November Scientific Evidence after *Reese v. Stroh*: The Washington Supreme Court's Love Affair with *Frye*

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NOVEL SCIENTIFIC EVIDENCE AFTER REESE V. STROH: THE WASHINGTON SUPREME COURT’S LOVE AFFAIR WITH FRYE

Robert D. Leinbach

Abstract: In Reese v. Stroh, the Washington Supreme Court upheld the use of the Frye test as a threshold inquiry in civil cases involving novel scientific evidence. By affirming the decision of the court of appeals, but not its reasoning, the Washington Supreme Court side-stepped the court of appeals's argument for adoption of the Daubert standard in civil cases analyzing ER 702. This Note examines the decision in Reese v. Stroh and concludes that the Washington Supreme Court failed to determine clearly the proper analysis of ER 702 in cases involving novel scientific evidence. It further agrees with Justice Johnson’s concurring opinion that the Daubert test provides the appropriate analysis of ER 702 under such circumstances. It recommends that Washington adopt the Daubert standard in all cases involving novel scientific evidence to address best the needs of an increasingly technological society.

In Reese v. Stroh, the Washington Supreme Court had the opportunity to clarify the proper application of Washington Rule of Evidence (ER) 702 in cases involving novel scientific evidence. The court instead avoided the issue and decided the case on other grounds, holding that the scientific methodology applied in Reese was not novel. In the process, the court expressly retained the rule, first articulated in 1923 in Frye v. United States, that expert testimony derived from a scientific theory or principle is admissible only if it has achieved general acceptance in the relevant scientific community. The court, however, did not articulate how expert testimony should be analyzed for reliability under ER 702. Because the Frye test no longer is sufficient for such an analysis, it should be abandoned and replaced by the test enunciated by the U.S. Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, Inc.

In Daubert, the Court stated that the rule established in Frye is “incompatible with” the “liberal thrust” of the Federal Rules of Evidence

2. ER 702 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.” Wash. R. Evid. 702.
4. 293 F. 1013 (D.C. Cir. 1923).
(FRE) and their "general approach of relaxing the traditional barriers to 'opinion' testimony." On December 19, 1978, the Washington Supreme Court adopted a new evidence code based on the Federal Rules of Evidence, and the Washington Rules of Evidence became effective on April 2, 1979. ER 702 and ER 703 mirror FRE 702 and FRE 703. Prior to the adoption of the Washington Rules of Evidence, Washington courts applied the Frye test when confronted with questions of admissibility of novel scientific evidence. In the years between the adoption of the Federal Rules of Evidence and the Daubert decision, many courts and commentators debated whether Frye had continuing validity. The U.S. Supreme Court concluded that debate for the federal court system in Daubert. Yet the Supreme Court of Washington in State v. Cauthron, although acknowledging the recent trend towards rejecting the Frye standard, upheld the state's long-standing adherence to Frye in criminal cases.

Seizing upon the opportunity to distinguish Cauthron, Division One of the Washington Court of Appeals held in Reese v. Stroh that Frye only applied in a criminal context, and that Daubert was the appropriate standard in a civil context. As Reese II was appealed to the Washington

9. ER 703 provides:
   The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence.
10. See Wash. R. Evid. 702, 703 cmts.
11. Some authorities viewed the failure of FRE 702 to mention Frye or its "generally accepted in the relevant scientific community" language as an indication that the drafters intended to abandon the Frye standard. See Aronson, supra note 8, § 702, at 11 (1993). Other authorities view the adoption of FRE 702 without any mention of Frye as an indication that Frye is still good law, finding it implausible that over 60 years of jurisprudence would be overruled without comment. See, e.g., Stephen A. Salzburg & Kenneth R. Redder, Federal Rules of Evidence Manual 452 (3d ed. 1982).
13. In Cauthron, the Washington Supreme Court held that evidence of the restricted fragment length polymorphism (RFLP) method of DNA typing was accepted universally and thus admissible. 120 Wash. 2d at 899, 846 P.2d at 512. The court reversed Cauthron's conviction on seven counts of first degree rape, however, because testimony that Cauthron's DNA "matched" the perpetrator was improperly admitted without statistical support of its probability. Id. at 907, 846 P.2d at 516.
Supreme Court, lawyers anxiously awaited the court's clarification of the matter. Unfortunately, the majority's opinion in *Reese III* failed to clarify the law on the admissibility of novel scientific evidence.

This Note analyzes the decision in *Reese III* and reveals the need for a clear, concise standard for Washington courts when applying ER 702 and ER 703 to questions involving scientific expert testimony. Part I of this Note provides a brief history of the Frye and Daubert decisions and reviews Washington's application of Frye prior to *Reese v. Stroh*. Part II traces the procedural history of *Reese v. Stroh*. Part III critically analyzes the holding of the Washington Supreme Court. Finally, part IV concludes that the supreme court's continued adherence to the Frye analysis is outdated, ill-advised, and unnecessary in both civil and criminal cases. It suggests that the Washington Supreme Court should adopt the analysis set forth in Daubert in all cases involving scientific expert testimony to provide consistency and responsiveness to the needs of a more scientific and technological society, as envisioned by the Federal Rules of Evidence.

I. STANDARDS FOR ADMITTING NOVEL SCIENTIFIC EVIDENCE

A. Frye's General Acceptance Test

The problem of ensuring reliable expert testimony began well before the Frye decision. In the 1858 case of *Winans v. New York & Erie Railroad*, the U.S. Supreme Court observed that “[e]xperience has shown that opposite opinions of persons professing to be experts may be obtained to any amount . . . wasting the time and wearying the patience of both court and jury, and perplexing, instead of elucidating, the questions involved . . .” The Frye court attempted to correct some of this judicial inefficiency by establishing a bright line test wherein expert testimony should not be admitted unless the scientific principle from which the deduction has been made is “sufficiently established to have gained general acceptance in the particular field in which it belongs.”

*Frye* dealt with the issue of the admissibility of the results of a systolic blood pressure deception test. The District of Columbia Court of

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15. 62 U.S. 88 (1858).
16. *Id.* at 101.
18. The systolic blood pressure deception test was an early version of the “lie detector” test.
Appeals held that this deception test was inadmissible because the test had not yet "gained such standing and scientific recognition among physiological and psychological authorities as would justify the courts in admitting" the expert testimony as to its results.\(^{19}\) The *Frye* decision was lauded as keeping pace with the state of technology in 1923, while granting the courts the instruments necessary to counter the battle of the so-called experts of suspect science.

\section{Pros and Cons of *Frye*}

The most impressive aspect of *Frye* has been its staying power. The principal reason behind its over seventy years of applicability is its straightforwardness. This clarity reduces the need for time-consuming analysis of the reliability of every scientific methodology by the presiding judge. *Frye* also has been praised for protecting against the prejudicial effect of unproved hypotheses and avoiding conducting the misleading and confusing reliability determination in front of a jury.\(^{20}\) Under *Frye*, the reliability determination is made extrajudicially by the relevant scientific community.\(^{21}\) Supporters of *Frye* argue that such a determination should be made by those most qualified—the scientists themselves.\(^{22}\) Such an approach alleviates the concern underlying *Frye* that juries are likely to give too much weight to the probative value of the testimony of purported scientific experts.

The *Frye* standard also has had its share of critics. The standard has been termed "vague" because determining the relevant scientific community can be elusive and arbitrary.\(^{23}\) It is further difficult to determine what percentage of the community constitutes general acceptance.\(^{24}\) As some commentators have observed, *Frye* "simply does not acknowledge that 'consensus' is multi-faceted and reflects different meanings in different scientific contexts."\(^{25}\) Also, even before *Daubert*,

\begin{itemize}
\item \(19.\) *Frye*, 293 F. at 1014.
\item \(21.\) *Frye*, 293 F. at 1014.
\item \(23.\) See Graham, *supra* note 20, § 703.2.
\item \(24.\) See Gianelli, *supra* note 22, at 1210–11.
\end{itemize}
many viewed *Frye* as inconsistent with the policies underlying the adoption of the Federal Rules of Evidence.\(^2\)

The main criticism of *Frye* is that it serves as a barrier to valid scientific techniques during the lag time period necessary for novel techniques to gain general acceptance. In *United States v. Williams*,\(^2\) the Second Circuit Court of Appeals expressed its frustration with the slow pace at which a consensus is built when it observed that the *Frye* analysis relies on scientific nose counting.\(^2\) Judges' hands become tied in that they must exclude some reliable scientific evidence on the basis of this nose counting even if the overwhelming evidence regarding the scientific methodology affirms its validity.

2. **Daubert's Rejection of Frye**

In *Daubert*, the U.S. Supreme Court agreed with the Third Circuit's reasoning in *Downing* that the *Frye* standard is no longer viable in light of the Federal Rules of Evidence.\(^2\) The Court assigned to the trial judge the responsibility of ensuring at the outset of the trial that the scientific evidence is reliable and relevant to the issues of the case.\(^3\) FRE 702 establishes the standard for determining the reliability and relevance of such evidence in that it requires that the expert witness testify to "scientific knowledge" that will "assist the trier of fact."\(^4\) Thus, the trial judge must make a determination that the "reasoning or methodology underlying the testimony is scientifically valid and . . . [that the] reasoning or methodology properly can be applied to the facts in issue."\(^5\)

Focusing on the underlying methodology of the expert witness to ascertain the reliability of the testimony, Justice Blackmun set forth a list of factors to be considered by judges: (1) whether the technique or theory "can be (and has been) tested" to determine its "falsifiability"; (2) "whether the theory or technique has been subjected to peer review and publication"; (3) the "known or potential rate of error" of a "particular scientific technique," including the "existence and maintenance of

\(^{26}\) See, e.g., *United States v. Downing*, 753 F.2d 1224 (1985) ("The general acceptance standard reflects a conservative approach to the admissibility of scientific evidence that is at odds with the spirit, if not the precise language, of the Federal Rules of Evidence.").

\(^{27}\) 583 F.2d 1194 (2d Cir. 1978).

\(^{28}\) *Id.* at 1198.


\(^{30}\) *Id.* at 592.

\(^{31}\) *Id.*

\(^{32}\) *Id.*
standards controlling the technique’s operation”; and (4) a Frye analysis of the relevant scientific community. Justice Blackmun made it clear that the list is not to be conclusive, and that each factor is not to be individually determinative.

The goal of the Daubert Court was to substitute the “austere” Frye test with a flexible one in line with the Federal Rules of Evidence. The Court concluded by addressing two of the main concerns voiced by the advocates for both parties: that abandoning the Frye test would result in a flood of junk science under more liberal rules, and that a gatekeeping role for the judge was ill-placed and would stifle science. The Court answered the first question by highlighting the already existing safeguards such as cross-examination and the burden of proof. Therefore, the Court impliedly stressed that a focused inquiry by the trial judge under the Federal Rules of Evidence should rid courtrooms of junk science anyway.

Answering the second concern, the Court noted that legal disputes, as opposed to scientific conclusions, should be resolved quickly and finally. The majority acknowledged that scientific conclusions that are “probably wrong” may help other scientists to achieve their quest for truth in a matter. In a legal setting, however, the Court dismissed the utility of such conjectures for “the project of reaching a quick, final, and binding legal judgment—often of great consequence—about a particular set of events in the past.” As commentators have observed, it appears a bit ridiculous to suggest that science depends upon the law for sustenance. Moreover, the judge’s gatekeeping role is in “ensuring reliability, not [scientific] discovery.”

33. Id. at 593–94.
34. Id. at 594.
35. Id. at 589.
36. Id. at 595–97.
37. Id. at 596.
38. Id.
39. Id. at 597.
40. Id.
42. Id.

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B. Frye and Daubert in Washington

In State v. Woo, the Washington Supreme Court mentioned Frye for the first time. The defendants in Woo were charged with multiple counts of bribing a police officer. They then filed motions seeking polygraph examinations and a ruling that recorded polygraph readings and the opinion of the operator based thereon would be admissible. Without expressly adopting Frye, the court noted that the general rule, "followed almost without exception since Frye v. United States . . . is that the results of a polygraph examination are inadmissible at trial." The court then concluded that the record was insufficient to depart from the general rule.

Washington courts subsequently have found that the Woo court implicitly adopted the Frye standard for the admissibility of novel scientific evidence, at least in the criminal context. Applying the Frye standard in Washington to evaluate novel techniques in criminal trials, however, has not been without confusion. Contributing to the confusion has been determining where the "general acceptance" test falls in the analytical process after Washington's adoption of ER 702. Although ER 702 does not mention a threshold question of whether the particular method has gained general acceptance in the relevant scientific community, in State v. Maule, Division One of the Washington Court of Appeals fit the Frye standard into ER 702 by placing the reliability of the method or technique within the framework of the threshold requirement that the testimony help the trier of fact. The Maule court followed the approach suggested by Judge Weinstein that permits the trial judge, in determining whether the opinion is admissible as an expert opinion, "to assess the reliability of the theory, methodology, procedure

43. 84 Wash. 2d 472, 527 P.2d 271 (1974).
44. Id., 527 P.2d at 272.
45. Id.
46. Id. at 473, 527 P.2d at 272.
47. Id. at 475, 527 P.2d at 273.
52. See 3 J. Weinstein & M. Berger, Evidence § 702[01], at 702–19 (1982).
or principle propounded by the expert and the probative value of his testimony through factors similar to those enunciated in *Daubert*.54

Just over a month after *Daubert*, the Washington Supreme Court applied the *Frye* test without mention of the *Daubert* decision in *In re Young*.55 The defendant in *In re Young* contended that the State’s expert testimony—that Young was likely to re-offend because he had a particular mental abnormality or personality disorder that makes a person likely to rape—should have been excluded. The court held that the standard for admissibility is the “well-established” general acceptance rule of *Frye*.56 It should be noted, however, that the defendant only claimed on appeal that the State’s expert testimony failed to meet the *Frye* test, and thus there was no dispute as to the appropriate standard to apply.57

In the more recent case of *State v. Riker*,58 the Washington Supreme Court recognized *Daubert*’s holding that the *Frye* standard is not applicable under the Federal Rules of Evidence, but nevertheless continued to adhere to the *Frye* analysis as a threshold inquiry to be considered in determining the admissibility of evidence under ER 702.59 The court noted, however, that many of the observations made by Justice Blackmun in the majority opinion of *Daubert* may be helpful to trial judges in making the threshold *Frye* determination, and stated in dicta that their holding of inadmissibility would be the same under a *Daubert* analysis.60 Three months later, Division One of the Court of Appeals, no longer supporting the *Frye* standard, held in *Reese II* that *Frye* was inapplicable to a civil case,61 forcing the Washington Supreme Court

54. Specifically, Judge Weinstein stated that:

Whether or not the scientific principles involved have been generally accepted by experts in the field may still have a bearing on reliability and consequent probative value of the evidence [after the adoption of the Federal Rules of Evidence] ... The expert’s qualifications and stature, the use which has been made of the new technique, the potential rate of error, the existence of specialized literature, ... may all enter into the court’s assessment.


56. *Id.* at 56, 857 P.2d at 1016.
57. *Id.* at 55, 857 P.2d at 1016.
59. *Id.* at 360 n.1, 869 P.2d at 48 n.1.
60. *Id.* Because *Frye* is a factor to be considered under *Daubert*, it is arguable that the court in *Riker* implicitly adopted the *Daubert* standard, even in a criminal case.
again to address the muddled issue of the admissibility of novel scientific evidence.

II. REESE V. STROH

A. The Facts

In 1984, William Reese was referred to Dr. Stroh because his asthma condition had worsened. In the spring of 1985, Dr. Stroh diagnosed Reese as having asthma, chronic obstruction pulmonary disease, and alpha-1-antitrypsin deficiency (AAT deficiency). Dr. Stroh told Reese that his condition was not serious, but that Reese could expect to lose lung capacity at a rate of approximately one percent per year faster than the average person. However, Reese began to lose lung capacity at a much greater rate.

In November 1989, Reese’s brother also was diagnosed with AAT deficiency and began Prolastin therapy, which was approved by the Food and Drug Administration (FDA) in 1987. Specifically, the FDA approved Prolastin for treatment of AAT-deficient patients because Prolastin raises the level of antitrypsin in the blood and successfully treats other serum protein deficiencies such as hemophilia. The FDA had no statistical proof, however, of Prolastin’s efficacy in treating AAT deficiency. Reese called Dr. Stroh about the possibility of starting Prolastin therapy himself, but Dr. Stroh declined because he believed that Prolastin was unproven and thought that there might be risks of transmitting blood-borne infections. In March 1990, Reese’s condition significantly worsened, and he began Prolastin therapy under the supervision of his brother’s doctor.

In October 1990, Reese sued Dr. Stroh for medical malpractice, contending that Stroh’s failure to prescribe Prolastin therapy between 1987 (when the FDA approved the treatment) and 1989 (when Reese’s lung capacity fell below critical levels) was preventable negligent action, resulting in a worsening of his lung function. At trial, Reese called Dr.
Fallat as the plaintiff's first expert witness on causation. Dr. Fallat was Chief of the pulmonary division at California Pacific Medical Center in San Francisco, board qualified in internal and pulmonary medicine, and had researched AAT deficiency since 1966. Reese sought to elicit testimony as to whether Dr. Fallat had an opinion with a "reasonable medical probability basis" regarding whether Prolastin was an effective treatment for an AAT-deficient patient like himself. Dr. Stroh objected on foundation grounds and the trial judge sustained the objection. The trial court then allowed Reese to make an offer of proof as to foundation outside the presence of the jury.

Dr. Fallat confirmed that the FDA approved Prolastin for the treatment of AAT deficiency without statistical proof of its efficacy, but testified that the FDA decided to release the drug for such use "because it was very probable that the material was safe and effective." Dr. Fallat also testified that, as of May 1992, over 2000 patients were treated with Prolastin and that there were no documented cases of hepatitis or AIDS contamination. He also stated that preliminary results suggested that the drug was stabilizing the patients. Dr. Fallat acknowledged that only population studies could prove with statistical significance whether a particular drug is effective in treating patients with a particular disease, and that no such study was done on Prolastin. He distinguished, however, between drawing a conclusion that a drug has in fact been effective for a certain population and drawing a conclusion that a drug has a good probability of improving a specific patient's condition. He testified that for patients with severe AAT deficiency such as Reese there was a "strong consensus" among the working group members at the National Institute of Health that Prolastin would be of a particular benefit.

In addition to FDA approval of Prolastin and the preliminary positive results from its use, Dr. Fallat testified regarding his own clinical experience in treating AAT-deficient patients with Prolastin. He stated that at least half of the thirty-five to forty such patients on his registry

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71. Id.
72. Reese III, 128 Wash. 2d at 304, 907 P.2d at 284.
73. Id.
74. Id.
75. Reese II, 74 Wash. App. at 554, 874 P.2d at 203.
76. Id.
77. Id.
were being treated with Prolastin, and that Prolastin was safe and effective for those patients. He also testified that Prolastin therapy was most effective in patients with severe AAT deficiency and an asthmatic component, such as Reese, and that he expected that Reese would respond favorably to the drug.\(^7\)

On the basis of the information and studies supporting the FDA's approval of Prolastin, his own clinical experience, and information regarding the plaintiff's medical condition, Dr. Fallat concluded that, based upon a reasonable medical probability, Prolastin therapy would be effective for Reese.\(^7\) He further concluded that, had Dr. Stroh prescribed Prolastin for Reese as soon as it became available, the treatment would have reduced the rate of AAT decline by fifty percent. Dr. Fallat also stated that there "wouldn't be a handful of pulmonologists in the country" who, given Reese's condition, would not prescribe Prolastin therapy, and that by failing to prescribe Prolastin, Dr. Stroh did not act as a reasonably prudent physician.\(^8\)

After hearing the offer of proof, the trial court held that Dr. Fallat's testimony lacked the necessary scientific foundation and was therefore inadmissible.\(^8\) The court noted that Dr. Fallat did not have a statistically significant basis for his opinion as to the efficacy of Prolastin therapy in treating AAT deficiency.\(^8\) Although the trial court did not explicitly state it was applying the *Frye* test, its explanation for rejecting Dr. Fallat's testimony indicates that it found that Prolastin therapy was not generally accepted within the relevant scientific community.\(^8\) In light of this ruling, Reese decided not to call his other expert witnesses, whose testimony would have been to the same effect as Dr. Fallat's testimony.\(^8\) Dr. Stroh then moved for a directed verdict, which the trial court granted on the basis that Reese could not prove proximate cause.\(^8\) Reese's motion for reconsideration was denied, and he appealed the trial court's evidentiary ruling.\(^8\)

\(^7\) *Id.*
\(^8\) *Id.*
\(^8\) *Reese II*, 74 Wash. App. at 555, 874 P.2d at 203.
\(^8\) *Reese III*, 128 Wash. 2d at 304, 907 P.2d at 284.
\(^8\) *Id.*
\(^8\) *Id.*
\(^8\) *Id. at 305, 907 P.2d at 284.*
\(^8\) *Id.*
B. Reese II: The Court of Appeals' Decision

The Washington Court of Appeals, Division One, reversed the trial court's evidentiary ruling, and held that the trial court erred in not admitting Dr. Fallat's testimony concerning causation.\textsuperscript{87} The court held that \textit{Frye}'s general acceptance test did not apply in civil cases.\textsuperscript{88} In rejecting the \textit{Frye} test, the court of appeals expressly adopted the \textit{Daubert} standard.\textsuperscript{89} The court acknowledged, however, that Dr. Fallat's testimony was admissible under either standard because the methods he used to reach his conclusion were, in fact, generally accepted in the scientific community.\textsuperscript{90}

In holding that \textit{Frye} did not apply in civil cases, the court of appeals noted that the Washington Supreme Court never expressly adopted the \textit{Frye} test in the civil context.\textsuperscript{91} Writing for the court, Judge Agid stated that the Washington Supreme Court "intimated that a \textit{Frye} analysis is appropriate only in criminal and quasi-criminal cases."\textsuperscript{92} To support this conclusion, Judge Agid cited \textit{In re Johnston},\textsuperscript{93} wherein the Washington Supreme Court noted that \textit{Frye}'s higher standard need not be met when determining the admissibility of a urinalysis in a prison disciplinary proceeding.\textsuperscript{94} Judge Agid also found it persuasive that Washington courts, with one exception, have neither discussed nor applied \textit{Frye} in a civil case.\textsuperscript{95} Judge Agid dismissed the one exception, \textit{Burkett v.}
Northern, as contrary to the opinion of the court in Reese II, and also noted that it was based entirely on criminal precedent.

The court further expressed several policy reasons for declining to apply the Frye analysis in a civil context. First, the court stated that the "austere" Frye standard originally was adopted to prevent the use of mechanical technologies that appeared infallible to the average juror, fearing that an aura of infallibility would cloud the technology's experimental nature. Second, the court highlighted the imbalance in resources between the prosecution and the defense in a typical criminal case. Observing that criminal cases often depend on whether defendants have the financial means to rebut the prosecution's case with their own expert testimony, the court stated that the Frye standard serves as a necessary safeguard in criminal cases to avoid convictions of innocent parties.

Finally, the court noted that criminal cases carry a higher burden of proof than civil cases. Thus, the prosecution ought to utilize "highly-reliable" methodologies and techniques in criminal cases, whereas in a civil case the testimony need only be reliable and accurate. Hence, the court concluded that in the criminal context the necessary "added measure of assurance" is supplied by the Frye standard, but in a civil case the Washington Rules of Evidence are adequate to ensure reliable and accurate testimony.

The court then analyzed the admissibility of Dr. Fallat's testimony under ER 702 and 703. Focusing first on ER 702, the court acknowledged that the judge should determine whether the testimony is

96. 43 Wash. App. 143, 715 P.2d 1159, review denied, 106 Wash. 2d 1008 (1986). Burkett v. Northern was an action to recover damages resulting from an auto accident. Division III of the Court of Appeals applied a Frye analysis in ruling that the expert medical testimony of "scientific experimental procedures" called thermography was inadmissible. 43 Wash. App. at 147, 715 P.2d at 1161.

97. Reese II, 74 Wash. App. at 557 n.4, 874 P.2d at 204 n.4.


99. Reese II, 74 Wash. App. at 557-58, 874 P.2d at 205 (citing People v. McDonald, 690 P.2d 709 (Cal. 1984)).

100. Id. at 558, 874 P.2d at 205.

101. Id. at 559, 874 P.2d at 205.

102. The standard burden of proof in criminal cases is guilt beyond a reasonable doubt as opposed to guilt by a preponderance of the evidence in civil cases.

103. Reese II, 74 Wash. App. at 559, 874 P.2d at 205.

104. Id. at 559, 874 P.2d at 205.
of "scientific... knowledge" which will 'assist' the trier of fact." The court read ER 702 as establishing a two-pronged inquiry to assure reliability and relevance. The reliability prong is established by ensuring that the admitted testimony is sufficiently grounded in "scientific knowledge."  

In developing the relevance prong of the inquiry, the court also relied on Daubert to determine whether the scientific testimony will assist the trier of fact. The court stated that this part of the analysis requires the trial court to assess "whether the reasoning or methodology underlying the testimony is scientifically valid and... whether that reasoning or methodology properly can be applied to the facts in issue." The court then adopted the Daubert factors to determine the validity of the methodology, including Frye's general acceptance test as a factor to be considered. 

Finally, the court held that Dr. Fallat's testimony was "grounded in 'scientific knowledge', based on 'what is known." The court ruled that an expert witness's lack of a statistical basis for conclusions on causation does not preclude the admissibility of causation testimony, "[a]s long as the basic methodology employed to reach... a conclusion is sound." The lack of a statistical basis affects the weight, not the admissibility, of the expert testimony. Thus, the court of appeals found Dr. Fallat's testimony admissible under the Daubert test, reversed the directed verdict against Reese, and remanded for a new trial. Dr. Stroh then appealed to the Washington Supreme Court.

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105. Id. at 560, 874 P.2d at 206.
106. Id.
107. The court followed the Daubert analysis in defining "scientific knowledge" as a belief more than just a subjective belief or unsupported speculation. Id. (citing Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 590 (1993)).
108. Id. at 560, 874 P.2d at 206 (quoting Daubert, 509 U.S. at 592-93).
109. Id.
110. Id. at 563, 874 P.2d at 207 (citing Daubert, 509 U.S. at 590).
112. Id. at 564, 874 P.2d at 208.
113. Id. at 566, 874 P.2d at 209.
C. Reese III: The Washington Supreme Court’s Decision

On appeal, the Washington Supreme Court affirmed the reversal and remand, but expressly rejected the court of appeals’ reliance on Daubert as unnecessary. In the majority opinion written by Justice Madsen, the court agreed that reliability is a factor in determining the admissibility of scientific evidence, but found that the court of appeals’ utilization of the Daubert analysis to determine such reliability was improper. The court held that when the admissibility of novel scientific evidence is at issue, courts should turn initially to the general acceptance test derived from Frye. Only after it has been established by the judge that the testimony is admissible under Frye can the trial court analyze whether that testimony is proper expert testimony under ER 702. The majority reasoned that because Dr. Stroh did not contest that Dr. Fallat’s methodology was generally accepted in the relevant scientific community, Frye was not implicated. The court further ruled that an expert opinion regarding application of an accepted theory or methodology is weighed under the general reliability standards of ER 702 and ER 703, and that Washington case law is sufficient to interpret those rules without the need for Daubert.

The court then observed that the general rule in Washington is that expert medical testimony on the issue of proximate cause is required in medical malpractice cases. Hence, under ER 702, such expert testimony is found to be helpful to the jury’s understanding of a matter outside the competence of an ordinary layperson. The court thus ended its analysis of Dr. Fallat’s testimony under ER 702’s “helpfulness test.”

Next, the court turned to a “reliance test” under ER 703. The majority held that ER 703 “permits an opinion based on an expert’s first-hand knowledge or on information generally relied on in the field of

115. Id.
116. Id. at 306, 907 P.2d at 285.
117. Id.
118. Id. at 307, 907 P.2d at 286 (citing State v. Ortiz, 119 Wash. 2d 294, 831 P.2d 1060 (1992)).
119. Id. at 307–08, 907 P.2d at 286.
120. Id. at 308, 907 P.2d at 286.
121. Id. (citing Karl B. Tegland, Washington Practice, Evidence § 300 (3d ed. 1989)).
122. Id. at 308–09, 907 P.2d at 286.
123. Id. at 309, 907 P.2d at 286.
The court found that the lack of a statistical basis in Dr. Fallat's causation opinion was not fatal to his testimony, holding that medical expert testimony must be based upon a "reasonable degree of medical certainty." The court finally concluded that Dr. Fallat was prepared to offer an opinion on causation with a reasonable degree of medical certainty, based on his extensive experience in treating AAT deficiency and his participation in and reliance on studies using Prolastin therapy. The court therefore remanded the case to the trial court for a reassessment of the proposed testimony in conformity with its opinion. What exactly should one do to conform with the majority's opinion is the question left unanswered, and the impetus for the scalding concurring opinion from Justices Johnson, Utter, and Smith.

D. Reese III: The Concurring Opinion

In his concurrence with Justice Utter and Justice Smith, Justice Johnson aptly observed that the majority’s approach “is of no precedential value and offers no help to parties and courts faced with similar problems.” Justice Johnson concurred in affirming the evidentiary holding by the court of appeals, but wrote separately “to provide a constructive framework for applying ER 702 in cases involving the admissibility of expert testimony based on scientific evidence” under Daubert.

Justice Johnson noted that the majority found that Dr. Fallat’s opinion on causation should have been admitted because Dr. Fallat was a qualified expert and his testimony would assist the jury in determining a fact at issue. He was concerned, however, that the majority did not provide a clear analysis of how to determine the reliability of the evidence on which Dr. Fallat’s testimony was based, even though it recognized that such a reliability assessment is required by ER 702.

124. Id.
125. Reese III, 128 Wash. 2d at 309, 907 P.2d at 286 (citing McLaughlin v. Cooke, 112 Wash. 2d 829, 836, 774 P.2d 1171, 1175 (1989)).
126. Id. at 310, 907 P.2d at 287.
127. Id.
128. Id. at 310, 907 P.2d at 287 (Johnson, J., concurring).
129. Id.
130. Id. at 315, 907 P.2d at 289 (Johnson, J., concurring).
131. Id.
Justice Johnson argued that the majority failed to address whether the proposed testimony by Dr. Fallat constituted scientific knowledge.\(^{132}\) It is this question, noted Justice Johnson, that determines the reliability of the expert testimony.\(^{133}\) He then listed several of the \textit{Daubert} factors to consider when making this reliability determination.\(^{134}\)

Recognizing that the initial \textit{Frye} inquiry had been the rule in Washington in criminal cases, but not in civil cases, Justice Johnson reasoned that the majority's interpretation of the state's \textit{Frye} jurisprudence was unfounded.\(^{135}\) He observed that only four cases in Washington applied a \textit{Frye}-type analysis to scientific or medical evidence under ER 702 and ER 703 in a civil context following the adoption of the Rules of Evidence in 1979.\(^{136}\) Moreover, he found that these cases do not support the majority's holding that the initial \textit{Frye} inquiry applies to a civil case.\(^{137}\) Justice Johnson then agreed with the court of appeals' policy reasons for differentiating between civil and criminal cases.\(^{138}\) Thus, he concluded that it was inappropriate to extend the initial \textit{Frye} inquiry to civil cases, finding that a "constructive application of ER 702 performs the necessary reliability and relevance assessment required in all cases involving scientific evidence."\(^{139}\)

III. CRITICAL ANALYSIS OF THE MAJORITY OPINION IN \textit{REESE III}

The majority opinion in \textit{Reese III} denied the court of appeals' invitation to adopt \textit{Daubert} in civil cases. The Washington Supreme Court stated that existing caselaw was sufficient to have admitted Dr. Fallat's expert testimony under the general principles of ER 702 and ER

\begin{itemize}
\item \(^{132}\) \textit{Id.}
\item \(^{133}\) \textit{Id.} at 315, 907 P.2d at 290 (Johnson, J., concurring).
\item \(^{134}\) \textit{Id.}
\item \(^{135}\) \textit{Id.} at 311, 907 P.2d at 287–88 (Johnson, J., concurring).
\item \(^{136}\) \textit{Id.}
\item \(^{138}\) \textit{Id.} at 312, 907 P.2d at 288 (Johnson, J., concurring).
\item \(^{139}\) \textit{Id.} at 314, 907 P.2d at 289 (Johnson, J., concurring).
\end{itemize}
In doing so, the court acknowledged that reliability is a factor when determining the admissibility of scientific evidence, but established no standard as to how that reliability is determined—under Daubert, Frye, or otherwise. As a result, it remains unclear in Washington how reliability, a necessary inquiry under ER 702, fits into the analytical framework for determining the admissibility of scientific evidence.

A. The Majority Opinion in Reese III Does Not Provide a Test for Determining When Scientific Evidence Should Be Considered Novel

The court side-stepped a novel-scientific-analysis by noting that Dr. Stroh did not argue that the theory or the methodology involved in Prolastin therapy lacked acceptance in the scientific community. The court thus held that “[a]n expert opinion regarding [the] application of an accepted theory or methodology to a particular medical condition does not implicate Frye.” In doing so, however, the court appears to have misconstrued Dr. Stroh’s argument. Although Dr. Stroh agreed that the FDA had approved Prolastin for treating AAT-deficient patients, he argued that the relevant scientific community had not accepted this treatment as being successful, and thus he had no duty to prescribe Prolastin therapy in the absence of proof that it was effective. Hence, the assertion that the therapy was in fact effective should have been construed as a novel theory.

The court of appeals understood Dr. Stroh’s argument, but found that the testimony regarding Prolastin therapy’s effectiveness met the Daubert standard for admissibility, and that any doubts about specific statistical evidence should go to the weight of such testimony after

140. Id. at 307–08, 907 P.2d at 286.

141. A major concern of the Daubert test is the difficulty in determining the meaning of novel scientific evidence. See, e.g., Lee Loevinger, Science as Evidence, 35 Jurimetrics J. 153, 178 (1995). This question is beyond the scope of this Note. However, this author is of the opinion that the Daubert test should be applied to all expert testimony under ER 702. For a discussion on why Daubert should apply to all expert testimony, see G. Michael Fenner, The Daubert Handbook: the Case, Its Essential Dilemma, and Its Progeny, 29 Creighton L. Rev. 939, 967–93 (1996).

142. Reese III, 128 Wash. 2d at 307, 907 P.2d at 286.

143. Id. (citing State v. Ortiz, 119 Wash. 2d 294, 831 P.2d 1060 (1992) (finding Frye inapplicable where testimony based not on novel scientific procedures but on practical experience and acquired knowledge)).

144. Id.
admitted. Yet the Washington Supreme Court, as the concurring justices noted, "incorrectly confuse[d] the theory behind Prolastin augmentation therapy with the therapy itself" in holding that Prolastin therapy for AAT-deficient patients is not novel. In fact, the court's conclusion that Frye is not implicated further muddles the question of when novel scientific evidence exists. As stated by Justice Johnson in his concurrence, "this ruling only raises additional questions. What is the methodology properly being considered—augmentation therapy or Prolastin augmentation therapy? What is the particular medical condition—abnormal blood serum protein levels or AAT deficiency?" By separating the Frye inquiry from the ER 702 inquiry, the Washington Supreme Court continues to adhere to an analysis that promotes uncertainties. These uncertainties would be eliminated if the Daubert test is adopted for determining the admissibility of all scientific expert testimony.

B. The Majority Opinion in Reese III Failed To Clarify How Reliability Should Be Determined Under ER 702

The majority acknowledged that Dr. Fallat's expert opinion testimony must be reliable under ER 702 and ER 703. The court then found Dr. Fallat's testimony reliable under ER 702 because he was qualified as an expert and because medical testimony on the issue of proximate cause is helpful to the jury. Neither the fact that witnesses are qualified as experts, nor that they are prepared to testify about a subject matter that would be helpful of the trier of fact addresses the issue of the reliability of the expert's testimony. Some analysis as to the reliability of what is being professed must be performed, yet the majority opinion terminated its ER 702 inquiry without any reliability assessment.

145. The court of appeals also suggests that it would have found it generally accepted by the relevant scientific community that Prolastin therapy is effective, implying that if a method is approved by the FDA it must be accepted that it will be effective, even absent statistical proof of efficacy. See Reese II, 74 Wash. App. 550, 561, 874 P.2d 200, 206 (1994).

146. Reese III, 128 Wash. 2d at 313, 907 P.2d at 288 (Johnson, J., concurring).

147. Id. at 314, 907 P.2d at 289 (Johnson, J., concurring).

148. Even more so if Daubert is used for all expert testimony. See supra note 141.

149. Id. at 307–08, 907 P.2d at 286.

150. Id. at 308–09, 907 P.2d at 286.

151. The majority's two-prong analysis of ER 702 is followed by a finding that ER 703 in cases involving medical expert testimony requires only that the opinion be based on a "reasonable degree of medical certainty." Id. at 309, 907 P.2d at 286 (citing McLaughlin v. Cooke, 112 Wash. 2d 829, 836, 774 P.2d 1171, 1175 (1989) (citing State v. Crenshaw, 98 Wash. 2d 789, 802 n.2, 659 P.2d 488,
The majority cited *State v. Ortiz*\(^{152}\) in support of its ER 702 analysis. *Ortiz* was a criminal case in which the defendant appealed his conviction of aggravated first-degree murder.\(^{153}\) One of the bases for his appeal was that expert testimony by a tracker\(^ {154}\) was improperly admitted as the science of tracking had not been generally accepted in the relevant scientific community.\(^ {155}\) The *Ortiz* court articulated the following test for the admissibility of expert scientific testimony: "(1) the witness qualifies as an expert, (2) the opinion is based upon an explanatory theory generally accepted in the scientific community, and (3) the expert testimony would be helpful to the trier of fact."\(^ {156}\) The court held that the tracker qualified as an expert and that his testimony would be helpful to the trier of fact. The court also held that the second prong of the test, the *Frye* prong, did not apply because the tracker’s testimony was "not based on novel scientific experimental procedures, but rather upon his own practical experience and acquired knowledge."\(^ {157}\) The majority in *Reese III* inappropriately relied on *Ortiz* to support its ER 702 analysis. Contrary to the majority’s opinion in *Reese III*, the *Ortiz* court addressed the lack of a test for reliability when the second prong is not applied. In *Ortiz*, the court observed that the tracker’s testimony "was not so technical that a jury could not judge its reliability for itself."\(^ {158}\) Because the testimony required specialized knowledge, an ER 702 analysis should have been applied, but the non-technical nature of the testimony justified shifting the reliability prong to the weight of the evidence, not to its admissibility.\(^ {159}\)

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496 n.2 (1983)). In allowing certainty as a standard sufficient to satisfy ER 702, the court appears to have misunderstood the reliability requirement of the rule. Mere certainty does not always equal reliability.


153. Id. at 297, 831 P.2d at 1062.

154. The tracker, Joel Hardin, testified as to the killer’s height and weight, mental state, familiarity with the terrain and with raspberry bushes, and other facts beyond the physical conditions he observed about the tracks left in a field. Id. at 297–98, 831 P.2d at 1062–63.

155. Id. at 310–11, 831 P.2d at 1069.


157. Id. at 311, 831 P.2d at 1069.

158. Id.

159. In addition, the court’s holding in *Ortiz* also appears flawed. Though the testimony of the tracker may have been non-technical in nature, the use of the techniques of the tracker to prove guilt was a novel use of such methodology, and should have been subject to an ER 702 novel-scientific analysis.
No similar justification existed in Reese v. Stroh. Contrary to the Ortiz court, the court in Reese III explicitly stated that medical malpractice cases are "prime example[s]" of cases where expert testimony is admitted because it is outside the competence of an ordinary layperson. Thus, the court found that it could not shift the reliability analysis to the trier of fact during trial, nonetheless the court followed Ortiz and skipped the reliability prong entirely.

The majority opinion in Reese III demonstrates the confusion created by the Washington Supreme Court's continued insistence on incorporating a Frye analysis into ER 702. As Justice Johnson states in his concurrence, "[t]he better approach, and the one taken in Daubert and by the Court of Appeals, is to focus on the reliability of the evidence... where the admissibility of scientific evidence is at issue." Utilizing the Daubert analysis in all cases in which scientific evidence is involved ensures that the expert testimony will be reliable and relevant by conducting the following inquiry: "(1) whether it is more likely than not that the expert's methodology and principles are reliable, and (2) whether those principles and methodology can properly be applied to the facts at issue." The majority declined to adopt Daubert for performing the reliability inquiry under ER 702, yet at the same time it held that Frye also was inapplicable for this purpose. Thus, the decision in Reese III lacks a reliability determination, even though the court insisted that reliability was essential to an ER 702 inquiry. Because this result defies logic and offers no precedential value, the court's opinion is disappointing, especially at a time when Washington needs a clear determination of the rule on admissibility.

IV. THE WASHINGTON SUPREME COURT SHOULD ADOPT DAUBERT IN BOTH CIVIL AND CRIMINAL CASES

The Daubert analysis provides a better standard than Frye for ensuring the reliability and validity of the scientific expert testimony at issue. Daubert clarifies the judge's role as the gatekeeper, and properly shifts the focus of the inquiry from a theory's general acceptance to the underlying validity of the expert's scientific methodology. The U.S. Supreme Court developed a standard that would be more liberal and

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160. Id. at 308, 907 P.2d at 286 (citing Tegland, supra note 121, § 300, at 435).
161. Id. at 316, 907 P.2d at 290 (Johnson, J., concurring).
162. Id. at 315, 907 P.2d at 290 (Johnson, J., concurring) (citing Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 590–95 (1993)).
flexible in admitting valid techniques without general acceptance, yet stricter in that Daubert's stringent validity test screens more junk science after thorough inquiry by the judge. In creating this balance, the Court formulated a test that could rid courts of outdated techniques, admit valid novel theories, and meet the challenges of an increasingly technological society that did not exist when Frye was decided in 1923. The Washington Supreme Court should correct the inadequacies of its decisions such as Reese III by adopting the Daubert analysis of ER 702.

A. The Initial Criticisms of Daubert Have Proved Unfounded

A main criticism of the Daubert test was that it was too liberal. Some commentators feared that Daubert would open the floodgates to "absurd and irrational pseudoscientific assertions" because junk science could not effectively be excluded without the bright-line rule of Frye. The opposite has turned out to be true. One study has shown that approximately two-thirds of the reported cases in the year after Daubert excluded the expert testimony at issue. Another review of all federal cases from Daubert to July 1995 revealed that in nearly seventy percent of the cases, judges excluded expert testimony on scientific evidence. Thus, judges have taken their gate-keeping role seriously, and expert testimony is under far greater scrutiny under Daubert than Frye.

Another criticism of Daubert stems from a concern that a complex inquiry into the scientific evidence will be time consuming and overly burdensome on the judge. It is true that Daubert hearings may involve complex determinations; however, the result of a Daubert determination under ER 104(a) will shorten or simplify the remainder

163. Daubert, 509 U.S. at 595-97 (addressing the concerns of amici briefs).


166. See Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311 (9th Cir. 1995). On remand from the United States Supreme Court, the Ninth Circuit voiced concern that the Supreme Court had put judges in the "uncomfortable position" of making complicated scientific determinations; see also William A. Schroeder, The Future of Frye in Illinois, 82 Ill. B.J. 488, 494 (1994)

167. It should also be noted, as was evident in the O.J. Simpson fiasco, that Frye hearings currently run quite long in complex cases. See, e.g., State v. Hollis/DeFroe, No. 92-1-04603-9 and 92-1-03699-8 (King County Super. Ct. 1993) (six week Frye hearing).

168. ER 104(a) reads: "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 . . . ." Wash. R. Evid. 104(a). ER 104 is the same as Federal Rule 104(c). Compare Fed R. Evid. 104(a) with Wash. R. Evid. 104(a). Rule 104 hearings are used frequently in the federal courts.
of the trial, significantly reducing the overall expenditure of judicial time and money. In any event, if in a particularly complex case the determination is time consuming, the inquiry is worth the effort to ensure the validity of the scientific evidence. One significant policy reason for applying the Frye test was a concern that juries give too much weight to expert testimony, and thus may decide the case on inappropriate grounds. By performing the Daubert validity hearing, a court is more capable of addressing that policy concern than it was under Frye. As one commentator has stated in support of the Daubert analysis, “valid law requires valid science to reach a valid decision.”


Washington’s biggest barrier to the adoption of Daubert is its precedent in applying Frye. Division One of the Court of Appeals recognized this barrier, found it to be especially applicable in criminal cases, and concluded in Reese II that it could be surmounted in the civil context. Though at least one commentator suggests that the court in Reese II had no business coming to such a conclusion, the court drew reasonable inferences and its interpretation of the caselaw was justified. The precedent of applying Frye in a criminal context is to determine whether the expert scientific testimony meets the Daubert standard. Fenner, supra note 141, at 948. At the Daubert hearing, the proponent of the evidence will have to show by a preponderance of the evidence that the evidence satisfies Daubert. Id.

169. See Fenner, supra note 141, at 957.
170. See infra note 181.
171. Loevinger, supra note 141, at 187.
172. Precedent alone is not a sufficient reason for its continued adherence in Washington. Federal Frye precedent pre-Daubert was just as strong. Because Washington adopted the Federal Rules of Evidence for determining the admissibility of expert testimony, and the current interpretation of those rules exists in Daubert, the Washington Supreme Court must at the least explain why Frye should be applied in its place.


174. Smith criticized the opinion in Reese II because “[c]ontrary to Division I’s assertion, the courts of Washington have discussed and applied the Frye standard in more than one civil case,” and “the Washington Supreme Court has adequately supported its application of the Frye standard in civil cases.” Id. at 70. Smith noted that Frye or a Frye-like test was also applied in In Re Peterson, 120 Wash. 2d 833, 869, 846 P.2d 1330 (1993), and Intalco Aluminum Corp. v. Department of Labor and Industries, 66 Wash. App. 644, 833 P.2d 390 (1992), review denied, 120 Wash. 2d 1031 (1993). Smith observed that the court acknowledged the Peterson decision, but suggested that the court chose not to consider it as applying Frye because the Washington Supreme Court “had only
undoubtedly a much higher hurdle to overcome. In the post-Daubert decision of State v. Riker, the court acknowledged Daubert, but nevertheless "continue[d] to adhere to the... Frye analysis... in determining the admissibility of evidence under ER 702." Similarly, in the recent case of State v. Gregory, Division One of the Court of Appeals by-passed the defendant's invitation to decide whether the Frye test should be adhered to in criminal cases, stating that the issue is "proscribed by last year's decision in State v. Riker." The Gregory court noted, however, that the issue had not properly been preserved at

suggested a 'Frye-type' rule and did not cite to Frye..." Smith, supra note 173, at 70. What must be remembered, however, is that the court of appeals considered Peterson to be a quasi-criminal case, and the court merely noted that the opinion in Peterson did not cite Frye or discuss its application "in the civil context." Reese II, 74 Wash. App. 550, 557 n.5, 874 P.2d 200 n.5 (1994). In addition, the case that the Peterson court cited in support of its Frye-type analysis, State v. Ciskie, 110 Wash. 2d 263, 751 P.2d 1165 (1988), is a criminal case, something the Reese II court felt contributed to the flawed application of the Frye standard in Burkett v. Northern, 43 Wash. App. 143, 151 P.2d 1159, review denied, 106 Wash. 2d 1008 (1986). Id. at 557 n.5, 874 P.2d at 205 n.5. In Intalco, the defendant appealed a Board of Industrial Appeals' award of workers' compensation benefits to three workers who claimed to have become disabled because of long-term exposure to toxic substances at their employers' plant. 66 Wash. App. at 647, 833 P.2d at 392. The defendant argued that the Board inappropriately admitted testimony by the workers' physicians on causation without a showing that their causation theory was substantiated by other studies. Id. at 659, 833 P.2d at 398. Judge Agid, also the author of Reese, held that the conclusions of expert witnesses need not meet a requirement of general acceptance in the scientific community. Id. at 662, 833 P.2d at 399-400. In an opinion similar to that of the Washington Supreme Court's in Reese III, Judge Agid found that because the techniques and methodologies used by the plaintiffs' physicians were not challenged, a validity test (Frye or otherwise) was not implicated, and any doubts as to the experts' conclusions were to be decided by the jury. Id. It is important to note that Intalco, along with Burkett and Peterson, were all pre-Daubert decisions. In support of her conclusion that Frye was adequately established as the standard in civil cases before Reese, Smith highlights the Burkett court's understanding of ER 702 as backing an application of Frye as the appropriate standard. Smith, supra note 173, at 71. As has been previously discussed, ER 702 incorporates into Washington Federal Rule of Evidence 702. Prior to Daubert, the Frye analysis had been utilized in federal cases involving novel scientific evidence, consistent with the determinations of the courts of Washington. It was Daubert that created a new interpretation of FRE 702, thus impliedly a new interpretation of ER 702. Reese II was the first case to entertain the continued applicability of the Frye standard in a civil case after Daubert. Reese II, 74 Wash. App. at 557, 874 P.2d at 204. The court in Reese II did not argue that the Washington Supreme Court had drawn a distinction between criminal and civil cases in determining the applicability of novel scientific evidence. The court merely found that in light of Daubert's indirect interpretation of ER 702 as eliminating the Frye analysis, Washington's Frye precedent in the civil context was not strong enough to withstand a Daubert analysis challenge. Thus, the court of appeals itself, not the Washington Supreme Court, justifiably drew the civil/criminal distinction.
the trial court level, arguably implying that if it had been, Division One would have sent a challenge to the Washington Supreme Court as to its long-standing adherence to Frye in criminal cases.\textsuperscript{180}

Although the supreme court has remained firm in its application of Frye in criminal cases,\textsuperscript{181} many lower courts, like the court in Gregory, have followed supreme court precedent unenthusiastically. State v. Cissne,\textsuperscript{182} a 1994 Division Three Court of Appeals decision, provides an example of how some lower courts have dealt with the issue in the face of Washington Supreme Court precedent. The defendant in Cissne appealed his conviction of driving while intoxicated on the basis that it was prejudicial error to admit the results of a horizontal gaze nystagmus (HGN) test\textsuperscript{183} without evidence that the relevant scientific community had generally accepted HGN testing as reliable.\textsuperscript{184} The State contended that because HGN testing does not involve scientific principles, Frye is inapplicable when not offered to prove a specific blood alcohol level.\textsuperscript{185}

The court acknowledged that other jurisdictions had refused to apply Frye, even when these jurisdictions found that HGN evidence was scientific evidence.\textsuperscript{186} The court further recognized that “other jurisdictions have rejected Frye in favor of a more liberal test of

\textsuperscript{180} Id.

\textsuperscript{181} The most recent case to uphold the Frye standard as a threshold inquiry in criminal cases involving novel scientific evidence is State v. Copeland, 130 Wash. 2d 244, 922 P.2d 1304 (1996). Copeland involved the admissibility of DNA evidence in a premeditated murder and felony murder conviction. Id. at 1310. The Copeland court rejected the State’s invitation to adopt the Daubert standard for the admissibility of scientific evidence. Id. at 1315. In doing so, the court reasoned that the Daubert analysis is flawed because judges should not be subjected to the “difficult task” of analyzing opinions involving methods “far beyond their knowledge.” Id. at 1314–15. A critical analysis of the Copeland opinion, though enticing, is beyond the scope of this Note. However, because a particular lawsuit involves a highly technical subject is no justification for allowing a judge to shift evidentiary determinations to scientists. For a more thorough response to the Copeland court’s only articulated criticism of Daubert, see Loevinger, supra note 141, at 181–189. Furthermore, the use of judicial notice will minimize the need for judges to engage in time-consuming investigations, especially if they are allowed to look at the body of federal law decisions interpreting Daubert. See infra note 200 and accompanying text.

\textsuperscript{182} 72 Wash. App. 677, 865 P.2d 564 (1994).

\textsuperscript{183} The police officer explained during the trial that HGN testing is based on the medical belief that with a certain degree of intoxication the eyes are unable to track smoothly and/or track at all. Under extreme intoxication the eye will be “unable to follow and . . . go into a spaz effect and the pupil will actually just fluctuate back and forth rapidly from side to side while . . . trying to focus on the object.” Id. at 680 n.2, 865 P.2d at 566 n.2.

\textsuperscript{184} Id. at 679, 865 P.2d at 565.

\textsuperscript{185} Id. at 680, 865 P.2d at 566.

\textsuperscript{186} Id. at 685, 865 P.2d at 568 (citing State v. Clark, 762 P.2d 853, 856 (Mont. 1988) (“[IIts] liberal evidentiary rules have eroded the ‘general acceptance’ standard of Frye.”).
admissibility based on the relevance standard of the Federal Rules of Evidence . . . .”187 The court then went on to hold that the *Frye* standard applies to HGN testing if proven on remand that it is a novel technique “until such time as our Supreme Court abandons *Frye* and interprets ER 702 in the same manner as *Daubert* interpreted Fed. R. Evid. 702 . . . .”188

In the court of appeals’ opinion in *Reese II*, Judge Agid stated two reasons why the policy considerations in favor of applying the *Frye* standard do not apply in the civil context: (1) criminal defendants often lack the economic means to retain scientific witnesses necessary to wage a “battle of the experts,” and (2) because of the potential loss of liberty, added measures of assurance are required to ensure a reliable and accurate conviction.189 Both of these justifications rely on the belief that the *Frye* analysis creates a more stringent standard for admissibility, providing a necessary safeguard against criminally convicting an innocent person. As previously discussed, post-*Daubert* cases have shown that the *Daubert* standard is, in effect, a more stringent standard due to its thorough analysis, and can provide greater safeguards to the criminal defendant than *Frye*. Furthermore, as one of the factors considered in a *Daubert* analysis, *Frye* can still play a role in excluding unsubstantiated methodologies.

C. The *Daubert* Analysis of Novel Scientific Evidence Is Well-Suited to Meet the Challenges of Modern Technological Advances

Calls for the reform of expert testimony have permeated throughout the history of jurisprudence.190 The pre-*Daubert* reform movement stemmed from the overwhelming perception that expert witnesses are nothing more than hired guns.191 Expert witnesses are both disdained and indispensable. Some reform was necessary to ensure a reliable and accurate evaluation of expert witness testimony. Joining this reform movement, the U.S. Supreme Court interpreted FRE 702 in *Daubert* to provide courts with the necessary framework, coupled with the tools

187. *Id.*, 865 P.2d at 569 (citing *State v. Cauthron*, 120 Wash. 2d 879, 886, 846 P.2d 502, 505 (1993)).
188. *Id.* at 686, 865 P.2d at 569.
already provided by the adversary system, to screen out unreliable scientific testimony. Daubert has been successful in this regard.

At least one commentator has suggested that the reform of expert testimony go even further and interpret FRE 702 as requiring not just reliability, but also necessity. Perrin argues that the current climate in which expert witnesses testify justifies a presumption of inadmissibility, similar to the presumption used for hearsay evidence. Thus, Perrin would require Daubert to be codified in Rule 702 for all expert testimony in all cases because Daubert's requirement of scientific validity is "the appropriate standard for measuring reliability." Perrin further argues that any "marginally reliable expert testimony [should] satisfy a necessity requirement, limiting expert testimony to that which is needed by the jury to resolve an issue in the case." Perrin, in essence, would require that the proponent of the evidence show that the expert testimony is beyond the comprehension of the trier of fact. This necessity prong elaborates on the "fit" portion of the Daubert opinion.

Perrin's approach is problematic because it would exacerbate concerns that the Rule 702 determination is time consuming and overly burdensome. In addition to conducting the Daubert validity analysis, courts would need to determine when expert testimony becomes marginal, and then if it is deemed to be marginal, they must decide where to draw the line on the burden of necessity. Many commentators already believe that the Daubert test is inconsistent due to the greater discretion given to judges as gatekeepers. Perrin's approach, although arguably more thorough, would magnify these concerns. It is essential that


194. Id. at 1453. Perrin believes that because experts are really paid advocates, evidence rules should be skeptical, not "trusting" and "liberal." Id.

195. Id. at 1454.

196. Id. at 1462–66.

197. Id. at 1463. As an example of evidence not meeting this burden, Perrin discusses expert testimony about the meaning of certain words. Id. (citing World Boxing Council v. Howard Cosell, 715 F. Supp. 1259, 1264–65 (S.D.N.Y. 1989) (holding that jury was capable of reading Cosell's book and comparing it to articles he claimed to have relied on without assistance of plaintiff's expert in media relations and communications research)). As examples of instances meeting this burden, Perrin lists the standard of care in a professional malpractice case and forensic DNA testing. Id.

198. Perrin himself lists "the likely inconsistent application" of Daubert as one of its difficulties. Perrin, supra note 193, at 1447.
Washington adopt an approach that is not only theoretically sound, but is also practical in its application.

D. A Blueprint for Washington Courts to Follow When Applying a Daubert Analysis

A perfectly written rule that encompasses all of the concerns about abuses in the use of expert testimony has proven elusive. The *Daubert* analysis provides the most comprehensive standard for determining the scientific validity behind an expert's testimony, addressing the most pressing need of excluding junk science so that juries can make determinations based on reliable evidence. Because courts may have concerns that the *Daubert* test is too time-consuming, especially at the superior court level, *Daubert* hearings should be conducted in a structured, straightforward manner. The following is a suggested outline for courts to utilize in conducting an efficient *Daubert* hearing:

1. Is the witness qualified to testify as an expert?
2. Is the expert testifying about scientific knowledge?  
3. Is the general theory and methodology reliable?
   a) Is the technique so well established that judicial notice can be taken of its scientific validity?
   b) If no judicial notice can be taken, is the scientific opinion "based on the 'methods and procedures of

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199. This test is also applicable for technical or other specialized knowledge. See supra note 141.
200. This step of the *Daubert* process is a practical necessity, and will serve over time to drastically reduce time-consuming battles of expert witnesses in judicial proceedings. When to take judicial notice, however, is a fine line that should not be used as a cover for implementing the *Frye* test in *Daubert* clothing. The key difference is that judicial notice should be taken once a certain methodology has been through the rigors of the *Daubert* test in the Washington Supreme Court, enough other courts, or has passed the *Daubert* test by such a large margin in one court that the reliability of the methodology is beyond a reasonable doubt. In State v. Cauthron, 120 Wash. 2d 879, 846 P.2d 502 (1993), the Washington Supreme Court stated that other jurisdictions and law reviews and journals may be examined when deciding whether to admit or exclude novel scientific evidence. 120 Wash. 2d at 888, 846 P.2d at 506. This type of examination would enhance further the utilization of judicial notice in cases involving novel scientific evidence. Because *Daubert* is the standard used in the federal courts and in a majority of the states, application of *Daubert* in Washington would allow Washington courts to take advantage of the benefits of the analyses in these other jurisdictions. Hence, the *Daubert* standard plus the Cauthron inquiries should eventually equal significant gains in judicial efficiency.
science' rather than on 'subjective belief or unsupported speculation?' 201

i) Can the theory and methodology be tested?

ii) Has the theory and methodology been tested?
   a) What was the rate of error?
   b) What maintenance of standards and controlling techniques were used?
   c) Was the testing done specifically for the current litigation?

iii) Has there been peer review of the theory and methodology?
   a) Has the theory and methodology been published?
   b) Is the theory and methodology generally accepted in the relevant scientific community?
   c) Is the technique commonly used in a particular field? 202

iv) Are there any other relevant factors the court should consider concerning the reliability of the theory and methodology?
   c) Does the expert's testimony assist the trier of fact?
   i) Is there a certain fit between the methodology and the case at bar? 203
   ii) Does that fit continue throughout each step of the methodology?

4. Is the probative value of the proferred opinion "substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence?" 204


202. Id. at 742 (considering "the 'non-judicial uses to which the scientific techniques are put'"). This factor becomes more important as the Daubert test is used for experts with specialized knowledge outside of the scientific realm. See Fenner, supra note 141, at 966.

203. See In re Paoli, 35 F.3d at 743-45 (requiring "more than bare logical relevance").

204. See Wash. R. Evid. 403.
5. Is the data relied on by the expert "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject?"\textsuperscript{205} 

The requirement of valid scientific evidence for admissibility helps to ensure justice in a society increasingly dependent on science and technology. As Perrin himself observes, \textit{Daubert} is an important step in the reform of expert opinion testimony.\textsuperscript{206} Washington has not yet taken that step, refusing even to start in that direction by finding \textit{Frye} inapplicable in the civil context in \textit{Reese III}. Washington should join the modern world in its application of ER 702, and replace the \textit{Frye} test with the \textit{Daubert} test in both civil and criminal cases.

V. CONCLUSION

In \textit{Reese III}, the Washington Supreme Court had the opportunity to settle the debate among Washington courts about how to analyze novel scientific evidence under ER 702 in civil cases. Instead, it muddled the situation even further by finding a reliability determination necessary under ER 702 but failing to provide a standard for this reliability determination. The \textit{Daubert} standard ensures such a reliability analysis under ER 702. Furthermore, no justification remains for \textit{Frye}'s continued application in criminal cases. Washington should adopt the \textit{Daubert} analysis of ER 702 for all cases involving novel scientific evidence so that the courts can be more responsive to today's increasingly technological needs.

\textsuperscript{205} See Wash. R. Evid. 703. If judges have concerns about their ability to make this ER 703 determination due to their lack of knowledge of the technique, they should secure their own expert pursuant to ER 706, which allows the court to "appoint witnesses of its own selection." Wash. R. Evid. 706(a).

\textsuperscript{206} Perrin, \textit{supra} note 193, at 1441.