⁵ The process should begin at deposition.²⁴⁶ The challenging attorney should initially inquire into the expert's qualifications and credentials, asking the expert to identify her particular field or fields of expertise for use in a Rule 703 challenge.²⁴⁷ Additionally, the attorney should establish the timing and circumstances of the beginning of the expert's inquiry to determine if the expert's opinions were developed solely for litigation.²⁴⁸

Next, the attorney should determine what raw facts and data the expert relied upon in forming her opinions and request that the expert break her opinion down into component parts. After breaking each opinion down into its component parts or sub-conclusions, and determining the timing of the expert's arrival at each sub-conclusion, the attorney should question the expert to isolate the facts or data underlying each sub-conclusion.²⁴⁹ Assumed facts should be ferreted out and compared to proven facts for possible rele-

245. See Holley D. Thames, Comment, *Frye Gone, but Not Forgotten in the Wake of Daubert: New Standards and Procedures for Admissibility of Scientific Expert Opinion*, 63 Miss. L.J. 473, 491 (1994) (suggesting that attorneys seeking to exclude expert testimony first evaluate *Daubert* factors and then prepare deposition outline to ensure questioning on each factor, as well as on issues that can be challenged under Rules 702, 703, and 403).

246. See *id.* (stating that deposition serves as basis for later challenge to expert testimony).

247. See TEX. R. CIV. EVID. 703 (providing that expert witnesses can base their opinions on facts and data not admitted into evidence only if nonadmitted facts and data are reasonably relied upon by other experts in witnesses' field in forming opinions). See generally Cathleen C. Herasimchuk & John F. Sutton, Jr., *Opinions and Expert Testimony*, 30 HOUS. L. REV. 797, 851-62 (1993) (discussing application and criticisms of Rule 703).

248. See *Du Pont*, 38 Tex. Sup. Ct. J. at 860, 1995 WL 359024, at *11 (explaining how fact that expert's research was conducted for purpose of litigation weighed against its admission).

249. See Daniel Riesel, *Pre-Trial Discovery of Experts, Scientific Proof, and Examination of Experts in Environmental Litigation*, C127 A.L.I.-A.B.A. 209, 232 (1995) (advising that depositions be used to probe into "factual predicate for the expert's opinion"), available in Westlaw, JLR Database; see also Wendy Fleishman & Russell Jackson, *Challenges to the Admissibility of Expert Testimony: What Works After Daubert?* (asserting that litigants challenging admissibility of expert testimony under *Daubert* "should identify with particularity the flaws in the expert's analysis"), in PROVING OR DEFENDING REPETITIVE STRESS INJURY, MEDICAL DEVICE, LEAD, PHARMACEUTICAL, AND CLOSED HEAD TRAUMA CASES: A SATELLITE PROGRAM 121, 132 (PLI Commercial Law & Practice Course Handbook Series No. A-723, 1995).

vance challenges.²⁵⁰ The attorney should always ask whether the facts or data underlying the expert's conclusions are reasonably relied upon by other experts in her field, particularly if the facts or data are partially inadmissible.²⁵¹ The expert should also be asked whether she can provide any independent verification of such reasonable reliance.²⁵²

Finally, an exploration of the methodology that the expert applied to underlying facts or data is an important prerequisite for challenging the expert.²⁵³ This information will, of course, be useful for cross-examination even if the challenge is unsuccessful.²⁵⁴ To argue that the expert's methodology may be unreliable as a matter of law, the challenging attorney should highlight any premature conclusions or any failure to rule out alternative causes.²⁵⁵ The challenging attorney should also ask the expert to provide in-

250. See *Burroughs Wellcome Co. v. Crye*, 907 S.W.2d 497, 499 (Tex. 1995) (holding that expert opinion based on assumed facts that materially vary from undisputed facts cannot support favorable judgment).

251. Cf. Holley D. Thames, Comment, *Frye Gone, but Not Forgotten in the Wake of Daubert: New Standards and Procedures for Admissibility of Scientific Expert Opinion*, 63 Miss. L.J. 473, 494 (1994) (stating that, despite wide implications of *Daubert*, litigants can still challenge expert testimony under Rule 703 if opinion is based on nonadmitted facts and data).

252. See *Du Pont*, 38 Tex. Sup. Ct. J. at 861, 1995 WL 359024, at *12 (affirming trial court's exclusion of expert testimony, in part because expert could not present evidence to show that other experts in field relied on similar methodology); see also *Hopkins v. Dow Corning Corp.*, 33 F.3d 1116, 1124-25 (9th Cir. 1994) (emphasizing importance of peer acceptance of expert's methodology in satisfying *Daubert* test for admission of scientific evidence), *cert. denied*, 115 S. Ct. 734 (1995); *Zuchowicz v. United States*, 870 F. Supp. 15, 20 (D. Conn. 1994) (admitting testimony in part because it was "founded upon data and methodologies that are reasonably relied upon by experts in their field and generally accepted in the scientific community").

253. See generally Wendy Fleishman & Russell Jackson, *Challenges to the Admissibility of Expert Testimony: What Works After Daubert?* (identifying several methodological flaws that could serve as basis for gatekeeping motion, including failure to rule out alternative causes, unwarranted extrapolations from data to reach conclusions, and use of "new or controversial techniques"), in *PROVING OR DEFENDING REPETITIVE STRESS INJURY, MEDICAL DEVICE, LEAD, PHARMACEUTICAL, AND CLOSED HEAD TRAUMA CASES: A SATELLITE PROGRAM* 121, 133-45 (PLI Commercial Law & Practice Course Handbook Series No. A-723, 1995).

254. See Daniel Riesel, *Pre-Trial Discovery of Experts, Scientific Proof, and Examination of Experts in Environmental Litigation*, C127 A.L.I.-A.B.A. 209, 282 (1995) (stating that cross-examination of expert witness should be preceded by careful examination of expert's methodology), available in Westlaw, JLR Database.

255. See *Du Pont*, 38 Tex. Sup. Ct. J. at 860, 1995 WL 359024, at *11 (positing that failure to rule out alternative causes of damage renders expert's testimony mere speculation).

dependent verification for her methodology, including any evidence that peers have reviewed her methods or conclusions.²⁵⁶

After gathering this information during the deposition, the attorney may proceed with a gatekeeping motion to exclude the expert's testimony, which might also be styled, "Objection and Request for Rule 104 Gatekeeping." Any serious motion should state: (1) each opinion and conclusion sought to be excluded; (2) the facts and data on which these opinions and conclusions are based; (3) the extent to which these facts and data are reasonably relied on by the expert's peers; (4) the method or process by which the expert's opinion was generated from underlying facts and data; and (5) the evidence, supported by deposition references, that calls into question the reliability of the method or process.²⁵⁷ The motion should also include deposition references discussing the specific qualifications of the proffered witness and the relevance and fit of the witness's particular expertise to the disputed issues in the case.²⁵⁸ Objections to reliability based on the *Du Pont* majority's interpretation of Rule 702 and the dissent's interpretation of Rule 703 should follow the deposition references.²⁵⁹

To facilitate challenges based on relevance and fit, the introductory section of a gatekeeping motion should carefully identify the factual issues that will be presented to the jury.²⁶⁰ Undisputed facts that may conflict with facts assumed by the expert should also be identified.²⁶¹ This identification of the issues in dispute will aid the

256. See *id.* at 860-61, 1995 WL 359024, at *11 (holding that expert testimony is not reliable when there is no evidence that methodology was appropriate and reliable, or peer-reviewed).

257. See *supra* notes 249-56 and accompanying text.

258. Cf. Holley D. Thames, Comment, *Frye Gone, but Not Forgotten in the Wake of Daubert: New Standards and Procedures for Admissibility of Scientific Expert Testimony*, 63 Miss. L.J. 473, 498 (1994) (stating that litigants seeking to exclude expert testimony in federal courts should file motions in limine based on deposition testimony, affidavits, and discovery responses).

259. See Margaret A. Berger, *Evidentiary Framework* (noting that federal courts may inconsistently analyze similar issues under either Rule 702 or Rule 703), in FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 37, 43 (1994).

260. See *Du Pont*, 38 Tex. Sup. Ct. J. at 858, 1995 WL 359024, at *8 (holding that proffered testimony must be connected to disputed issues in case to be relevant and of assistance to jury as mandated by Rule 702).

261. See *Crye*, 907 S.W.2d at 499-500 (overturning judgment based on expert testimony because facts assumed by expert conflicted with undisputed facts).

court when it weighs the probative value of the expert opinion against its possible prejudicial effects.²⁶²

Finally, the prayer in a motion to exclude should request that the proponent of the expert testimony be required to establish the predicate for admissibility, as set forth in *Du Pont*, by a preponderance of proof.²⁶³ However, litigants should remember that the *Du Pont* dissent placed the burden of proof on the challenging party²⁶⁴ and the *Havner* court failed to acknowledge the burden set forth in the *Du Pont* majority opinion.²⁶⁵ Thus, the most aggressive gatekeeping motions should attach affidavit proof controverting the expert's self-serving deposition statements concerning the reliability of her methodology.

VI. PRESERVING ERROR WHEN AN EXPERT IS EXCLUDED

The party whose expert's testimony is excluded by a successful gatekeeping motion should pay careful attention to preserving the appellate record.²⁶⁶ To protect the record, a party responding to a gatekeeping motion should either seek a reported evidentiary hearing²⁶⁷ or file extensive affidavit proof.²⁶⁸ If the trial court ex-

262. See *Du Pont*, 38 Tex. Sup. Ct. J. at 859, 1995 WL 359024, at *9 (emphasizing need for trial court to balance probative value of evidence against possible prejudicial effects upon finding of reliability and relevance to make final determination of admissibility).

263. See *id.* at 858, 1995 WL 359024, at *9 (holding that "[o]nce the party opposing the evidence objects, the proponent bears the burden of demonstrating its admissibility").

264. See *id.* at 867, 1995 WL 359024, at *19 (Cornyn, J., dissenting) (contending that "party opposing a given expert witness's testimony must controvert the expert's claim of reasonable reliance").

265. See *supra* notes 140-44 and accompanying text.

266. See TEX. R. APP. P. 52(a) (providing that parties must timely and specifically object to trial court actions to preserve complaint for review); TEX. R. CIV. EVID. 103(a)(2) (establishing that trial court cannot commit error in excluding evidence unless "the substance of the evidence was made known to the court by offer"). Rule 52(a) provides:

In order to preserve a complaint for appellate review, a party must have presented to the trial court a timely request, objection or motion, stating the specific grounds for the ruling he desired the court to make if the specific grounds were not apparent from the context. It is also necessary for the complaining party to obtain a ruling upon the party's request, objection or motion. If the trial judge refuses to rule, an objection to the court's refusal to rule is sufficient to preserve the complaint. It is not necessary to formally except to rulings or orders of the court.

TEX. R. APP. P. 52(a); see *McInnes v. Yamaha Motor Corp.*, 673 S.W.2d 185, 187 (Tex. 1984) (holding that excluded deposition on file with court does not constitute bill of exceptions for purposes of preserving error), *cert. denied*, 469 U.S. 1107 (1985).

267. See TEX. R. APP. P. 52(b) (providing that party whose evidence is excluded can preserve error by making informal bill of exceptions or offer of proof before court).

cludes expert testimony, well-developed proof of admissibility will facilitate an appellate challenge to the trial court's discretionary determination.²⁶⁹

Rule 104(a) of the Texas Rules of Civil Evidence authorizes a trial court to determine "[p]reliminary questions concerning the qualification of a person to be a witness . . . or the admissibility of evidence."²⁷⁰ Strictly speaking, a Rule 104(a) preliminary admissibility ruling is not merely a ruling in limine conditioned on trial proof of a proper predicate. Trial judges, however, will probably be most comfortable treating a preliminary exclusion as a ruling in limine, reserving a permanent ruling until the expert is offered at trial.²⁷¹ Because Texas courts are not accustomed to Rule 104

268. See TEX. R. APP. P. 52(c) (providing for formal bills of exception for parties objecting to exclusion of evidence). The trial judge may modify the bill. *Id.* If the party is dissatisfied with the judge's changes, the party may file affidavit proof supporting the correctness of the original bill. *Id.* A party can make a formal, written bill of exceptions whenever a trial court refuses to allow the party to make an informal bill of exceptions. John B. Thomas, *Objections and Preservation of Error in Texas Civil Evidence and Discovery*, in STATE BAR OF TEXAS, ADVANCED EVIDENCE AND DISCOVERY COURSE R-14 (1994). *But cf.* MICHOL O'CONNOR, O'CONNOR'S TEXAS RULES: CIVIL TRIALS 646 (1994) (characterizing formal bill as rigid, outdated procedure with no federal equivalent).

269. See *Service Lloyds Ins. Co. v. Martin*, 855 S.W.2d 816, 824 (Tex. App.—Dallas 1993, no writ) (explaining that appellate court will not reverse trial court's exclusion of testimony unless party seeking review presents record on appeal to show error requiring reversal); *Lopez v. Southern Pac. Transp. Co.*, 847 S.W.2d 330, 336 (Tex. App.—El Paso 1993, no writ) (holding that party seeking reversal must preserve for appellate review substance and relevancy of proposed testimony by "indicat[ing] the questions that would have been asked, what the answers would have been and what was expected to be proved by those answers"). On the other hand, an admission of challenged testimony cannot be sustained on appeal if the proponent fails to establish the elements of admissibility by a preponderance of proof on the record. See *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 907 S.W.2d 535, 541-42 (Tex. App.—Corpus Christi 1994, writ granted) (original opinion) (holding that, for expert testimony to adequately support jury finding of causation, court must find such testimony possesses "probative force," which means that opinion must not be speculative and must be scientifically grounded according to Rules 702, 703, and 705); *Maritime Overseas Corp. v. Ellis*, 886 S.W.2d 780, 787 (Tex. App.—Houston [14th Dist.] 1994, writ requested) (considering and rejecting argument that court should require expert testimony to meet *Daubert* admissibility standards to support jury verdict, because appellant never objected to introduction of expert's testimony and federal statute at issue only required "featherweight" burden of proof to establish causation).

270. TEX. R. CIV. EVID. 104(a).

271. *Cf. Rawlings v. State*, 874 S.W.2d 740, 742-44 (Tex. App.—Fort Worth 1994, no pet.) (discussing differences between motion in limine and Rule 52(b) request for ruling outside of presence of jury, and concluding that counsel's objection was in fact motion in limine that did not preserve error). *But cf. Klekar v. Southern Pac. Transp. Co.*, 874 S.W.2d 818, 824-25 (Tex. App.—Houston [1st Dist.] 1994, writ denied) (ruling that counsel

gatekeeping and may treat a Rule 104 ruling as a ruling on a motion in limine, Texas attorneys should definitely continue to make bills of exception when testimony is excluded before trial to ensure that error is preserved. Parties waive their objections to in-limine exclusions of evidence if they do not object at trial.²⁷²

To raise a complaint of reversible error, cautious counsel should follow the procedure employed by the plaintiffs in *Du Pont* to make a bill of exceptions until the proper procedure for preserving error is clarified. Following the entry of an order excluding the plaintiffs' only expert, the parties in *Du Pont* agreed to try their case to the court, but stipulated that the case would be retried to a jury if there was a reversal.²⁷³ In the course of the bench trial, the Robinsons sought to introduce the excluded testimony and, upon the judge's adherence to his former ruling, presented an informal bill of exceptions describing the testimony they wanted to present.²⁷⁴ By adopting this procedure, the Robinsons avoided a useless, protracted jury trial that they knew they could not win without their only causation expert. They also ensured a future jury trial if the appellate courts accepted their expert's testimony, and, more importantly, ensured error would be preserved whether the reviewing court treated the exclusion of testimony as a ruling on a motion in limine or as a distinct ruling under Rule 104. Thus, a party whose expert is excluded should, at least for now, go through the motions of a trial to present a bill of exceptions at that time, rather than risking an inadvertent waiver of objections.

An attorney who makes such an informal offer of proof to preserve error should be certain the offer is made before the court,

did not waive objection to admission of expert testimony by not objecting to its introduction at trial because counsel had obtained ruling at hearing on bill of exceptions).

272. See *Pool v. Ford Motor Co.*, 715 S.W.2d 629, 637 (Tex. 1986) (holding that party must timely object to questions asked in violation of in-limine order to preserve error), *judgment set aside upon settlement agreement*, 749 S.W.2d 489 (Tex. 1988); *Acord v. General Motors Corp.*, 669 S.W.2d 111, 116 (Tex. 1984) (holding that trial court's action in granting or denying motion in limine can never be considered reversible error unless the court rules again on admissibility at trial); *Glenn v. Kinco Crane, Inc.*, 836 S.W.2d 646, 648 (Tex. App.—Houston [1st Dist.] 1992, no writ) (explaining that ruling on motion in limine does not preserve error for appellate review).

273. *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 854, 1995 WL 359024, at *3 (June 15, 1995).

274. *Id.*

court reporter, and opposing counsel,²⁷⁵ outside of the presence of the jury, and prior to the reading of the charge.²⁷⁶ The attorney should obtain a ruling on the record to foreclose any confusion on appeal.²⁷⁷ The record of an informal offer should reflect the context in which the proof was offered, the purpose for which it was offered, and the reason the evidence should be admitted.²⁷⁸ A

275. See TEX. R. APP. P. 52(b) (providing for party proffering excluded evidence to make bill of exceptions before trial judge and have hearing transcribed by court reporter). A bill of exceptions gives the proffering party an additional chance to convince the trial court to admit the evidence, in addition to preserving error for appellate review. MICHAEL O'CONNOR, O'CONNOR'S TEXAS RULES: CIVIL TRIALS 644 (1994). In fact, a trial court commits reversible error by refusing to allow a party to make a bill of exceptions because the appellate court needs a record to evaluate excluded evidence. *4M Linen & Uniform Supply Co. v. W.P. Ballard & Co.*, 793 S.W.2d 320, 324 (Tex. App.—Houston [1st Dist.] 1990, writ denied).

276. See TEX. R. APP. P. 52(b) (allowing party to present bill of exceptions in absence of jury, so long as it is made before charge is read to jury); TEX. R. CIV. EVID. 103(b) (providing for offer of proof in absence of jury and prior to jury charge); see also *4M Linen & Uniform Supply Co.*, 793 S.W.2d at 323 (interpreting Rule 52(b) to require that trial courts permit party to make bill of exceptions prior to reading of jury charge); *McKinney v. National Union Fire Ins. Co.*, 747 S.W.2d 907, 909-10 (Tex. App.—Fort Worth 1988) (holding that bill of exceptions offered after jury charge is read does not preserve error), *aff'd*, 772 S.W.2d 72 (Tex. 1989).

277. See TEX. R. APP. P. 52(a) (providing that objecting party must obtain ruling to preserve error for appellate review); *Waldon v. City of Longview*, 855 S.W.2d 875, 880 (Tex. App.—Tyler 1993, no writ) (finding that proponent of excluded evidence did not preserve complaint because party failed to obtain ruling on admissibility from trial court after presenting informal bill of exceptions); *Raw Hide Oil & Gas, Inc. v. Maxus Exploration Co.*, 766 S.W.2d 264, 274 (Tex. App.—Amarillo 1988, writ denied) (holding that party's bill of exceptions, despite being ruled on after judgment was rendered, did not preserve error because party failed to request ruling or object to lack of ruling on offer prior to charge being read to jury). *But see Guentzel v. Toyota Motor Corp.*, 768 S.W.2d 890, 897 (Tex. App.—San Antonio 1989, writ denied) (reviewing exclusion of expert testimony, even though no formal ruling was in transcript, because filed objections to exclusion of testimony contained notation and initials of judge sustaining exclusion of testimony). An unclear ruling on the record caused problems for the Robinsons at the intermediate level in *Du Pont*. See *Robinson v. E.I. Du Pont De Nemours & Co.*, 888 S.W.2d 490, 491-92 (Tex. App.—Fort Worth 1994) (determining that trial court's equivocal answer of "all right" in response to request for ruling on admissibility nevertheless preserved error because context of statement indicated that court was overruling Robinsons' bill of exceptions), *rev'd*, 38 Tex. Sup. Ct. J. 852, 1995 WL 359024 (June 15, 1995). Should the trial court refuse to rule on admissibility after a party presents an informal bill of exceptions, an objection to the court's refusal to rule will preserve error. TEX. R. APP. P. 52(a).

278. See TEX. R. APP. P. 52(b) (providing that "a transcription of the reporter's notes showing the offer, whether by concise statement or question and answer, showing the objections made, and showing the ruling thereon, when included in the record certified by the reporter, shall establish the nature of the evidence, the objections and the ruling"); *Continental Coffee Prods. Co. v. Cazarez*, 903 S.W.2d 70, 80 (Tex. App.—Houston [14th Dist.]

tender of the expert's deposition testimony and a transcript of the prior Rule 104(a) gatekeeping hearing should meet these requirements.

To establish reversible error on appeal, counsel must demonstrate that the excluded testimony is controlling on a material issue such that exclusion probably led to an improper verdict.²⁷⁹ Therefore, an informal offer of proof should also include reasons why the testimony is materially important and thus controlling to the judgment, unless, of course, the opposing party is willing to stipulate to the controlling nature of the excluded testimony.²⁸⁰ In cases involving hotly debated issues of causation, such as products liability or toxic tort cases, counsel should be able to demonstrate that the disputed testimony is controlling because causation is an essential element of these claims.

If the exclusion of expert testimony totally undermines the proponent's case, the party that initiated gatekeeping may move for summary judgment.²⁸¹ However, because the movant carries the

1995, writ requested) (concluding that appellants failed to preserve error because they did not specify purpose for which evidence was offered and reason why evidence was admissible). Importantly, a party must be able to demonstrate and preserve harmful error at the informal offering. See Tex. R. Civ. Evid. 103(a) (providing that "[e]rror may not be predicated upon a ruling which admits or excludes evidence unless a substantial right of the party is affected").

279. *Mentis v. Barnard*, 870 S.W.2d 14, 16 (Tex. 1994); see also TEX. R. APP. P. 81(b) (providing that "[n]o judgment shall be reversed . . . unless the appellate court shall be of the opinion that the error complained of amounted to such a denial of the rights of the appellant as was reasonably calculated to cause and probably did cause rendition of an improper judgment"); *Gee v. Liberty Mut. Fire Ins. Co.*, 765 S.W.2d 394, 396 (Tex. 1989) (listing elements that must be shown to reverse judgment based on trial court's admission or exclusion of evidence).

280. See *Gee*, 765 S.W.2d at 396 (explaining that courts "must review the entire record to determine whether the judgment was controlled by the testimony that should have been excluded").

281. See, e.g., *Porter v. Whitehall Lab., Inc.*, 9 F.3d 607, 614-15 (7th Cir. 1993) (affirming summary judgment entered after trial court concluded that plaintiff's three expert opinions on causation were not acceptable under *Daubert*); *Chikovsky v. Ortho Pharmaceutical Corp.*, 832 F. Supp. 341, 345-46 (S.D. Fla. 1993) (granting summary judgment because expert testimony supporting causal link between use of Retin-A and plaintiff's birth defect was not scientifically valid under *Daubert*); *DeLuca v. Merrell Dow Pharmaceuticals, Inc.*, 791 F. Supp. 1042, 1059 (D.N.J. 1992) (granting summary judgment on remand because no reliable expert testimony linked Bendectin ingestion to plaintiff's birth defects), *cert. denied*, 114 S. Ct. 691 (1994); *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 727 F. Supp. 570, 572 (S.D. Cal. 1989) (granting summary judgment after rejecting plaintiff's expert testimony), *aff'd*, 951 F.2d 1128 (9th Cir. 1991), *vacated*, 113 S. Ct. 2786 (1993).

summary judgment burden, as opposed to the burden placed on the nonmovant in *Du Pont*, all parties who have successfully challenged experts may not be able to obtain summary judgment.²⁸² Thus, the proponent's summary judgment response should include the excluded expert's deposition testimony and affidavits establishing qualification, reliability, relevance, and relative probity.²⁸³ Additionally, the response might include an attorney's affidavit with an attached transcript of the gatekeeping hearing to ensure that the defense of the excluded expert at the preliminary hearing becomes part of the appellate record.²⁸⁴

VII. TYPES OF TESTIMONY OPENED TO GATEKEEPER SCRUTINY BY FULL IMPLEMENTATION OF THE TEXAS RULES

The emphasis that *Du Pont* places on full implementation of Rules 702, 703 and 403 of the Texas Rules of Civil Evidence in preliminary evaluations of proffered opinion evidence increases the odds of a successful challenge to many types of problematic expert testimony.²⁸⁵ In the past, courts have liberally admitted opinion evidence on the grounds that it may be of assistance to the jury, often without a complete analysis of the prejudice that could result from allowing marginally relevant and unreliable testimony to be presented to a jury by one given the imprimatur of expertise

282. See *supra* notes 140–44 and accompanying text.

283. See TEX. R. CIV. P. 166a(c) (providing that summary judgment decision shall be based on, among other things, deposition transcripts and parties' supporting affidavits); see also *Life Ins. Co. v. Gar-Dal, Inc.*, 570 S.W.2d 378, 382 (Tex. 1978) (stating that affidavits must state facts, not just legal conclusions, to defeat summary judgment motion); *Rogers v. Duke*, 766 S.W.2d 547, 548 (Tex. App.—Houston [1st Dist.] 1989, no writ) (holding that depositions must be on file with court to be considered summary judgment evidence when motion is heard). On appeal, the proponent of the excluded expert must demonstrate that the excluded expert testimony was legally sufficient to raise a fact issue. See *Duff v. Yelin*, 751 S.W.2d 175, 176 (Tex. 1988) (stating that, to affirm instructed verdict, court must find there was no probative evidence raising fact issue for jury); *Havner*, 907 S.W.2d at 552-54 (opinion on en banc reh'g Aug. 10, 1995) (affirming denial of summary judgment, refusal to exclude evidence at trial, and judgment based on expert testimony concerning causation because proffered expert testimony was reliable and relevant under *Du Pont* standards).

284. Cf. *Casso v. Brand*, 776 S.W.2d 551, 553 (Tex. 1989) (stating that only recorded or written summary judgment proof is preserved for appellate review).

285. Cf. Frank C. Woodside et al., *Evidence Problems: Daubert and Beyond*, CA11 A.L.I.-A.B.A. 101, 106 (1995) (reporting that "approximately 2/3's of the reported cases since *Daubert* have excluded expert testimony"), available in Westlaw, JLR Database.

by the court.²⁸⁶ Now, however, challenges to the types of experts discussed below have greater prospects for success.

A. *Predetermined Theory Experts*

Predetermined theory experts are obviously open to challenge under *Du Pont*. The predetermined theory expert focuses her investigation of damage causation on an already publicized or easily demonstrable problem, without identifying and ruling out other causes.²⁸⁷ In *Du Pont*, the Texas Supreme Court indicated that such a methodology is inadequate as a matter of law.²⁸⁸

Often, a predetermined theory expert in the products liability field reveals her methodology, as in *Du Pont*, by attempting to create visual or demonstrative evidence that illustrates the predetermined causation theory from the very beginning of the investigation process.²⁸⁹ For example, the Robinsons' expert in *Du Pont* took photographs early on to identify "what he was trying to show."²⁹⁰ Sometimes, a predetermined theory expert will even acknowledge that other causation scenarios are possible, but will as-

286. See *White Budd Van Ness Partnership v. Major-Gladys Drive Joint Venture*, 798 S.W.2d 805, 815-16 (Tex. App.—Beaumont 1990, writ dismissed) (allowing expert witness with degree in engineering to testify on standard of care for architects because fields of expertise in those professions overlap and are intertwined on issues upon which expert testified), cert. denied, 502 U.S. 861 (1991); see also *Developments in the Law—Confronting the New Challenges of Scientific Evidence*, 108 HARV. L. REV. 1481, 1509 (1995) (noting that juries may view expert testimony as more objective than other types of evidence); cf. Rochelle C. Dreyfuss, *Is Science a Special Case?: The Admissibility of Scientific Evidence After Daubert v. Merrell Dow*, 73 TEX. L. REV. 1779, 1783 (1995) (pointing out that many scientific techniques that do not meet *Daubert* standard were routinely admitted in past).

287. See *Bell v. Swift Adhesives, Inc.*, 804 F. Supp. 1577, 1580 (S.D. Ga. 1992) (granting defendant's motion for summary judgment in part because plaintiff's expert failed to rule out alternative causes for plaintiff's liver cancer); Linda A. Bailey et al., *Reference Guide on Epidemiology* (explaining that researchers must consider and rule out confounding factors or alternative causes in their studies to avoid erroneous results), in FEDERAL JUDICIAL CENTER, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 121, 158-60, 163 (1994).

288. See *E. I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 860, 1995 WL 359024, at *11 (June 15, 1995) (characterizing expert's opinion as "speculation" because he reached conclusion without first researching and ruling out alternative causes).

289. See Marc S. Klein, *Expert Testimony in Pharmaceutical Product Liability Actions*, 45 FOOD DRUG COSM. L.J. 393, 429 (1990) (noting that unsound expert opinions in pharmaceutical product liability actions are often based on mere temporal relationship, rather than scientific reasoning).

290. *Du Pont*, 38 Tex. Sup. Ct. J. at 853, 1995 WL 359024, at *1.

sert that the existence of the problem on which they are focusing enables them to summarily rule out those other scenarios.²⁹¹

In toxic exposure cases such as *Du Pont*, a predetermined theory expert will often arrive at a premature conclusion on causation based on a temporal relationship between a given exposure and an adverse effect, without ruling out the possibility of coincidence.²⁹² Federal courts have often found such a simplistic methodology to be insufficient to satisfy the requirements of Rule 702 of the Federal Rules of Evidence.²⁹³ *Du Pont* suggests that Texas courts will reach a similar result.²⁹⁴

291. See *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 757 (3d Cir. 1994) (discussing how expert determined that plaintiffs suffered from PCB exposure based on his knowledge of plaintiffs' exposure and general effects of PCBs, without considering alternative causes), *cert. denied sub nom.* *General Elec. Co. v. Ingram*, 115 S. Ct. 1253 (1995).

292. Although the Latin terminology for such fallacious reasoning is "*post hoc ergo propter hoc*," I prefer the wry description of this analysis as a "sun rises because the rooster crows" approach. For the article that uses this terminology and also provides a complete description of this approach, see Wendy Fleishman & Russell Jackson, *Challenges to the Admissibility of Expert Testimony: What Works After Daubert?*, in *PROVING OR DEFENDING REPETITIVE STRESS INJURY, MEDICAL DEVICE, LEAD, PHARMACEUTICAL, AND CLOSED HEAD TRAUMA CASES: A SATELLITE PROGRAM* 121, 133 (PLI Commercial Law & Practice Course Handbook Series No. A-723, 1995).

293. See *Schmaltz v. Norfolk & W. Ry. Co.*, 878 F. Supp. 1119, 1122 (N.D. Ill. 1995) (stating that "[i]t is well settled that a causation opinion based solely on temporal relationship is not derived from the scientific method and is therefore insufficient to satisfy the requirements of Federal Rule of Evidence 702"); see also *Porter v. Whitehall Lab., Inc.*, 9 F.3d 607, 614-15 (7th Cir. 1993) (stating that mere conjecture based upon temporal relationship between plaintiff's exposure to substance and later development of symptoms could not establish causation); *Perry v. United States*, 755 F.2d 888, 893 (11th Cir. 1985) (finding no evidence of causation because expert could not "rule out the possibility that the temporal proximity of the illness and vaccination was a coincidence"); *Hasler v. United States*, 718 F.2d 202, 204 (6th Cir. 1983) (positing that "[w]ithout more, [a] proximate temporal relationship will not support a finding of causation"), *cert. denied*, 469 U.S. 817 (1984); *Schmaltz*, 878 F. Supp. at 1122 (excluding expert testimony based solely on occurrence of respiratory illness after pesticide exposure); *Conde v. Velsicol Chem. Corp.*, 804 F. Supp. 972, 1023 (S.D. Ohio 1992) (rejecting expert testimony based entirely on temporal relationship between exposure and injury), *aff'd*, 24 F.3d 809 (6th Cir. 1994); *In re Swine Flu Immunization Prods. Liab. Litig.*, 533 F. Supp. 567, 572 (D. Colo. 1980) (stating that "mere temporary relationship between the onset of a disease and the vaccination is insufficient to establish legal causation"); *Del Pilar v. Eastern Air Lines, Inc.*, 172 F. Supp. 158, 160 (S.D.N.Y. 1959) (criticizing plaintiff's illogical presumption that fact that he sat in airline seat was proof that seat caused his subsequent back injuries).

294. See *Du Pont*, 38 Tex. Sup. Ct. J. at 860, 1995 WL 359024, at *11 (rejecting expert's contention that because Robinsons applied Benlate to their trees, and trees showed signs of damage, Robinsons' Benlate must have been contaminated).

B. *Duty Experts*

Duty experts, who are often law professors or lawyers introduced to explain legal duties to the jury,²⁹⁵ are also now more vulnerable to gatekeeping challenges. This vulnerability stems from the Texas Supreme Court's recognition that an expert is a potentially prejudicial "unbridled authority figure" in the eyes of jurors,²⁹⁶ and its holding that expert testimony "must be 'sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.'"²⁹⁷ In Texas, the judge is responsible for determining the scope of the duties created by law.²⁹⁸ Therefore, proffered expert testimony that addresses the proper allocation of duties between parties cannot be of assistance to the jury and, thus, should not be admitted.²⁹⁹

295. See Thomas E. Baker, *The Impropriety of Expert Witness Testimony on the Law*, 40 KAN. L. REV. 325, 325 (1992) (noting increasing use of expert testimony from lawyers and law professors regarding legal issues).

296. *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 855, 1995 WL 359024, at *4 (June 15, 1995).

297. *Id.* at 858, 1995 WL 359024, at *8 (quoting *United States v. Downing*, 753 F.2d 1224, 1242 (3d Cir. 1985)).

298. See *Greater Houston Transp. Co. v. Phillips*, 801 S.W.2d 523, 525 (Tex. 1990) (reiterating that existence of duty in tort case is question of law that courts must decide based on specific factual circumstances and several factors, "including the risk, foreseeability, and likelihood of injury weighed against the social utility of the actor's conduct, magnitude of the burden of guarding against the injury, and the consequences of placing the burden on the defendant"); *Lawson v. B Four Corp.*, 888 S.W.2d 31, 33 (Tex. App.—Houston [1st Dist.] 1990, writ denied) (stating that determination of duty is question of law for courts to decide based on facts of case).

299. See *Crum & Forster, Inc. v. Monsanto Co.*, 887 S.W.2d 103, 133-34 (Tex. App.—Texarkana 1994) (providing that witnesses cannot give testimony to aid jury in interpreting law because only judge can decide matters of law), *vacated on agreed motion of parties*, No. 6-92-00100-CV, 1995 WL 273592 (Tex. App.—Texarkana Mar. 9, 1995); *Texas Workers' Compensation Comm'n v. Garcia*, 862 S.W.2d 61, 105 (Tex. App.—San Antonio 1993) (concluding that law professor's testimony concerning constitutionality of statute was inadmissible because it was opinion testimony on legal issue), *rev'd on other grounds*, 893 S.W.2d 504 (Tex. 1995); *Schauer v. Memorial Care Sys.*, 856 S.W.2d 437, 451 (Tex. App.—Houston [1st Dist.] 1993, no writ) (reiterating that "[i]t is well-established that 'matters of law are not proper subjects for expert opinion'" (quoting *Adamson v. Burtle*, 186 S.W.2d 388, 396 (Tex. Civ. App.—San Antonio 1945, writ ref'd w.o.m.))); *Cluett v. Medical Protective Co.*, 829 S.W.2d 822, 827 (Tex. App.—Dallas 1992, writ denied) (affirming exclusion of expert testimony regarding scope of coverage of insurance policy because testimony concerned legal duty); see also *Bammerlin v. Navistar Int'l Transp. Corp.*, 30 F.3d 898, 900-01 (7th Cir. 1994) (positing that courts, rather than expert witnesses, should resolve issues regarding the meaning of federal standards and should instruct juries accordingly); *Marx & Co., Inc. v. Diners' Club, Inc.*, 550 F.2d 505, 508 (2d Cir.) (excluding testimony of attorney expert on legal standards applicable to contract), *cert. denied*, 434 U.S. 861 (1977); *Contini*

The prior practice of admitting expert opinions on duties under Rule 704 of the Texas Rules of Civil Evidence, which allows expert opinion on mixed questions of law and fact that are otherwise admissible, will probably not continue.³⁰⁰ *Du Pont* strengthens challenges to expert testimony combining law and fact by suggesting new grounds for contesting assertions that opinions are otherwise admissible.³⁰¹ The lack of precise relevance of duty-expert opinions to issues that are actually before a jury, as well as the tendency of such evidence to confuse and create prejudice, should allow parties to deny that mixed opinions are otherwise admissible under Rule 704.³⁰²

v. Hyundai Motor Co., 876 F. Supp. 540, 542-43 (S.D.N.Y. 1995) (contending that courts, not experts, must instruct jury on questions of law). *But see* Transport Ins. Co. v. Faircloth, 861 S.W.2d 926, 938-39 (Tex. App.—Beaumont 1993, no writ) (allowing former Texas Supreme Court justice's expert testimony concerning procedures for settling minor's personal injury claim), *rev'd on other grounds*, 898 S.W.2d 269 (Tex. 1995).

300. *See* TEX. R. CIV. EVID. 704 (providing that "testimony in the form of an opinion or inference otherwise admissible is not objectionable because it embraces an ultimate issue to be decided by the trier of fact"); *Birchfield v. Texarkana Memorial Hosp.*, 747 S.W.2d 361, 365 (Tex. 1987) (stating that, in addition to Rule 704, "fairness and efficiency dictate that an expert may state an opinion on a mixed question of law and fact as long as the opinion is confined to the relevant issues and is based on proper legal concepts"); *Lyondell Petrochemical Co. v. Flour Daniel, Inc.*, 888 S.W.2d 547, 554 (Tex. App.—Houston [1st Dist.] 1994, writ denied) (finding admissible expert testimony regarding whether contractor had complied with government regulations because expert testified as to factual basis of his conclusion and application of regulation to facts was difficult for jury to comprehend); *Crum & Forster, Inc.*, 887 S.W.2d at 134-35 (allowing testimony regarding propriety of Mary Carter agreements because testimony was connected to challenging party's conduct in case); *Keene Corp. v. Rogers*, 863 S.W.2d 168, 176-77 (Tex. App.—Texarkana 1993, writ requested) (noting that experts may offer opinions on mixed question of law and fact so long as experts are provided with proper predicate on which to base their responses).

301. *See Du Pont*, 38 Tex. Sup. Ct. J. at 858, 1995 WL 359024, at *8 (holding that, "in addition to showing that an expert witness is qualified, Rule 702 also requires the proponent to show that the expert's testimony is relevant to the issues in the case and is based upon a reliable foundation").

302. *Cf. Louder v. DeLeon*, 754 S.W.2d 148, 149 (Tex. 1988) (*per curiam*) (suggesting that Rule 702, which requires that expert testimony assist jury, and Rule 403, which excludes some probative evidence that may confuse, prejudice, or mislead jury, may affect court's ruling on admissibility of mixed questions of law and fact); *Birchfield*, 747 S.W.2d at 365 (explaining that expert testimony on mixed questions of law and fact "must be confined to relevant issues"); Thomas C. Riney, *Expert Testimony and Discovery* (suggesting that attorneys challenging expert testimony on mixed questions of law and fact make objections based on relevance to disputed issues and Rule 702 requirement that opinions assist jury), in STATE BAR OF TEXAS, *ADVANCED EVIDENCE AND DISCOVERY COURSE M-7* (1994).

C. *Experts on Subjective States and Other Technical Experts Whose Methodologies Cannot Be Substantiated*

Du Pont also increases the chance of excluding expert testimony concerning the state of mind and awareness of an individual or corporation.³⁰³ No reliable, specialized methodology for determining subjective states currently exists, which renders this type of testimony open to reliability challenges.³⁰⁴ Further, expert testimony that draws conclusions on subjective states from documents or other circumstantial evidence does not assist the trier of fact in making more accurate inferences than those they could reach unaided through an exercise of common sense.³⁰⁵ Accordingly, such testimony should be excluded under *Du Pont* because it is much more likely to be prejudicial than probative.³⁰⁶

303. Cf. *Wilson v. City of Chicago*, 6 F.3d 1233, 1238-39 (7th Cir. 1993) (affirming under *Daubert* district court's exclusion of testimony regarding mental and physical effects of electroshock therapy); *Gier v. Educational Serv. Unit No. 16*, 845 F. Supp. 1342, 1349-53 (D. Neb. 1994) (stating that admissibility status for psychological testimony in child abuse cases is suspect after *Daubert*). One pre-*Du Pont* Texas court previously found similar mental state testimony inadmissible, but under a different legal theory. See *Borden, Inc. v. De La Rosa*, 825 S.W.2d 710, 718-19 (Tex. App.—Corpus Christi 1991) (finding expert testimony of attorney concerning employer's motive in firing employee inadmissible because issue did not require specialized knowledge to assist jury), *judgment vacated upon settlement*, 831 S.W.2d 304 (Tex. 1992).

304. See David L. Faigman et al., *Check Your Crystal Ball at the Courthouse Door, Please: Exploring the Past, Understanding the Present, and Worrying About the Future of Scientific Evidence*, 15 CARDOZO L. REV. 1799, 1832 (1994) (noting that in some areas, including psychology and psychiatry, experts seek to offer "scientific" opinions that are not supported by empirical evidence); see also Charles R. Dunn, *Use of Psychiatrists* (reviewing various studies regarding reliability of psychiatric and psychological diagnoses, most of which reported wide differences in diagnoses), in STATE BAR OF TEXAS, EXPERTS IN LITIGATION: A PERFORMANCE ENHANCEMENT COURSE K-16 to K-19 (1987).

305. See *Borden*, 825 S.W.2d at 718 (finding that expert testimony of attorney that employee's firing was in retaliation for filing workers' compensation claim was admitted in error because testimony concerned simple factual inquiry that jury could answer unaided); *Seale v. Winn Exploration Co., Inc.*, 732 S.W.2d 667, 669 (Tex. App.—Corpus Christi 1987, writ denied) (excluding testimony of psychiatrist concerning monetary value of loss of love, affection, and companionship in wrongful death action because testimony presented no special knowledge that jurors did not already have); see also *Developments in the Law—Confronting the New Challenges of Scientific Evidence*, 108 HARV. L. REV. 1481, 1525-26 (1995) (discussing controversy over whether to classify psychology as science for evaluation under *Daubert*, especially in light of fact that psychologists often testify on issues already familiar and entrusted to juries, including mental states of individuals).

306. See *E.I. Du Pont De Nemours & Co. v. Robinson*, 38 Tex. Sup. Ct. J. 852, 855, 859, 1995 WL 359024, at *4, 9 (June 15, 1995) (warning of prejudicial influence of expert testimony and urging courts to exclude such testimony under Rule 403).

Because *Du Pont's* holding is not limited to scientific evidence,³⁰⁷ any expert whose methodology is suspect is now subject to challenge.³⁰⁸ The United States Court of Appeals for the Fifth Circuit has already applied *Daubert* to assess the methodology of an economist,³⁰⁹ and other federal circuits have applied *Daubert* to evaluate expert testimony on design feasibility.³¹⁰ Similar assessments are now possible in Texas state courts under *Du Pont*. Many types of experts, in addition to those listed, will undoubtedly be identified for challenge as the bench and bar explore the scope of *Du Pont*. The efficacy of those challenges, however, will depend on the continued willingness of the Texas Supreme Court to review decisions such as *Havner*, in which mere lip service has been paid to the guidelines in *Du Pont*.

VIII. CONCLUSION

The advent of trial court gatekeeping aimed at full implementation of the Texas Rules of Civil Evidence invites a fresh look at expert practice. A new approach to the engagement, use, and challenge of testifying experts is necessary, guided by three *Rs*—relia-

307. See *supra* note 182 and accompanying text.

308. Cf. Edward J. Imwinkelried, *The Next Step After Daubert: Developing a Similarly Epistemological Approach to Ensuring the Reliability of Nonscientific Expert Testimony*, 15 CARDOZO L. REV. 2271, 2278-79 (1994) (discussing implications of *Daubert* on reliability of nonscientific expert testimony, and finding it "every bit as suspect as the reliability of scientific evidence"); *Developments in the Law—Confronting the New Challenges of Scientific Evidence*, 108 HARV. L. REV. 1481, 1515 & n.45 (1995) (explaining that courts may exclude expert testimony based on hypotheses that have not been challenged by testing and experimentation, but warning that some types of hypotheses are not amenable to such experimentation and that courts may have difficult time applying this criteria).

309. See *Marcel v. Placid Oil Co.*, 11 F.3d 563, 567 (5th Cir. 1994) (excluding economist's expert testimony based on independent study of worklife expectancies of oilfield workers because expert did not provide any information on how work-life expectancies of oilfield workers differed from that of other occupations or national average); see also *Wilt v. Buracker*, 443 S.E.2d 196, 203 (W. Va. 1993) (adopting *Daubert* standard and finding that trial court abused discretion in allowing expert testimony on calculation of damages because methodology used by expert had no relevance to issues at hand), *cert. denied*, 114 S. Ct. 2137 (1994). See generally Carl Roth & Doyle W. Curry, *Use of the Economist/Annuity* (defining economic expert as one whose testimony is used to help determine adequate compensation for plaintiff's injuries), in STATE BAR OF TEXAS, EXPERTS IN LITIGATION: A PERFORMANCE ENHANCEMENT COURSE M-1 (1987).

310. See *Pries v. Honda Motor Co.*, 31 F.3d 543, 545 (7th Cir. 1994) (excluding expert's testimony regarding "test" of seat belt latch for defective design, consisting of dropping similar latch on hard surface to see if it would open, because test did not qualify as scientific).

bility, relevance, and relative probity. Although it will be more difficult to establish the predicate for admission of expert testimony in the future, the analyses provided thus far by Texas courts, especially the supreme court's analysis in *Du Pont*, give firm guidance on the factors that will aid in defending or challenging the admission of an expert's testimony.

The Supreme Court's endorsement of pretrial exclusion of experts in *Du Pont* may also save a great deal of jury "down time." Marginal experts may now be eliminated before a jury is impaneled. Additionally, many preliminary questions as to the admissibility of testimony from experts who can withstand challenge can be resolved before trial without consuming valuable jury time.

It is to be hoped that the quality of justice dispensed in Texas will be improved as a result of the careful preparation that is now required to equip an expert to meet an opponent's informed challenge. The recent, thoughtful opinions of the Texas Supreme Court and the Dallas Court of Appeals should certainly aid in that process. Ultimately, however, the effects of the recent changes in focus regarding experts in Texas will depend on the creativity of the attorneys who regularly prepare and challenge experts, and the trial judges who rule on gatekeeping motions.