Daubert Roulette

Don't Leave It to Chance—Opposing Expert Testimony Under the Current Circuit Split

By Kelly M. Lippincott and Suzanne E. Derr

Three circuits admit expert testimony liberally, four exclude it liberally, and the rest mostly seem to take a reliably straightforward, balanced position on courts' *Daubert* gatekeeping functions.

Different levels of *Daubert* scrutiny are applied to determine the admissibility of expert testimony around the country. If there are *Daubert* issues in your case that need to be resolved, their outcome is usually tied to the forum.

For example, if your client has been sued in the Seventh, Eighth, or Ninth Circuit, expect the liberal admission of expert testimony and its exclusion as unreliable only when it is based on a "faulty methodology or theory." Conversely, if your client has been sued in the Second, Third, Sixth, or Tenth Circuit, you will find that expert testimony will be rigorously screened and may be excluded upon the finding of "any step that renders the analysis unreliable."

Since *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579, 113 S. Ct. 2786 (1993), and its progeny were decided and Federal Rule of Evidence 702 was amended in 2000, the circuit courts of appeals' review of trial courts' gatekeeping function for expert testimony has been inconsistent, which has resulted in conflicting rulings and a circuit split. Recently, after the Ninth Circuit issued an opinion in *SQM North America, Corp. v. City of Pomona,* 750 F.3d 1036 (9th Cir. 2014), the Supreme Court had the opportunity to resolve the circuit split, provide guidance to the circuit courts of appeals, and promote the consistent application of *Daubert* and Federal Rule of Evidence 702 in making expert witness admissibility determinations. In *SQM North America,* the Ninth Circuit, in an admitted conflict with the other courts of appeals, held that trial courts may exclude expert testimony as unreliable only when it is based on a "faulty methodology or theory." *Id.* at 1048. This is in direct conflict with the Third Circuit and other circuits, which have held that "any step that renders the analysis unreliable renders the expert's testimony inadmissi-

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ble." *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 745 (3d Cir. 1994). As a result, until the Supreme Court tackles this issue, the circuit courts of appeals' decisions will continue to produce inconsistent results because different standards of admissibility are applied to expert witness testimony.

Because the current legal landscape provides the circuit courts of appeals with significant latitude in determining expert admissibility issues, the performance of the trial courts' gatekeeping function—and the circuit courts of appeals' review of it—vary. This article examines the varying approaches by which the circuits interpret *Daubert,* apply the factors in Federal Rule of Evidence 702, and assess the courts' gatekeeping function.

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Daubert and Federal Rule of Evidence 702

Since *Daubert* was decided in 1993, trial courts have undertaken a "gatekeeping role" to "ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." *Daubert* 509 U.S. at 597–98. In assigning this role, the Supreme Court listed five substantive factors to direct how the district courts as gatekeepers should assess expert evidence, including (1) whether the theory or technique in question can be and has been tested; (2) whether it has been subjected to peer review and publication; (3) its known or potential error rate; (4) the existence and maintenance of standards controlling its operation; and (5) whether it has attracted widespread acceptance within a relevant scientific community. *Daubert,* 509 U.S. at 593–94. In addition to these factors, the Supreme Court further instructed trial courts to assess "whether the reasoning or methodology underlying the testimony is scientifically valid and… whether that reasoning or methodology properly can be applied to the facts in issue." *Daubert,* 509 U.S. at 592–93.

Federal Rule of Evidence 702 was amended in 2000 and has essentially codified the *Daubert* standard. The amended rule requires that all adversarial expert testimony be subjected to a reliability test, and its factors mirror those set forth in *Daubert*, including (1) whether the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (2) whether the testimony is based on sufficient facts or data; (3) whether it is the product of reliable principles and methods; and (4) whether the expert reliably applied the principles and methods to the facts of the case.

Yet despite the Supreme Court's guidance in *Daubert,* its progeny, and amended Fed. R. Evid. 702, some courts of appeals continue to disregard the direction and apply their own standards to determine whether to admit expert testimony. The *SQM North America* case provides a recent example of the Ninth Circuit's application of its "methodology-only" standard in reversing the district court's decision to exclude expert testimony. *SQM North America*, 750 F.3d at 1045.

SQM North America Corp. v. City of Pomona

In *SQM North America*, the U.S. District Court for the Central District of California granted the *Daubert* motion and excluded the expert's opinions. The Ninth Circuit reversed the California federal district court decision and found that the federal district court had abused its discretion by excluding the expert's testimony. The U.S. Supreme Court denied SQM North America's Petition for Writ of Certiorari to the U.S. Court of Appeals for the Ninth Circuit.

The *Daubert* Motion and the Excluded Expert's Opinions

In 2010, the City of Pomona filed a lawsuit against SQM North America (SQMNA), asserting a single cause of action for strict product liability based on an allegedly defectively designed fertilizer. Pomona contended that 50 years ago, SQMNA sold fertilizer containing trace amounts of perchlorate that subsequently contaminated municipal groundwater. Pomona sued SQMNA to recover the cost of investigating and remediating the perchlorate contamination. In particular, Pomona alleged that the primary source of the groundwater contamination was SQMNA's importation of natural sodium nitrate from the Atacama Desert in Chile for use as a fertilizer.

Because Pomona didn't have witness or documentary support for its claim that SQMNA's fertilizer was used there, Pomona relied solely on the expert opinions of Neil Sturchio, Ph.D., to establish product identification. Pomona claimed that Dr. Sturchio developed a method that used stable isotopic analysis of perchlorate to "fingerprint" the source of perchlorate in groundwater.

Before trial, SQMNA moved *in limine* to exclude Dr. Sturchio's testimony on causation. SQMNA argued that Sturchio's opinions should be excluded because his method for isotopic analysis of perchlorate did not meet *Daubert's* reliability standards.

Dr. Sturchio's opinions relied on a four-step methodology with multiple subparts, which was disclosed in his expert report. The methodology was also published in 2011 in the *Guidance Manual*, which was commissioned with the Environmental Security Technology Certification Program of the U.S. Department of Defense. The four steps described in the *Guidance Manual* include (1) collection of groundwater samples; (2) extraction and purification; (3) oxygen and chlorine isotopic analyses on the purified samples; and (4) determination of probable sources by comparing the resulting isotope data to a reference database. Before the *Guidance Manual* was published, other peer-reviewed articles described the methods for stable isotope analysis that were used by Dr. Sturchio and his colleagues.

Based on his analysis and the application of the four-step methodology, Dr. Sturchio opined that the dominant source of perchlorate in the Pomona groundwater was from the Atacama Desert in Chile. However, the samples also contained minor amounts of perchlorate from other,

additional sources, including synthetic or indigenous natural sources. Nevertheless, based on Dr. Sturchio's findings, Pomona argued that the perchlorate found in its groundwater had the same distinctive isotopic composition as the perchlorate that SQMNA imported into southern California from Chile between 1927 and the 1950s.

SQMNA moved to exclude Dr. Sturchio's opinions, arguing that the stable isotope analysis failed to satisfy *Daubert* and was insufficiently reliable to be received in evidence under Fed. R. Evid. 702. After an evidentiary hearing, the district court granted SQMNA's motion *in limine*. The district court found that Dr. Sturchio's methods were not reliable because they were not generally accepted in the scientific community and had not been adequately tested. Citing the self-titled *Guidance Manual* prepared by Dr. Sturchio for the Department of Defense, the district court noted that the "parameters are still being refined," and "there are no USEPA-certified methods for Compound Specific Isotope Analysis of organic or inorganic compounds." The district court further pointed out that Dr. Sturchio's procedures had not been tested by other labs, and in the Pomona case, they were not subject to re-testing because of the "failure to take dual samples." Lastly, the district court emphasized that the reference database, against which Dr. Sturchio "interpreted" the so-called isotope fingerprint, was too limited to be reliable with an acceptable rate of error.

Once Dr. Sturchio's testimony was excluded, Pomona voluntarily dismissed its complaint with prejudice and sought immediate review in the Ninth Circuit.

The Ninth Circuit Reversal

The Ninth Circuit held that the district court abused its discretion in excluding Dr. Sturchio's opinion testimony. In doing so, the Ninth Circuit determined that the district court did not apply the correct rule of law and that "only a faulty methodology or theory, as opposed to imperfect execution of laboratory techniques, is a valid basis to exclude expert testimony." *SQM North America,* 750 F.3d at 1048.

With respect to Dr. Sturchio's methodology, the Ninth Circuit concluded that it was sufficient because "scientific methods that are subject to 'further testing and refinement' may be generally accepted and sufficiently reliable. There are no 'certainties in science.'" *Id.* at 1044 (quoting *Daubert*, 509 U.S. at 590). For scientific evidence to be admissible, the proponent must show that the assertion is "derived by [a] scientific method." *Id.* at 1045. Opinions based on "unsubstantiated and undocumented information is the antithesis of… scientifically reliable expert opinion." *SQM North America,* 750 F.3d at 1044 (quoting *Cabrera v. Cordis Corp.*, 134 F.3d 1418, 1423 (9th Cir. 1998)). Moreover, "the existence of ongoing research…does not necessarily invalidate the reliability of expert testimony." *Id.* (citing *Metabolife Int'l, Inc. v. Wornick*, 264 F.3d 832, 843 (9th Cir. 2001)).

In applying these principles to the *SQM North America* case, the Ninth Circuit concluded that the controlling standards in Dr. Sturchio's *Guidance Manual* were subject to further evolution. *SQM North America*, 750 F.3d at 1045. The court explained: "A 'disagreement over, not the absence of, controlling standards' is not a basis to exclude expert testimony." *Id.* (quoting and citing *U.S. v. Chischilly,* 30 F.3d 1144 (9th Cir. 1994)). The Ninth Circuit found that the methods described in the *Guidance Manual* were the product of 12 peer-reviewed publications on stable isotope analysis of perchlorate, thereby rendering it a product of inter-laboratory collaboration that began before the initiation of the litigation. *SQM North America,* 750 F.3d at 1045. Moreover, because Dr. Sturchio compiled the *Guidance Manual* with two other laboratories, the collaboration further showed that the methods Dr. Sturchio used were reviewed by other laboratories and subject to inter-laboratory calibration. *Id.* As a result, the Ninth Circuit found that there was no record-based evidence that Dr. Sturchio's opinion was the product of a hasty, incomplete effort. *Id.* Instead, it concluded that "the record shows that Dr. Sturchio's methodology and report were based on the scientific method, practiced by recognized scientists in the field, and had a basis in the knowledge and experience of the relevant discipline, which rendered his report and testimony reliable." *Id.* at 1046.

The Ninth Circuit also reversed the district court's exclusion of Dr. Sturchio's testimony on the basis that his methods "have not been tested by other laboratories and are not subject to retesting given the failure to take dual samples." In finding that the district court incorrectly applied the "testability" prong of *Daubert,* the Ninth Circuit assigned error for three reasons. *Id.* First, because other laboratories had tested the methodologies from the *Guidance Manual* that Dr. Sturchio used, his methods could be objectively challenged. *Id.* at 1046–47.

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Second, Dr. Sturchio's procedures were subject to retesting, which permitted "[s]omeone else using the same data and methods… [to] be able to replicate the result[s]." *Id.* at 1047 (quoting *Zenith Elecs. Corp. v. WH-TV Broad. Corp.*, 395 F.3d 416, 419 (7th Cir. 2005)). Third, while Dr. Sturchio failed to verify his test results independently with a separate lab, such a failure could serve to undermine or impeach the weight of his testimony, but it did not refute the scientific reliability of his analysis. *Id.*

In conclusion, the court noted that "in the Ninth Circuit,… expert evidence is inadmissible where the analysis 'is the result of a faulty methodology or theory as opposed to imperfect execution of laboratory techniques whose theoretical foundation is sufficiently accepted in the scientific community to pass muster under *Daubert*.'" *Id.* at 1047–48 (citing *Chischilly*, 30 F.3d at 1154). The rationale of this approach was that "a minor flaw in an expert's reasoning or a slight modification of an otherwise reliable method does not render expert testimony inadmissible." *Id.* at 1048. The Ninth Circuit further concluded that a "more measured approach to an expert's adherence to methodological protocol is consistent with the spirit of *Daubert* and the Federal Rules of Evidence: there is a strong emphasis on the role of the fact finder in assessing and weighing the evidence." *Id.* (citing *Daubert*, 509 U.S. at 594–95).

SQMNA's Denied Petition for Writ of Certiorari

In its Petition for a Writ of Certiorari, SQMNA presented the following question to the Supreme Court for review: "[w]hether, as the Ninth Circuit held, in open and admitted conflict with other courts of appeals, a district court may exclude expert testimony as unreliable only when it is based on a 'faulty methodology or theory,' or whether, as the Third Circuit and other circuits have held, 'any step that renders the analysis unreliable renders the expert's testimony inadmissible.'" *SQM North America Corp. v. City of Pomona,* 750 F.3d 1036 (9th Cir. 2014), *cert. denied*, 135 S. Ct. (No. 14-297).

In fact, these courts of appeals have adopted a bright line rule: any step that renders the analysis unreliable under the *Daubert* factors renders the expert's testimony inadmissible.

In December 2014, the Supreme Court denied SQMNA's petition. *Id.* As a result, the circuit split persists.

Exclusion by "Faulty Methodology or Theory" Only: The Seventh, Eighth, Ninth Circuits

Similar to the Ninth Circuit, the Seventh and Eighth Circuits liberally admit expert testimony. These circuits have articulated the view that any fault in an expert's methodology affects the weight of the expert's opinions, not their admissibility. Therefore, in practice, if your client is sued in the Seventh, Eighth, or Ninth Circuit, the expert likely will be permitted to testify before a jury.

In *Manpower, Inc. v. Insurance Co. of Pennsylvania*, 732 F.3d 796 (7th Cir. 2013), the district court excluded a forensic accounting expert who had been designated to testify regarding the insured's claim for business-interruption loss in an insurance coverage matter. At the close of discovery, the carrier moved *in limine* to exclude the expert's opinion, arguing that it was not the product of a reliable methodology. *Id*. at 801. The district court reasoned, in excluding the expert's opinion, that whether the calculations were reliable "turns on whether [the expert] used reliable methods when selecting the numbers used in his calculations—specifically, projected total revenues and projected total expenses." *Id.* The Seventh Circuit reversed the district court and noted that the expert's opinion "although not bulletproof," was "sufficiently reliable to present to a jury" and that "in excluding [his] opinion, the district court exercised its gatekeeping role under *Daubert* with too much vigor." *Id*. at 805.

In reversing the district court in *Manpower, Inc*. and holding that the expert should be permitted to testify before a jury, the Seventh Circuit recognized that trial courts have "considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." It further noted that reliability is determined by the "validity of the methodology employed by an expert, not the quality of the data used in applying the methodology or the conclusions produced." *Id*. at 806 (quoting *Kumho Tire v. Carmichael*, 526 U.S. 137 (1999)). Finally, the Seventh Circuit warned that when a court "unduly scrutinizes the quality of the expert's data and conclusions rather than the reliability of the methodology the expert employed," it "usurps the role of the jury." *Id*. at 806 (citations omitted).

Similarly, in *Johnson v. Mead Johnson & Co.*, 754 F.3d 557 (8th Cir. 2014), the Eighth Circuit held that the district court abused its discretion in excluding testimony by the plaintiff's experts on the source of bacteria in a product liability action against the manufacturer of infant formula. The district court found that the experts did not adequately "rule out" other possible sources of the bacteria contamination and excluded their testimony. *Id*. at 560. In reviewing the district court's decision, the Eighth Circuit described *Daubert* and Fed. R. Evid. 702 as having greatly liberalized the standards for admitting expert testimony, which *Kumho Tire* then further extended. *Id*. at 562. After noting a number of decisions that applied the liberal admission standards, the Eighth Circuit concluded that the district court violated these standards in *Johnson* by resolving doubts in favor of excluding testimony and, "[b]y doing so, it disallowed the adversarial process to work." *Id*. at 563.

Exclusion by "Any Step": The Second, Third, Sixth, Tenth Circuits

Contrary to the Seventh, Eight, and Ninth Circuits' liberal admission of questioned expert testimony, the Second, Third, Sixth, and Tenth Circuits' application of *Daubert* and Fed. R. Evid. 702 is significantly more rigorous and exclusionary. In fact, these courts of appeals have adopted a bright line rule: any step that renders the analysis unreliable under the *Daubert* factors renders the expert's testimony inadmissible. According to the Third Circuit's holding in *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717 (3d Cir. 1994) (*Paoli II*), "any step that renders the [expert's] analysis unreliable under the *Daubert* factors renders the expert's testimony inadmissible[,]… whether the step completely changes a reliable methodology or merely misapplies that methodology." *Id*. at 745. As a result, when a challenge is made to an opposing expert's methodology, the expert is less likely to be permitted to testify before a jury.

The Second Circuit relied on the Third Circuit's reasoning in *Paoli II* and Fed. R. Evid. 702 in affirming a district court's decision to exclude experts' testimony that was offered to show a causal link between the plaintiff's exposure to workplace toxins and his injuries. *Amorgianos v. Nat'l R.R. Passenger Corp*., 303 F.3d 256, 265–70 (2d Cir. 2002). One expert "fail[ed] to apply his stated methodology reliably to the facts of the case" by omitting admittedly key variables from his analysis. *Id*. at 268–69. Another expert's testimony was unreliable because "the analytical gap between the studies on which she relied and her conclusions was simply too great." In *Amorgianos*, the Second Circuit treated the Federal Rule 702(b) and (d) requirements as threshold admissibility determinations for the trial court to make.

Similarly, in *Tamraz v. Lincoln Electric Co.*, 620 F.3d 655 (6th Cir. 2010), the Sixth Circuit relied on Fed. R. Evid. 702(b) and (d) in reversing a district court's admission of expert testimony that purported to establish that the defendants' products caused the plaintiff's illness. Gaps in the expert's reasoning from previously published studies meant that his testimony was "at most a working hypothesis, not admissible scientific 'knowledge'" based on "sufficient facts or data" or "the product of reliable principles and methods… applied reliably to the facts of the case." *Id.* at 670. The Sixth Circuit emphasized that scientific hypotheses "serve well in the clinic but not in the courtroom." *Id.* at 673. Elaborating, the Sixth Circuit commented, "Conjectures… are of little use… in the project of reaching a quick, final, and binding legal judgment—often of great consequence—about a particular set of events in the past." *Id.* at 677 (quoting *Daubert*, 509 U.S. at 597).

Until the Supreme Court provides further guidance, the circuit courts of appeals will continue to apply *Daubert* and Fed. R. Evid. 702 as they see fit, and inconsistent results will continue to be the norm.

Similar to the Second and Sixth Circuits, the Tenth Circuit treated the Fed. R. Evid. 702 requirements as threshold admissibility determinations for the district court in *Attorney General of Oklahoma v. Tyson Foods, Inc.*, 565 F.3d 769 (10th Cir. 2009). *Tyson Foods* involved Oklahoma's claim that the defendant's use of poultry litter as fertilizer caused bacterial contamination of the state's waterways. Although the experts' testimony rested on generally accepted methodologies such as DNA testing, those methodologies were applied in new ways that lacked "further indications of reliability." *Id.* at 780. One expert's approach was "novel and untested," as she herself admitted, and the record suggested that it suffered from "procedural flaws." *Id.* at 781. Another expert's approach "had not been tested or peer reviewed," "doubts were raised regarding [his] sampling procedures and possible flaws in the data presented," and his analysis failed to "account for alternative sources of the poultry-litter components." *Id.*

In *Tyson Foods,* the Tenth Circuit cited the *Paoli II* "any step" rule and concluded that the trial court did not abuse its discretion in holding that the experts' testimony was unreliable and could not support a causal link between the defendants' fertilizers and contamination of Oklahoma's water. *Id.* at 780–81. It expressly rejected Oklahoma's argument "that *Daubert* should not have been used to assess the application of the experts' methodologies, but rather should have been used to assess only the methodologies upon which [they] relied." *Id.* at 779.

Caught in Between: The Other Circuits

In *Milward v. Acuity Specialty Products Group, Inc.*, 639 F.3d 11 (1st Cir. 2011), the district court excluded a toxicology expert who had been designated to testify that the defendants' chemicals caused plaintiff's illness. The district court bifurcated the suit into two phases. *Id.* at 13. The first phase concerned whether the plaintiff's expert opinion on "general causation" was admissible under Fed. R. Evid. 702. *Id.* If the plaintiff's expert evidence was ruled admissible, the second phase would have considered all other issues, including negligence, exposure, and "specific causation" of the plaintiff's illness. *Id.* The case never reached the second phase because the district court ruled that the testimony of the plaintiff's expert on general causation was inadmissible because it "lacked sufficient demonstrated scientific reliability to warrant its admission under FRE 702." *Id.*

In reversing the district court in *Milward* and holding that the expert should be permitted to testify before a jury, the First Circuit "stress[ed] that it is up to the jury to decide whether to accept [the expert's opinion]." *Id.* at 14. The First Circuit found that the district court erred in excluding the expert's testimony because its decision was based on its erroneous evaluation of the weight of the evidence, which is an issue for the jury, and its misperception of the expert's methodology. *Id.* at 20. The First Circuit further noted that the district court "placed undue weight on the lack of general acceptance of [the expert's] conclusions," "crossed the boundary between gatekeeper and trier of fact," and "exceeded the scope of its discretion" under *Daubert Id.* at 22 and 26.

In the remaining jurisdictions, including the Fourth, Fifth, Eleventh, and D.C. Circuits, the courts of appeals tend to perform a reliably straightforward, balanced review of the district courts' *Daubert* gatekeeping functions, and unlike in the other circuits, these courts of appeals have not overtly placed preferential or determinative emphasis on one factor over any of the others. *See, e.g., Bryte ex rel. Bryte v. American Household, Inc.*, 429 F.3d 469 (4th Cir. 2005); *Johnson v. Arkema, Inc.*, 685 F.3d 452 (5th Cir. 2012); *Hughes v. Kia Motors Corp.*, 766 F.3d 1317 (11th Cir. 2014); *Heller v. District of Columbia*, 952 F.Supp.2d 133 (D.C. Cir. 2013).

Conclusion

While the Supreme Court could standardize how the circuit courts of appeals apply *Daubert*, its progeny, and Fed. R. Evid. 702 to unreliable expert testimony, it has thus far declined to do so. The *SQM North America* case presented the Supreme Court with the opportunity to level the playing field, regulate the circuits' review of district courts' gatekeeping function under *Daubert* and Fed. R. Evid. 702, and create a more uniform framework through which federal judges could decide expert testimony admission issues. Until the Supreme Court provides further guidance, the circuit courts of appeals will continue to apply *Daubert* and Fed. R. Evid. 702 as they see fit, and inconsistent results will continue to be the norm. Accordingly, until the circuit split is resolved, corporate defense attorneys should approach *Daubert* and Fed. R. Evid. 702 issues as litigation strategy decisions that depend on the circuit in which they find themselves rather than as a game of chance. FD