Ripe for Revision:
A Critique of Federal Rule of Evidence 706
and the Use of Court-Appointed Experts

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I. INTRODUCTION

Federal Rule of Evidence 706, which authorizes district courts to appoint their
own expert witnesses, is ripe for revision. Judge Learned Hand had the foresight in
1901 to write: "No one will deny that the law should in some way effectively use
expert knowledge wherever it will aid in settling disputes. The only question is as to

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how it can do so best."¹ A century of adjudication and academic pontification has sought to answer the question of how trial courts, including judges and juries, can best digest and apply scientific and technical evidence to facilitate the achievement of just outcomes in complex cases.² While the principle answer has been the party expert witness, the “court-appointed expert”—who may or may not testify as a witness—emerged as a second answer.³ The current court-appointed expert rules, however, are fraught with confusion and inconsistencies.⁴ Thus, the time has come to draft a new Federal Rule of Evidence 706 that provides district courts with proper guidance in the use of court-appointed experts.

The expert witness is—and will likely continue to be—a key element of the adversarial process.⁵ Nevertheless, because expert witnesses are retained by the parties, the “battle[] of [the] experts” has elicited criticism.⁶ For example, former Second Circuit Judge Jerome Frank attacked the adversarial system stating that “the partisanship of the opposing lawyers [frequently] blocks the uncovering of vital evidence or . . . distorts it.”⁷ Additionally, judges surveyed by the Federal Judicial Center cited party experts who “abandon objectivity and become advocates for the side that hired them” as being the most frequent problem they encounter with expert testimony in civil cases.⁸ The idea of the court-appointed expert evolved to address this criticism.⁹ Judges, therefore, often appoint experts “when the parties’ experts offer[] directly conflicting testimony on topics that [are] beyond the comprehension of the court."¹⁰

The notion of the “court-appointed expert” had a long history prior to the adoption of Federal Rule of Evidence 706 in 1975.¹¹ In the early twentieth century, respected members of the legal community advocated the use of court-appointed, respected members of the legal community advocated the use of court-appointed, respected members of the legal community advocated the use of court-appointed, respected members of the legal community advocated the use of court-appointed, respected members of the legal community advocated the use of court-appointed,
non-adversarial experts to facilitate both judges' and juries' understanding of scientific and technical evidence. In 1911, Judge Hand freely admitted his own limited scientific knowledge in *Parke-Davis & Co. v. H.K. Mulford Co.*, which involved complex chemical patents, when he wrote: "I cannot stop without calling attention to the extraordinary condition of the law which makes it possible for a man without any knowledge of even the rudiments of chemistry to pass upon such questions as these... only a trained chemist is really capable of passing upon such facts..." Judge Hand went on to advocate a formal change in legal practice: "How long we shall continue to blunder along without the aid of *unpartisan and authoritative scientific assistance* in the administration of justice, no one knows; but all fair persons not conventionalized by provincial legal habits of mind ought, I should think, unite to effect some such advance." 

For the first time, in the 1920 case *Ex parte Peterson*, the United States Supreme Court acknowledged the trial court's common law authority to appoint experts. The case involved contract claims totaling over $30,000 related to the buying and selling of coal. The Court upheld the district court's appointment of an auditor to review the parties' calculations based on a dizzying array of facts concerning the multitudes of transactions between the parties and their respective accounting techniques. Justice Louis Brandeis, writing for the majority, noted the importance of experts to the judge: "Courts have... inherent power to provide themselves with appropriate instruments required for the performance of their duties... This power includes authority to appoint persons unconnected with the court to aid judges in the performance of specific judicial duties, as they may arise in the progress of a cause." Justice Brandeis stated that an expert is also beneficial to the jury since, "without the aid to be rendered [by the expert], the trial judge would be unable to perform his duty of defining to the jury the issues submitted for their determination and of directing their attention to the matters actually in issue." 

The court-appointed expert currently comes in two forms—the expert witness, who is appointed under Federal Rule of Evidence 706 and typically assists the fact-finder with the merits decision, and the technical advisor, appointed under the district court's inherent authority (as established in *Ex parte Peterson*), who typically assists the judge with the admissibility decision. While these two permutations of the court-appointed expert have been helpful to judges and juries alike, the present state

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12. *Id.*
13. 189 F. 95, 115 (C.C.S.D.N.Y. 1911).
14. *Id.* (emphasis added).
15. 253 U.S. 300, 312-14 (1920).
16. *Id.* at 304.
17. *Id.* at 306-07.
18. *Id.* at 312 (emphasis added).
19. *Id.* at 313-14.
of the rules demands their revision, clarification, and consolidation within a new Rule 706. First, Rule 706 is ambiguous and fails to address the myriad of issues implicated by the use of court-appointed experts. Second, the rules governing the technical advisor are a product of contradictory case law and have never been codified. Furthermore, Rule 706 has never been substantively revised since its adoption in 1975, even though the other evidence rules regarding experts were revised in 2000. More importantly, a revision of Rule 706 is necessary given that science and technology continue to advance and become more complex, thus presenting judges and juries with increasingly challenging cases.

In summary, after nearly 30 undisturbed years, Federal Rule of Evidence 706 is ripe for revision. This paper presents a timely and comprehensive critique of Federal Rule of Evidence 706 and the use of court-appointed experts and provides suggestions for revision and expansion of the Rule. Part II discusses the two current types of court-appointed experts. Part III discusses several reasons for revision. Part IV critiques the existing court-appointed expert rules and offers specific proposals for revision. Part V offers final considerations.

II. CURRENT DISTINCTIONS: TWO TYPES OF COURT-APPOINTED EXPERTS

Two major types of decisions must be made during a case: (1) Whether evidence is admissible and (2) who wins the case on the merits in light of the admissible evidence. The judge determines the admissibility of evidence, regardless of whether the case is a bench trial or a jury trial. However, in a bench trial, the judge plays dual roles: She or he determines the admissibility of evidence while also presiding as the sole fact-finder and final arbiter of the merits of the case. In a jury trial, notwithstanding the judge’s role in preliminary fact-finding and power to direct verdicts, the jury is the primary fact-finder and decision-maker regarding a case’s merits.

The admissibility role of the federal trial judge was addressed a decade ago in the landmark case Daubert v. Merrell Dow Pharmaceuticals, Inc. With Daubert and subsequent cases, the United States Supreme Court sparked a revolution in how
trial courts deal with scientific and technical evidence. The Court placed greater responsibility on district courts to understand these types of evidence, mandating that federal trial judges be "gatekeepers" and only admit scientific and technical evidence that meets a high threshold of reliability.\footnote{Joiner, 522 U.S. 136 (1997).}

The \textit{Daubert} Court, interpreting Federal Rule of Evidence 702\footnote{509 U.S. at 591-92. The full text of Federal Rule of Evidence 702 follows:\newline\textbf{Testimony by Experts} If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based on sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.} in light of Federal Rule of Evidence 104(a),\footnote{509 U.S. at 592. The full text of Federal Rule of Evidence 104(a) follows:\newline\textbf{Preliminary Questions; 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.} outlined five non-exclusive factors that district court judges might consider when determining the admissibility of scientific—and eventually all—expert testimony.\footnote{509 U.S. at 593-94; \textit{Kumho Tire Co.}, 526 U.S. at 148.} These factors are: (1) whether the theory or technique underlying the evidence offered by the expert can be and has been tested; (2) whether the theory or technique has been reviewed by peers and published; (3) the "known or potential rate of error;" (4) "the existence and maintenance of standards controlling the technique's operation;" and (5) whether the theory or technique has gained "general acceptance" by a "relevant scientific community."\footnote{\textit{Daubert}, 509 U.S. at 593-94.} The net effect of \textit{Daubert} was to demand greater scientific and technical proficiency from federal trial judges to ensure "evidentiary relevance and reliability."\footnote{Id. at 595.} This evidentiary revolution begged the question of how judges were to gain this increased scientific and technical expertise. Although some may argue that \textit{Daubert} does not "really [stand] for the Court's approval of independent information gathering by judges through the use of vehicles such as court-appointed experts,"\footnote{Kim, supra note 7, at 224.} the district court's authority to appoint its own experts has become the common and preferred method by which federal trial judges should seek to increase their scientific proficiency.

\begin{itemize}
\item 509 U.S. at 591-92. The full text of Federal Rule of Evidence 702 follows:
\item Testimony by Experts
\item If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based on sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.
\item \textbf{Preliminary Questions; 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.
\item 509 U.S. at 593-94; \textit{Kumho Tire Co.}, 526 U.S. at 148.
\item \textit{Daubert}, 509 U.S. at 593-94.
\item \textit{Id.} at 595.
\item Kim, supra note 7, at 224.
\end{itemize}
and technical knowledge. However, court-appointed experts are also helpful to the fact-finder, especially given the barrage of highly complex scientific and technical evidence thrown at the typical lay juries in modern cases.

Therefore, with regard to complex scientific and technical evidence, the court-appointed expert has two discrete purposes—to help the judge, in light of Daubert, understand the scientific or technical bases of evidence to make an admissibility decision and to help the fact-finder, whether the judge or jury, understand the relevance and weight or credibility of the evidence to make a merits decision.

Court-appointed experts are currently divided into two categories—the expert "witness" and the "technical advisor." Federal Rule of Evidence 706 has been interpreted to grant the district court the authority to appoint an expert witness, not a technical advisor. The primary role of the court-appointed expert witness under

41. Fed. R. Evid. 702.
42. Cf. Reilly v. United States, 863 F.2d 149, 155 (1st Cir. 1988).
43. The full text of Federal Rule of Evidence 706 follows:

Court Appointed Experts
(a) Appointment.—The court may on its own motion or on the motion of any party enter an order to show cause why expert witnesses should not be appointed, and may request the parties to submit nominations. The court may appoint any expert witnesses agreed upon by the parties, and may appoint expert witnesses of its own selection. An expert witness shall not be appointed by the court unless the witness consents to act. A witness so appointed shall be informed of the witness' duties by the court in writing, a copy of which shall be filed with the clerk, or at a conference in which the parties shall have opportunity to participate. A witness so appointed shall advise the parties of the witness' findings, if any; the witness' deposition may be taken by any party; and the witness may be called to testify by the court or any party. The witness shall be subject to cross-examination by each party, including a party calling the witness.

(b) Compensation.—Expert witnesses so appointed are entitled to reasonable compensation in whatever sum the court may allow. The compensation thus fixed is payable from funds which may be provided by law in criminal cases and civil actions and proceedings involving just compensation under the fifth amendment. In other civil actions and proceedings the compensation shall be paid by the parties in such proportion and at such time as the court directs, and thereafter charged in like manner as other costs.

(c) Disclosure of appointment.—In the exercise of its discretion, the court may authorize disclosure to the jury of the fact that the court appointed the expert witness.

(d) Parties' experts of own selection.—Nothing in this rule limits the parties in calling expert witnesses of their own selection.

Fed. R. Evid. 706.
44. See Reilly, 863 F.2d at 155; see also Ass'n of Mexican-American Educators v. California, 231 F.3d 572, 591 (9th Cir. 2000).
Rule 706 is to help the fact-finder—particularly the jury—accurately weigh the evidence presented by the parties’ experts in order to make a merits decision. However, confusion results when Rule 706 experts are also used to aid in the admissibility decision, which is something the Justices mentioned in Daubert and General Electric Co. v. Joiner. Because the court-appointed expert witness may offer opinions or make “findings” as well as offer additional evidence beyond that presented by the parties, the expert witness is subject to specific adversarial safeguards. Specifically, the expert witness must report on his or her findings, may be deposed during discovery, typically testifies at trial, and may be cross-examined. For example, in a wrongful death action brought against the federal government resulting from the 1993 raid on the Branch Davidians in Waco, Texas, the district court appointed an expert from Vector Data Systems to testify whether “flashes or glints of light” seen on infrared tape were signs of federal agent gunfire or were from some other source, such as sunlight.

In contrast, although the Federal Circuit, which primarily hears patent and other intellectual property cases, may appoint “technical assistants” under the Federal Courts Improvement Act, the rules governing district courts’ use of court-appointed technical advisors are not codified. As mentioned above, the district courts’ common law “inherent authority” to appoint a technical advisor was first articulated in Ex parte Peterson. Given that technical advisors have traditionally been used to facilitate the admissibility decision, the district courts’ power to appoint a technical advisor has also been said to emanate from Federal Rule of Evidence 104(a), which allows the court to go beyond the bounds of the evidence rules when making an admissibility determination.

The First Circuit stated in Reilly v. United States that the “pure” technical advisor’s role is to explain the scientific and technical bases of evidence, acting as a

45. See FED. R. EVID. 702, 706.
48. Deason, supra note 39, at 77.
49. See Reilly, 863 F.2d at 156.
54. 253 U.S. at 312 (1920).
55. FED. R. EVID. 1008.
"sounding board for the judge – helping the [judge] to educate himself in the jargon and theory disclosed by the [parties' experts'] testimony . . ."  

56 However, because the technical advisor does not offer opinion or "findings," present additional evidence, nor is typically required to compile a report, 57 he or she is not subject to key aspects of the adversarial system, namely, discovery, testimony, and cross-examination. 58 For example, in a patent infringement action against Intel, the district court appointed a technical advisor after "recogniz[ing] that it would be ‘faced with expert testimony, scientific articles, and patents’ the technology of which the court ‘urgently require[d]’ the assistance of a technical advisor to understand." 59

Although the court-appointed expert "witness" and "technical advisor" have been helpful in adjudicating scientifically and technically complex cases, both district court judges and juries have been attempting to meet the demands of increasingly complicated cases with a collection of contradictory case law and a far from helpful Federal Rule of Evidence. Pervasive confusion and policy conflicts justify a revision and expansion of Federal Rule of Evidence 706.

III. REASONS FOR REVISION

Consolidating the concepts of the court-appointed expert "witness" and "technical advisor" within one clear and comprehensive Federal Rule of Evidence is long overdue. This is especially true in light of the fact that the evidentiary revolution sparked by Daubert lead to the 2000 revision of Federal Rules of Evidence 701, 702, and 703, but bypassed Rule 706. 60 Specifically, confusion surrounding the existing rules and policy concerns related to how court-appointed experts fit into the adversarial process justify the revision and expansion of Federal Rule of Evidence 706.

A. Confusion

The simple fact that the present court-appointed expert rules are confusing justifies their revision. The confusion surrounding the application of the court-appointed expert "witness" and "technical advisor" stems from three basic sources: (1) the technical advisor rules are not codified; (2) Rule 706 is ambiguous; and (3) courts have inconsistently applied the rules or assigned overlapping roles and directives to witnesses and advisors. 61

56. Reilly v. United States, 863 F.2d 149, 157 n.7, 158 (1st Cir. 1988).
57. Id. at 160 n.8.
58. Id. at 156.
60. FED. R. EVID. 701-703, 706 advisory committee's notes.
61. See Reilly, 863 F.2d at 155; Laural L. Hooper et al., Assessing Causation in Breast Implant Litigation: The Role of Science Panels, 64 LAW & CONTEMP. PROBS. 139, 143 (2001); Note,
The first and perhaps most obvious source of confusion is that the concept of the technical advisor is not codified. The rules governing the technical advisor are amorphous, having evolved through case law, and are a cause of disagreement among judges about specific procedures. For example, the First Circuit in Reilly v. United States stated: "We disagree with the suggestion that a technical advisor should be required, as a matter of course, to write a report." In contrast, Judge A. Wallace Tashima, dissenting in Association of Mexican-American Educators v. California, wrote: "I would hold that a district court minimally must . . . make explicit, either through an expert's report or a record of ex parte communications, the nature and content of the technical advisor's advice."

Second, Rule 706 is itself confusing and ambiguous. While some courts, including the First and Ninth Circuits, have explicitly exempted court-appointed technical advisors from the provisions of Rule 706, the First Circuit in Reilly admitted "the question is not free from all doubt." In fact, "Judge [Jack] Weinstein argued for an interpretation of Rule 706 that would 'give courts increased flexibility to appoint experts [and] technical advisors . . . ." Thus, taking Judge Weinstein's cue, the argument reasonably can be made that Rule 706 already includes the concept of the technical advisor or, conversely, that the technical advisor was not meant to be a model separate from that outlined in Rule 706.

Although the text of Rule 706 often refers to the court-appointed expert "witness," the title of the Rule is simply "Court Appointed Experts." More importantly, the Rule is completely silent regarding the expert's purpose or specific role. The Rule requires that the expert be informed of his "duties," but this is hardly a clear mandate regarding what are the expert's duties. The Rule does not explicitly limit the expert's role to helping the fact-finder understand the weight of the evidence in order to make a merits decision. Presumably, Rule 706 permits the expert to also assist the judge with the admissibility determination, which is a role traditionally delegated to the technical advisor.

supra note 46, at 951.

62. See Reilly, 863 F.2d at 156.
63. See id. at 157-58 (citing the procedures of various circuits).
64. Id. 863 F.2d at 160 n.8.
65. Ass'n of Mexican-American Educators v. California, 231 F.3d 572, 611 (9th Cir. 2000).
66. Reilly, 863 F.2d at 156; Ass'n of Mexican-American Educators, 231 F.3d at 590-91.
67. Reilly, 863 F.2d at 155.
69. FED. R. EVID. 706.
70. Id.
71. Id.
72. Id.
Rule 706 is also virtually silent on how the expert is permitted to fulfill his or her unstated purpose.\textsuperscript{74} The Rule requires the expert to advise the parties of his or her “findings”—the meaning of which is itself not clear—but the Rule does not order the expert to testify; it states he or she “may” be called to testify.\textsuperscript{75} If the court-appointed expert under Rule 706 need not testify, then it is not clear how he or she is to assist the jurors in their fact-finding mission. Additionally, the Rule presumably permits the expert to confer with the judge privately as long as the expert communicates with the parties regarding any findings made, which merges traditional distinctions between the court-appointed expert witness and technical advisor.\textsuperscript{76}

Finally, the Advisory Committee Notes for Rule 706 hint that the technical advisor concept was contemplated when the Rule was drafted.\textsuperscript{77} The \textit{Reilly} court pointed out that the Notes cite “expert-witness” cases and law review articles.\textsuperscript{78} However, the Notes also state that “The inherent power of a trial judge to appoint an expert of his own choosing is virtually unquestioned... Hence the problem becomes largely one of detail.”\textsuperscript{79} The Notes add that a “comprehensive scheme for court appointed experts was initiated with the adoption of Rule 28 of the Federal Rules of Criminal Procedure in 1946” and that provisions for deposing and cross-examining the expert were added to the thesis of Federal Rule of Criminal Procedure 28 and ultimately codified in Federal Rule of Evidence 706.\textsuperscript{80}

Therefore, because the district court’s “inherent power” or authority has been traditionally associated with the appointing of technical advisors, the Advisory Committee Notes arguably suggest that the Rule was intentionally drafted to include and codify the common law concept of the technical advisor, adding the necessary details to make the technical advisor subject to the specific reporting, discovery, and trial provisions of Rule 706.\textsuperscript{81} This was done presumably for various policy reasons, including respecting the adversarial process by ensuring the court-appointed expert’s

\begin{flushleft}
\textsuperscript{74} FED. R. EVID. 706 (a).
\textsuperscript{75} Id.
\textsuperscript{76} Cecil & Willging, \textit{supra} note 10, at 1029-30.
\textsuperscript{77} FED. R. EVID. 706 advisory committee’s notes.
\textsuperscript{78} 863 F.2d 149, 155 (1st Cir. 1988).
\textsuperscript{79} FED. R. EVID. 706 advisory committee’s notes.
\textsuperscript{80} Id. As amended, the full text of Federal Rule of Criminal Procedure 28 (advisory committee’s notes effective December 1, 2002) follows:

Interpreters. The court may select, appoint, and set the reasonable compensation for an interpreter. The compensation must be paid from funds provided by law or by the government, as the court may direct. (Notes of Advisory Committee on 2002 amendments. The language of Rule 28 has been amended as part of the general restyling of the Criminal Rules to make them more easily understood and to make style and terminology consistent throughout the rules. These changes are intended to be stylistic only.)

FED. R. CRIM. P. 28.

\textsuperscript{81} Note, \textit{supra} note 46, at 951-52.
\end{flushleft}
credibility and accountability to the parties. However, if the argument is unconvincing that Rule 706 may be reasonably interpreted to incorporate the notion of the technical advisor, at the very least, the dueling arguments show that the Rule requires further revision to clarify what it precisely addresses.

Third and lastly, the distinctions between the court-appointed expert witness and technical advisor become further confused when courts inconsistently apply the rules or assign overlapping roles and directives to witnesses and advisors. For example, in Daubert, Justice Harry Blackmun appeared to confuse the role of a Rule 706 court-appointed expert, suggesting that such an expert may assist the district court in the admissibility determination. Justice Blackmun wrote for the majority: "a judge assessing a proffer of expert scientific testimony under Rule 702 should also be mindful of other applicable rules. . . . Rule 706 allows the court at its discretion to procure the assistance of an expert of its own choosing." 82

The science panels used in the silicone breast implant litigation provided a telling and more detailed example of confused expert roles. Judge Robert Jones of the District of Oregon appointed a panel of "technical advisors" and Judge Sam Pointer of the Northern District of Alabama appointed a panel of experts under Rule 706, not to specifically make an admissibility or merits determination, but to answer essentially the same question: Whether silicone breast implants cause various diseases. 86

Consistent with precedent, Judge Jones claimed that the technical advisors were to assist him in determining the "admissibility of challenged evidence." However, the technical advisors did not simply educate Judge Jones by defining terminology and explaining underlying theory. Instead, they opined that the plaintiffs' expert evidence, claiming that silicone breast implants do cause disease, was unreliable, which reaches beyond the bounds of the "pure" technical advisor outlined in Reilly. Additionally, "Judge Jones agreed to a number of procedural protections required when experts are appointed under Rule 706." In particular, "Judge Jones agreed to provide a written charge to the technical advisors, to communicate with the advisors on the record, and to allow the attorneys a limited opportunity to question the advisors regarding the content of their reports." 89

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83. Id. at 595.
85. Id. at 1392-93.
86. Id. at 1394.
87. Hooper et al., supra note 61, at 143.
88. See Hall, 947 F. Supp. at 1466-76.
89. Reilly v. United States, 863 F.2d 149, 157-58 (1st Cir. 1988).
90. Hooper et al., supra note 61, at 143.
91. Id. at 143 n.18 (citing Laura L. Hooper et al., Neutral Science Panels: Two Examples of Court-Appointed Experts in the Breast Implants Product Litigation 9 (2001)).
In October 2003, an advisory panel for the federal Food and Drug Administration recommended that silicone breast implants be allowed back on the market after being banned since 1992. However, in January 2004, the FDA rejected the panel’s recommendation, explaining that more data is needed on “how often [silicone breast implants] break apart in women’s bodies and the resulting health effects from leaking silicone.”

Furthermore, although technical advisors traditionally may not provide the judge with additional evidence, Judge Jones specifically asked the panel, “If epidemiological studies have not been done or are inconclusive, what other data . . . can justify, to a reasonable medical probability, a conclusion concerning the cause of the syndrome or disease at issue?” In fact, Judge Tashima, dissenting in Association of Mexican-American Educators v. California, noted that technical advisors often move beyond the role of the pure technical advisor by providing the judge with additional evidence in the form of advice or other “extra-record information.” He stated, “Whenever a court appoints a technical advisor, there is a danger that the court will rely too heavily on the expert’s advice, thus compromising [the court’s] role as an independent decisionmaker and the requirement that its findings be based only on evidence in the record.”

While Rule 706 court-appointed experts traditionally assist the fact-finder in making a merits decision, Judge Pointer’s Rule 706 experts provided a written report that could also be relevant to the admissibility determination, which requires a scrutinizing review of the underlying methodology of evidence proffered under Daubert. For example, “The immunologist found that many of the studies available for analysis were methodologically inadequate, with ill-defined or inappropriate comparison subjects or unorthodox data analyses.” In fact, because the purpose of Judge Pointer’s panel was to create a written report and videotaped testimony to be available for future trials, “attorneys for the defendants found the report and videotaped testimony extremely useful, and expected to use them . . . in any Daubert hearings that might precede these trials.”

In summary, confusion regarding court-appointed experts has resulted from a lack of codified rules for technical advisors, Rule 706’s ambiguity, and because courts

94. Id. at 155 (emphasis added).
95. 231 F.3d 572, 611 (9th Cir. 2000).
96. Id. at 610-11.
98. Hooper et al., supra note 61, at 164.
99. Id. at 164-65.
use the two allegedly different models to answer similar questions by following similar procedures. This confusion justifies the consolidation, clarification, and revision of court-appointed expert rules.

B. Policy Concerns

Dueling policy concerns hover over the concepts of the court-appointed expert "witness" and "technical advisor," making the confusing and inconsistently applied rules worse.100 On one side of the debate is the policy that the judicial system should remain loyal to the adversarial process.101 "One of the basic premises of the American litigation system is that a neutral decisionmaker makes a determination based on evidence collected, presented, and subjected to scrutiny by advocates for the parties."102

On the other side of the debate is the policy that judges and juries should make well-informed decisions.103 Whether an admissibility or merits decision, a well-informed decision can only be made if the decision-maker has and understands all the relevant facts. While the adversarial process promises that the truth and all necessary facts will be revealed with clarity through its implementation, critics argue that this is easier said than done.104

For example: (1) the parties have lost sight of the need to explain the basics; (2) the opposing experts have attacked each other so ferociously that the judge [or jury] does not feel comfortable relying on either expert’s explanation; (3) both parties elect to omit discussion of a scientific issue that the court considers relevant to resolving the dispute; (4) the parties make a strategic choice to complicate the issues in the hope that the triers of fact will throw up their hands and accept the ultimate conclusion of the expert they "like best," rather than trying to follow each step of the analysis; (5) the parties simply lack the resources to marshal the expert evidence necessary to address the legal issues.105

The notion of the court-appointed expert was devised to address criticisms of the adversarial process.106 While it is imperative that judges and juries make independent determinations with cases becoming more scientifically and technically complex,

100. See Deason, supra note 39, at 152-53.
101. Id at 61-62.
102. Id.
103. Id. at 82, 134.
105. Id.
106. See Deason, supra note 39, at 66.
judges and juries can benefit from a third source of expertise that is independent from confounding and often conflicting evidence presented by party experts. "Court-appointed experts can assist courts in bridging gaps left by the parties and their respective experts."107 Thus, the two narrow purposes of a court-appointed expert are to help the judge, in light of Daubert, understand the scientific or technical bases of evidence to make an admissibility decision and to help the fact-finder—judge or jury—understand the relevance, weight, or credibility of the evidence and make a decision based on the merits when other sources of information prove inadequate.108

Policy concerns achieve circularity when proponents of the adversarial process criticize the use of court-appointed experts for undermining the adversarial process. Specifically, critics fear that the judge or jury will be unduly influenced by the expert or, conversely, the judge or jury will give undue deference to the expert, thus "usurp[ing] the judge and jury's traditional fact-finding responsibility."109 For example, BEI Technologies Inc. v. Matsushita Electric Industrial Co., Ltd. involved a complex patent infringement action related to "quartz rate sensor products."110 Rather than simply evaluating the parties' expert testimony or providing additional technical evidence for the judge's consideration, the court-appointed expert went further and actually made legal conclusions. The court-appointed expert "filed his report recommending that the Court deny BEI's motion for summary judgment and grant Matsushita's motion for summary judgment."111 The fear of undermining the adversarial process is compounded if the court-appointed expert is not truly "neutral" and, in the case of the technical advisor, "the parties cannot discern the advisor's bias or effectively counter the advice given by the advisor to the judge."112

This concern explains why commentators have often proposed "new" rules to govern the use of technical advisors that mirror the provisions of Rule 706.113 However, the proposed rules further blur the line distinguishing Rule 706 experts from technical advisors and add to the overall confusion.114 For example, one

107. See Ellsworth, supra note 104, at 173.
108. See Deason, supra note 39, at 82-83.
111. Id. at 788.
112. Note, supra note 46, at 953.
114. Compare Thomas M. Crowley, Help Me Mr. Wizard! Can We Really Have "Neutral" Rule 706 Experts?, 1998 DET. C.L. MICH. ST. U.L. REV. 927, 972 (suggesting that technical advisors are used to preclude discord and that Rule 706 experts should be called as witnesses), with Hess, supra note 113 (advocating a technical advisor rule based on an expert witness rule with the same provisions).
commentator simply suggested replacing the term "expert witness" in Rule 706 with "technical advisor" to create Federal Rule of Evidence 707 without making any substantive changes to the guiding provisions. Another commentator admonished: "courts should freely allow [Rule 706] experts to be called as witnesses and should not use the verbal sleight of hand of calling the chosen experts 'technical advisors' in order to preclude discovery." 116

In addition to providing clarity, a revision of Federal Rule of Evidence 706 must strike a balance between ensuring that judges and juries have flexible tools to fashion well-informed decisions and preventing "trial by [expert] witness." 117 In particular, a revision of Rule 706 should expand the requirements for expert selection and compensation, outline specific, delineated roles for court-appointed experts, and provide appropriate procedural safeguards for the court, parties, and appointed experts to follow.

IV. PROPOSALS FOR REVISION

This quandary of conflicting policies and confusing rules demands that the rules governing the court-appointed expert "witness" and "technical advisor" be revised with an eye toward consolidation and clarification while keeping in mind key policies. Although the finer points of revision must also be considered, this exercise leads to the primary conclusion that the Federal Rules of Evidence should be revised to create one comprehensive rule—a "new" Rule 706—that authorizes the use of court-appointed experts for the two, primary purposes of assisting the judge with the admissibility decision and assisting the fact-finder, whether judge or jury, with the merits decision. The new Rule should also specify appropriate procedural safeguards to address the aforementioned policy concerns.

While the Reilly court may have implicitly argued that the constitutional concepts of due process and fundamental fairness mandate the use of certain procedural safeguards with respect to court-appointed experts, 118 the clearest directive would be an official revision of the Federal Rules of Evidence by the Rules Committee. The primary areas of necessary revision include selection and compensation of the expert, the expert’s role and permissible contributions to the case, and procedural safeguards that regulate the expert’s contributions and communications between the expert, judge, and parties.

As an overview, the selection process should be the same regardless of what role the expert is to play. However, contributions and accompanying procedural

116. Crowley, supra note 114, at 972.
117. Id. at 969-70 (discussing court-appointed witnesses turning "trial by jury" into "trial by witness").
118. Hess, supra note 113, at 586-87 (citing Reilly v. United States, 863 F. 2d 149, 159 (1st Cir. 1988)).
safeguards should be considered in light of the expert’s role, as should compensation schemes. While aligning procedural safeguards with contributions remains somewhat faithful to the traditional distinctions between the court-appointed expert “witness” and “technical advisor,” suggested revisions take into account policy concerns. With regard to language, the new Rule should address “court-appointed experts” generally while creating the subsets of “consulting expert”—for the admissibility decision—and “testifying expert” for the merits decision.119

A. Selection and Related Considerations

The selection process is perhaps the most important area of revision because it is the first line of defense against court-appointed experts inappropriately influencing judges and juries. A revision of the selection process is especially needed because Rule 706 is wanting in this area and no formal rules have been established for the selection of “technical advisors” who may threaten the adversarial process the most by conferring with the judge in private per tradition without being subject to any formal procedural safeguards.120 In fact, Judge Tashima, dissenting in Association of Mexican-American Educators v. California, stated that “a district court minimally must: (1) utilize a fair and open procedure for appointing a neutral technical advisor...”121

The principle goal in selecting a court-appointed expert is to find someone who is neutral and unbiased.122 While judges and juries may still be persuaded by a court-appointed expert during the decision-making process, a reasonably impartial expert helps ensure judges and juries will make well-informed, objective decisions by lessening the likelihood of expert manipulation. However, no expert can be truly “impartial” because “science is not value [neutral].”123 “In reality, science, like any other academic study, occurs within the social, economic, and political realm and not in an ideological vacuum. Scientists are human beings, which means that they too are subject to social and personal interests.”124 Furthermore, “To have achieved the level of knowledge in a field necessary to be an expert, one must have made commitments to certain theoretical and methodological points of view that compete within a given discipline.”125 But recognizing that scientists cannot be entirely objective does not

120. See Hess, supra note 113, at 587.
121. 231 F.3d 572, 611 (9th Cir. 2000).
122. See id. at 611.
123. Crowley, supra note 114, at 961.
125. Crowley, supra note 114, at 956.
render the use of court-appointed experts pointless. The real issue becomes "what kinds of bias or preconceptions are acceptable, and by what criteria acceptability is judged." Thus, selection and compensation become important procedural safeguards in the use of court-appointed experts.

Although Rule 706 makes a meager attempt at outlining the selection procedure of court-appointed expert "witnesses," its principle of party participation is sound and should be applied to the traditional notion of the "technical advisor"—whose scattered rules do not explicitly require party involvement in the selection process—because "increased party involvement in the process enhances the legitimacy of the appointment." In other words, infusing some level of adversarialism into the selection of court-appointed experts serves as a check on an expert's lack of inherent neutrality. Preliminarily, as mentioned above, the new Rule should not reference court-appointed expert "witnesses," but simply "court-appointed experts."

1. Determining the Need

Rule 706 begins by stating that "The court may on its own motion or on the motion of any party enter an order to show cause why expert witnesses should not be appointed...." While the gist of the statement is discernable, it can be made clearer and should be elaborated. First, the judge or either party should be able to make a motion requesting the appointment of a court-appointed expert. The movant should affirmatively explain why a court-appointed expert is needed. As Rule 706 already suggests, non-moving parties should have an opportunity to object and explain why a court-appointed expert is not needed. The judge should then have the final say as to whether an expert will be appointed.

The new Rule should emphasize that the court shall not appoint its own expert because of the initial appearance of complexity or ambiguity, "[m]ere differences" between party experts, or "minor gaps in information." Rather, the judge "should first look to the adversarial process to resolve any conflicts or to produce necessary information, and expert appointment should only be used as a last resort." Judges should use the threat of appointment to induce the parties to present clear and comprehensive scientific or technical information—whether through discovery or trial testimony—to avoid the need to appoint an expert. This echoes the Rule 706

126. Id. at 952.
127. FED. R. EVID. 706(a); Choy, supra note 124, at 1448.
128. FED. R. EVID. 706(a).
129. See FED. R. EVID. 706 ("The court may... on the motion of any party enter an order to show cause why expert witnesses should not be appointed... ."); see also Choy, supra note 124, at 1447 ("The court... should... give the parties an opportunity to oppose the appointment.").
130. See Choy, supra note 124, at 1447.
131. Id. at 1446.
132. Id.
Advisory Committee Notes, which state that "The ever-present possibility that the judge may appoint an expert in a given case must inevitably exert a sobering effect on the expert witness of a party and upon the person utilizing his services."\textsuperscript{133}

However, a vague threat hiding in the pages of the Federal Rules of Evidence will never be as effective as the judge clearly and affirmatively expressing his or her intent during the litigation. This will put the parties on notice and ideally encourage them to present clear and complete evidence that truly facilitates the admissibility or merits decision. This is consistent with Rule 702, which requires that "scientific, technical, or other specialized knowledge . . . assist the trier of fact to understand the evidence or to determine a fact in issue."\textsuperscript{134}

The foregoing discussion necessarily implicates the issue of timing, although Rule 706 makes no mention of timing.\textsuperscript{135} During the course of litigation, it is not clear when the initial motion may be made by the judge or the parties or when an expert may actually be appointed by the court.\textsuperscript{136} Logic demands that the new Rule should ultimately specify that an expert may be appointed at any time when the need arises during litigation, thus providing maximum flexibility for the use of court-appointed experts. Nevertheless, the new Rule should also suggest procedures that will enable all involved to properly identify the need for a court-appointed expert without interfering with trial as well as a timeline that will provide a reasonable period for wise selection.

For example, the Federal Judicial Center advocates the use of a specific "pretrial procedure" that "permits narrowing of disputed issues and preliminary screening of expert evidence" to give the judge "an early indication of the need for court-appointed experts."\textsuperscript{137} While only focusing on civil trials, the Center encourages judges to force party attorneys to share expert information in accordance with Federal Rule of Civil Procedure 26 and also encourages judges to call one or more pretrial conferences consistent with Federal Rule of Civil Procedure 16.\textsuperscript{138} Judges should "use the conference to explore in depth what issues implicate expert evidence, the kinds of evidence likely to be offered and its technical and scientific subject matter, and anticipated areas of controversy."\textsuperscript{139} Additionally, judges surveyed by the Federal Judicial Center "expressed satisfaction" with appointing an expert after discovery, while those who appointed experts "immediately before or during the trial indicated that appointment earlier in the process would have been helpful."\textsuperscript{140} Conversely, an

\begin{tabular}{ll}
133. & \textit{FED. R. EVID.} 706 advisory committee's note. \\
134. & \textit{FED. R. EVID.} 702 (emphasis added). \\
135. & \textit{See} \textit{FED. R. EVID.} 706. \\
136. & \textit{See} \textit{FED. R. EVID.} 706. \\
138. & Cecil \& Willging, \textit{supra} note 10, at 1060. \\
139. & Schwarzer \& Cecil, \textit{supra} note 137, at 42. \\
140. & Cecil \& Willging, \textit{supra} note 10, at 1021. \\
\end{tabular}
appointment made too early may not be helpful, as illustrated in Stanley v. Ohio Department of Rehabilitation and Corrections where, less than two weeks after filing his complaint, the plaintiff requested that the district court appoint an expert medical witness to evaluate whether "prison officials and employees were deliberately indifferent to [his] medical needs." The district court held that "At this stage of the pleadings, the Court is without sufficient evidence by which to determine whether appointment of an expert is necessary."

Therefore, the new Rule should suggest that judges encourage pretrial communication between party attorneys and schedule formal pretrial conferences before and after discovery to facilitate the identification of the need for a court-appointed expert. Furthermore, the new Rule should suggest that the trial date not be set until after discovery, at which time it should become clear whether a court-appointed expert will be useful for either the judge or jury. If the judge confirms that a court-appointed expert is needed, the trial date should be set after a reasonable amount of time has been allocated for the expert's selection. The judge should also have the discretion to determine the appropriateness of such procedures in a criminal trial.

Regarding the selection and appointment of a court-appointed expert, Rule 706 states that the court "may request the parties to submit nominations" and "may" appoint an expert "agreed upon by the parties" or an expert "of its own selection." As mentioned above, the Rule's general policy of party participation in the selection process is wise. However, the Rule fails in giving the judge too much discretion and too little guidance in the selection process. Three main procedures must be specifically addressed: (1) compiling a list of potential experts; (2) screening the experts for unacceptable bias; and (3) making the final selection.

2. Compiling the List

The new Rule should explicitly state how a sufficiently neutral and qualified court-appointed expert might be found. Supporting this notion, the Federal Judicial Center reported in its survey that "Some judges spoke of the difficulty in recruiting unbiased experts with the knowledge demanded in litigation." Rule 706 wisely allows the parties to submit nominations and encourages them to submit a list of mutually acceptable candidates. The new Rule should also require the parties to

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142. Id.
143. FED. R. EVID. 706(a).
144. See FED. R. EVID. 706.
145. Id.
146. Cecil & Willging, supra note 10, at 1022.
147. FED. R. EVID. 706(a).
submit nominations with "a summary of their qualifications and an explanation of the manner in which those qualifications 'fit' the issues in the case," give the judge discretion to limit the nominations to a certain number of experts, and permit "the parties to strike nominees from each other's list," which "will increase party involvement and expand the list of acceptable candidates."\textsuperscript{148}

The new Rule should also inform the judge and attorneys that experts may be found by consulting universities and professional organizations.\textsuperscript{149} This notion is supported by the American Bar Association's Civil Trial Practice Standards that encourage the court to seek "recommendations from a relevant professional organization or entity that is responsible for setting standards or evaluating qualifications of persons who have expertise in the relevant area, or from the academic community..."\textsuperscript{150} Additionally, the American Association for the Advancement of Science (AAAS) launched the Court Appointed Scientific Experts (CASE) program in 1998 and began formally taking requests from district court judges in February 2001. The program assists district court judges in finding qualified experts who will be selected "on a case-by-case basis, tailor[ed] to the specific request of the judge seeking assistance."\textsuperscript{151} In fact, Justice Stephen Breyer encouraged use of the AAAS service in his concurring opinion in \textit{General Electric Co. v. Joiner}.\textsuperscript{152} Similarly, Duke University School of Law maintains The Registry of Independent Scientific and Technical Advisors "to help judges and others involved in dispute resolution find highly qualified impartial experts to advise them in particular cases, when they determine that such experts may be helpful in resolving disputes on a well-informed, principled basis."\textsuperscript{153} Finally, using professional organizations as a source of expert candidates will become more valuable as professional organizations "hold their respective members accountable for providing disingenuous testimony."\textsuperscript{154}

However, the new Rule should explicitly caution judges and attorneys against using "pre-existing personal or professional contacts to identify an expert."\textsuperscript{155} The Federal Judicial Center noted, "The extent to which judges relied on their informal

\begin{itemize}
\item \textsuperscript{148} \textit{American Bar Ass'n Civil Trial Practice Standards} 11(a)(ii), at 29 (1998) [hereinafter ABA Civil Trial Practice Standards]; Schwarzer & Cecil, \textit{supra} note 137, at 48.
\item \textsuperscript{149} Schwarzer & Cecil, \textit{supra} note 137, at 48.
\item \textsuperscript{150} ABA Civil Trial Practice Standards, \textit{supra} note 148, 11 (a)(iv)(A), at 29.
\item \textsuperscript{152} 522 U.S. 136, 149-50 (1997).
\item \textsuperscript{155} Cecil & Willging, \textit{supra} note 10, at 1023.
\end{itemize}
networks of friends and acquaintances raises concerns about the extent to which such networks can be relied on to provide skilled and neutral experts to inform the deliberations of the trier of fact."  

3. Screening

Once a list of potential court-appointed experts has been compiled, the candidates must be screened for unacceptable bias or conflicts of interest, keeping in mind that all experts have some degree of partiality. Since Rule 706 is silent on this matter, the new Rule should require the experts to "make full disclosure of all engagements (formal or informal), publications, statements, or associations that could create an appearance of partiality" as well as any "previously taken positions on the technical issues that [are] the object of the dispute." Furthermore, the new Rule should require all involved, including the candidates, attorneys, and the judge, to disclose any personal and economic relationships or past associations that would constitute classic conflicts of interest. Beyond requiring disclosure, the new Rule should also permit the court and parties to conduct their own investigations and directly question the candidates in open court.

4. Final Selection

With the candidates screened for potential prejudice, the final selection must be made. Rule 706 states that the judge "may" appoint an expert "agreed upon by the parties" or an expert "of its own selection." This broad language grants the judge too much discretion. The new Rule should be tighter. To respect the adversarial process, the new Rule should require that the judge first attempt to appoint an expert agreed upon by the parties. If the parties cannot come to a consensus, then the judge may exercise his or her discretion to appoint an expert of his or her own choosing, which is a condition that has support in case law. If the parties do agree upon an expert, the new Rule should authorize the judge to appoint a different expert only for good cause stated on the record. Furthermore, the judge should unilaterally select an expert only after considering objections raised by the parties.

156. Id.
158. Id.
159. Cecil & Willging, supra note 10, at 1023.
160. See Hooper et al., supra note 61, at 151.
161. FED. R. EVID. 706(a).
162. Cecil & Willging, supra note 10, at 1024.
163. Id.
5. Post-Selection Considerations

Rule 706 states that an expert "so appointed shall be informed of [his or her] duties by the court in writing, a copy of which shall be filed with the clerk, or at a conference in which the parties shall have the opportunity to participate."\(^{164}\) The notion of providing the expert with a written "job description"\(^{165}\) is a wise requirement that should remain intact. However, the new Rule should require that the parties be given the opportunity to comment on the written instructions\(^{166}\) and the opportunity to be present when the judge communicates the instructions to the expert,\(^{167}\) which are additional ways of tapping into the beneficial aspects of the adversarial system.

Furthermore, the new Rule should prohibit the judge from instructing the expert verbally, i.e., at a conference. This is sound policy because written instructions are easier to reference and provide a detailed record, which an appellate court might find useful in conducting its review. In fact, one of Judge Pointer's panel experts appointed under Rule 706 "commented that the oral instructions seemed fine initially, but the panel later realized that all instructions should have been written and affirmed by all involved."\(^{168}\) Researchers at the Federal Judicial Center summarized that providing the expert with a "job description" serves the specific purposes of:

(1) establishing a record of the terms and conditions of the appointment,
(2) clarifying the role of the expert in relation to the role of the judge, (3) defining the legal and technical issues in the case and identifying the technical issues the expert [is] to address, and (4) establishing procedures for assembling information, communicating with the parties, and reporting findings and opinions.\(^{169}\)

Additionally, the new Rule should encourage the judge to include in the expert's written directive "instructions describing what they can expect in court proceedings" because "Some experts are professionals in this area [and] others are new to it."\(^{170}\) For example, one of Judge Pointer's experts was "shocked at the degree of disclosure required. [Others] showed varying degrees of disagreement with fundamental principles of the legal system, such as access to discovery materials and rights to confront and cross-examine opposing viewpoints."\(^{171}\)

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165. Reilly v. United States, 863 F.2d 149, 159 (1st Cir. 1988).
166. Schwarz & Cecil, supra note 137, at 63.
168. Hooper et al., supra note 61, at 159.
169. Cecil & Willging, supra note 10, at 1025.
170. Schwarz & Cecil, supra note 137, at 63.
171. Hooper et al., supra note 61, at 169.
Rule 706's final directive relating to expert selection requires that an expert "not be appointed by the court unless [the expert] consents to act."\textsuperscript{172} This provision is reasonable and should remain intact. Such consent is related to fully informing the expert; specifically, "fairness demands that experts be fully informed of the risks and demands of the system before agreeing to serve."\textsuperscript{173}

Several of these procedures have been adopted by the Delaware courts. For example, in \textit{Saudi Basic Industries Corp. v. Mobil Yanbu Petrochemical Co.}, the party experts could not agree on the elements of the usurpation claim under Saudi law.\textsuperscript{174}

The Court asked each side to submit names of three experts, and permitted each side to comment on the other's proposed experts. After considering all the various objections lodged, the Court decided to locate its own experts.

The Court located Mr. Herbert Wolfson, and provided his qualifications to the parties for their comment, and discussed with the parties at great length what issues it wanted Mr. Wolfson to research. The Court then issued an order appointing Mr. Wolfson and describing his role in the litigation.\textsuperscript{175}

\textbf{B. Contributions, Communications, and Procedural Safeguards}

To select an appropriate court-appointed expert and subsequently inform the expert of his or her duties, it is necessary to know what role the expert is to play and how he or she may play that role. In other words, the new Rule should outline (1) what contributions the expert may make to a case and (2) how the expert may share these contributions, specifically focusing on procedural safeguards that regulate communications between the expert, judge, litigants, and third parties in light of the aforementioned policy considerations.

As mentioned above, the new Rule should remain faithful to traditional concepts by making the convenient distinction between the court-appointed expert who facilitates the judge's admissibility decision and the expert who assists the fact-finder—whether judge or jury—with the merits decision.\textsuperscript{176} The new Rule should streamline language by embracing the subsets of the "consulting expert" and the "testifying expert."\textsuperscript{177} The new Rule's "consulting expert" would be akin to the traditional court-appointed "technical advisor" who helps the judge determine the

\begin{itemize}
\item \textsuperscript{172} \textit{FED. R. EVID.} 706(a).
\item \textsuperscript{173} Hooper \textit{et al.}, \textit{supra} note 61, at 172-73.
\item \textsuperscript{174} \textit{Saudi Basic Indus. Corp. v. Mobil Yanbu Petrochemical Co.}, No. 00C-07-161-JRJ, slip op. at 2 (Del. Super. Ct. Aug. 26, 2003).
\item \textsuperscript{175} \textit{id.}
\item \textsuperscript{176} \textit{See Schwarzer & Cecil, \textit{supra} note 137, at 59.}
\item \textsuperscript{177} \textit{id.} at 52.
\end{itemize}
admissibility of evidence and the "testifying expert" would be akin to the court-appointed expert "witness" of Rule 706 who helps the fact-finder with the merits decision.\(^\text{178}\)

1. Selection Continued: One Expert or Two

A preliminary issue is whether a single individual may play dual roles as a "consulting expert" and a "testifying expert" or whether different individuals should be assigned these roles separately, thus forcing the court to conduct a second selection process if an additional expert is needed later in the litigation. The argument in favor of requiring two individuals to play separate roles rests on the twin concerns that allowing one expert to "morph" into another later in the litigation will confuse the individual and that a consulting expert who later acts like a testifying expert will be tainted when providing additional information to the fact-finder.\(^\text{179}\) While these concerns are legitimate, the argument in favor of allowing one individual to be both a consulting expert and a testifying expert provides the court with maximum flexibility.\(^\text{180}\)

Flexibility is important because the course of litigation is unique from one case to the next.\(^\text{181}\) For example, requiring the court to conduct a second selection process would be unduly burdensome in terms of further delay of trial and increased costs for parties whose budgets are limited. Thus, the new Rule should grant the judge discretion as to whether to appoint one or two individuals. However, to avoid confusion, if the judge determines later in the litigation that a second expert is needed, but the judge would prefer not to conduct a second round of selection, the new Rule should require the judge to clearly identify to the parties when the expert changes roles by drafting a new "job description" and ensuring that related procedures are properly followed.

2. The Consulting Expert

The purpose of the new Rule's "consulting expert" would be to help the judge determine the admissibility of evidence. For the consulting expert to be effective, the new Rule should be flexible by permitting the consulting expert to act in multiple capacities and be subject to certain optional, though strongly encouraged, procedural safeguards.

First, the consulting expert should be able to act as a neutral educator or "translator"\(^\text{182}\)—akin to the traditional "pure" technical advisor—by explaining to the

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178. See id. at 60-61.
179. See Ellsworth, supra note 104, at 177.
180. Schwarzer & Cecil, supra note 137, at 60.
181. See Ellsworth, supra note 104, at 174.
182. Ellsworth, supra note 104, at 173.
judge the scientific and technical terminology, underlying methodology, overarching concepts, and background information related to the evidence presented by the parties. Second, the consulting expert should be able to move beyond the bounds of the pure technical advisor and provide the judge with additional "evidence" in the form of the expert's own advice or opinion on the reliability of the parties' evidence or in the form of actual studies or reports from other sources, including the expert himself. In other words, the consulting expert should be free to conduct independent research. However, to preserve confidentiality, the consulting expert should be prohibited from conferring with third parties outside the case.

This second role of the consulting expert is the most controversial. Courts have often permitted the traditional technical advisor to provide advice to the judge without any kind of adversarial checks by the parties. As mentioned above, Judge Tashima, dissenting in Association of Mexican-American Educators v. California, stated that "whenever a court appoints a technical advisor, there is a danger that the court will rely too heavily on the expert's advice, thus compromising [the court's] role as an independent decisionmaker and the requirement that its findings be based only on evidence in the record." Thus, without public scrutiny by the attorneys, there is a risk that such ex parte communication may result in the consulting expert unduly influencing the judge.

The strongest counter-argument, which favors shielding consulting experts from the adversarial process, is that the admissibility determination is primarily a legal, not factual, question. The admissibility determination is a two-part process where the judge first finds preliminary facts and then determines whether those facts meet the applicable legal standard. Those in favor of shielding the consulting expert from the adversarial process emphasize that the second part of this process is the most important. In other words, although the judge must find preliminary facts to determine whether a Rule of Evidence applies, the final and most important part of the admissibility determination is whether the evidence is in or out and that is a question of law. Rule 104(a) states that "the admissibility of evidence shall be determined by the court. . ." In making a legal determination, judges are generally granted broad discretion and maximum flexibility in how they arrive at their decision. For example, Rule 104(a) states that the judge "is not bound by the rules

183. See Deason, supra note 39, at 62.
184. Id.
185. Ass'n of Mexican-American Educators v. California, 231 F.3d 572, 610-11 (9th Cir. 2000).
186. See Deason, supra note 39, at 90.
187. See generally FED. R. EVID. 104(a).
188. See Deason, supra note 39, at 90.
189. Id.
190. FED. R. EVID. 104(a).
of evidence" when making an admissibility determination.\textsuperscript{192} The law clerk is a tool judges often use to facilitate legal decisions and "is generally accepted as a necessary part of managing a burdensome caseload."\textsuperscript{193} Similarly, the "consulting expert" can also be considered a "specialized law clerk"\textsuperscript{194} who helps the judge answer the legal question of whether a given piece of evidence is admissible.

A response to this argument is that the judge's finding of preliminary facts is not an insignificant part of the admissibility determination. Although the final admissibility decision might be a legal question, the heart of the decision rests on the judge finding certain facts about the reliability of the evidence and this is no trivial task.\textsuperscript{195} In light of Daubert, the judge must make factual conclusions that are scientifically and technically complex.\textsuperscript{196} While "a judge can filter out 'bad' legal advice or research from a law clerk; he or she is ill-equipped, however, to do the same with 'bad' [scientific or] technical advice" from a consulting expert.\textsuperscript{197} Furthermore, "Unlike a typical clerk, an expert has experience and stature that merit deference, and thus the risk of deference increases."\textsuperscript{198}

Regarding the degree to which a consulting expert's influence may be checked by the adversarial process, the tie-breaking practical consideration is that it is simply too difficult to mandate procedural safeguards that manage an inherently close and dynamic back-and-forth relationship between judge and expert. In other words, it would be unduly burdensome, if not nearly impossible, to determine when a consulting expert crosses the line from tutoring a judge to providing influential advice and attach mandatory procedural safeguards to the latter. On a more philosophical level, Daubert places the burden on the judge to gain, in one way or another, the requisite scientific and technical expertise to make fair and reasonable admissibility decisions.\textsuperscript{199} Thus, the judge should be given deference, respect, and the benefit of the doubt that he or she will use appropriate means to execute his or her duty.

Therefore, the new Rule should provide the judge with flexibility to "engage in freewheeling discussion"\textsuperscript{200} with the consulting expert, while also strongly suggesting that the judge follow specific procedural safeguards because "Concealing the nature

\textsuperscript{192} FED. R. EVID. 104(a).
\textsuperscript{193} Deason, supra note 39, at 139.
\textsuperscript{194} Ellsworth, supra note 104, at 176; see also General Electric Co. v. Joiner, 522 U.S. 136, 149 (1997) (Breyer, J. concurring) (discussing "specially trained law clerks").
\textsuperscript{195} See Deason, supra note 39, at 90.
\textsuperscript{196} Id.
\textsuperscript{197} Ass'n of Mexican-American Educators v. California, 231 F.3d 572, 614 (9th Cir. 2000) (Tashima, J. dissenting).
\textsuperscript{198} Deason, supra note 39, at 140.
\textsuperscript{200} Reilly v. United States, 863 F.2d 149, 158 (1st Cir. 1988).
of [the] expert advice can only erode confidence in the court's role as a neutral and independent decisionmaker. 201 Specifically, the new Rule should suggest that the judge conduct admissibility hearings and have the consulting expert create a written report subject to party review.

For example, the judge and consulting expert should have the opportunity to examine the parties' experts on the witness stand. This mirrors "Judge Jones and [his] technical advisors [who] also asked questions of the parties' experts about the basis of their testimony." 202 If the judge intends to use the consulting expert as more than a neutral educator, the judge should require the consulting expert to draft a report summarizing the expert's conclusions regarding the reliability of proffered evidence, whether that evidence is in the form of party expert testimony or other documentary evidence, as well as the expert's "discussions with the judge." 203 Once the report is complete, the judge should conduct another admissibility hearing where the attorneys have the opportunity to examine the consulting expert directly, which is what Judge Jones did with his technical advisors. 204 If the judge decides against allowing the consulting expert to testify during an admissibility hearing, the judge "should allow the parties to respond to the [consulting expert's] written report before making an admissibility ruling." 205

Alternatively, if the judge wishes to avoid an admissibility hearing altogether, the new Rule may suggest that the judge invite the attorneys to attend a meeting with the consulting expert, either in person or via conference call, or that "a record of the discussion can be forwarded to the parties." 206 Finally, the new Rule should require that all records from the hearings and meetings and the consulting expert's report become part of the official record to facilitate appellate review.

As for the consulting expert's authority to confer with the parties or the party experts, the new Rule should require the judge to "ensure that every party is... aware of all communications between any party and a court-appointed expert by permitting all parties to be present when any party meets or speaks with the expert, or providing that all communications between any party and the expert will be in writing with copies to all parties." 207

In summary, the new Rule should favor, though not mandate, the use of procedural safeguards because "such safeguards will permit the parties to remain informed of the nature of the technical assistance and raise objections when the intended form of assistance encroaches on the duties of the judge. At the same time,

201. Ass'n of Mexican-American Educators, 231 F.3d at 614 (Tashima, J. dissenting).
203. Note, supra note 46, at 958.
204. Hooper et al., supra note 61, at 166.
205. Note, supra note 46, at 958.
information about the expert's advice will permit parties to challenge misplaced factual assumptions and debatable opinions.208

3. The Testifying Expert

The purpose of the new Rule's "testifying expert" would be to help the fact-finder, whether judge or jury, with the merits decision by influencing how the fact-finder weighs the evidence. The testifying expert may do this implicitly by providing additional documentary evidence, such as studies or reports, for the fact-finder to consider or by explicitly stating his or her opinion regarding the credibility of the parties' expert evidence. However, the new Rule should acknowledge that a testifying expert may also be useful to educate the jury in basic terminology and fundamental concepts that underlie expert evidence, similar to the role of the traditional "pure" technical advisor.209 This is important because juries are generally comprised of lay people who must contend with the parties losing "sight of the need to explain the basics" and the parties' "strategic choice to complicate the issues in the hope that the triers of fact will throw up their hands and accept the ultimate conclusion of the expert they 'like the best'..."210

Rule 706 commands that the "witness so appointed shall advise the parties of the witness' findings, if any; the witness' deposition may be taken by any party; and the witness may be called to testify by the court or any party. The witness shall be subject to cross-examination by each party, including the party calling the witness."211 Because Rule 706 contemplates that the court-appointed expert witness will contribute "findings" or additional evidence for the fact-finder to consider, the Rule's express reference to adversarial procedures is sound.212 However, it is the permissive element of the Rule that is problematic.213

The only requirement in Rule 706 is that the expert "shall" advise the parties of his or her findings.214 Beyond that, the Rule states that the expert "may" be subject to the adversarial process.215 This suggests that a consulting expert should not be subject to the adversarial process by mandate of the Rule.216 However, if a court-appointed expert is charged to help the jury with its merits determination, there is little benefit in the expert reporting his or her findings to the parties, but not being questioned in open court in the presence of the jury.

208. Cecil & Willging, supra note 10, at 1067.
209. See Hooper et al., supra note 61, at 173.
211. FED. R. EVID. 706(a).
212. Id.
213. FED. R. EVID. 706(c).
214. FED. R. EVID. 706(a).
215. Id.
216. Id.
Therefore, the new Rule should require that a "testifying expert" prepare a report of his or her "findings," which may include additional studies or information that the expert deems relevant to the question at issue as well as his or her opinion regarding the significance of other admitted evidence and expert testimony. Of course, the judge must have the freedom to examine the admissibility of this evidence as well. In such a case, the judge may find that appointing two different individuals to serve as consulting expert and testifying expert would make the most sense.

The new Rule should also require that the testifying expert actually testify and be subject to direct questioning by the judge and parties. While "inquiry into factors not directly related to the report, such as the personal motivations of the researcher or opinions on matters outside the report, is regarded as an unnecessary attack on the integrity of the individual," the new Rule should grant the judge discretion to set the parameters for examination of the testifying expert. Additionally, the new Rule should permit the judge to determine whether the testifying expert’s written report should be admitted into evidence or if the jury’s access should be limited to hearing the expert’s testimony from the witness stand.

Deserving separate consideration is the controversial issue of whether a testifying expert should be subject to other aspects of the adversarial process; namely, pretrial depositions and the discovery of notes used to create his or her report. For example, Judge Pointer’s Rule 706 experts had mixed reactions to these adversarial procedures. While at least “One panelist was pleased with the discovery depositions and appreciated having a copy of the questions in advance,” another “did not understand why discovery depositions, separate from trial depositions, were necessary.” Additionally, two experts “found the requests for documents to be intrusive and generally inappropriate for a scientific inquiry” and others thought “notes and records are not public property, however, but the intellectual property of the scientist; thus, the notes should not have to be disclosed for cross-examination.”

Therefore, the new Rule should give the judge discretion to determine whether additional discovery procedures are appropriate, while also strongly suggesting that they not be used unless absolutely necessary. In other words, open court testimony and examination should generally be sufficient to expound on the expert’s findings without having to subject the expert to duplicative and intrusive pretrial investigation. However, the new Rule should suggest that the parties provide the expert with key questions in advance of trial so that the expert may provide accurate and comprehensive testimony.

217. Hooper et al., supra note 61, at 165-66.
218. See id. at 167.
219. Id. at 169.
220. Id.
221. Id.
Additionally, the new Rule should address the issue of *ex parte* communication. The judge may need to conduct "incidental communications" with the testifying expert concerning logistical matters "in which full participation by the parties is unnecessary."222 However, because the testifying expert is to provide additional evidence to the fact-finder, the new Rule should generally bar *ex parte* communication between judge and expert, especially in the case of a bench trial, unless absolutely necessary. This will ensure that what the judge uses to decide the case is what was developed in open court. This policy is supported by *Edgar v. K.L.*, where the Seventh Circuit "disqualified a district judge from a case in which he repeatedly met outside the presence of counsel to discuss the merits of the case with an appointed panel of expert witnesses scheduled to testify at trial."223 The "district judge ‘declined to state on the record his own memories of what happened,’ and instead chose to invoke an unspecified ‘judicial privilege,’ [thus] the Seventh Circuit was forced to assume that the conversations involved a discussion of the merits of the litigation."224 Of course, *ex parte* communication between a testifying expert and the jury should be completely banned.

As for the testifying expert’s authority to confer with the parties or the party experts, the new Rule should mirror that which was proposed for the consulting expert, i.e., require the judge to:

> ensure that every party is . . . [a]ware of all communications between any party and a court-appointed expert by [p]ermitting all parties to be present when any party meets or speaks with the expert, or [p]roviding that all communications between any party and the expert will be in writing with copies to all parties."225

The use of the testifying expert to help the fact-finder evaluate the credibility of admitted evidence implicates the issue of what standard of proof should be used. In response to Judge Pointer’s Rule 706 experts, a plaintiff’s attorney:

> was concerned that Judge Pointer instructed the panel members to apply the standard of proof used in their respective fields. As a result, panel members used the scientific standard, which requires greater certainty than the legal standard of preponderance of the evidence. This attorney believed the scientific standard was the wrong standard to use.226

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224. *Id.* (quoting *Edgar*, 93 F.3d at 258).
Therefore, the new Rule should clarify the issue of standard of proof by specifying that each individual study presented as evidence must meet the rigors of the scientific standard of proof, which is typically a ninety-five or ninety-nine percent confidence level, while the legal preponderance standard should be used to consider the evidence in aggregate.\(^\text{227}\)

Once a testifying expert is selected and set to testify, in the case of a jury trial, Rule 706 gives the judge discretion whether to disclose to the jury that the additional expert was appointed by the court.\(^\text{228}\) This issue has elicited controversy as well.\(^\text{229}\) While the ABA's Civil Trial Practice Standards state that "The witness should not ordinarily be identified as one appointed by the court,"\(^\text{230}\) the Federal Judicial Center recommends that "in almost all cases the court's sponsorship of the expert should be explicitly acknowledged, along with whatever limiting instructions are thought to be appropriate regarding the weight to be given the expert's testimony relative to the testimony of the parties' experts."\(^\text{231}\)

The concern is that "juries will merely rubber-stamp the opinions of" testifying experts.\(^\text{232}\) However, a 1991 study "found that jurors do not tend to weigh a court-appointed expert's testimony as heavily as critics suggest. In fact, it found that adversarial experts were received better, and that the adversarial context actually improved juror recall of the testimony."\(^\text{233}\) Ultimately, honesty is the best policy. If the legal system assumes that juries are capable of sifting through mounds of evidence and testimony and rendering just verdicts consistent with applicable law, then the legal system should not hesitate to disclose to the jury when an additional witness is sponsored by the court. In other words, with an accurate record of the facts, juries should be given the benefit of the doubt that they will assign appropriate weight to all expert evidence.

Thus, the new Rule, consistent with the Federal Judicial Center's recommendation, should require that the judge disclose to the jury that the testifying expert is a court appointee. However, limiting instructions should also be required. The ABA's Civil Trial Practice Standards outline sufficient instructions:

[The jury] is not to give greater weight to the testimony of a court-appointed expert than any other witness simply because the court chose

\(^{227}\) Faigman et al., supra note 24, at 130.
\(^{228}\) Fed. R. Evid. 706(c).
\(^{229}\) Compare ABA Civil Trial Practice Standards, supra note 148, 11(e)(ii), at 30, with Cecil & Willging, supra note 10, at 1069.
\(^{230}\) ABA Civil Trial Practice Standards, supra note 148, 11(e)(ii), at 30.
\(^{231}\) Cecil & Willging, supra note 10, at 1069.
\(^{232}\) Gross et al., supra note 109, at 233.
\(^{233}\) Id. (citing Nancy J. Brekke et al., Of Juries and Court-Appointed Experts: The Impact of Nonadversarial versus Adversarial Expert Testimony, 15 Law & Hum. Behav. 451, 457, 466 (1991)).
the expert; the jury may consider the fact that the witness is not retained by the either party in evaluating the witness's opinion; and the jury should carefully assess the nature of, and the basis for, each witness's opinion.  

A final issue is how to sequence the court-appointed expert's testimony in relation to the testimony of party experts.  

The Federal Judicial Center noted that:

the timing and sequence of the testimony may have serious effects on the jury's recollection of the evidence and may distort the normal primacy and recency benefits that accompany the opening and closing presentations during trial. A presentation by the expert in either the beginning or the end of the trial can be expected to have greater influence than a presentation during the middle of trial.  

While these concerns are legitimate, the new Rule should leave the choice up to the judge, as is consistent with Federal Rule of Evidence 611(a), which grants the trial court the "discretion to control the order of presentation of the evidence."  

C. Compensation

A final issue is how to compensate court-appointed experts for their services, since it is rare that an expert will work for free. Determining compensation is especially important because it is a common belief that who pays is who influences. Additionally, the Federal Judicial Center found that some judges avoid using court-appointed experts because of the "difficulties in providing compensation." Rule 706 states that public funds may be used to compensate experts used in criminal or civil trials involving a property takings claim under the Fifth Amendment. This provision is fair and should be incorporated into the new Rule.

However, Rule 706 states, "In other civil actions and proceedings the compensation shall be paid by the parties in such proportion and at such time as the court directs, and thereafter charged in like manner as other costs." In the case of a consulting expert whose sole purpose is to assist the judge with the admissibility

234. ABA CIVIL TRIAL PRACTICE STANDARDS, supra note 148, 11(e)(iii)(A)-(C), at 31.  
235. Cecil & Willging, supra note 10, at 1040.  
236. Id.  
237. Id. (interpreting FED. R. EVID. 611(a)).  
238. Id. at 1045.  
239. Id. at 1048-49.  
240. Cecil & Willging, supra note 10, at 1046.  
241. FED. R. EVID. 706(b).  
242. Id.
decision, there is no reason why the parties should have to share in this expense, even if the parties approve of the appointment. Thus, the new Rule should require that public funds be used to compensate consulting experts. However, compensating the testifying expert is more complicated.

Because the judge has the final say as to whether a testifying expert is appointed or not, it would be unfair to force the parties to pay for an additional expert witness whom they may not have agreed to and who may not testify in their favor.\textsuperscript{243} "Furthermore, because an expert may serve long before the case is resolved, a means must be found to provide prompt payment while retaining the option of reallocating the expenses among the parties based on the resolution of the issues."\textsuperscript{244} Finally, if the parties are required to compensate the testifying expert, ordering the parties to pay an equal share would be the fairest solution.

Therefore, in light of these concerns, the new Rule should direct the judge to first ask the parties if they together are willing to cover the costs of the testifying expert. If the parties refuse and the excuse is indigence, then the parties must provide the court with sufficient proof of diminished resources and the judge may then compensate the expert with public funds. Finally, if the parties refuse and their reason is something other than inability to pay, the judge may order the parties to provide funds up front with the understanding that the judge will, at the end of trial, assign the expense to the losing party as costs.

V. Final Thoughts

A clear and comprehensive revision of Federal Rule of Evidence 706 is needed to provide district courts with guidance in the use of court-appointed experts for the discrete purposes of facilitating the admissibility and merits decisions. However, judges' use of court-appointed experts is, ideally, only an interim solution until judges become more scientifically and technically adept. This is not to say that such a rule will not be useful in the future. Indeed, such a rule will always be useful given that juries will continue to lack scientific and technical sophistication, being comprised of new members with each case. Furthermore, such a rule will always be useful given that science and technology will continue to advance. Therefore, judges should have at their disposal a tool—the court-appointed expert—that helps them dissect an unfamiliar science or technology issue. But, generally, "the use of court-appointed experts should decline as judges' sophistication with scientific methods increases."\textsuperscript{245}

Dissenting in Daubert, Chief Justice William Rehnquist implied that the majority was requiring judges to become "amateur scientists," a role he evidently felt judges are ill-equipped to play: "I defer to no one in my confidence in federal judges; but I am at a loss to know what is meant when it is said that the scientific status of a theory

\textsuperscript{243}. Cecil & Willging, supra note 10, at 1045.
\textsuperscript{244}. Id.
\textsuperscript{245}. FAIGMAN ET AL., supra note 24, at 63.
depends on its ‘falsifiability,’ and I suspect some of them will be, too.\textsuperscript{246} However, \textit{Daubert} was the first step in a movement to produce more scientifically and technically proficient judges—a movement that the judicial and broader legal community should embrace.\textsuperscript{247} Taking this idea one step further, such scientific and technical education should not be limited to the learn-as-you-go approach, which occurs when judges preside over scientifically or technically complex cases and consequently decide to appoint experts. Such judicial education should start before the judge dons the black robe and enters the courtroom.

While many post-graduate classes, seminars, and workshops are provided for judges, law schools should be the primary advocates of this paradigm shift in the legal culture.\textsuperscript{248} Law schools should take it upon themselves to graduate lawyers sufficiently versed in the basic principles of science and technology so that lawyers can “spot” both the legal and scientific or technical issues within a case. Law schools have an obligation to produce competent legal professionals—would-be attorneys and judges alike—and legal competence now includes a familiarity with at least the basics of science and technology. Therefore, notwithstanding the fact that most law students fear that which is scientific or technical and so opt instead to major in subjects such as Political Science or English, a handful of key scientific and technical courses should be offered and even required as part of the law school curriculum.\textsuperscript{249} Courses in the scientific method and statistical analysis should be as revered as the standard first-year torts and contract courses. The University of California, Hastings College of the Law, offers one such course: Scientific Method for Lawyers, which is taught by Professors David L. Faigman and Roger Park.\textsuperscript{250}

Beyond law school, although the topic deserves its own extended academic analysis, the legal culture should seriously consider the idea of specialized science courts.\textsuperscript{251} Regardless of what mechanisms are ultimately employed, the legal community must continue to discuss and refine how best to digest and apply complex scientific and technical evidence to achieve just outcomes. As Judge Learned Hand wrote in 1901, “No one will deny that the law should in some way effectively use expert knowledge wherever it will aid in settling disputes. The only question is as to how it can do so best.”\textsuperscript{252}

\begin{itemize}
\item \textsuperscript{246} Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 600-01 (1993) (Rehnquist, J. dissenting).
\item \textsuperscript{247} Cecil & Willging, \textit{supra} note 10, at 995.
\item \textsuperscript{249} See generally FRANK, \textit{supra} note 7, at 225-41.
\item \textsuperscript{250} See Univ. of Cal., Hastings Coll. of Law, Records Office, \textit{Course Catalog}, http://www.uchastings.edu/records_01/PDF/CourseCatalog03-04.pdf (last visited Jan. 7, 2004).
\item \textsuperscript{251} See, e.g. Kondo, \textit{supra} note 52, at 20, 85-93; Joseph Sanders, \textit{From Science to Evidence: The Testimony on Causation in the Bendectin Cases}, 46 STAN. L. REV. 1, 80 (1993).
\item \textsuperscript{252} Hand, \textit{supra} note 1, at 40.
\end{itemize}