

**Maryland State Bar Association**  
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**EXPERT TESTIMONY UNDER FRYE-REED:  
TRENDS AND RECENT CASES**

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**I. THE LITIGATOR'S TOOLBOX**

1. Maryland trial judges come from diverse backgrounds. Some have had substantial experience with experts in novel, highly complex, or technical areas, either as lawyers or judges; others have not. Consequently, do not assume the judge will immediately grasp (or want to wrestle with) this arcane area of practice.
2. Come armed with the books listed below. We use them daily and absent a decision by the Court of Appeals to the contrary, most of us will follow the opinions of these authors.
  - JOSEPH MURPHY & PAUL GRIMM, *COMPARATIVE GUIDE TO THE MARYLAND AND FEDERAL RULES OF EVIDENCE* (2007).
  - LYNN MCLAIN, *MARYLAND RULES OF EVIDENCE* (2007).
  - JOSEPH MURPHY, *MARYLAND EVIDENCE HANDBOOK* (4th ed. 2010).
3. The proponent of a *Frye-Reed* motion should raise it well in advance of trial. Do not expect the trial judge to let the jury sit idle while you explore the niceties of an expert's opinion.
4. Do not overly resist your opponent's request for a *Frye-Reed* hearing. This is your chance to not only educate the trial judge, but also make your record for the appellate courts. Trial judges, like sharks, sense fear.
5. A "bench book" is essential. Do not expect the trial judge to comb through the record or go to the library. If you want her to read something, provide it in an easy-to-use format.

6. Know the relevant procedural Maryland Rules:
  - Maryland Rule 5-104(a) (questions as to the qualifications of a witness).
  - Maryland Rule 5-101(c)(1) (discretionary application of the rules of evidence).
  - Maryland Rule 5-201(b)(2) (judicial notice).
  - Maryland Rule 2-502 (questions for decision by the court).
  - Maryland Rule 2-311 (motions).
7. Know the Maryland Rules governing expert witnesses:
  - Maryland Rule 5-702 (who is an expert).
  - Maryland Rule 5-703 (bases of expert opinion testimony).
  - Maryland Rule 5-704(a) (opinion on ultimate issue).

## II. DO I NEED AN EXPERT?

1. In *Ragland v. State*, 385 Md. 706, 725 (2005), the Court of Appeals narrowly construed Maryland Rule 5-701, which governs the admissibility of lay opinion testimony.
2. Under *Ragland*, only a properly qualified expert may testify to matters based on specialized knowledge, education, or skill. This necessarily includes scientific and technical knowledge. *Ragland* essentially adopted the narrow construction of lay opinion testimony that is applied under FRE 701. See *Bank v. China v. NBM LLC*, 359 F.2d 200, 202-04 (2d Cir. 2004); *Certain Underwriters at Lloyd's v. Sinkovich*, 232 F.3d 200, 203 (4th Cir. 2000).
3. In *Robinson v. State*, 348 Md. 104, 120 (1997), the Court of Appeals had approved a somewhat broader scope of lay opinion testimony where the witness had specialized experience. It is doubtful that the *Robinson dicta* survived *Ragland*. See *Wilder v. State*, 191 Md. App. 319, 361-68 (2010) (error to allow police officer to testify as to cell phone site evidence without qualifying him as an expert); see also *Coleman-Full v. State*, 192 Md. App. 577 (2010) (applying *Wilder* to reverse conviction where witness was not qualified as an expert).
4. If you need expert testimony to prove an element of a claim or defense, and do not have one, the trial court may properly grant summary judgment and dismiss your case. *Schultz v. Bank of America*, 413 Md. 15, 36 (2010); *Crickenberger v. Hyundai*, 404 Md. 37

(2008); *Crickenberger*, 404 Md. at 53-59 (Murphy, J., concurring); *Rodriguez v. Clarke*, 400 Md. 39 (2007); *Smith v. Dodge Plaza Ltd. Partnership*, 148 Md. App. 335, 353-54 (2002).

5. In a criminal case, permitting a lay witness to offer testimony that requires an expert generally is reversible error. *State v. Blackwell*, 408 Md. 677, 696-98 (2009). See Maryland Rule 4-263(d)(8) (expert witness disclosure requirements).
6. In a civil case, the failure to timely designate an expert and provide the expert's report, under Maryland Rule 2-402(f)(1), as well as the failure to comply with a Scheduling Order entered under Maryland Rule 2-504, may result in the exclusion of the expert. *Livingstone v. Greater Anesthesiology & Pain Consultants, P.C.*, 187 Md. App. 346, 372-92 (2009); *Maddox v. Stone Electrical Contractors*, 174 Md. App. 489 (2007); *Lowrey v. Smithsburg Emergency Medical Service*, 173 Md. App. 662 (2007); *Helman v. Mendelson*, 138 Md. App. 29 (2001).

### III. EXPERT TESTIMONY: THE BASICS

1. In Maryland, the admissibility of expert testimony turns on fulfilling the requirements of Maryland Rule 5-702. *Food Lion v. McNeill*, 393 Md. 715, 730-31 (2006); *Rollins v. State*, 392 Md. 455, 498-99 (2006); *CSX Transp., Inc. v. Miller*, 159 Md. App. 123, 183-84, 189 (2004).
2. Under Maryland Rule 5-702, "the admissibility of expert testimony is within the sound discretion of the trial judge and will not be disturbed on appeal unless clearly erroneous." *Blackwell v. Wyeth*, 408 Md. 575, 618 (2009).
3. In short, Maryland trial courts enjoy wide but not unlimited discretion in determining whether to admit expert testimony. *In Re Tatianna B.*, 417 Md. 259, 263-65 (2010); *Buxton v. Buxton*, 363 Md. 634, 650-51 (2001); *Oken v. State*, 327 Md. 628, 659-61 (1992); *Giant Food, Inc. v. Booker*, 152 Md. App. 166, 182-90 (2003).
4. A trial court does not have the discretion "to make an erroneous ruling that results in the admission of incompetent and unfairly prejudicial expert testimony." *Hall v. State*, 107 Md. App. 684, 695 n.6 (1996).
5. Whether a witness is an "expert" in a given field can be a close call. Compare *I.W. Berman Properties v. Porter Bros., Inc.*, 276 Md. 1, 13-15 (1975) with *Ditto v. Stoneberger*, 145 Md. App. 469, 498-99 (2002). See also *Samsung Corp. v. Bennett*, 154 Md. App. 59, 66, 72-73 (2003) (expert need not actually perform a particular procedure to be qualified to express an opinion about it); *Radman v. Harold*, 279 Md. 167, 172-73 (1977) (same).

6. An expert may not stray beyond the area of her expertise for which she has been qualified and accepted. *Johnson v. State*, 408 Md. 204, 225 (2009); *In re Yve S.*, 373 Md. 551, 613 (2003).
7. Watch out for the “because I said so” opinions. See *Beatty v. Trailmaster Products, Inc.* 330 Md. 726, 741 (1993); *Waldt v. University of Maryland Medical System Corp.*, 181 Md. App. 217, 265-66 (2008), *aff’d in relevant part*, 411 Md. 207 (2009).
8. An instructive guide as to the types of opinions experts can and cannot give is found in *Hall v. State*, 107 Md. App. 684 (1996) and *Johnson v. State*, 408 Md. at 223-26.
9. But no witness, however learned, may give an “expert opinion” if the subject matter of the testimony is within the common knowledge of lay jurors. *Scott v. Sears, Roebuck & Co.*, 789 F.2d 1052, 1055 (4th Cir. 1986) (rejecting “human factors” expert); *K-Mart Corp. v. Honeycutt*, 24 S.W.3d 357, 360-61 (Tex. 2000) (same).
10. An expert must be careful not to misapply the law in formulating the opinion. *City of Frederick v. Shankle*, 136 Md. App. 339, 365-66, *aff’d*, 367 Md. 5, 15-16 (2001) (affirming exclusion of expert testimony which disregarded legal principle clearly set forth in controlling statute). See also *Eleban v. Eghrari-Sabet*, 174 Md. App. 60, 100 (2007) (affirming trial court properly excluded expert when the opinion as to damages was not based on the formula contained in the parties’ agreement and expert otherwise lacked an adequate factual basis for her damage opinion).
11. If the expert is not qualified to give the opinion offered, her opinion does not have an adequate factual basis, or the methodology she used is not reliable, then the testimony is not admissible. Deficiencies in any of these areas do not simply go to weight, they likely preclude admissibility. *Franch v. Ankney*, 341 Md. 350, 364-65 (1996); *Evans v. State*, 322 Md. 24, 34-35 (1991); *Wood v. Toyota Motor Corp.*, 134 Md. App. 512, 519-24 (2000); *Carter v. Shoppers Food Warehouse*, 126 Md. App. 147, 154-159 (1999).
12. As Judge Moylan colorfully reiterated: “If a proffered expert opinion, properly challenged, fails the Rule 5-702 test in any respect, it does not come into evidence at all. It does not come halfway in, with less than full efficacy. Under Rule 5-702, the evidence is either in or out.” *Terumo Medical Corp. v. Greenway*, 171 Md. App. 617, 624 (2006).
13. Remember, under Maryland Rule 5-703(a), an expert may base an opinion on evidence that otherwise would be inadmissible hearsay, as long as it “is of a kind that is customarily relied on by experts in that particular calling.” *Kent Village Associates Joint Venture v. Smith*, 104 Md. App. 507, 524 (1995). Also review the following cases *CSX Transp., Inc. v. Miller*, 159 Md. App. at 189; *Keene Corp. v. Hall*, 96 Md. App. 644, 660-61 (1993); *In re Joseph G.*, 94 Md. App. 343, 348-49 (1993).
14. Even if otherwise inadmissible hearsay, documents that were relied on by an expert may be disclosed to the jury under Rule 5-703(b). *Brown v. Daniel Realty Co.*, 409 Md. 565, 600-06 (2009).

15. But the Rule does not allow an expert to be used simply as a sounding board to transmit inadmissible hearsay to the jury if the information was not actually used by the expert in formulating the opinion. See *United States v. Tomasian*, 784 F.2d 782, 786 (7th Cir. 1986); *Crowley v. Chait*, 322 F. Supp. 2d 530, 533 (D.N.J. 2004); *Rollins v. State*, 161 Md. App. 34, 82, 84-85 (2005), *aff'd*, 392 Md. 455 (2006).
16. Be careful when citing appellate opinions where the decision of the trial judge was affirmed under the highly deferential abuse of discretion standard. In many cases, such as *CSX Transp., Inc. v. Miller*, 159 Md. App. at 197-204, the decision of the trial judge could have gone the other way and still have been affirmed.
17. A recent example of the trial court's discretion in this area is *Bomas v. State*, 412 Md. 392 (2010). In that case, the Court of Appeals affirmed the exclusion of expert testimony, regarding the vagaries of eye-witness identification, but indicated that such testimony might properly be admitted under other circumstances. 412 Md. at 416-23.
18. If the expert is testifying only by deposition (and there will be no opportunity to cure any problems with the deposition questions at trial), comply, if you can, with the oft-stated requirement that the expert "render his opinion to a reasonable degree of probability within his field of expertise." *Hines v. State*, 58 Md. App. 637, 670 (1984).
19. The failure of the expert to do so does not necessarily render their opinion inadmissible. But why play with fire? Read both *Karl v. Davis*, 100 Md. App. 42, 52-53 (1994) and *Mayor and City Council of Baltimore v. Theiss*, 354 Md. 234, 261-63 (1999) (Rodowsky, J., concurring).
20. If you fail to object to the admission of expert testimony under Rule 5-702 at the time it is offered, you cannot later challenge the legal sufficiency of the proponent's case by way of a motion for judgment under Rule 2-519. *Terumo Medical Corp. v. Greenway*, 171 Md. App. 617, 622-30 (2006); see Maryland Rule 5-103(a)(1) (contemporaneous objection requirement); Rule 2-517(a) (same).
21. The fact-finder may believe all, part, or none of the expert's testimony. *Walker v. Grow*, 170 Md. App. 255, 275, *cert. denied*, 396 Md. 13 (2006).

#### **IV. FRYE-REED IS NOT DAUBERT-KUHMO TIRE: DO NO CONFUSE THE JUDGE**

1. In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the Supreme Court held that the standard set forth in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), for determining the admissibility of scientific evidence and expert scientific testimony did not survive the adoption of the Federal Rules of Evidence. Specifically, the Supreme Court rejected the "general acceptance" test of *Frye* in favor of the more rigorous "gate-keeper" role under FRE 702.

2. In *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), the Supreme Court extended *Daubert* to all expert testimony, including opinions on non-scientific matters.
3. A federal trial court's *Daubert* ruling is reviewed under an abuse of discretion standard. *General Electric Company v. Joiner*, 522 U.S. 135, 146 (1997).
4. An excellent application of the principles of *Daubert* and *Kumho Tire* may be found in *Colon v. BIC USA, Inc.*, 199 F. Supp 2d 53 (S.D.N.Y. 2001).
5. The Court of Appeals adopted the *Frye* standard in *Reed v. State*, 283 Md. 374 (1978).
6. Since the adoption of Maryland Rule 5-702 in 1994, the Court of Appeals consistently has held that the Rule did not abrogate the *Frye-Reed* standard. *Clemons v. State*, 392 Md. 339 (2006); *Wilson v. State*, 370 Md. 191 (2002).
7. The Court of Appeals has flatly declined to adopt the approach outlined in *Daubert*. *Clemons v. State*, 392 Md. at 349 n.7.
8. In Maryland, a *Frye-Reed* analysis applies at least, to: (1) novel scientific theories; (2) novel methods that are applied to accepted scientific theories or data; (3) the "analytical gap," *i.e.*, whether accepted methodologies "mesh" with accepted analyses; and (4) previously accepted theories and methods that are now subject to reconsideration.
9. Counsel, or the court, should seek a *Frye-Reed* hearing when the proffered expert testimony has not been vetted adequately in reported judicial decisions or the accepted scientific literature. *See State v. Baby*, 404 Md. 220, 266-71 (2008); *Tucker v. State*, 407 Md. 368, 384-86 (Harrell, J., dissenting); *Giddens v. State*, 148 Md. App. 407, 416-17 (2002) (declining to apply *Frye-Reed*), *discussing Keene Corp v. Hall*, 96 Md. App. 644, 660 (1993) (excluding expert opinion on the basis of *Frye-Reed*).
10. However, a *Frye-Reed* hearing is not necessary if the trial court can determine that the scientific evidence either is specifically permitted by statute or generally accepted by well-reasoned reported decisions or other competent authorities. *Armstead v. State*, 342 Md. 38, 54 (1996); *Wagner v. State*, 160 Md. App. 531, 546-67 (2005).
11. The proponent of the evidence has the burden of establishing that it satisfies the *Frye-Reed* standards. *Reed v. State*, 283 Md. at 380; *Cobey v. State*, 73 Md. App. 233, 238 (1987).
12. Appellate review of a trial court's factual findings is governed by the clearly erroneous standard. The trial court's ultimate conclusion under *Frye-Reed*, however, is subject to *de novo* review. *Blackwell v. Wyeth*, 408 Md. 575, 611 (2009); *Wilson v. State*, 370 Md. at 201-02 n.5; *Fleming v. State*, 194 Md. App. 76, 100 (2010); *Wagner v. State*, 160 Md. App. 531, 547 (2005).

13. Although the general standards of Maryland Rule 5-702 apply to experts under *Frye-Reed*, additional trial court scrutiny of an expert's qualifications in the specific field is permitted, if not required. *Blackwell*, 408 Md. at 627-29.
14. **CAUTION:** The failure to timely request a *Frye-Reed* hearing likely will result in the issue not being preserved for appeal. *In Re Adoption/Guardianship of Tatianna B.*, 427 Md. at 267-77 n.5 (Court of Appeals refused to consider *Frye-Reed* challenge to an expert's testimony when trial court was not asked to conduct a *Frye-Reed* hearing); *Addison v. State*, 188 Md. App. 165, 180-84 (2009), *cert. denied*. 412 Md. 255 (2010) (Court of Special Appeals refused to subject expert's trial testimony to a *Frye-Reed* analysis on appeal when no such challenge was raised below).
15. In *Montgomery Mutual Ins. Co. v. Chesson*, 399 Md. 314 (2007), the Court of Appeals held that the trial court should have held an *in limine* hearing, to determine whether the underlying scientific theory *and* methodologies used by the plaintiff's mold expert were generally accepted. The case was remanded for the trial court to hold the proper hearing.
16. In *Chesson*, the specific issues were "whether the medical community generally accepts the theory that mold exposure causes the illnesses that [plaintiffs] claimed to have suffered, and the propriety of the tests Dr. Shoemaker employed to reach his conclusions." 399 Md. at 328.
17. Stated somewhat differently: "Dr. Shoemaker's testimony was based on scientific opinion regarding the causal link between mold exposure and sick building syndrome. As such, both his theories regarding causation and the tests he employed to diagnose [the plaintiffs] were subject to *Frye-Reed* analysis." 399 Md. at 329. *See Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965, 968-70 (10th Cir. 2001) (same result—exclusion— upon application of *Daubert*).
18. *Blackwell v. Wyeth*, 408 Md. 575 (2009), provides the most comprehensive *Frye-Reed* analysis to date by the Court of Appeals and is "required reading" in this area. In that case, the Court of Appeals affirmed the trial court's exclusion of expert testimony purporting to link the vaccine preservative, thimerosal, with neurological defects in children, such as autism.
19. Exclusion was appropriate in *Blackwell* because although the underlying data was generally accepted it was applied to support a novel theory. 408 Md. at 596. In other words, the methodology and reasoning of the experts used to connect the facts to their conclusions were not generally accepted. 408 Md. at 607. This problem has been termed the "analytical gap." 408 Md. at 607-09.
20. The message of *Blackwell* is clear: "[I]t can be seen that our jurisprudence engages trial judges in a serious gate-keeping function, to differentiate serious science from 'junk science.'" 408 Md. at 591.

21. In a post-*Blackwell* case, *Fleming v. State*, 194 Md. App. 76, 99-109 (2010), the Court of Special Appeals held that expert testimony regarding firearms toolmark analysis was properly admitted under *Frye-Reed*, notwithstanding that it has been rejected by a number of courts.

## V. BASIC STEPS IN A “TYPICAL” FRYE-REED HEARING

*Question:* Whether exposure to substance A causes medical condition B is generally accepted by the relevant scientific community.

*Question:* Whether the tests or procedures used to draw a causal link between A and B are generally accepted.

**Step 1:** Is the use of expert testimony appropriate for this case?

- Does the subject of the proposed testimony involve scientific, technical, or specialized knowledge beyond the knowledge or experience of the jurors?
- Will the expert’s testimony be helpful to the fact finder?

**Step 2:** Is the expert qualified in the sense that she possesses unique knowledge, skill, experience, training, or education?

**Step 3:** Does the expert have a sufficient factual basis to support the testimony she will offer?

This step focuses on what the witness did, why she did it, and what she bases her decision on. In other words, is there an adequate factual basis to support the witness’ opinions. For purposes of *Frye-Reed*, you need to persuade the trial court both as to the soundness of the expert’s reasoning and that it is generally accepted.

**Step 4:** Are the methodologies, principles, or tests used by the expert to reach her conclusions reliable? Are they generally accepted?

### ***Daubert/Kumho Worksheet***

In *Samuel v. Ford*, 96 F. Supp. 2d 491, 504 (D. Md. 2000), Chief Magistrate Judge Paul Grimm provided a detailed, seven-point checklist. A copy of this useful guide is reprinted, verbatim below, and may be adapted to a *Frye-Reed* hearing. See also the discussion of a *Frye-Reed* hearing in J. Murphy, *Maryland Evidence Handbook* § 1406(A) (4th ed. 2010 & 2010 Cum. Supp).

**1. Name of Expert Challenged.**

**2. Brief summary of opinion(s) challenged** (if more than one, designate separately), **including reference to the source of the opinion** (i.e., Rule 26(a)(2)(B) disclosure, deposition transcript references, interrogatory answers).

- Attach highlighted copy of source materials as exhibit.

**3. Briefly describe methodology/reasoning used by expert to reach each opinion which is challenged.**

- Include reference to source of challenged methodology/reasoning, and attach a highlighted copy as an exhibit.

**4. Briefly explain the basis for the challenge to the reasoning/methodology used by the expert** (for example, methodology unreliable; methodology reliable, but not valid for application to this case; failure to use standardized or accepted methodology (i.e., with a standardized test)).

- Attach a highlighted copy of affidavit or other source material supporting challenge to methodology/reasoning as an exhibit.

**5. Is the challenged methodology/reasoning subject to a known or potential error rate? If so, briefly describe it.**

- Attach a highlighted copy of any relevant source material as an exhibit.

**6. Summarize relevant peer review materials relating to methodology/reasoning challenged.**

- Attach a highlighted copy of any relevant source material as an exhibit.

**7. If the challenge to the opinion is based upon a contention that the methodology/reasoning has not been generally accepted within the relevant scientific or technical community, briefly explain the basis for this contention.**

- Attach highlighted copy of any relevant supporting materials as an exhibit.