Making *Daubert* Dispositive

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Because *Daubert*decisions are becoming
increasingly casedispositive in complex
cases, understanding how
to discern and dismantle
the foundations of expert
testimony is a crucial skill
for defense attorneys.

Avoiding the Talismanic Effect of Unfounded Expert Testimony

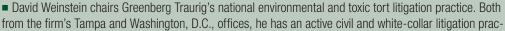
When a suburban Florida woman sued the owner of a neighboring chemical plant and alleged that its emissions permanently damaged her lungs and caused her a variety of other illnesses, she retained, among others, an expert

toxicologist to help her prove her case. The former EPA scientist was impressively credentialed—a point the district court itself would acknowledge—and his anticipated testimony was a major driver behind the plaintiff's demand for more than \$50 million.

At first glance, some aspects of her claims were concerning. The plaintiff, for instance, had serious and well-documented health problems. The EPA had also recently determined that the air quality near her lifelong neighborhood had not met the National Ambient Air Quality Standard for sulfur dioxide (SO2), which can be hazardous in high concentrations. On the other hand, the emissions about which the plaintiff complained are relatively ubiquitous and, in her case, had been emitted from

sources located more than a mile from her home. Those and other details signaled that that the science underlying the plaintiff's claims might have been specious.

Yet scientifically specious claims like the plaintiff's still pose a substantial risk to defendants—particularly where they will be bolstered by expert testimony. As the U.S. Supreme Court warned in *Daubert*, even specious expert testimony "can be both powerful and quite misleading because of the difficulty in evaluating it." *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 595 (1993) (citation omitted). And as the Eleventh Circuit later observed, "no other kind of witness is free to opine about a complicated matter without any firsthand knowledge of the facts in the case," and lay jurors tend to assign expert testimony "talismanic









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significance." *United States v. Frazier*, 387 F.3d 1244, 1260, 1263 (11th Cir. 2004).

The "talismanic significance" placed on expert testimony by lay jurors is not lost on plaintiffs' lawyers. Take the late Texas trial lawyer and purported "King of Torts," Joe Jamail. He once quipped: "I don't need all the science to be on my side. Any good trial lawyer knows that if you've got one credible expert or scientific study, then you can let the jury decide."

In the case at hand, the district court exercised its gatekeeper role and did not "let the jury decide." It instead found that, notwithstanding his "impressive credentials," the plaintiff's expert had "failed to adhere to the methodology expected of toxicologists in toxic tort cases." That failure rendered his opinions unreliable and therefore inadmissible. This, in turn, left the plaintiff unable to prove either general or specific causation regarding any of her personal injury claims. For that reason, the district court granted summary judgment, which the Eleventh Circuit later affirmed. Williams v. Mosaic Fertilizer, LLC, No. 8:14-cv-1748-T-35MAP, 2016 WL 7175657 (M.D. Fla. June 24, 2016), aff'd, 889 F.3d 1239 (11th Cir. 2018).

This experience reflects just one of an expanding category of cases in which *Daubert* decisions are case dispositive. Because avoiding trial risk and expense is valuable to any defendant, the process through which this particular defendant discerned and then dismantled the foundations for the toxicologist's opinions, consequently obtaining summary judgment, provides practical lessons to lawyers defending complex claims.

Analyze Whether the Plaintiff's Theory of the Case Requires Expert Testimony

Defendants in complex cases should begin by determining whether plaintiffs can prove their claims without expert testimony. This requires understanding the limits on what juries can permissibly infer, given the law of the pertinent jurisdiction and the theory of the case.

Our judicial system entrusts juries to find facts using their own reasoning and experience. "Jurors are supposed to reach their conclusions on the basis of common sense, common understanding and fair beliefs, grounded on evidence consisting of direct statements by witnesses or proof of circumstances from which inferences can fairly be drawn." Schulz v. Pennsylvania R.R. Co., 350 U.S. 523, 526 (1956).

Common sense and fair beliefs, however, sometime fall short of enabling juries to draw non-speculative inferences from complex facts. When that happens, expert opinions must bridge the inferential gap. That is why the Supreme Court has acknowledged for at least half a century that there are "causes of action in which the law predicates recovery upon expert testimony." *Salem v. U.S. Lines Co.*, 370 U.S. 31, 35 (1962).

The Court called those causes of action "rare" in the 1960s, but they are less so now particularly in tort cases. State law typically governs the type of evidence needed to prove a tort claim, and all fifty states require expert testimony on issues that fall "outside common knowledge and lay experience." In re Lipitor (Atorvastatin Calcium) Mktg., Sales Practices & Products Liab. Litig., 227 F. Supp. 3d 452, 469 (D. S.C. 2017) (exhaustively surveying state precedent). Because this expert requirement reflects state substantive policy, it applies even to state law claims brought in federal court. See, e.g., In re Mirena IUD Products Liab. Litig., 713 F. App'x 11, 15 (2d Cir. 2017) ("State law controls on the guestion of what evidence is necessary to prove an element of a state law claim, such as general causation.").

Although some causes of action require expert testimony more often than others, there are few hardline rules. For instance, medical malpractice claims routinely require experts. But while a jury might be ill equipped to determine whether a surgeon selected "an acceptable method of treatment" from a range of apparent alternatives, that same jury could capably conclude that leaving "nearly a half yard of gauze deeply embedded in the flesh" of a patient constitutes malpractice. See Atkins v. Humes, 110 So. 2d 663, 666 (Fla. 1959). The applicability of the expert testimony requirement thus turns on both the plaintiff's theory of the case and the cause of action. The ultimate inquiry is whether "jurors of ordinary intelligence, sense and judgment" are "capable of reaching a conclusion" required to find for the plaintiff in the absence of an expert. See id.

In federal court, the plaintiff's complaint should impart enough information to glean his or her theory of the case. After all, even the lenient *Iqbal-Twombly* pleading standard

requires "fair notice" not only of "the nature of the claim, but also the 'grounds' on which the claim rests." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 556 n.3 (2007).

If the complaint leaves the plaintiff's theory unclear, however, a defendant may consider using early contention interrogatories. Federal Rule of Civil Procedure 33(a)(2) expressly permits them. And although "the

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court may order that the interrogatory need not be answered until designated discovery is complete, or until a pretrial conference or some other time," see id., narrowly tailored contention interrogatories can be appropriate early in a case if they "contribute meaningfully to clarifying the issues in the case, narrowing the scope of the dispute, or setting up early settlement discussions, or... are likely to expose a substantial basis for a motion under Rule 11 or Rule 56." See In re Convergent Techs. Sec. Litig., 108 F.R.D. 328, 338–39 (N.D. Cal. 1985).

In Williams, the complaint made clear that the plaintiff was asserting toxic tort claims—those through which a plaintiff attempts to prove a "civil wrong arising from exposure to a toxic substance." Hendrix ex rel. G.P. v. Evenflo Co., Inc., 609 F.3d 1183, 1196 n.6 (11th Cir. 2010) (citation omitted). Under Eleventh Circuit precedent, establishing proof of causation in a toxic tort action "requires expert testimony." McClain v. Metabolife Int'l, Inc., 401 F.3d 1233, 1237(11th Cir. 2005). Accordingly, the defendant made an early determination that the admissibility of the plaintiff's toxicologist's testimony might make or break her case.

Press for Timely and Complete Rule 26 Disclosures

Once a defendant determines that an issue will require expert testimony, it should dis-

cern who will offer that testimony, what precisely that testimony will entail, and how the testimony will be developed. Fortunately, the Federal Rules of Civil Procedure were designed to simplify this process.

Rule 26(a)(2) requires retained experts to prepare and serve a report containing, among other things, "a complete statement of all opinions the witness will express and the basis and reasons for them." Fed. R. Civ. P. 26(a)(2)(B)(i). The objects of this requirement are to "avoid trial by ambush," to "promote fairness in both the discovery process and at trial," Macaulay v. Anas, 321 F.3d 45, 50 (1st Cir. 2003), and ideally—although perhaps not realistically—to dispense "with the need to depose the expert" in order to understand the "testimony the witness is expected to present on direct examination," see Fed. R. Civ. P. 26 advisory committee notes to 1993 amendment.

Rule 37 works in tandem with Rule 26 to incentivize "full disclosure" by providing "that a party will not ordinarily be permitted to use on direct examination any expert testimony" that was not disclosed in the expert's report. See id. Rule 37 exclusions are self-executing and apply unless a nondisclosure was "substantially justified or is harmless." See Fed. R. Civ. P. 37(c)(1).

Despite Rule 37's self-executing nature, defendants should consider moving under the rule for complete disclosures if they believe that an expert's report fails to satisfy the stricture of Rule 26. If the court grants the motion, more thorough disclosures should follow. If it denies the motion, the defendant will have begun developing a record that the failure to disclose any additional testimony will not have been substantially justified or harmless.

In *Williams*, the plaintiff's toxicologist furnished a sixteen-page summary of "preliminary expert opinions," not a finalized report. *See* 889 F.3d at 1243. In it, he disclosed his intent to opine essentially that due to a genetic blood-cell disorder, the plaintiff was an "eggshell plaintiff" who had developed pulmonary hypertension and other conditions as a result of exposure to the defendant's alleged emissions. *Id.* The toxicologist's report included seventy-six references to empirical peer-reviewed studies, websites, and regulatory documents, but "[n]one were pin-cited or oth-

erwise annotated to show which portions supported each conclusion." *Id.*

The defendant moved to compel more complete disclosures under Rule 37, arguing that the plaintiff must first satisfy the requirements of Rule 26 before a defendant can even begin to scrutinize the disclosures. The district court denied the motion but ruled that it would indeed enforce the plain language of Rule 37 and restrict the toxicologist's testimony to only that which was disclosed in his report—thus limiting the scope of his testimony to a report that the defendant believed could not demonstrate causation. Had the case gone to trial, that ruling would, no doubt, have been significant. This strategy also helped sensitize the court to some of the deficiencies the defendant identified in the proffered opinions.

Research Methodological Requirements

After getting as much written information as possible regarding the details of the expert's anticipated testimony, defendants should turn to evaluating the testimony's admissibility. In all federal and most state courts, this means scrutinizing the opinion for compliance with the *Daubert* standard, which often comes down to analyzing methodological reliability. There are at least three ways to approach the challenge.

First, defense attorneys should identify and study a respected subject-specific treatise to appreciate and understand the scientific process governing the particular area of proposed scientific or technical expertise. For toxic torts and other claims involving complex science, the Federal Judicial Center's Reference Manual on Scientific Evidence is a good choice. It explains various areas of scientific inquiry that are commonly addressed by the judiciary, and jurists at all levels—including the U.S. Supreme Court and every federal circuit—have relied on the reference manual to help manage complex cases and understand the basic tenets from which scientific evidence should be derived. It is difficult to overstate the reference manual's persuasive and educational value.

Second, defendants should engage their own testifying and consulting experts if they have the resources to do so. Such experts should be able to elucidate the methodology expected in the plaintiff's expert's field and can help parse the opposing expert's report for methodological deficiencies.

Third, and most importantly, defendants should exhaustively research controlling precedent on any methodological requirements for the type of testimony that the plaintiff's expert intends to offer. This is particularly important because judges view science through the lens of the law, and the "law lags science." *Hendrix*, 609 F.3d at 1193–94 (quoting *Rosen v. Ciba–Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996)). Any plaintiff who attempts to persuade a judge that the state of science has changed to such an extent that established methodological precedent should not apply to his or her proffered expert should have a steep hill to climb.

The defendant in Williams employed all three approaches, particularly focusing on toxicological methodologies explained in the reference manual and considered by the Eleventh Circuit to be "indispensable" to a reliable causation opinion in toxic tort cases. Chapman v. Procter & Gamble Distrib., LLC, 766 F.3d 1296, 1308 (11th Cir. 2014). For general causation opinions—that is, opinions on whether a substance can cause the harm that the plaintiff alleges experts should perform a "dose-response" assessment and account for the "background risk of disease." Id. at 1306, 1308. For specific causation—that is, whether a substance did cause the alleged harm experts should consider the plaintiff's actual dose, including whether the plaintiff was "exposed to a sufficient amount of the substance in question to elicit the health effect in question," and they should attempt to "rule out" the health effect's potential alternative causes. McClain, 401 F.3d at 1242, 1252 (citations omitted).

Conduct a Methodology-Focused Deposition

Defendants should next depose the expert, guided by the results of their methodology research. The defendant in this case, for example, deposed the plaintiff's toxicologist and questioned him about the Eleventh Circuit's "indispensable" methodologies.

Specifically, the defendant first questioned the toxicologist about his dose-response assessments. The dose-response relationship is the "hallmark" of toxicology—the "single most important factor to

consider in evaluating whether an alleged exposure caused a specific adverse effect." *Id.* Importantly, "all substances potentially can be toxic." *Chapman*, 766 F.3d at 1307. Consequently, it is the dose—"the amount of chemical that enters the body"—that "differentiates a poison from a remedy." For that reason, "[s]cientific knowledge of the harmful level of exposure to a chemical plus knowledge that plaintiff was exposed to such quantities are minimal facts necessary to sustain the plaintiff's burden." *McClain*, 401 F.3d at 1241 (quoting *Allen v. Pennsylvania Eng'g Corp.*, 102 F.3d 194, 199 (5th Cir.1996)).

The plaintiff's toxicologist testified that exposure to SO₂ and a combination of hazardous air pollutants (HAPs) had caused her ailments. He conceded, however, that he had never performed a dose-response assessment specific to the plaintiff. Rather, the toxicologist had taken various riskbased regulatory standards at face value and presumed that they reflect a harmful level of exposure. For instance, he assumed that exposure to SO₂ in concentrations exceeding its seventy-five parts-per-billion National Ambient Air Quality Standard (NAAQS) could cause the plaintiff's conditions. He made similar assumptions for the HAPs based on reference concentrations in the EPA's Integrated Risk Information System (IRIS). As for the SO2 and HAP exposures that the plaintiff claimed to have experienced, the toxicologist estimated those exposures from two academic studies regarding regional air quality. On careful examination, however, it became clear that he never attempted to measure or model the plaintiff's actual exposures.

Second, the defendant examined the toxicologist about background risk. Consideration of background risk is a comparative exercise in which a scientist evaluates whether a population's exposure to a substance increases incidence of a particular adverse effect over background levels. *Id.* at 1244. Because any incidence can be a coincidence, it helps in determining general causation to "know how much additional risk" of a particular adverse effect accompanies exposure to a particular substance. *Id.*

The toxicologist's deposition testimony suggested that he had not materially considered background risk. Not only was he unable to recall the background prevalence

of the conditions most central to his opinions, he could not say whether measured levels of any of the HAPs were elevated in the plaintiff's neighborhood, and he was not aware of any complaints from residents similar to those of the plaintiff.

Third, the defendant asked the toxicologist how he accounted for alternative potential causes of the plaintiff's conditions. This typically involves a methodology called "differential etiology," which is essentially a process of elimination that involves "compiling, or ruling in, a comprehensive list of possible causes that are generally capable of causing the illness or disease at issue, and then systematically and scientifically ruling out specific causes until a final, suspected cause remains." *Kilpatrick v. Breg, Inc.*, 613 F.3d 1329, 1342 (11th Cir. 2010).

The toxicologist acknowledged that obesity, allergies, lifestyle, exposure to second-hand smoke, and genetic predispositions were possible alternative causes for the plaintiff's maladies. Nevertheless, he testified without support that he had ruled those causes out based on their low "probability."

Pair *Daubert* and Summary Judgment Motions

If the expert's deposition reveals significant methodological deficiencies, then the defendant should consider filing paired *Daubert* and summary judgment motions. The *Daubert* briefing will be the primary battleground. It is there that the defendant will connect its methodological research to its proof derived from depositions and other materials. In contrast, the accompanying summary judgment motion will lend itself to a straightforward syllogism:

- The plaintiff's claims cannot be proved without admissible expert testimony.
- The plaintiff's expert testimony is inadmissible for the reasons explained in the *Daubert* motion.
- Therefore, the plaintiff's claims cannot be proved.

The defendant in *Williams* successfully executed this strategy. Based on a paired set of *Daubert* and summary judgment motions, the court excluded the toxicologist's causation opinions as unreliable for several reasons with which the Eleventh Circuit later agreed.

For one thing, the expert's reliance on regulatory standards such as the NAAQs

to establish harmful dose thresholds was methodologically unsound. Regulatory standards, the Eleventh Circuit explained, are intentionally overprotective and thus not predictive of "the exposure levels that actually cause harm." *Williams*, 889 F.3d at 1247.

For another, two academic studies on which the toxicologist later attempted to rely to estimate the emissions doses that the

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plaintiff actually experienced "directly contradicted his causation opinions." Indeed, they showed that the defendant's facility only made a "minor contribution" to ambient concentrations of the pertinent constituents and that those concentrations "fell hundreds of times below levels that would present health risks to the public." *Id.* at 1246.

Those combined errors confirmed that the toxicologist had "neglected" the dose-response relationship, which would alone have sufficed to render his testimony inadmissible. *See id.* at 1243. Additionally, the expert's incomplete report and equivocal deposition testimony failed to evince "serious consideration of the background risk" and meaningful consideration of "other potential causes" of the plaintiff's ailments. *See id.* at 1248–49.

After excluding the toxicologist's testimony, the district court granted summary judgment on all the plaintiff's health-based claims, which disposed of more than ninety-nine percent of her claimed damages.

Be Wary of Expert Testimony from Lay Witnesses

In this case, however, the district court's initial summary judgment order did not

completely resolve the case. The plaintiff had also claimed that the defendant's emissions had diminished the value of her home and that she could testify to that diminution.

At first blush, such testimony might seem admissible because courts throughout the country routinely allow lay owners to testify regarding the value of their prop-

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erty. As suggested, however, it is always important to dig a little deeper.

The defendant had propounded a contention interrogatory asking for "any criteria, rationale, bases, or grounds" that the plaintiff had used in her diminution calculation. The plaintiff responded only that she did "not believe" that any rational person would buy her home, given her belief that the defendant's emissions were toxic. Moreover, the plaintiff conceded during her deposition that she had never attempted to sell her home or spoken to a realtor about doing so. Regional property records also established that home values in her neighborhood were rising.

Against this backdrop, the defendant moved in limine to exclude the plaintiff's proffered diminution opinion as inadmissible expert testimony masquerading as lay opinion, and also as unduly speculative and lacking foundation. This district court agreed, as did the Eleventh Circuit, holding that the proffered opinion was "pure speculation" and thus not based on the personal knowledge required for lay opinion testimony to be admissible under Federal Rule of Evidence 701. See id. at 1250.

Consider Creative Uses of Trial Briefs

While the motion in limine directed to the plaintiff's diminution opinion was pending, trial approached. This presented an unusual problem: the plaintiff had conceded that her only evidence of diminution in the value of her property—and thus her only evidence of property damage—was her own

contemplated diminution testimony, which the defendant thought to be inadmissible. This meant that trial was approaching for a case in which there would be no admissible evidence offered for a necessary element of her claim, but the trial court had already denied summary judgment without considering the admissibility quandary.

The defendant used its trial brief to flag the problem and present potential solutions. If the court agreed that the plaintiff's testimony was inadmissible, one option would be for the court to exercise its inherent authority to revisit the interlocutory partial summary judgment order and grant complete summary judgment instead. See Bodine v. Fed. Kemper Life Assur. Co., 912 F.2d 1373, 1376 (11th Cir. 1990) ("[P]artial summary judgment, dismissing some but not all of the claims, [is] an interlocutory order, and thus [is] subject to revision by the district court."). Another would be simply to grant summary judgment sua sponte, relying on the context of the case to ensure that the plaintiff had sufficient notice that the defendant's motion in limine could have a dispositive effect. Compare Bradley v. Pittsburgh Bd. of Educ., 913 F.2d 1064, 1069-70 (3d Cir.1990) (reversing the grant of summary judgment where nonmoving party had no notice or opportunity to present evidence), with Howard Johnson Int'l v. Cupola Enters., 117 F. App'x 820, 822–23 (3d Cir.2004) (distinguishing Bradley and upholding the grant of summary judgment on a motion in limine where the nonmovant had notice that the motion was dispositive).

The court took the latter approach, granting summary judgment in favor of the defendant sua sponte in the same order in which it excluded the plaintiff's proposed lay diminution opinion.

One Final Lesson: Citations Needed

Finally, the appellate proceedings in this case impart a final lesson on the importance of citations and presenting the bases for expert opinions "meaningfully."

As addressed above, the plaintiff's toxicologist included citations to seventy-six sources in his report, but "[n]one were pin-cited or otherwise annotated to show which portions supported each conclusion." After the district court had excluded his opinions, the plaintiff attempted to

argue through a reconsideration motion and on appeal that some of those sources supported his opinions, but were not considered by the court.

The Eleventh Circuit rejected that argument, reasoning that the court could not be faulted for the plaintiff's and her toxicologist's failure to "squarely present" the foundations for his opinions "until after the fact." *Williams*, 889 F.3d at 1246.

This holding comports with a concept that federal courts have applied many times in many contexts: "Judges are not like pigs, hunting for truffles buried in briefs." United States v. Dunkel, 927 F.2d 955, 956 (7th Cir. 1991); see also, e.g., New Mexico Off-Highway Vehicle All. v. U.S. Forest Serv., 645 F. App'x 795, 803-04 (10th Cir. 2016) ("We do not act as advocates for parties, and we will not typically search out the facts necessary to support a litigant's position. Moreover, we have limited resources, and can ill afford to go on a treasure hunt in the record without doing a disservice to other litigants."). As the party bearing the burden of proving his or her expert's reliability, the plaintiff has to present evidence of the reliability meaningfully. It is not error for district courts to consider only those bases that are "squarely before it." See Williams, 889 F.3d at 1248 n.3.

Conclusion

If the King of Torts was right, excluding expert testimony to which lay jurors may assign "talismanic significance" is a critical component of any defendant's strategy in a complex scientific or technical case. Any such defense strategy should encompass an analysis of whether a plaintiff's theory of a case requires expert testimony. Defendants should consider the value of pressing for timely and complete Rule 26 disclosures. They should develop a comprehensive understanding of the given discipline's methodological requirements and then use that understanding to conduct a methodology-focused deposition. They should then carefully consider pairing Daubert and summary judgment motions when exclusion of an expert's proffered testimony will be case or claim dispositive. And finally, they should consider the creative use of any available procedural mechanisms and opportunities to brief a court.