5. Pre-Trial Civil

Sections 5.1 - 5.6

Hon. Joseph J. Maltese

5.1 Introduction

While scientific testimony in criminal cases steal the headlines and are the subject of numerous television programs, judges in civil cases are more likely to be the gatekeeper of scientific evidence in the courtroom throughout the United States. A recent study by the Federal Judicial Center, the judicial educational organization for the federal judiciary, found that most of the trials involving expert testimony were civil:

- 45% were tort cases, primarily involving personal injury or medical malpractice;
- 23% were Civil Rights cases;
- 11% were contract cases;
- 10% were intellectual property cases, primarily patent cases;
- 2% were labor cases;
- 2% were prisoner rights cases and;
- *% were other civil cases.[1]

However, as *Chart 5.1* shows only slightly more than half of the experts provided scientific or medical expert testimony.[2]

Civil proceedings often require expert testimony in order to prove or disprove causes of action. Airplane crashes, railroad and ship collisions, and countless negligence cases from automobile, truck and motorcycle crashes all require expert scientific evidence.

Expert testimony from the members of the National Transportation Safety Board (NTSB) and/or crash reconstructionists are often required to testify about the element of crash causation. In engineering and product defect cases ranging from bridge and building collapses to faulty equipment causing serious injury or death, all require scientific and technical expertise.

Even pedestrian slips and falls on stairways or snow and ice may require an expert on kinesiology or a meteorologist to make out a plaintiff's case. In order to prove or disprove a professional medical malpractice case, medical experts must opine that the defendant doctor, dentist or health care provider deviated from the applicable professional standard of care which proximately caused injury to the plaintiff. An expert health care provider in the same or similar specialty as the defendant is required to discuss that standard of care and give an expert opinion for the case to proceed to trial.

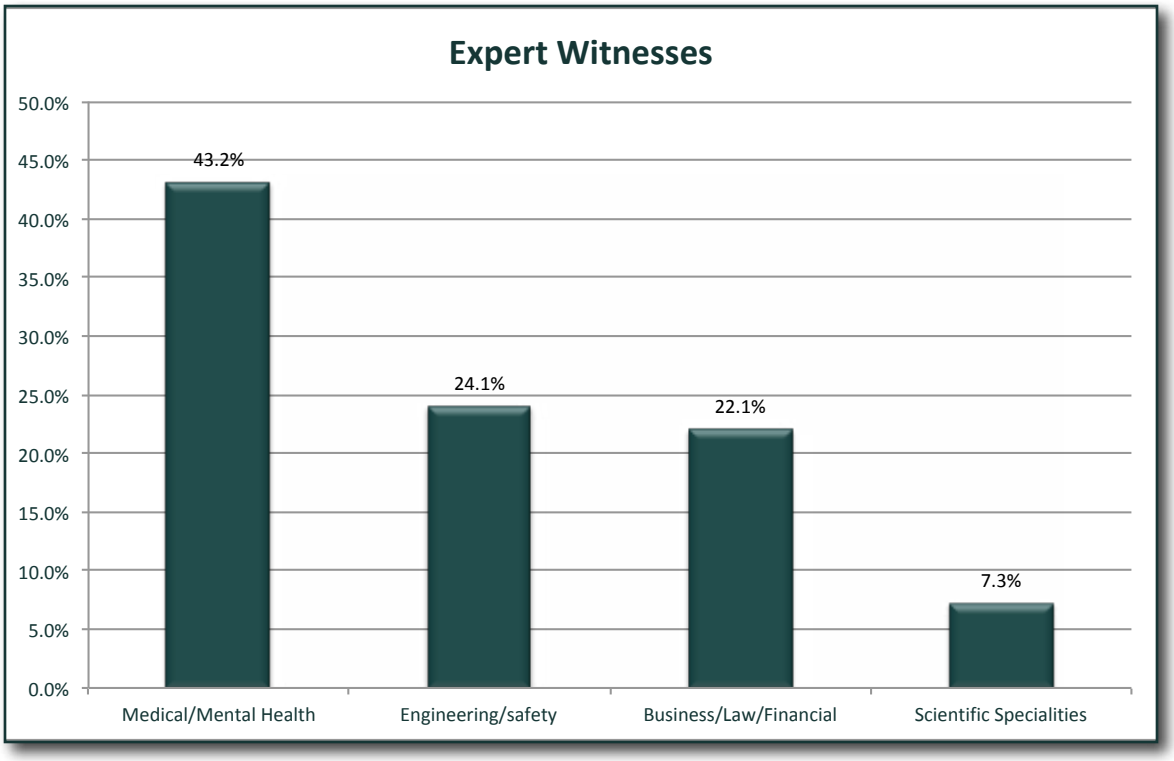

Chart 5.1

Toxic torts and hazardous waste materials may cause injury to humans, other animals, and crops, as well as reduce the value of buildings. They may foul the environment in the air, water and soil, which may require expert witnesses in chemistry, biology, botany and environmental science to prove or disprove the quantum and effects of such toxins.

In family courts, divorce, custody and visitation cases may require the expertise of mental health professionals like psychologists. The contested probate of a will may require medical and/or psychiatric experts to ascertain the condition of the testator when he or she signed the will, as well as questioned documents examiners to give expert opinions to the court whether the signature on the will is that of the testator. Establishing the impact of sexual harassment and sex abuse requires experts who have the education, training and experience to give opinions about rape trauma syndrome and battered child syndrome to explain why the victims acted the way they did after the event or refused to discuss it for years thereafter.

In spite of the constant use of this type of testimony in civil actions, most state jurisdiction only require that plaintiffs provide "notice" in their complaint that identifies the claims asserted against defendants.[3] The result is that neither judges nor the parties have a complete understanding of the scope of the scientific evidence that will be offered in a trial. This makes the discovery process of critical importance in cases involving science evidence.

5.2 Pre-Trial Discovery of an Expert

Attorneys consult with experts in order to assist them in preparing a *prima facie* case for trial. They generally acquire this evaluation in order to obtain a possible recommendation to proceed or not to proceed with the case. Some attorneys may not initially want a written report from an expert because all written reports are discoverable. However, once a report is reduced to writing, counsel must comply with either the Federal Rules of Civil Procedure (FRCP), or appropriate State Rules of Procedure, and federal and state Rules of Evidence, which generally mandate that written expert reports shall be turned over to opposing counsel.[4]

FRCP 26, generally governs the disclosure of expert testimony.[5] This rule requires disclosure of any person who may be testify at trial presenting scientific and other expert evidence.[6] Failing to disclose the existence of such a witness can result in a serious penalty. FRCP 37(c) states that the party who fails to disclosure "is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless."[7] Several courts have interpreted this rule as requiring mandatory exclusion of such evidence. However, judges still have the discretion to decide whether the failure to disclose is harmless.[8]

The submission of a written disclosure report is also required when an expert was "retained or specially employed to provide expert testimony," or the expert's "duties as the party's employee regularly involve giving expert testimony."[9] However, when an expert who does not regularly testify as an expert expresses an opinion derived from firsthand knowledge, a report may not be required.[10] As one court explained: "[I]f a physician's opinion regarding causation or any other matter was formed and based on observations made during the course of treatment, then no Subsection B (FRCP 26 (2)(B))[11] report is required, albeit the Subsection C (FRCP 26 (2)(C))[12] report discussed above will be required. If, however, the physician's opinion was based on facts gathered outside the course of treatment, or if the physician's testimony will involve the use of hypotheticals, then a full subsection B report will be required."[13]

5.2.1 An Expert's Report

The report itself should contain:

a. a complete statement of all opinions, which may be expressed at trial;

b. the basis and reasons for the expert's opinion;

c. data and information on which the opinion is based;

d. exhibits to be used to support the opinion;

e. a curriculum vitae or resume;

f. all publications within the past 10 years;

g. compensation to be paid for the study and testimony; and

h. a listing of previous cases in which the expert had testified (either at trial or deposition) within the preceding four years.[14]

A judge can either set a date for the disclosure of the expert witness in a scheduling order or rely on the date set in the rules of civil procedure.

A discovery deposition of an expert witness in the absence of an agreement otherwise is admissible at trial.[15]

5.2.2 Ghost Writers

An expert witness report or an appended journal article, or study presented as that of the testifying expert should be that of the expert and not the affidavit or work product of a colleague or the attorney presenting the case. In civil matters attorneys knowing what is needed to be stated to the court in order to make out a prima facie case or to survive or defeat a summary judgment motion frequently craft affidavits for their clients, but on occasion, also write out the expert witness affidavit with the necessary words to support their case. While it is not objectionable to advise experts that they need to follow a certain format for an affidavit or certification, it is fraudulent and unethical to supply the substantive contents of the expert's report.

The opinion must be solely that of the expert. Frequently, such reports are offered with or without the author of the report or the scientist or technician who conducted the test. While the confrontation clause of the U.S. Constitution that exists in a criminal case does not apply in a civil action, foundational problems regarding admissibility still do.

5.3 Judge's Role as a Gatekeeper in Pre-Trial Proceedings

In most jurisdictions, once the plaintiff serves a summons and complaint and the defendant has served an answer or files a pre-answer motion to dismiss the complaint, then the judge typically will have the counsel or pro se litigants appear for a preliminary case management conference.

At the initial preliminary case management conference, the judge should take charge to manage the litigation by having counsel for the parties collaborate electronically, or meet in person before the conference, to hopefully agree to the terms for the preliminary case management order to establish what issues exist and how to resolve them short of trial by discovery. This is particularly important in cases involving potential scientific evidence.

The judge, as the manager of the litigation docket, should attempt to limit trial issues generally and scientific disputes specifically.

The judge, as the manager of the litigation docket, should attempt to limit trial issues generally and scientific disputes specifically if possible, by written stipulations without the necessity of formal written motions. The judge should also ascertain what discovery is necessary and how the parties generally intend to meet their burdens of proof.

The judge should ascertain what are the key issues in the case and who potentially is going to testify at a trial. The parties and non-expert witnesses who testify will outline the case by direct examination to the "who, what, where, when, how and possibly why" the cause of action arose. The opponents will scrutinize these witnesses and will cross-examine them generally utilizing indirect conclusory questions in a "yes" or "no" manner. As discussed above, as early as possible, the parties should disclose their expert witnesses and the general substance of that testimony.

The parties need foundational specific information regarding what the expert witnesses will say and the basis for their testimony. Reasonable discovery of these expert witnesses in the form of written interrogatories in lieu of or followed up with oral or video depositions under oath should be encouraged.

Since depositions are costly, time consuming and sometimes difficult to schedule and complete, the judge should ascertain what depositions are really necessary and limit the number of depositions, without prejudicing any of the parties. The scheduling order should establish rules for the conduct of fair and efficient depositions. The judge should prohibit speaking objections and require that objections be stated concisely and in a non-argumentative manner. If the attorneys or parties cannot comport with these rules, the court may order that all future depositions be videotaped for judicial review or require counsel to expeditiously deliver a copy of the transcript to the court for review. In the case complex scientific evidence, the court may also order that a special master or magistrate be present at the deposition to make immediate rulings and that the parties pay for such person to be available.

The parties should be encouraged to advise the court as soon as possible if they are seeking a protective order from discovery upon a claim of privilege or that certain matters are attorney work product or trade secrets. Such materials should be reviewed *in camera*. Such matters should be ruled upon as soon as possible and may require the assistance of a Special Master. The court should only protect those matters for which a clear and significant need for confidentiality has been demonstrated.

The initial case management order should include a detailed schedule of which party will do what by a particular date. The order should provide the date when information such as a bill of particulars, documents, photographs and tapes in support of the scientific evidence, will be disclosed. The order should also include the persons to whom interrogatories are to be served and the dates when responses are required. If appropriate, it should list when the plaintiff is to be physically and/or mentally examined by particular health care professionals on behalf of the defendants. The order should also list the parties, fact witnesses and expert witnesses with their specialty who are requested to be deposed under oath on or

before specific dates. Lastly, the Initial Case Management Order should include a date discovery is to be completed and a date short of the completion date for a Compliance Conference to enable the judge to monitor the progress of the discovery. Judges should direct that no discovery or compliance motions shall be made until the parties have documented that they have attempted to resolve the discovery dispute and may then advise the court, who should immediately intercede to resolve the dispute short of costly and time-consuming motion practice.

At the Compliance Conference the judge should issue an Amended Case Management Order covering all discovery matters not otherwise completed with dates certain for completion and a provision that if there is not compliance by the dates ordered, the court will consider sanctions, including monetary fines against the non-compliant attorneys and/or their clients, striking in whole or in part the plaintiff's complaint and/or the defendant's answer, counterclaims and cross-claims. The court may also consider precluding certain documents, witnesses or parts of their proffered testimony. The court should then re-establish a final compliance date when discovery is to be completed.

If the case does not settle prior then the amended order should require the parties to serve and file their motions for summary judgment, to include any motions for a *Frye* or *Daubert* hearing to preclude particular expert witnesses and/or their expert opinions in whole or in part, as well as their exhibits including reports, studies and professional texts or journal articles.

Scrutinizing expert witness reports and the appended professional journal articles and studies supporting the expert opinion is no easy task for judges. The reports on highly technical or scientific matters, with the underlying journal articles and studies, should be presented to the court when attorneys seek the judge's consideration and adoption of those studies and journal articles as the basis of support of an expert.

In the case of *General Electric Co. v. Joiner*,[16] the Supreme Court held that a trial court's decision excluding testimony from the plaintiff's experts and granting the defendants' motion for summary judgment, established that a judge could apply *Daubert*[17] criteria in a pre-trial hearing. Applying the abuse of discretion standard,

the justices reviewed the trial court record and found that the court had properly excluded the plaintiff's experts in a pre-trial hearing. Chief Justice Rehnquist writing the majority opinion said that it was within the district court's discretion to conclude that the plaintiff's experts: "conclusions and methodology are not entirely distinct from one another. Trained experts commonly extrapolate from existing data. But nothing in either *Daubert* or the Federal Rules of Evidence (FRE) requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered."[18] Thus, *Joiner* allows judges to conduct FRE 104(a)[19] hearings prior to trial.

States following the *Frye* criteria follow a similar practice.[20] The procedure generally starts with a motion in limine to exclude the evidence. Once the motion is filed, a judge can conduct a hearing to determine whether the scientific evidence that is the subject of the motion is admissible. In the hearing the burden of proof rests with the party proffering the evidence.[21] That evidence can include scientific publications, practical applications, the testimony of scientific experts and earlier court decision allows such evidence.[22]

At a pre-trial hearing on the admissibly of scientific evidence the expert witness report ought to be presented and reviewed. The judge must review all the materials submitted and render a decision whether the expert witness or evidence will be admitted into evidence prior to the empaneling of a jury.

The following are some considerations a judge may consider when scrutinizing scientific studies or reports:

- Who wrote it?
- Who did the actual research? Research assistants, laboratory technicians
- Who funded the study? Government, university, private foundation, pharmaceutical company, plaintiffs' or defendants' attorneys

- What is the size of the sample groups? Is it representative of the universe being studied? What is the selection bias? What is the sampling bias?[23] What controls were used?
- What are the methods and procedures used?
- Did the study utilize accepted methods and procedures and did the researcher follow those methods and procedures?
- Over what period of time was the study conducted? Are the dates significant?
- What was the margin of error of the study? How was it calculated?
- Was the data statistically significant?
- Who analyzed the data? Was it the researcher who initially established a hypothesis or was it an independent source?
- What conclusions were reached?
- Were the conclusions and the data fully published and subjected to peer review?
- Do other studies confirm or refute the conclusions of the study being asked to be accepted as proof of a theory to be testified to by an expert witness before the court?

Encouraging or allowing pre-trial hearing on the admissibly of scientific evidence has several advantages. Judges can take the time to educate themselves about complex scientific evidence without the pressure of a jury trial. In jurisdictions following *Daubert*, evidence that would not be admissible at trial can be admitted and considered for purposes of the hearing.[24] Finally, a pre-trial ruling on the admissibility of scientific evidence may obviate the need to conduct a trial either by creating an atmosphere for a settlement or encouraging a motion for summary disposition.

5.4 Judicial Research on Non-Legal Matters, Scientific or Technical

While most judges have limited exposure to scientific or technical methods and procedures when presented with such cases, it is only natural for a judge to seek knowledge about such topics, which he or she will be called upon to admit or not admit into evidence. The obvious quick fix to attain such knowledge is to turn to the search engines on the computer, which may produce scientific and technical information from various sources. This search for knowledge may present some ethical issues for the judge as the internet becomes an ex parte hearsay source of information, which is not scrutinized or cross-examined by the parties to the lawsuit. In some high-powered mass tort litigation, the judge may require that a court appointed expert conduct a formal tutorial for the judge, in the presence of counsel. This may not be practical or affordable in most instances as it is generally the counsel for the parties who will pay for this neutral court appointed expert. The parties may object as they are compelled to pay for their own experts, who will generally support their posture in the case.

Googling scientific or technical information may present ethical issues for the judge.

Merely telling judges not to research the scientific or technical topics so as not to appear ignorant or non-conversant with the technical jargon may prove to be an effort in futility. An appropriate remedy may be to have the parties present materials that give an overview of the general topic and permit them to comment about the materials presented by their adversary. Judges who nonetheless conduct their own non-legal research should disclose copies of what they found to all parties and have them comment about such materials in order to be open and allow for criticism. This has been the subject of debate in the legal community.[25] Judges should be aware of the particular rulings and the policy on independent non-legal research in their jurisdiction.

When presented with scientific, technical or other specialized evidence, judges and lawyers should review the evidence under their state standard of admissibility of either the *Frye* or *Frye* Plus (reliability) test or the *Daubert* standards. (See Chart 5.2.)

The Dual Approach in Evaluating Scientific or Technical Evidence

A. ***Frye* Plus Test** = general acceptance plus reliability of procedure or methodology forming the theory or opinion.

1. Is the underlying theory or procedure of the expert opinion new or novel?

NO — No need for a hearing.

YES — Continue.

2. Is the underlying theory, procedure or methodology generally accepted in the relevant specialized community? (*Frye* test)

NO — No need for a hearing.

YES — Continue.

3. Are the procedures implementing the theory, procedure or methodology generally accepted?

NO — No need for a hearing.

YES — Continue.

4. Were the procedures followed accurately to yield sufficiently reliable results to be admissible to a trier of fact?

NO — No need for a hearing.

YES — Continue.

If the elements are present, then the evidence shoud be admissible.

The Dual Approach in Evaluating Scientific or Technical Evidence

B. ***Daubert/Kumho*** reliability factors:

Is the methodology valid as to:

- Testing
- Acceptable error rate
- Peer review of results
- Any other relevant and reliable factors

NO — **If not reliable then exclude.**

YES — **If reliable then admit.**

C. **Final Note:** Remember, the *Daubert* "scientific reliability" standards were intended to expand the restrictive *Frye* "general acceptance" test – not further restrict it.

Chart 5.2

5.5 Conclusion

When comparing the *Frye* Plus[26] (reliability) test (New York) or the *Kelly/Frye* test[27](California) or *Robinson* tests[28] (Texas) or any other tests with the *Daubert/ Kumho* standards, one may observe that the differences may be more semantical than scientific. All standards attempt to admit reliable evidence and exclude unreliable evidence. The review may differ slightly on the approach to new theories or methods. Since the *Daubert* decision, the courts have given greater scrutiny to experts and their opinions.

Daubert created a new skepticism in reviewing forensic comparison evidence such as handwriting, bite marks, tool marks and even fingerprinting.[29] After the forensic experts learn how to satisfy the challenges by presenting a clear demonstration of their experience based upon expertise through scientific evidence hearings, the courts will in turn become acquainted with the skills, training and experience of the experts and their body of technical and specialized knowledge that, for the most part, will meet the *Daubert/Kumho* standards.

Notwithstanding the post-*Daubert/Kumho* attacks on the validity of forensic evidence, most forensic sciences that were heretofore found to be "generally accepted," will continue to be "generally accepted" by the courts after the expert communities undergo some re-evaluation and validity testing of the techniques and methodology employed by the experts. Forensic experts should also undergo meaningful periodic certification to attest that they are qualified to conduct such forensic tasks.

Until new theories or some old theories have been validated to explain the procedures and methodology in reaching their conclusions, the validity of those theories will be challenged until such time as they achieve general acceptance within their discipline and the courts. In order for a theory or procedure to achieve "general acceptance," it usually undergoes some or all of the factors outlined in *Daubert* and *Kumho*.

After the court decides the motions for summary judgment and *Frye* or *Daubert* motions, if the plaintiff's causes of action are not dismissed or their expert witnesses precluded from testifying in whole or in part, then the court should revisit settlement before finally scheduling a trial date.

5.6 ENDNOTES

1. U.S. District Court Judicial Caseload Profile Report (Aug. 8, 2005) (on file with author).

2. *Id*.

3. Spencer A. Benjamin, *Pleading in State Courts after Twombly and Iqbal*, U. OF VIRGINIA SCH. OF L. (2010) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2038349

4. As each State has adopted its own rules of civil procedure and most are based to some extent on the Federal Rules of Civil Procedure, the citations in this section will rely on the Federal Rules.

5. FED. R. CIV. P. 26 - General Provisions Governing Discovery

   Required Disclosures - Methods to discover:

   . . . (2) Disclosure of Expert Testimony

   A party must disclose the identity of any person (expert witnesses) who may be used at trial to present evidence under rules 702, 703, or 705 of the Federal Rules of Evidence.

   Experts must submit and sign a written report containing:

   - a complete statement of all opinions, which may be expressed at trial;
   - the basis and reasons for the expert's opinion;
   - data and information on which the opinion is based;
   - exhibits to be used to support the opinion;
   - a curriculum vitae or resume
   - all publications within the past 10 years;
   - compensation to be paid for the study and testimony; and
   - a listing of previous cases in which the expert had testified (either at trial or deposition) within the preceding 4 years.

   The due date of expert disclosures is (unless the court alters it):

   - initial expert testimony: At least 90 days before trial

- rebutting expert testimony: (responding to initial testimony): Within 30 days of the initial expert disclosure.

Pretrial Disclosure - for any evidence to be used at trial, a party shall disclose:

- The name, address, phone number of each witness and the subject matter of their testimony (if not already provided), separately indicating which witnesses may appear at trial and which may not.
- Designation of witnesses whose testimony is expected by deposition.
- Appropriate identification of each document and exhibit, and summaries of evidence.

Other Disclosure Rules:

- Pretrial disclosure must be submitted at least 30 days before trial.

Within 14 days after pretrial disclosure, a party may file a list disclosing:

- Any objections to the use of depositions
- Any objections to the admissibility of materials (with a reason for the objection)
- If objections are not made before 14 days, they are deemed to be waived, unless the omission is excused for good cause.

Trial Preparation; Obtaining Expert Opinions:

Federal Rules

Depositions:

- Depositions of any person identified as an expert may be taken and may be used at trial.
- If an Expert Disclosure Report is required (by local rules), the deposition shall be conducted after the report is received.
- Other Parties' Experts: Parties may discover known facts, or opinions of another parties' experts (via deposition or interrogatories) who are not expected to be used at trial, but only if the parties show exceptional circumstances that make it impractical for them to obtain the expert information by hiring an expert on their own.

Payment of Experts:

The court shall require the party requesting the information to pay the expert, unless manifest injustice will result:

- A reasonable fee for her time spent responding to the discovery requests; and
- A reasonable portion of the expert's fee to the other party for the expert opinions obtained.

6. FED. R. CIV. P. 26 (a)(2)(A).

7. *See e.g.*, Santiago-Lampon v. Real Legacy Assurance Co., 293 F.R.D. 86 (D.P.R. 2013).

8. *See e.g.*, Esposito v. Home Depot U.S.A., Inc., 590 F.3d 72 (1st Cir. 2009)

9. FED. R. CIV. P. 26(a)(2)(B).

10. *Id*.

11. FED. R. CIV. P. 26 (2) (B) Witnesses Who Must Provide a Written Report. Unless otherwise stipulated or ordered by the court, this disclosure must be accompanied by a written report--prepared and signed by the witness--if the witness is one retained or specially employed to provide expert testimony in the case or one whose duties as the party's employee regularly involve giving expert testimony. The report must contain:

    (i) a complete statement of all opinions the witness will express and the basis and reasons for them;

    (ii) the facts or data considered by the witness in forming them;

    (iii) any exhibits that will be used to summarize or support them;

    (iv) the witness's qualifications, including a list of all publications authored in the previous 10 years;

    (v) a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and

    (vi) a statement of the compensation to be paid for the study and testimony in the case.

12. FED. R. CIV. P. (2) (C) Witnesses Who Do Not Provide a Written Report. Unless otherwise stipulated or ordered by the court, if the witness is not required to provide a written report, this disclosure must state:

(i) the subject matter on which the witness is expected to present evidence under Federal Rule of Evidence 702, 703, or 705; and

(ii) a summary of the facts and opinions to which the witness is expected to testify.

13. Kondragunta v. Ace Doran Hauling & Rigging Co., No. 1:11-CV-01094-JEC, 2013 WL 1189493, at *10 (N.D. Ga. Mar. 21, 2013).

14. Fed. R. Civ. P. 26(a)(2)(B).

15. Fed. R. Civ. P. 26(a)(2)(C).

16. Gen. Elec. Co. v. Joiner, 522 U.S. 136 (1997).

17. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U. S. 579 (1993).

18. *Joiner, supra* note 16, 522 U.S. at 146.

19. Federal Rules of Evidence, Rule 104. Preliminary Questions (a) In General. The court must decide any preliminary question about whether a witness is qualified, a privilege exists, or evidence is admissible. In so deciding, the court is not bound by evidence rules, except those on privilege. https://www.law.cornell.edu/rules/fre/rule_104

20. *See e.g.,* Ruffin ex rel. Sanders v. Boler, 890 N.E.2d 1174 (Ill. 2008); Sean R. ex rel. Debra R. v. BMW of N. Am., LLC, 48 N.E.3d 937, 941 (N.Y. 2016); Roberti v. Andy's Termite & Pest Control, Inc., 113 Cal. App. 4th 893 (2003).

21. *See e.g.* People v. McKown, 924 N.E.2d 941, 950 (Ill. 2010).

22. *See e.g.* People v. Wesley, 633 N.E.2d 451, 454 (N.Y. 1994).

23. *See* Section 4, Statistics of this Bench Book.

24. Bruce Parker, *Effective Strategies For Closing The Door On Junk Science Experts*, Defense Counsel Journal, (1998) https://www.venable.com/files/Publication/cf64a2e3-b8fa-45b9-837c-f7064b8a5163/Presentation/PublicationAttachment/b9105023-1194-467b-879b-111ff29c5a0b/1138.pdf

25. *See*, Rebecca C. Harris, Black Robes, White Coats: The Puzzle of Judicial Policymaking and Scientific Evidence (Rutgers Univ. Press 2008); *see also*, George D. Marlow, *Black Robes to White Lab Coats: The Ethical Implications of a Judge's Sua Sponte, Ex Parte Acquisition of Social and Other Scientific Evidence During*

the Decision Making Process, 72 St. John's L. Rev. 291 (Spring 1998); Edward K. Cheng, *Independent Judicial Research in the Daubert Age*, 56 Duke L.J. 1263 (March 2007).

26. Sean R. ex rel. Debra R. v. BMW of N. Am., LLC, 48 N.E.3d 937, 941 (N.Y. 2016).

27. People v. Kelly, 549 P.2d 1240 (CA 1976).

28. E.I. du Pont de Nemours and Co., Inc. v. Robinson, 923 S.W.2nd 549 (Tex. 1995).

29. *See* Section 3.10 Forensic Pattern Evidence. and Section 3.11 Forensic Analytical Evidence of this Bench Book.