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LET DATA SPEAK EQUALLY TO ALL: THE PRODUCTION, PROTECTION, AND USE OF RAW DATA IN LITIGATION[1]

by Laura Ellsworth, Chuck Moellenberg, and Neelie Simmons [2]

I. INTRODUCTION

Scientists seek truth from examining data. Litigators seek truth from examining witnesses. This article posits the thesis that litigators seeking truth from scientists should be able to get it from examining the same source as the scientists: the data.

Since the Supreme Court's decision in *Daubert v. Merrill-Dow Pharmaceuticals, Inc.*, trial judges in federal and many state courts have become "gatekeepers" of scientific testimony, "ensur[ing] that any and all scientific testimony . . . is not only relevant, but reliable.[3] As the Supreme Court later explained, the "reliability" component of the gatekeeping inquiry exists "to make certain that an expert ... employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field."[4]

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CROSS-EXAMINATION OF EXPERTS ON "UNDERLYING FACTS OR DATA"

by Carl Robin Teague

I recently represented a defendant in a products liability case in which the plaintiff alleged that he was using a gasoline line trimmer when it caught fire and caused him to sustain serious burn injuries. The pleadings left the sequence of events and cause of the fire a mystery. At the outset of the case, opposing counsel sent me an e-mail that was a welcome start to solving the mystery. It contained information about "an important defense issue:"

> As it relates to the plaintiff...[you] are entitled to receive a copy of his medical records and I will gladly provide you with what I have. The records indicate that he was smoking at the time of the fire and filling the gas tank. ... In any event, this raises an important defense issue and I wanted to advise you of this at the outset of the suit.

What a nice surprise-and from the other side! This information seemed to fit squarely within Federal Rules of Evidence 803(4), titled "Statements for Purposes of Medical Diagnosis or Treatment," which provides that such statements about the "general

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character of the cause" are not excluded by the hearsay rule.

Case closed? Not quite. This is the rest of the email:

> From communicating with [plaintiff] through his parents, he denies that he was smoking or filling the tank at the time of the incident. Given the nature of his injuries coupled with his inability to communicate and the absence of [other] witnesses at the time of the fire, I obviously question the history taken by the health care provider.

After I presented a motion to admit this evidence, the federal judge indicated pretty clearly at the final pretrial conference that he would not admit the statements contained in the medical records under Rule 803(4) because the records did not attribute the statements to plaintiff or any other identified person and there was no proof about who made the statements.

Was there another way to skin the cat? Maybe.

One lesson learned by experience in this and other cases is that trial lawyers should prepare early on for the worst case scenario. One waits too long to begin preparing for the worst case if preparation begins only after the trial judge has, just before or during trial, decided to exclude the evidence that the trial lawyer expected would be the basis for a claim or defense.

In anticipation of the court's ruling, I crafted a strategy to cross-examine the plaintiff's experts on the smoking information at trial. The Eighth Circuit has explained the important role of cross-examination in exposing the facts or data underlying an expert witness's opinion:

> We have also noted that "once expert testimony has been admitted, the rules of evidence then place 'the full burden of exploration of facts and assumptions underlying the testimony of an expert witness squarely on the shoulders of opposing counsel's cross-examination.'" *Ratliff v. Schiber Truck Co.*, 150 F.3d 949, 955 (8th Cir. 1998)(quoting *Newell Puerto Rico, Ltd. v. Rubbermaid Inc.*, 20 F.3d 15, 20 (1st Cir. 1994)). It is, therefore, the "burden of opposing counsel to explore and expose any weaknesses in the underpinnings of the expert's opinion." *Ratliff*, 150 F.3d at 955 (citing *Newell Puerto Rico*, 20 F.3d at 21).[1]

Based on this premise, here are the steps I took:

I. FIRST STEP: REVIEW THE EXPERT WITNESSES' WRITTEN REPORTS

Federal Rule of Civil Procedure 26(a)(2) requires a "Disclosure of Expert Testimony." The rule requires the disclosure in a "written report" which "must contain," among other matters, "the data or other information considered by the witness in forming [opinions]."

Written reports containing statements by experts about "information considered" are a place to start in preparing for cross-examination on the related topics of "[t]he facts or data in the particular case upon which an expert bases an opinion or inference"[2] and "the underlying facts or data."[3] In my case, the opinion was about causation of an accident, more specifically causation of a fire involving use of a gasoline powered line trimmer.

II. SECOND STEP: IDENTIFY UNDERLYING DATA

The records of the local hospital contained the following statement, which is summarized: "Patient in emergency room was burned while trying to start yard machinery, was smoking and ignited gas and sustained burns." The records which contained this statement were included in the notebooks prepared by or for the three experts for the plaintiff. The fire cause and origin expert even highlighted in yellow the statements and put a tab on the page with this label: "Starr County records, smoking started gas on fire." The notebooks also contained records from the air ambulance company and the burn center to which the patient was transferred. The records of the burn center contained this statement, also highlighted in yellow by that expert: "The patient...was injured in a gasoline fire...when he was filling up his weed eater with gasoline while smoking a cigarette."

III. THIRD STEP: PERFORM EXPERT DISCOVERY

The advisory committee's note to Federal Rule of Evidence 705 "assumes that the cross-examiner has the advance knowledge which is essential for effective cross-examination."[4] As the trial lawyer well knows, this advance knowledge can be obtained through disclosure of expert testimony under Federal Rules of Civil Procedure 26(a)(2) and 26(e)(2), and through depositions or written discovery in which information is sought pursuant to Federal Rule of Civil Procedure 26(b)(4) and Federal Rules of Evidence 703 and 705. I chose to depose the plaintiff's experts.

A. Deposition of "Cause and Origin" Expert

The first expert employed by the attorney for plaintiff was a "fire cause and origin" expert. He was the first expert to conduct any significant investigation. (He was also the expert who highlighted in yellow and put a labeled tab on the pages of the medical records.) Cross-examination of him went about as expected, based upon the materials received before his deposition:

Q: Does your report and do the materials that you have produced today and that we have identified by exhibit contain all of the information and data that you have relied upon in forming the opinions or conclusions stated in your report?

A: I suspect that-I suspect that your-the answer to that [question] would be yes.

Q: In your report you state that you have reviewed and relied upon Starr County Memorial Hospital documents?

A: Yes.

Q: In investigating other incidents or fires, have you reviewed and relied upon medical and hospital records?

A: Yes, when it involves fatalities, when it involves injuries. I usually as a matter of practice gather individual records and review them, yes. And in some instances I even contact medical personnel to ask them questions.

Q: And do you have at least excerpts of the medical records from the local hospital, the air ambulance company and the burn center?

A: Yes.

Q: And from whom did you get the records prepared by the local hospital, air ambulance company and burn center?

A: I received them from my client, the attorney for plaintiff.

Q: You specifically refer to the records of the local hospital in your report, but you do not refer to the records of the air ambulance company or burn center. Even though you do not refer to the records of the air ambulance company and burn center in your report, did you also review and rely upon the statements contained in those records?

A: I have relied upon the package which includes records from the local hospital, air ambulance company and burn center.

That testimony seems to fit the description of "[t]he facts or data in the particular case upon which [the] expert bases an opinion or inference,"[5] facts or data "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences on the subject,"[6] and "underlying facts or data."[7]

B. Depositions of Mechanical Engineers

The plaintiff also retained two mechanical engineers to testify, not only on the design of the product and safer alternative designs, but also on what caused and did not cause the fire. In their joint written report, they stated, "Appendix A lists the documentation that we have reviewed in this matter." Note that, unlike the fire cause and origin expert, these two experts stated that they "reviewed" documentation, not that they "reviewed and relied upon" documentation. These experts thus seem to have adhered more closely to the requirement of a statement about "information considered."[8]

Interestingly, these two experts did not state in Appendix A to their report that they reviewed any of the medical or hospital records. Just as interesting is the fact that their file notebooks included a letter of transmittal from the plaintiff's attorney sending them a copy of excerpts of the medical and hospital records. Unlike the fire cause and origin expert, the two mechanical engineers did not highlight in yellow any statements contained in the medical records, or put tabs on the

pages where the medical records contain statements about smoking. The records were, however, located in a notebook behind a tab labeled "Medical."

The first of the two mechanical engineers to be deposed was helpful, but not as helpful to the defense as the fire cause and origin expert:

Q: Have you reviewed and relied upon the medical records?

A. I have reviewed them and looked at them, and to the extent of, you know, looking at something as burn patterns and such, yes, I have relied for some information out of the medical records.

Q: Do you find that the medical records here are reliable?

A: Well, I predominately looked at the photographs. Often times, doctors' handwriting is hard to read, hard to understand, so, you know, I've read through them.

Q: Have you reviewed the records of Starr County Memorial Hospital? [There was not a follow-up question about whether he found the medical records to be reliable.]

A: Yes.

Q: Have you reviewed the records of the air ambulance company?

A: Yes.

Q: Have you reviewed the records of the burn center?

A: Yes.

Q: In your review of those three sets of records, did you find anything about smoking a cigarette?

A: Yeah, there was some comments made by I guess whoever was doing admissions or something about being-the fire being possibly started by smoking cigarettes.

The second mechanical engineer had the benefit of advice overnight from counsel about my questions and the testimony. Expecting him to be thoroughly prepped on this issue, I tried to change up the questions to him a bit. At first impression, I was not successful:

Q: In your investigation of other accidents, have you ever relied upon statements contained in medical records in forming opinions about the sequence of events or causation of accidents?

A: I'm not a doctor, and so obviously I can't opine about that.

Q: You have reviewed medical records in other cases?

A: I've reviewed burn patterns, yes.

Q: You have also reviewed statements contained in medical records in other cases?

A: Statements-I have. I've always felt that the deposition records are better, because the first thing they [witnesses] go through they've listened to a speech kind of like you gave this morning about being careful, just answer the truth. And so somebody will speculate as to the cause of an accident and it'll be picked up by an EMS person. And I don't give a lot of weight to that, personally.

Q: In your investigation of other accidents in other cases, have you ever relied upon those kind of statements that are contained in medical records?

A: I really don't know. I may have, but because of the reasons I just went through, I'm generally skeptical of them unless their context is really understood.

Q: In your investigation of this accident, have you relied upon statements contained in the medical records about causation?

A: No.

Q: Have you reviewed any of the records contained in the medical records of the local hospital, air ambulance company or burn center?

A: I have not.

I wondered what these two experts' testimony would have been if the medical records had contained a statement to the effect that "the defective line trimmer leaked fuel and caused ignition by contact of the gas with a hot muffler or spark from a short." I kept that question to myself at the deposition stage.

IV. STEP FOUR: CROSS-EXAMINE EXPERTS AT TRIAL

Unfortunately for purposes of this case study, the gasoline line trimmer case

did not make it to trial, so we cannot evaluate the success of my strategy. I can, however, provide my analysis of how cross-examination would proceed in a case like this.

The scope of cross-examination is within the discretion of the trial court. The court should allow wide latitude for "meaningful exploration" of "the accuracy and truthfulness of the underlying [information]."[10]

For purposes of analyzing the scope of permissible cross-examination on underlying facts and data, I think examination of the following (individual) subsets is helpful: (A) cross-examination on information relied upon; (B) cross-examination on information not considered; (C) cross-examination on information considered but not relied upon; and (D) direct and cross-examination on information not admissible in evidence.

A. Cross-Examination on Information Relied Upon

Courts have "recognized that experts in various fields may rely properly on a wide variety of sources and may employ a similarly wide choice of methodologies in developing an expert opinion."[11]

> [T]he opposing party is always entitled to cross-examine an expert witness concerning the facts and data upon which that expert relied in forming her conclusion or opinion. Once [the expert witness] testified to her "determination," the [opposing party] was entitled to inquire into the circumstances of that investigation, the mode under which she conducted her inquiry, the people she interviewed, and the materials upon which she relied.[12]

The cross-examiner might ask questions about or relating to the sources of the information, whether sources are reliable, whether sources are biased or neutral, whether the information is of a type reasonably relied upon by experts in the field in forming opinions or inferences upon the subject, and if so why, whether the information is admissible in evidence, whether the probative value of the information in assisting the jury to evaluate the expert's opinion substantially outweighs the prejudicial effect, and about the reasons for the opinion or inference.

B. Cross-Examination On Information ***Not*** *Considered*

The subject of cross-examination on information *not* considered is quite different from cross-examination on information relied upon. *In Tramonte Fibreboard Corp.*, the Fifth Circuit indicated that the cross-examiner may not impeach an expert with information not reviewed by the expert.[13] In that case, one expert reviewed the medical records prepared by another expert, but did not review the transcript of the deposition of the other expert. The court held that the expert who reviewed the medical records prepared by the other expert "did not open the door to impeachment by [the other expert's] deposition testimony, because that document had no bearing on his credibility as a witness."[14]

Courts have "recognized that experts in various fields may rely properly on a wide variety of sources and may employ a similarly wide choice of methodologies in developing expert opinion."

That holding might be inconsistent with the holding in *Hale v. Firestone Tire & Rubber Co.*,[15] which is discussed in *Graham*.[16] In *Hale*, a defendant objected to cross-examination by the plaintiff of a defense expert witness about dissimilar accidents of which the defense expert had no knowledge:

> The [plaintiffs] claim that the evidence of other accidents was properly admitted by the trial court to question [the defense expert's] qualifications, disprove his theories, and impeach his testimony. We agree. ...This evidence was proper for impeachment purposes under the facts of this case where this expert delivered vast and comprehensive testimony as to the safety of the [product in question].[17]

Tramonte Fibreboard might also be inconsistent with a holding in *Mercado v. Ahmed*.[18] There the plaintiff claimed that the district court improperly limited her cross-examination of a defense expert witness:

> [The defense expert] testified that her review of [plaintiff's] medical and school records disclosed no evidence that he sustained a closed head injury when he was struck by the taxi. The plaintiff claims that she should have been permitted to impeach [the defense expert's] testimony with a paramedics report stating that [plaintiff] had suffered a head injury, or at least been permitted to show that [the defense expert's] opinion was based on an incomplete investigation. ...
>
> We find no merit in these allegations of error. The plaintiff established on cross-examination that [the defense expert] had not reviewed the paramedics' report, thus making the point that [the expert] had not reviewed *all* of [plaintiff's] medical records.[19]

Reading this case, I am reminded of the advice received from co-counsel when I at one time suggested sending to a medical expert only an excerpt of the medical records. He advised that this question would surely be asked of the medical expert: "You mean that the attorney for plaintiff did not send all the medical records?"

Reading this case, I am reminded of the advice received from co-counsel when I at one time suggested sending to a medical expert only an excerpt of the medical records. He advised that this question would surely be asked of the medical expert: "You mean that the attorney for the plaintiff did not send all the medical records?"

Whether a statement in *Bryan v. John Bean Division of FMC Corp.* is also inconsistent with Tramonte is unclear.[20] In that opinion, the Fifth Circuit stated:

> Additionally, the Advisory Committee Note to Rule 705 explicitly contemplates that in attempting to impeach the opinion the cross-examiner will elicit information concerning the basis of the opinion unfavorable to the opinion itself.[21]

That statement might be read to indicate that the cross-examiner may use information not considered by the expert that is "unfavorable" to the expert's opinion. What gives doubt about the meaning of that statement is the discussion by the court of an earlier holding by the court, in another case, that an expert may not be impeached except by information examined by the expert and upon which the expert bases his opinion or from which the expert testifies directly.[22]

C. Cross-Examination On Information Considered But Not Relied Upon

Another question is whether an expert may be cross-examined on information considered, but not relied upon, by that expert. *Graham* leaves little doubt about what he thinks is the rule: "[T]he expert may be cross-examined with respect to material reviewed by the expert but upon which the expert does not rely."[23] What is now unclear is whether the McCormick treatise on evidence is in agreement. In an earlier edition, *McCormick on Evidence* contained the same statement as is now contained in *Graham*.[24] That statement is not, however, contained in the current edition.[25]

The support for the statement by Graham is *Ratliff v. Schiber Truck Co.*[26] *Ratliff* involved a report prepared by another expert, which was reviewed and rejected by the expert who was under cross-examination.[27] The district court allowed counsel to cross-examine the expert with regard to the other expert's report because the expert had read the report before preparing his own report. The appellant challenged cross-

examination on information considered but rejected. The appellate court disagreed:

> We believe that the district court did not err by permitting counsel to cross-examine [the appellant's expert] concerning the report of [the other expert]. [The appellant's expert] admitted that he had read the report prior to submitting his own report. Therefore counsel was free to cross-examine the expert as to all documents he reviewed in establishing his opinion.[28]

Consistent with Graham's statement and the holding in *Ratliff* is the holding in *United States v. A & S Council Oil Co.*[29] Jackson was a star witness against the defendant in that criminal case. The defendant successfully attacked the credibility of Jackson.[30] The government called expert Rollins "to bolster Jackson's tattered credibility."[31] On cross-examination, the trial court refused to permit the defense to cross-examine prosecution expert Rollins about a polygraph test which indicated Jackson was lying.[32] During his research, expert Rollins "had been informed of the polygraph results."[33] Preliminarily the court noted:

> The data upon which an expert bases his opinion need not be admissible in evidence. FED. R. EVID. 703. However, to counteract the potential advantage this liberalized rule confers on the proponent of the opinion, Rule 705 permits the cross-examiner to require the expert to reveal otherwise-inadmissible underlying information before the jury, subject only to FED. R. EVID. 403's prejudice/probative value balancing test. *United States v. Gillis*, 773 F.2d 549, 553-554 (4th Cir. 1985).[34]

The court then held:

> Full examination of the underpinnings of an expert's opinion is permitted because the expert, like all witnesses, puts his credibility in issue by taking the stand. [Witness] Jackson's polygraph result is relevant to [expert] Rollins' credibility because Rollins must have necessarily discounted it to reach the opinion he stated in court. According to a government pleading, Rollins "opined that Eugene Jackson's test results may be due to his mental condition, not to any possible untruthfulness." Aside from the lack of conviction in this opinion ("may"), even its preferred explanation-that Jackson's polygraph failure was "due to his mental condition"-may well have failed to infuse the jury with confidence in Rollins' assessment of Jackson's credibility.
>
> [Defendant] should have been permitted to fully explore the bases of [expert] Rollins' opinion, including inquiry about Jackson's polygraph results. Rule 703 creates a shield by which a party may enjoy the benefit of inadmissible evidence by wrapping it in an expert's opinion; Rule 705 is the cross-examiner's sword, and, within very broad limits, he may wield it as he likes.
>
> We emphasize that the polygraph result is admissible as an attack on Rollins' opinion, not directly on Jackson's credibility, and the jury ought to be given a limiting instruction to that effect. Of course, the peculiarity of this case is that Rollins' opinion concerns Jackson's credibility. Nonetheless, the opinion is not exempted from searching cross-examination because of its subject matter.[35]

Fifth Circuit opinion seems to be to the contrary. *Bobb v. Modern Products, Inc.* contains this discussion:

> The rule established in *Swindle* and applied in *Bryan v. John Bean Division of FMC Corp.*, *supra*, indicates that the utilization of the expert's report on cross-examination was improper. Plaintiff's witness did not state that he had relied on the report, even though he had admitted that he had seen it. Until defendant established that plaintiff had relied on the report of the other doctor, it was improper for the defendant to read from that report in cross-examining plaintiff's witness.[36]

The question is whether the restriction imposed by the Fifth Circuit is merely on the reading to the jury of the unfavorable information contained in the document, so that the cross-examiner may refer to that unfavorable information, or whether the restriction prevents even mention of the information. In other words, might one-instead of reading the unfavorable

information-merely ask whether an identified document contains information contrary to or inconsistent with the opinion testified to by the expert?

D. Direct And Cross-Examination On Information Not Admissible In Evidence

The last subject to be discussed in this article is whether the cross-examiner or expert witness may disclose to the jury inadmissible "facts or data in the particular case upon which an expert bases an opinion or inference," or "underlying facts or data," that is, facts or data which underlie an opinion but which are not admissible in evidence. Federal Rule of Evidence 703 and the advisory committee's notes to the 2000 amendments seem to make the rule clear regarding disclosure on direct examination:

> Facts or data that are otherwise inadmissible shall not be disclosed to the jury by the proponent of the opinion or inference unless the court determines that their probative value in assisting the jury to evaluate the expert's opinion substantially outweighs their prejudicial effect.[37]

If clarification is needed, the advisory committee noted in 2000:

> Rule 703 has been amended to emphasize that when an expert reasonably relies on inadmissible information to form an opinion or inference, the underlying information is not admissible simply because the opinion or inference is admitted. ...

As in football, to get across the goal line, your team better have more than a passing game. Consider presenting motions to admit or exclude in advance of mediation, instead of just motions in limine, which are sometimes ruled upon so late in the procedure that you have little time to recover from an adverse ruling.

> The amendment provides a presumption against disclosure to the jury of information used as the basis of an expert's opinion and not admissible for any substantive purpose, when that information is offered by the proponent of the expert.[38]

In between those two statements, however, the advisory committee also stated:

> Nothing in this Rule [703] restricts the presentation of underlying expert facts or data when offered by an adverse party. *See* Rule 705.[39]

That advisory committee note seems to be consistent with the last sentence of Rule 705: "The expert may in any event be required to disclose the underlying facts or data on cross-examination."[40] Nevertheless, questions remain as to whether the cross-examiner may disclose information that is not admissible. For example, in *Polythane Systems v. Marina Ventures Int'l, Ltd.*,[41] the court held:

> The fact that [one party's] expert relied on portions of [another expert's] report does not make the report admissible. Federal Rule of Evidence 705 provides that an expert may give an opinion on a matter without prior disclosure of the facts or data underlying his opinion, unless the court requires otherwise. "The expert may in any event be required to disclose the underlying facts or data on cross-examination." FED. R. EVID. 705. While revealing the basis for an expert's opinion is allowed, such disclosure does not facilitate the admission of otherwise inadmissible evidence.[42]

Consequently, the court held that the admission of the other expert's report was error.[43]

In closing, I will try to make a few short points. My impression is that, considering the broad discretion given the trial judge, a small change in circumstances can lead to a big change in rulings, from admission to

exclusion and vice versa. I would avoid appearing smug about expectations. As in football, to get across the goal line, your team better have more than a passing game. Consider presenting motions to admit or exclude in advance of mediation, instead of just motions in limine, which are sometimes ruled upon so late in the procedure that you have little time to recover from an adverse ruling. Obviously, as previously stated, pretrial planning is in order for offers, objections, and requests for instructions on disclosures of underlying facts or data, so that the trial lawyer is not caught by surprise or unable to overcome an adverse ruling.

Carl Robin Teague has a solo practice in San Antonio, Texas, where he focuses on personal injury, products liability, and business litigation.

[1] *Brennan v. Reinhart Inst'l Foods*, 211 F.3d 449, 450-451 (8th Cir. 2000); *accord Symbol Tech., Inc. v. Opticon, Inc.*, 935 F.2d 1569, 1575-1576 (Fed. Cir. 1991).
[2] *See* Fed. R. Evid. 703.
[3] *See* Fed. R. Evid. 705.
[4] Fed. R. Evid. 705 advisory committee's notes (1972 proposed rules).
[5]Fed. R. Evid. 703.
[6] *See Id.*
[7] *See* Fed. R. Evid. 705.
[8] Fed. R. Evid. 26(a)(2)(B)(ii).
[9] 3 Michael H. Graham, Handbook of Federal Evidence § 705:3, at 496 and 496 n.14 (6th ed. 2006); *see also* 1 Kenneth S. Broun, McCormick on Evidence § 13, at 85-86 (6th ed. 2006). *See generally Ratliff v. Schiber Truck Co.*, 150 F.3d 949, 955 (8th Cir. 1998) ("Generally, a trial court has broad discretion in the matter of regulating cross-examination, and the exercise of such discretion will not be reversed absent an abuse of that discretion."); *Guillory v. Domtar Industries, Inc.*, 95 F.3d 1320, 1329 (5th Cir. 1996)(same).
[10] *Cooper v. Carl A. Nelson & Co.*, 211 F.3d 1008, 1021 (7th Cir 2000); *see also Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 596 (1993) ("Vigorous cross-examination, presentation of contrary evidence and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.").
[11] *Cooper*, 211 F.3d at 1020; *see also Bryan v. John Bean Division of FMC Corp.*, 566 F.2d 541, 545 (5th Cir. 1978); Fed. R. Evid. 703 ("The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing."); Fed. R. Evid. 703 advisory committee's notes (1972 proposed rules) ("Facts or data upon which expert opinions are based may, under the rule, be derived from three possible sources.").
[12] *Wheeler v. State of Texas*, 67 S.W.3d 879, 883 (Tex. Crim. App. 2002); *see also Polythane Systems, Inc. v. Marina Ventures Int'l, Ltd.*, 993 F.2d 1201, 1207 (5th Cir. 1993)("In *Box v. Swindle*, 306 F.2d 882 (5th Cir. 1962), a pre-Federal Rules of Evidence case, we held that the contents of a report prepared by a non-testifying expert could be admitted if a testifying expert bases his present opinion on, or testifies directly from, such a report. *Id.* at 887. Certain limitations apply, however, and the evidence should be admitted only for the limited purpose of discrediting or impeaching the testifying expert and the jury should be carefully instructed about its restricted use. *Id.* This reasoning was carried over into cases decided after the Federal Rules of Evidence were adopted. *See Bryan v. John Bean Div. of FMC Corp.*, 566 F.2d 541, 546 (5th Cir. 1978)").
[13] 947 F.2d 762, 765 (5th Cir. 1991).
[14] *Id.* at 765-766.
[15] 820 F.2d 928 (8th Cir. 1987).
[16] Handbook of Federal Evidence § 705:3 at 492 n.5.
[17] 820 F.2d at 934-35.
[18] 974 F.2d 863 (7th Cir. 1992).
[19] *Id.* at 873.
[20] *Bryan v. John Bean Division of FMC Corp.*, 566 F.2d 541 (5th Cir. 1978).
[21] *Id.* at 545.
[22] *See id.* at 546.
[23] Handbook of Federal Evidence § 705:3 at 491 n.4 (relying upon *Ratliff v. Schiber Truck Co.*, 150 F.3d 949, 955 (8th Cir. 1998).
[24] 1 Kenneth S. Broun, McCormick on Evidence § 13 at 56-57 (John William Strong ed., 4th ed. 1992).
[25] 1 Kenneth S. Broun, McCormick on Evidence § 13 at 84 (6th ed. 2006).
[26] 150 F.3d 949, 955 (8th Cir. 1998).
[27] *Id.*
[28] *Ratliff*, 150 F.3d at 955 (relying on *Vodusek v. Bayliner Marine Corp.*, 71 F.3d 148 (4th Cir. 1995)).
[29] 947 F.2d 1128 (4th Cir. 1991).
[30] *Id.* at 1131-1132.
[31] *Id.* at 1132.
[32] *Id.* at 1132-1134.
[33] *Id.* at 1134.
[34] *Id.*
[35] *Id.* at 1135; *see also Wheeler v. State of Texas*, 67 S.W.3d 879, 883, 885 (Tex.Crim.App. 2002) (After holding that "the opposing party is always entitled to cross-examine an expert witness concerning the facts and data upon which that expert relied in forming her conclusion or opinion," the court also held: "The State was also entitled to question [the expert] about information of which she was aware, but upon which she did *not rely*." (emphasis in original) The court added that this cross-examination would "allow a full inquiry into facts and data upon which [the expert] relied and her explanation as to why she did not rely upon other information.")
[36] 648 F.2d 1051 (5th Cir. 1981).
[37] Fed. R. Evid. 703.
[38] Fed. R. Evid. 703 advisory committee's notes (2000 amendments).
[39] *Id.*
[40] Fed. R. Evid. 705.
[41] 993 F.2d 1201 (5th Cir. 1993).
[42] *Id.* at 1207.
[43] *Id.* at 1208.

Tips from the Experts: Working Effectively With a Financial Expert Witness

by Susan M. Mangiero

Commercial legal actions are often complex with potentially large dollar payoffs. Recent headlines suggest that the trend will continue. Some prospective litigants see investment risk woes as a business development bonanza, with billions of dollars at stake. Law firms and litigation support firms are creating special teams to address the areas of sub-prime write-downs, option backdating, risk controls, pricing and adequacy of disclosures. As a result, many litigators are ramping up their knowledge of arcane topics such as derivatives, valuation models, trading leverage and risk metrics. Close quarters, binding deadlines, massive amounts of documents, and the undue pressure of high visibility cases can consume even the most experienced practitioner. Add a financial expert to the mix and things can unravel quickly in the absence of ground rules and managed expectations. The role of a financial expert witness is to render analytical clarity, and that goal is best achieved when the expert and attorney work together effectively.

Billable Time and Data Costs

If men are from Mars and women are from Venus, attorneys are from Mercury and experts are from Neptune. Known for quick thinking and speed, "Mercurians" seek to keep clocked time to a necessary minimum. While an expert should always be mindful of not overcharging, differences of opinion about what must be done are common. At the beginning, an attorney typically provides a verbal case overview and a copy of the complaint. Once hired, an expert unearths relevant and often material facts as she is given new documents. This results in more billable time. Like Neptune, god of the sea, good experts create tempests if asked to do a second-rate job by scaling back on work they deem essential. Three things can occur, none of which are good. An expert may withdraw from an assignment if she believes that her adherence to best work practices are being compromised. An expert may complete work but feel resentful about not being paid for a job well done. Some may take shortcuts.

To avoid problems, attorneys and experts should share project budget information at the outset. Scarce resources do not necessarily preclude the use of a qualified expert. To the contrary, a professional may be able to render a limited analysis as long as he identifies the report accordingly and makes the appropriate disclaimers with the opinion.[1] For example, in lieu of providing a full-blown opinion of value, an analysis of risk factors that drive worth may suffice. Alternatively, it may not always be necessary to examine hedges for a large portfolio if it can be shown that risk controls failed on even a few occasions.

Data is another budgetary consideration when hiring an expert to assist with business litigations. Most commercial disputes require accounting or financial numbers, sometimes going back many years. The expert should inform the attorney about likely costs and availability. When historical price or fee information is rare or hard to obtain in a user-friendly format, the expert needs extra time to properly assemble a dataset. An expert's request to be paid up front to acquire numbers is not unusual, with some datasets costing thousands of dollars. If confidentiality and easy access to technical support are important factors, direct subscription in the name of the expert is the way to go.

Business data varies by vendor, packaging and quality. To illustrate, consider financial futures price data. A 90-day constant maturity contract is not the same instrument as the traded spot contract that gets closer to expiration with each passing day. Beta, a measure of a stock's volatility vis-à-vis a general index like the S&P 500, can be reported on a levered or unlevered basis. Unless one is familiar with how a particular supplier does its calculations, trouble is sure to follow, especially with multiple step analyses.[2]

A good financial expert will be able to identify relevant information sources, know how to handle data "idiosyncrasies" and understand how bad inputs can distort computational outputs. In a similar fashion, a financial expert should be relatively familiar with canned software choices and know when and how a particular analytics program or model is likely to influence a result. Even when *Daubert* factors do not directly apply, a financial expert should be able to

guide a thorough discussion about ease of use, ability to replicate numbers and acceptance by academic and industry peers.

Clear Communication

Some attorneys favor experts who carefully listen. Others want fearless analysts who ask the right questions. A majority enjoy individuals who can explain difficult concepts without the use of jargon or overly technical language. Clear communication goes a long way to making everyone's life easier. Anything can be restated in common terms or illustrated in a manner that puts laymen at ease. Writing well and speaking persuasively are "must have" skills for any expert, but arguably more crucial for complex financial litigation. Imagine trying to explain funding status to a jury of part-time or unemployed workers who do not have a pension plan. Discuss regression or Monte Carlo simulation as a rocket scientist and wait for the inevitable request to speak plainly.

Clever use of visuals is another preferred tool for clear communication. With complex financial cases, a timeline is an invaluable tool. Even when oft-used methods are relied upon (such as an event study to determine "but for" impact on stock price), a simple graph, tied to date of occurrence, speaks volumes. That said, graphs and statistical tabulations vary by quality and purpose. A savvy analyst should be familiar with how information can be effectively or deceptively presented. For example, volatility may appear dire when asset prices are reported for a particularly turbulent calendar interval that is far from representative of "average" performance.

Meaningful conversation is a two-way responsibility. Attorney and expert must each understand what the other is saying, acknowledging that attorneys are seldom comfortable with the intricacies of investing, valuation or risk mitigation techniques. The use of a few buzz words by the attorney might convey a false impression of financial literacy that tempts an expert to launch into an overly technical discussion of the issues in the case. The converse is true as well. Experts frequently benefit when an attorney takes the time to provide an overview of basic legal concepts. For example, concepts such as investment suitability or prudence vary by venue or type of organization. A primer on legal viability can assist an expert in identifying what economic characteristics or elements of the process to emphasize. Egos checked at the door make for a smooth communication channel in both directions. Feigning comprehension does no party any good. "Give me the 101 version" is an apt mantra if doing otherwise adds to billable hours, or corrupts the process by introducing more confusion and prevents resolution of the dispute.

When citing academic studies or explaining statistical techniques, experts should refrain from automatically assuming that the work is known, understood or legitimate. If research is considered leading edge or dominates a field, the expert should say so and explain why. If some dispute the underlying assumptions, methodology or conclusions, elaborate rather than inviting a successful rebuttal.

Conclusion

The use of a financial expert or team of experts is more a necessity than a luxury in cases involving complex securities or transactions. Managing expectations and understanding budgetary and time constraints contribute to a smooth process. When litigations stretch into months or even years, attorneys must keep experts apprised as their schedules fill with other projects during interim lulls. Many financial experts enjoy the intellectual stimulation of working on multi-faceted cases. At a time of unprecedented and large-scale courtroom encounters, attorneys and financial experts must learn to work together effectively as they will likely be spending a lot of time together.

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1 Some certification standards expressly prohibit limited analyses.

2 Bad beta numbers beget imprecise cost of capital numbers which in turn result in economic damages that are either too low or too high.