EXPERT TESTIMONY: PENNSYLVANIA RULE OF EVIDENCE 702 AND THE FRYE RELIABILITY FACTORS

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Pennsylvania Rule Of Evidence 702 And The Frye Reliability Factors

Pennsylvania Rule of Civil Procedure 207.1 "establishes procedures for motions to exclude expert testimony which relies upon novel scientific evidence. The rule does not address the requirements for the admission of expert testimony under Pa. R.R. 702 and 703, which are governed by case law." Pa. R.Civ.P. 207.1 (note).

The Court must first determine if it desires responses from the non-moving parties, and then, if the Court so desires, the Court is to require the parties to respond to the motion. Id at (a)(4).

Under the mandated requirements of Pa.R.Civ.P. 207.1, the Court must first make, and announce, its initial determination as to whether the Court desires responses to a Motion to Exclude. It is only at that time that "[t]he court shall require that responses be filed if it determines that the matter should be addressed prior to trial." Pa.R.Civ.P. 207.1(4). When the Court determines that the matter should be addressed prior to trial, a response must be filed.

In essence, a Court needs to determine if it wishes to conduct a mini-trial prior to the trial of the matter regarding the issues raised in a Motion to Exclude or if the Court wishes to address these issues at trial.

"[A]dmissibility of the evidence depends upon the ***general*** acceptance of its validity by those scientists active in the field to which the evidence belongs." Commonwealth v. Topa, 471 Pa. 223, 369 A.2d 1277, 1281 (Pa. 1977) (emphasis in original).

The issue is whether or not the testimony meets the requirements for admissibility of scientific evidence set forth in Frye v. United States, 293 F.1013 (D.C. Cir. 1923) and adopted by the Pennsylvania Supreme Court in Commonwealth v. Topa, 471 Pa. 223, 369 A.2d 1277.

In Blum, the Superior Court was left to review whether or not a certain expert's testimony concerning causation was admissible. Blum v. Merrell Dow Pharmaceuticals, Inc., 705 A.2d 1314, (Pa. Super. 1997). In Blum, the question was whether certain testimony regarding the pharmaceutical relationship of a certain pharmaceutical product and birth defects.

The Frye test represents an attempt to measure the quality of scientific evidence prior to admission, so that jurors are not misled by unreliable evidence. Blum v. Merrell Dow Pharmaceuticals, 705 A.2d at 1317. Our courts have considered this to be necessary whenever science enters the courtroom, because there is the danger that the trial judge or jury will ascribe a degree of certainty to the testimony of the expert, which may not be deserved. Id citing Topa, 471 Pa. at 230, 369 A.2d at 1281. Therefore, because scientific testimony should aid jurors rather than mislead them, admissibility of scientific evidence depends upon the general acceptance of its validity by those scientists active in the field to which the evidence belongs. Blum, 705 A.2d at 1317 citing Topa, 471 Pa. at 231, 369 A.2d at 1281. The same concerns for reliability that lead to the adoption and application of Frye in criminal cases are not less present because the action is civil in nature. Blum, 705 A.2d at 1319 citing Liles v. Balmer, 439 Pa. Super. 238, 658 A.2d 1237 (1994).

It is not enough for an expert to say something could have happened or to guess; expert testimony must assert that the result came from the cause alleged. Smail v. Flock, 407 Pa. 148, 180 A.2d 59 (1962). Scientific testimony is admissible when an expert's opinion is not merely based on personal views, or views of a small segment of scientific community, but rather are generally accepted. Commonwealth v. Middleton, 379 Pa. Super. 502, 550 A.2d 561 (1988).

Although the legal process relies upon cross-examination of an expert to test the veracity of the expert's testimony, in dealing with complex scientific theories, cross-examination is not the appropriate tool to test the speciousness or accuracy of the expert's testimony where the evidence of which that testimony is based is not deemed reliable. Blum v. Merrell Dow Pharmaceuticals, 705 A.2d at 1322.

The judge, in considering admissibility, does not decide whether the propositions or theories are true or false. Id. Rather, the judge, as gatekeeper, decides whether the expert is offering sufficiently reliable, solid, trustworthy science. Id. The question is whether the science is good enough to serve as the basis for the jury's findings of fact, or is it dressed up to look good enough, but basically so untrustworthy that no finding of fact can properly be made on it. Id. If the latter is true, the integrity of the trial process would be tainted by the jury to consider it. Id.

In order to make such evidence admissible, there must be a showing of an existence of the causal relationship that is generally accepted in the relevant medical community. Blum v. Merrell Dow Pharmaceuticals, 705 A.2d at 1312 citing McKenzie v. Westinghouse Elec. Corp., 674 A.2d 1167, 1172 (Pa. Cmwlth. 1996).

Testimony by a qualified expert does not become scientific knowledge just because it is uttered by a scientist. Blum v. Merrell Dow Pharmaceuticals, 705 A.2d at 1323. An expert's self-serving assertion that his conclusions were derived by the scientific method is not deemed conclusive. Id.

Concluding that the causation testimony was not admissible in Blum, the Superior Court stated:

> "It is true that effective cross-examination is a powerful tool, and suffices to reveal the weaknesses in a witness's testimony where the lay jury is faced with common-sense questions of credibility or abilities of observation. However, the complex, confusing and possibly misleading details of scientific testimony do not so readily lend themselves to accurate assessment by even the most discerning jury. Much of such testimony is sophisticated and difficult to comprehend, and an analysis of the scientific validity of the methodologies underlying the testimony is simply beyond the capabilities of most lay persons. Therefore, the gatekeeping role of the court, far from detracting from the jury's function, is in fact essential to it: scientific methodology and conclusions must initially be scrutinized by the court to ensure that what might appear to the jury to be science is not in fact speculation in disguise. Properly supported scientific evidence, however complex, can then reach the jury for its consideration, while material whose complexity merely hides its unreliability is winnowed out. This is, in essence, the teaching of *Frye*, and that

teaching remains valid. Blum v. Merrell Dow Pharmaceuticals, 705 A.2d at 1325.

The general rule is that an expert can only be qualified to offer an opinion if he or she has sufficient skill, knowledge or experience in a field or calling as to make it appear that his or her opinion or inference will probably aid the trier of fact in its search for the truth. Dambacher v. Mallis, 485 A.2d 408 (Pa. Super. 1984). However, in order to be admissible, expert evidence on scientific matters must pass through an additional hoop: the Frye test.

Frye v. United States, 293 F.1013 (D.C. Cir. 1923)[1] was adopted by the Pennsylvania Supreme Court in Commonwealth v. Topa, 369 A.2d 1277 (Pa. 1977):

> "Admissibility of the evidence depends upon the *general* acceptance of its validity by those scientists active in the field to which the evidence belongs. Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidence force of the principle must be recognized, and while courts will go a long way in admitting expert testimony from a well recognized scientific principle or discovery, *the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs*. Commonwealth v. Topa, 369 A.2d at 1281, citing Frye v. United States, 293 F. at 1014 (emphasis in original).
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> The Frye test represents an attempt to measure the quality of scientific evidence prior to admission, so that jurors are not misled by unreliable evidence. Our courts have considered this to be necessary whenever science enters the courtroom, because "there is the danger that the trial judge or jury will ascribe a degree of certainty to the testimony of the expert . . . which may not be deserved." Commonwealth v. Topa, 369 A.2d at 1281.

Blum v. Merrell Dow, 750 A.2d at 1317. The Blum decision, in analyzing the issues presented in that case, as well as reviewing and analyzing all relevant Pennsylvania precedent, sets forth several controlling principles as to expert testimony:

a. the methodology upon which the expert relies must be "generally accepted" by the scientific community, Blum at 1318;

b. the purported expert's reasoning, methodology and conclusions must be "generally accepted by the relevant scientific communities," Blum at 1322;

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[1]Although the Frye test has been superseded in the federal courts by the Federal Rules of Evidence, and the interpretation of these rules set forth by the United States Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, 113 S. Ct. 2786 (1993), Daubert does not control the admissibility of scientific evidence in Pennsylvania Courts. Commonwealth v. Crews, 640 A.2d 395, 400 n. 2 (Pa. 1994).

c. unreliable scientific evidence which is not "generally accepted" can "never" be presented to the fact finder, Blum at 1321;

d. the purported expert's own testimony that the opinions and/or methodology are "generally accepted" is not sufficient, Blum at 1323;

e. although cross-examination of an expert is usually the proper means to test the veracity of an experts testimony, "in dealing with complex scientific theories, cross-examination is not the appropriate tool to test the speciousness or accuracy of the expert's testimony where the evidence on which that testimony is based is not deemed reliable," Blum at 1322; and

f. the judge is a "gatekeeper" who must decide whether the expert is offering sufficiently reliable, solid trustworthy evidence." Blum at 1322.

Plainly, based upon Blum v. Merrell Dow, the trial court has a duty to exclude expert testimony where either the methodology relied upon is generally accepted by the scientific community, or where the causal relationship is not generally accepted by the scientific community.

The purpose of Rule 207.1 is to provide the procedure for pre-trial motions concerning the admissibility of expert testimony which relies upon novel scientific evidence.

While courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principal or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs. Frye, 293 F. at 1014. Frye applies only to novel science. Trach v. Fellin, 2003 Pa. Super. 53, 2003 Pa. Super. Lexis 180 *20 (2003).

In addressing the meaning of "methodology" for the purposes of Frye, the Superior Court in Trach relied upon U.S. Supreme Court's holding in Daubert, "scientific methodology today is based on generated hypotheses and testing them to see if they can be falsified; indeed, this methodology is what distinguishes science from other fields of human inquiry. Trach v. Fellin, 2003 Pa. Super. Lexis 180 *31. Stated differently, the scientific method is a method of research in which a problem is identified, relevant data are gathered, a hypothesis is formulated from the data, and the hypothesis is empirically tested. Id. Within the meaning of the definition of scientific method, "empirical" means "provable or verifiable by experience or experiment." Id. Key aspects of the scientific method include the ability to test or verify a scientific experiment by a parallel experiment or other standard of comparison and to replicate the experiment to expose or reduce error. Id.

From a practical standpoint, if a party wishes to challenge the admissibility of expert testimony, the Motion to Exclude should be filed as early as possible and the litigator should be prepared to challenge its reliability, methodology and trustworthiness. The litigator should be prepared with solid evidence of the untrustworthiness of the opinion as evidence. Otherwise, the litigator can expect the Trial Judge to deny such a motion.