

ARIZONA RULES OF
EVIDENCE

PREFATORY COMMENT TO
2012 AMENDMENTS

Arizona Rules of Evidence, Prefatory Comment

Arizona Revised Statutes Annotated Currentness
Rules of Evidence for Courts in the State of Arizona (Refs & Annos)
➔**Prefatory Comment to 2012 Amendments**

The 2012 amendments to the Arizona Rules of Evidence make three different kinds of changes: (1) the Arizona rules have generally been restyled so that they correspond to the Federal Rules of Evidence as restyled. These "restyling" changes are not meant to change the admissibility of evidence; (2) in several instances, the Arizona rules have also been amended to "conform" to the federal rules, and these changes may alter the way in which evidence is admitted (see, e.g., Rule 702); and (3) in some instances, the Arizona rules either retain language that is distinct from the federal rules (see, e.g., Rule 404), or deliberately depart from the language of the federal rules (see, e.g., Rule 412).

The Court has generally adopted the federal rules as restyled, with the following exceptions: Rule 103(d) (Fundamental Error); Rule 302; Rule 404 (Character and Other Acts Evidence); Rule 408(a)(2) (Criminal Use Exception); Rule 611(b) (Scope of Cross-Examination); Rule 706(c) (Compensation for Expert Testimony); Rule 801(d)(1)(A) (Prior Inconsistent Statements as Non-Hearsay); Rule 803(25) (Former testimony (non-criminal action or proceeding)); and Rule 804(b)(1) (Former Testimony in a Criminal Case). The restyling is intended to make the rules more easily understood and to make style and terminology consistent throughout the rules and with the restyled Federal Rules. Restyling changes are intended to be stylistic only, and not intended to change any ruling on the admissibility of evidence.

The Court has adopted conforming changes to Rule 103 (Rulings on Evidence); Rule 201 (Judicial Notice); Rule 301 (Presumptions); Rule 407 (Subsequent Remedial Measures); Rule 410 (Plea Discussions); Rules 412-415; Rule 606 (Juror's Competency as a Witness); Rule 608 (Character Evidence); Rule 609 (Impeachment by Criminal Conviction); Rule 611 (Mode of Presenting Evidence); Rule 615 (Excluding Witnesses); Rule 701 (Opinion Testimony by Lay Witnesses); Rule 702 (Testimony by Expert Witnesses); Rule 704(b) (Opinion on an Ultimate Issue-- Exception); Rule 706 (Court Appointed Experts); Rule 801(d)(2) (Definitions That Apply to This Article; Exclusions from Hearsay); Rule 803(6)(A), (6)(D) and (24) (Hearsay Exceptions Regardless of Unavailability); Rule 804 (b)(1), (b)(3) and (b)(7) (Hearsay Exceptions When Declarant Unavailable); and Rule 807 (Residual Exception).

Conforming changes that are not merely restyling, as well as deliberate departures from the language of the federal rules, are noted at the outset of the comment to the corresponding Arizona rule.

Where the language of an Arizona rule parallels that of a federal rule, federal court decisions interpreting the federal rule are persuasive but not binding with respect to interpreting the Arizona rule.

CREDIT(S)

Added Sept. 8, 2011, effective Jan. 1, 2012. Amended Aug. 30, 2012, effective Jan. 1, 2013.

17A A. R. S. Rules of Evid., Prefatory Comment, AZ ST REV Prefatory Comment

ARIZONA RULE OF
EVIDENCE 702

WITH COMMENT TO 2012
AMENDMENT

Arizona Rules of Evidence, Rule 702

Arizona Revised Statutes Annotated Currentness
Rules of Evidence for Courts in the State of Arizona (Refs & Annos)

Article VII. Opinions and Expert Testimony

➔Rule 702. Testimony by Expert Witnesses

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

CREDIT(S)

Amended Sept. 8, 2011, effective Jan. 1, 2012.

COMMENT TO 2012 AMENDMENT

The 2012 amendment of Rule 702 adopts Federal Rule of Evidence 702, as restyled. The amendment recognizes that trial courts should serve as gatekeepers in assuring that proposed expert testimony is reliable and thus helpful to the jury's determination of facts at issue. The amendment is not intended to supplant traditional jury determinations of credibility and the weight to be afforded otherwise admissible testimony, nor is the amendment intended to permit a challenge to the testimony of every expert, preclude the testimony of experience-based experts, or prohibit testimony based on competing methodologies within a field of expertise. The trial court's gatekeeping function is not intended to replace the adversary system. 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.

A trial court's ruling finding an expert's testimony reliable does not necessarily mean that contradictory expert testimony is not reliable. The amendment is broad enough to permit testimony that is the product of competing principles or methods in the same field of expertise. Where there is contradictory, but reliable, expert testimony, it is the province of the jury to determine the weight and credibility of the testimony.

This comment has been derived, in part, from the Committee Notes on Rules--2000 Amendment to Federal Rule of Evidence 702.

FEDERAL RULE OF
EVIDENCE 702

WITH ADVISORY NOTES

Federal Rules of Evidence Rule 702, 28 U.S.C.A.

United States Code Annotated Currentness

Federal Rules of Evidence (Refs & Annos)

Article VII. Opinions and Expert Testimony

→ **Rule 702. Testimony by Expert Witnesses**

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based on sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

CREDIT(S)

(Pub.L. 93-595, § 1, Jan. 2, 1975, 88 Stat. 1937; Apr. 17, 2000, eff. Dec. 1, 2000; Apr. 26, 2011, eff. Dec. 1, 2011.)

ADVISORY COMMITTEE NOTES

1972 Proposed Rules

An intelligent evaluation of facts is often difficult or impossible without the application of some scientific, technical, or other specialized knowledge. The most common source of this knowledge is the expert witness, although there are other techniques for supplying it.

Most of the literature assumes that experts testify only in the form of opinions. The assumption is logically unfounded. The rule accordingly recognizes that an expert on the stand may give a dissertation or exposition of scientific or other principles relevant to the case, leaving the trier of fact to apply them to the facts. Since much of the criticism of expert testimony has centered upon the hypothetical question, it seems wise to recognize that opinions are not indispensable and to encourage the use of expert testimony in non-opinion form when counsel believes the trier can itself draw the requisite inference. The use of opinions is not abolished by the rule, however. It will continue to be permissible for the experts to take the further step of suggesting the inference which should be drawn from applying the specialized knowledge to the facts. See Rules 703 to 705.

Whether the situation is a proper one for the use of expert testimony is to be determined on the basis of assisting the trier. "There is no more certain test for determining when experts may be used than the common sense inquiry whether the untrained layman would be qualified to determine intelligently and to the best possible degree the particular issue without enlightenment from those having a specialized understanding of the subject involved in the dispute." Ladd, *Expert Testimony*, 5 Vand.L.Rev. 414, 418 (1952). When opinions are excluded, it is because they are unhelpful and therefore superfluous and a waste of time. 7 Wigmore § 1918.

The rule is broadly phrased. The fields of knowledge which may be drawn upon are not limited merely to the "scientific" and "technical" but extend to all "specialized" knowledge. Similarly, the expert is viewed, not in a narrow sense, but as a person qualified by "knowledge, skill,

experience, training or education." Thus within the scope of the rule are not only experts in the strictest sense of the word, e.g., physicians, physicists, and architects, but also the large group sometimes called "skilled" witnesses, such as bankers or landowners testifying to land values.

2000 Amendments

Rule 702 has been amended in response to *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and to the many cases applying *Daubert*, including *Kumho Tire Co. v. Carmichael*, 119 S.Ct. 1167 (1999). In *Daubert* the Court charged trial judges with the responsibility of acting as gatekeepers to exclude unreliable expert testimony, and the Court in *Kumho* clarified that this gatekeeper function applies to all expert testimony, not just testimony based in science. See also *Kumho*, 119 S.Ct. at 1178 (citing the Committee Note to the proposed amendment to Rule 702, which had been released for public comment before the date of the *Kumho* decision). The amendment affirms the trial court's role as gatekeeper and provides some general standards that the trial court must use to assess the reliability and helpfulness of proffered expert testimony. Consistently with *Kumho*, the Rule as amended provides that all types of expert testimony present questions of admissibility for the trial court in deciding whether the evidence is reliable and helpful. Consequently, the admissibility of all expert testimony is governed by the principles of Rule 104(a). Under that Rule, the proponent has the burden of establishing that the pertinent admissibility requirements are met by a preponderance of the evidence. See *Bourjaily v. United States*, 483 U.S. 171 (1987).

Daubert set forth a non-exclusive checklist for trial courts to use in assessing the reliability of scientific expert testimony. The specific factors explicated by the *Daubert* Court are (1) whether the expert's technique or theory can be or has been tested---that is, whether the expert's theory can be challenged in some objective sense, or whether it is instead simply a subjective, conclusory approach that cannot reasonably be assessed for reliability; (2) whether the technique or theory has been subject to peer review and publication; (3) the known or potential rate of error of the technique or theory when applied; (4) the existence and maintenance of standards and controls; and (5) whether the technique or theory has been generally accepted in the scientific community. The Court in *Kumho* held that these factors might also be applicable in assessing the reliability of non-scientific expert testimony, depending upon "the particular circumstances of the particular case at issue." 119 S.Ct. at 1175.

No attempt has been made to "codify" these specific factors. *Daubert* itself emphasized that the factors were neither exclusive nor dispositive. Other cases have recognized that not all of the specific *Daubert* factors can apply to every type of expert testimony. In addition to *Kumho*, 119 S.Ct. at 1175, see *Tyus v. Urban Search Management*, 102 F.3d 256 (7th Cir. 1996) (noting that the factors mentioned by the Court in *Daubert* do not neatly apply to expert testimony from a sociologist). See also *Kannankeril v. Terminix Int'l, Inc.*, 128 F.3d 802, 809 (3d Cir. 1997) (holding that lack of peer review or publication was not dispositive where the expert's opinion was supported by "widely accepted scientific knowledge"). The standards set forth in the amendment are broad enough to require consideration of any or all of the specific *Daubert* factors where appropriate.

Courts both before and after *Daubert* have found other factors relevant in determining whether expert testimony is sufficiently reliable to be considered by the trier of fact. These factors include:

(1) Whether experts are "proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying." *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995).

(2) Whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion. See *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (noting that in

some cases a trial court "may conclude that there is simply too great an analytical gap between the data and the opinion proffered").

(3) Whether the expert has adequately accounted for obvious alternative explanations. See Claar v. Burlington N.R.R., 29 F.3d 499 (9th Cir. 1994) (testimony excluded where the expert failed to consider other obvious causes for the plaintiff's condition). Compare Ambrosini v. Labarraque, 101 F.3d 129 (D.C. Cir. 1996) (the possibility of some uneliminated causes presents a question of weight, so long as the most obvious causes have been considered and reasonably ruled out by the expert).

(4) Whether the expert "is being as careful as he would be in his regular professional work outside his paid litigation consulting." Sheehan v. Daily Racing Form, Inc., 104 F.3d 940, 942 (7th Cir. 1997). See Kumho Tire Co. v. Carmichael, 119 S.Ct. 1167, 1176 (1999) (*Daubert* requires the trial court to assure itself that the expert "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field").

(5) Whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give. See Kumho Tire Co. v. Carmichael, 119 S.Ct. 1167, 1175 (1999) (*Daubert's* general acceptance factor does not "help show that an expert's testimony is reliable where the discipline itself lacks reliability, as for example, do theories grounded in any so-called generally accepted principles of astrology or necromancy."), Moore v. Ashland Chemical, Inc., 151 F.3d 269 (5th Cir. 1998) (en banc) (clinical doctor was properly precluded from testifying to the toxicological cause of the plaintiff's respiratory problem, where the opinion was not sufficiently grounded in scientific methodology); Sterling v. Velsicol Chem. Corp., 855 F.2d 1188 (6th Cir. 1988) (rejecting testimony based on "clinical ecology" as unfounded and unreliable).

All of these factors remain relevant to the determination of the reliability of expert testimony under the Rule as amended. Other factors may also be relevant. See Kumho, 119 S.Ct. 1167, 1176 ("[W]e conclude that the trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable."). Yet no single factor is necessarily dispositive of the reliability of a particular expert's testimony. See, e.g., Heller v. Shaw Industries, Inc., 167 F.3d 146, 155 (3d Cir. 1999) ("not only must each stage of the expert's testimony be reliable, but each stage must be evaluated practically and flexibly without bright-line exclusionary (or inclusionary) rules."); Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1317, n.5 (9th Cir. 1995) (noting that some expert disciplines "have the courtroom as a principal theatre of operations" and as to these disciplines "the fact that the expert has developed an expertise principally for purposes of litigation will obviously not be a substantial consideration.").

A review of the caselaw after *Daubert* shows that the rejection of expert testimony is the exception rather than the rule. *Daubert* did not work a "seachange over federal evidence law," and "the trial court's role as gatekeeper is not intended to serve as a replacement for the adversary system." United States v. 14.38 Acres of Land Situated in Leflore County, Mississippi, 80 F.3d 1074, 1078 (5th Cir. 1996). As the Court in *Daubert* stated: "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." 509 U.S. at 595. Likewise, this amendment is not intended to provide an excuse for an automatic challenge to the testimony of every expert. See Kumho Tire Co. v. Carmichael, 119 S.Ct. 1167, 1176 (1999) (noting that the trial judge has the discretion "both to avoid unnecessary 'reliability' proceedings in ordinary cases where the reliability of an expert's methods is properly taken for granted, and to require appropriate proceedings in the less usual or more complex cases where cause for questioning the expert's reliability arises.").

When a trial court, applying this amendment, rules that an expert's testimony is reliable, this does not necessarily mean that contradictory expert testimony is unreliable. The amendment is broad enough to permit testimony that is the product of competing principles or methods in the same field of expertise. See, e.g., Heller v. Shaw Industries, Inc., 167 F.3d 146, 160 (3d Cir. 1999) (expert testimony cannot be excluded simply because the expert uses one test rather than another, when both tests are accepted in the field and both reach reliable results). As the court stated in In re Paoli R.R. Yard PCB Litigation, 35 F.3d 717, 744 (3d Cir. 1994), proponents "do not have to demonstrate to the judge by a preponderance of the evidence that the assessments of their experts are correct, they only have to demonstrate by a preponderance of evidence that their opinions are reliable.... The evidentiary requirement of reliability is lower than the merits standard of correctness." See also Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1318 (9th Cir. 1995) (scientific experts might be permitted to testify if they could show that the methods they used were also employed by "a recognized minority of scientists in their field."); Ruiz-Troche v. Pepsi Cola, 161 F.3d 77, 85 (1st Cir. 1998) ("Daubert neither requires nor empowers trial courts to determine which of several competing scientific theories has the best provenance.>").

The Court in Daubert declared that the "focus, of course, must be solely on principles and methodology, not on the conclusions they generate." 509 U.S. at 595. Yet as the Court later recognized, "conclusions and methodology are not entirely distinct from one another." General Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997). Under the amendment, as under Daubert, when an expert purports to apply principles and methods in accordance with professional standards, and yet reaches a conclusion that other experts in the field would not reach, the trial court may fairly suspect that the principles and methods have not been faithfully applied. See Lust v. Merrell Dow Pharmaceuticals, Inc., 89 F.3d 594, 598 (9th Cir. 1996). The amendment specifically provides that the trial court must scrutinize not only the principles and methods used by the expert, but also whether those principles and methods have been properly applied to the facts of the case. As the court noted in In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 745 (3d Cir. 1994), "any step that renders the analysis unreliable ... renders the expert's testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology."

If the expert purports to apply principles and methods to the facts of the case, it is important that this application be conducted reliably. Yet it might also be important in some cases for an expert to educate the factfinder about general principles, without ever attempting to apply these principles to the specific facts of the case. For example, experts might instruct the factfinder on the principles of thermodynamics, or bloodclotting, or on how financial markets respond to corporate reports, without ever knowing about or trying to tie their testimony into the facts of the case. The amendment does not alter the venerable practice of using expert testimony to educate the factfinder on general principles. For this kind of generalized testimony, Rule 702 simply requires that: (1) the expert be qualified; (2) the testimony address a subject matter on which the factfinder can be assisted by an expert; (3) the testimony be reliable; and (4) the testimony "fit" the facts of the case.

As stated earlier, the amendment does not distinguish between scientific and other forms of expert testimony. The trial court's gatekeeping function applies to testimony by any expert. See Kumho Tire Co. v. Carmichael, 119 S.Ct. 1167, 1171 (1999) ("We conclude that Daubert's general holding--setting forth the trial judge's general 'gatekeeping' obligation--applies not only to testimony based on 'scientific' knowledge, but also to testimony based on 'technical' and 'other specialized' knowledge."). While the relevant factors for determining reliability will vary from expertise to expertise, the amendment rejects the premise that an expert's testimony should be treated more permissively simply because it is outside the realm of science. An opinion from an expert who is not a scientist should receive the same degree of scrutiny for reliability as an opinion from an expert who purports to be a scientist. See Watkins v. Telsmith, Inc., 121 F.3d 984, 991 (5th Cir. 1997) ("[I]t seems exactly backwards that experts who purport to rely on general engineering principles and practical experience might escape screening by the district

court simply by stating that their conclusions were not reached by any particular method or technique.”). Some types of expert testimony will be more objectively verifiable, and subject to the expectations of falsifiability, peer review, and publication, than others. Some types of expert testimony will not rely on anything like a scientific method, and so will have to be evaluated by reference to other standard principles attendant to the particular area of expertise. The trial judge in all cases of proffered expert testimony must find that it is properly grounded, well-reasoned, and not speculative before it can be admitted. The expert's testimony must be grounded in an accepted body of learning or experience in the expert's field, and the expert must explain how the conclusion is so grounded. See, e.g., American College of Trial Lawyers, Standards and Procedures for Determining the Admissibility of Expert Testimony after Daubert, 157 F.R.D. 571, 579 (1994) (“[W] hether the testimony concerns economic principles, accounting standards, property valuation or other non-scientific subjects, it should be evaluated by reference to the ‘knowledge and experience’ of that particular field.”).

The amendment requires that the testimony must be the product of reliable principles and methods that are reliably applied to the facts of the case. While the terms “principles” and “methods” may convey a certain impression when applied to scientific knowledge, they remain relevant when applied to testimony based on technical or other specialized knowledge. For example, when a law enforcement agent testifies regarding the use of code words in a drug transaction, the principle used by the agent is that participants in such transactions regularly use code words to conceal the nature of their activities. The method used by the agent is the application of extensive experience to analyze the meaning of the conversations. So long as the principles and methods are reliable and applied reliably to the facts of the case, this type of testimony should be admitted.

Nothing in this amendment is intended to suggest that experience alone--or experience in conjunction with other knowledge, skill, training or education--may not provide a sufficient foundation for expert testimony. To the contrary, the text of Rule 702 expressly contemplates that an expert may be qualified on the basis of experience. In certain fields, experience is the predominant, if not sole, basis for a great deal of reliable expert testimony. See, e.g., United States v. Jones, 107 F.3d 1147 (6th Cir. 1997) (no abuse of discretion in admitting the testimony of a handwriting examiner who had years of practical experience and extensive training, and who explained his methodology in detail); Tassin v. Sears Roebuck, 946 F.Supp. 1241, 1248 (M.D.La. 1996) (design engineer's testimony can be admissible when the expert's opinions “are based on facts, a reasonable investigation, and traditional technical/mechanical expertise, and he provides a reasonable link between the information and procedures he uses and the conclusions he reaches”). See also Kumho Tire Co. v. Carmichael, 119 S.Ct. 1167, 1178 (1999) (stating that “no one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience.”).

If the witness is relying solely or primarily on experience, then the witness must explain how that experience leads to the conclusion reached, why that experience is a sufficient basis for the opinion, and how that experience is reliably applied to the facts. The trial court's gatekeeping function requires more than simply “taking the expert's word for it.” See Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1319 (9th Cir. 1995) (“We've been presented with only the experts' qualifications, their conclusions and their assurances of reliability. Under *Daubert*, that's not enough.”). The more subjective and controversial the expert's inquiry, the more likely the testimony should be excluded as unreliable. See O'Conner v. Commonwealth Edison Co., 13 F.3d 1090 (7th Cir. 1994) (expert testimony based on a completely subjective methodology held properly excluded). See also Kumho Tire Co. v. Carmichael, 119 S.Ct. 1167, 1176 (1999) (“[I]t will at times be useful to ask even of a witness whose expertise is based purely on experience, say, a perfume tester able to distinguish among 140 odors at a sniff, whether his preparation is of a kind that others in the field would recognize as acceptable.”).

Subpart (1) of Rule 702 calls for a quantitative rather than qualitative analysis. The amendment requires that expert testimony be based on sufficient underlying “facts or data.” The term “data”

is intended to encompass the reliable opinions of other experts. See the original Advisory Committee Note to Rule 703. The language "facts or data" is broad enough to allow an expert to rely on hypothetical facts that are supported by the evidence. *Id.*

When facts are in dispute, experts sometimes reach different conclusions based on competing versions of the facts. The emphasis in the amendment on "sufficient facts or data" is not intended to authorize a trial court to exclude an expert's testimony on the ground that the court believes one version of the facts and not the other.

There has been some confusion over the relationship between Rules 702 and 703. The amendment makes clear that the sufficiency of the basis of an expert's testimony is to be decided under Rule 702. Rule 702 sets forth the overarching requirement of reliability, and an analysis of the sufficiency of the expert's basis cannot be divorced from the ultimate reliability of the expert's opinion. In contrast, the "reasonable reliance" requirement of Rule 703 is a relatively narrow inquiry. When an expert relies on inadmissible information, Rule 703 requires the trial court to determine whether that information is of a type reasonably relied on by other experts in the field. If so, the expert can rely on the information in reaching an opinion. However, the question whether the expert is relying on a *sufficient* basis of information--whether admissible information or not--is governed by the requirements of Rule 702.

The amendment makes no attempt to set forth procedural requirements for exercising the trial court's gatekeeping function over expert testimony. See Daniel J. Capra, *The Daubert Puzzle*, 38 Ga.L.Rev. 699, 766 (1998) ("Trial courts should be allowed substantial discretion in dealing with *Daubert* questions; any attempt to codify procedures will likely give rise to unnecessary changes in practice and create difficult questions for appellate review."). Courts have shown considerable ingenuity and flexibility in considering challenges to expert testimony under *Daubert*, and it is contemplated that this will continue under the amended Rule. See, e.g., Cortes-Irizarry v. Corporacion Insular, 111 F.3d 184 (1st Cir. 1997) (discussing the application of *Daubert* in ruling on a motion for summary judgment); In re Paoli R.R. Yard PCB Litig., 35 F.3d 717, 736, 739 (3d Cir. 1994) (discussing the use of *in limine* hearings); Claar v. Burlington N.R.R., 29 F.3d 499, 502-05 (9th Cir. 1994) (discussing the trial court's technique of ordering experts to submit serial affidavits explaining the reasoning and methods underlying their conclusions).

The amendment continues the practice of the original Rule in referring to a qualified witness as an "expert." This was done to provide continuity and to minimize change. The use of the term "expert" in the Rule does not, however, mean that a jury should actually be informed that a qualified witness is testifying as an "expert." Indeed, there is much to be said for a practice that prohibits the use of the term "expert" by both the parties and the court at trial. Such a practice "ensures that trial courts do not inadvertently put their stamp of authority" on a witness's opinion, and protects against the jury's being "overwhelmed by the so-called 'experts'." Hon. Charles Richey, Proposals to Eliminate the Prejudicial Effect of the Use of the Word "Expert" Under the Federal Rules of Evidence in Criminal and Civil Jury Trials, 154 F.R.D. 537, 559 (1994) (setting forth limiting instructions and a standing order employed to prohibit the use of the term "expert" in jury trials).

GAP Report--Proposed Amendment to Rule 702

The Committee made the following changes to the published draft of the proposed amendment to Evidence Rule 702:

1. The word "reliable" was deleted from Subpart (1) of the proposed amendment, in order to avoid an overlap with Evidence Rule 703, and to clarify that an expert opinion need not be excluded simply because it is based on hypothetical facts. The Committee Note was amended to accord with this textual change.

2. The Committee Note was amended throughout to include pertinent references to the Supreme Court's decision in *Kumho Tire Co. v. Carmichael*, which was rendered after the proposed amendment was released for public comment. Other citations were updated as well.

3. The Committee Note was revised to emphasize that the amendment is not intended to limit the right to jury trial, nor to permit a challenge to the testimony of every expert, nor to preclude the testimony of experience-based experts, nor to prohibit testimony based on competing methodologies within a field of expertise.

4. Language was added to the Committee Note to clarify that no single factor is necessarily dispositive of the reliability inquiry mandated by Evidence Rule 702.

2011 Amendments

The language of Rule 702 has been amended as part of the restyling of the Evidence Rules to make them more easily understood and to make style and terminology consistent throughout the rules. These changes are intended to be stylistic only. There is no intent to change any result in any ruling on evidence admissibility.

STATE V. BERNSTEIN (RPI
HERMAN), ___ ARIZ. ___,
317 P.3D 630 (APP. 2014)

SCOTTSDALE CRIME LAB
GAS CHROMATOGRAPH
INSTRUMENT

317 P.3d 630

(Cite as: 317 P.3d 630)

H

Court of Appeals of Arizona,
Division 1.
STATE of Arizona, Petitioner,
v.

The Honorable Jerry BERNSTEIN, Commissioner of the
Superior Court of the State of Arizona, in and for the
County of Maricopa, Respondent Commissioner,
Doreen Lynn Herman; Ramsey Tohannie; Armen Aslayan;
Keith Porter; Mara Hall; Shyla Rotmil; Robert R. Farinas;
Kymberly Crowley; Jason Quan; Michael Dinola; Kelly
Lewis Day, Real Parties in Interest.

No. 1 CA-SA 13-0285.
Jan. 14, 2014.
As Amended Feb. 6, 2014.

Background: In multiple prosecutions for driving while intoxicated (DWI), defendants filed motions in limine with respect to results of blood alcohol testing (BAC) from Scottsdale Crime Laboratory (SCL). The Superior Court, Maricopa County, Nos. CR2010-126788-001, CR2010-158681-001, CR2011-113050-001, CR2011-116266-001, CR2011-132750-001, CR2011-152826-001, CR2011-161795-001, CR2012-110698-001, CR2012-112612-001, CR2012-112620-001, and CR2012-119408-001, Jerry Bernstein, Judge Pro Tempore, issued minute entry granting motions. State brought petition for special action challenging exclusion of BAC test results.

Holdings: The Court of Appeals, Thumma, J., held that:
(1) it would exercise its discretion to accept special action jurisdiction;
(2) requirement of the state evidentiary rule governing expert testimony that the expert's testimony pertain to scientific knowledge establishes a standard of evidentiary reliability; and

(3) state established by preponderance of the evidence that defendants' SCL BAC test results were admissible under rule of evidence governing expert testimony.

Relief granted; minute entry and stay vacated; matters remanded.

West Headnotes

[1] Courts 106 ↪ 207.1

106 Courts

106VI Courts of Appellate Jurisdiction

106VI(A) Grounds of Jurisdiction in General

106k207 Issuance of Prerogative or Remedial

Writs

106k207.1 k. In general. Most Cited Cases

Appellate court has discretion to accept special action jurisdiction, and will accept jurisdiction if a petitioner does not have an equally plain, speedy, and adequate remedy by appeal, or if a case presents an issue of first impression and one of statewide importance that is likely to recur. 17B A.R.S. Special Actions Rules of Proc., Rule 1(a).

[2] Courts 106 ↪ 207.1

106 Courts

106VI Courts of Appellate Jurisdiction

106VI(A) Grounds of Jurisdiction in General

106k207 Issuance of Prerogative or Remedial

Writs

106k207.1 k. In general. Most Cited Cases

Special action jurisdiction is particularly appropriate when statutes or procedural rules require immediate interpretation, and for petitions presenting a purely legal issue of first impression that is of statewide importance. 17B A.R.S. Special Actions Rules of Proc., Rule 1(a).

317 P.3d 630

(Cite as: 317 P.3d 630)

[3] Courts 106 ↪ 207.1

106 Courts

106VI Courts of Appellate Jurisdiction

106VI(A) Grounds of Jurisdiction in General

106k207 Issuance of Prerogative or Remedial

Writs

106k207.1 k. In general. Most Cited Cases

For purposes of determining special action jurisdiction on state's challenge to exclusion of blood alcohol content (BAC) test results in driving while intoxicated (DWI) prosecutions, defendants' motions in limine tested legal question of interpretation of rule of evidence governing expert testimony with respect to evidentiary reliability or scientific validity of test results, rather than trial court's assessment of witness credibility. 17A A.R.S. Rules of Evid., Rule 702.

[4] Courts 106 ↪ 207.1

106 Courts

106VI Courts of Appellate Jurisdiction

106VI(A) Grounds of Jurisdiction in General

106k207 Issuance of Prerogative or Remedial

Writs

106k207.1 k. In general. Most Cited Cases

Court of appeals exercised its discretion to accept special action jurisdiction, on state's challenge to minute entry of superior court granting motions in limine seeking suppression of blood alcohol content (BAC) test results in prosecutions for driving while intoxicated (DWI), where petition sought purely legal interpretation of rule of evidence governing expert testimony, and state had no equally plain, speedy or adequate remedy by appeal. 17A A.R.S. Rules of Evid., Rule 702; 17B A.R.S. Special Actions Rules of Proc., Rule 1(a).

[5] Criminal Law 110 ↪ 1139

110 Criminal Law

110XXIV Review

110XXIV(L) Scope of Review in General

110XXIV(L)13 Review De Novo

110k1139 k. In general. Most Cited Cases

Criminal Law 110 ↪ 1153.12(3)

110 Criminal Law

110XXIV Review

110XXIV(N) Discretion of Lower Court

110k1153 Reception and Admissibility of Evidence

110k1153.12 Opinion Evidence

110k1153.12(3) k. Admissibility. Most Cited Cases

Appellate court reviews de novo matters involving interpretation of court rules, and reviews a fact-based decision to permit or exclude expert testimony for an abuse of discretion. 17A A.R.S. Rules of Evid., Rule 702.

[6] Automobiles 48A ↪ 422.1

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak422.1 k. In general. Most Cited Cases

State, as proponent of blood alcohol content (BAC) test results from Scottsdale Crime Laboratory (SCL) in prosecutions for driving while intoxicated (DWI), had burden to show by preponderance of the evidence that SCL BAC test results were admissible under rule of evidence governing expert testimony. 17A A.R.S. Rules of Evid., Rule 702.

[7] Criminal Law 110 ↪ 388.1

110 Criminal Law

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110XVII Evidence

110XVII(I) Competency in General

110k388 Experiments and Tests; Scientific and Survey Evidence

110k388.1 k. In general. Most Cited Cases

Factors for determining whether scientific evidence is admissible include whether the scientific methodology has been tested, whether the methodology has been subjected to peer review, the known or potential rate of error, whether the methodology has general acceptance, and the existence and maintenance of standards controlling the technique's operation. 17A A.R.S. Rules of Evid., Rule 702.

[8] Criminal Law 110 ⚡472

110 Criminal Law

110XVII Evidence

110XVII(R) Opinion Evidence

110k468 Subjects of Expert Testimony

110k472 k. Matters involving scientific or other special knowledge in general. Most Cited Cases

Factors identified in *Daubert* may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony, and nature of the inquiry under rule governing expert testimony must be tied to the facts of a particular case. 17A A.R.S. Rules of Evid., Rule 702.

[9] Automobiles 48A ⚡422.1

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak422.1 k. In general. Most Cited Cases

For purposes of determining admissibility of blood alcohol content (BAC) test results from Scottsdale Crime Laboratory (SCL) in prosecutions for driving while in-

toxicated (DWI), state showed by preponderance of the evidence that criminalist's scientific and technical knowledge regarding SCL BAC test results was relevant and would assist trier of fact in understanding evidence. 17A A.R.S. Rules of Evid., Rule 702(a).

[10] Automobiles 48A ⚡422.1

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak422.1 k. In general. Most Cited Cases

For purposes of determining admissibility of blood alcohol content (BAC) test results from Scottsdale Crime Laboratory (SCL) in prosecutions for driving while intoxicated (DWI), state showed by preponderance of the evidence that SCL BAC test results were based on sufficient facts or data. 17A A.R.S. Rules of Evid., Rule 702(b).

[11] Automobiles 48A ⚡422.1

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak422.1 k. In general. Most Cited Cases

For purposes of determining admissibility of blood alcohol content (BAC) test results from Scottsdale Crime Laboratory (SCL) in prosecutions for driving while intoxicated (DWI), state showed by preponderance of the evidence that SCL BAC test results were based on reliable principles and methods; parties stipulated and trial court found that gas chromatography, SCL's BAC testing method, was accepted within scientific community and thus met at least three *Daubert* factors, court found that SCL had policies and procedures consistent with, and that supplement, international standards, and court was not persuaded that any SCL BAC testing for any named defendant was done improperly. 17A A.R.S. Rules of Evid.,

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Rule 702(c).

[12] Automobiles 48A ↪ 422.1

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak422.1 k. In general. Most Cited Cases

Automobiles 48A ↪ 424

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak424 k. Reliability of particular testing devices. Most Cited Cases

For purposes of determining admissibility of blood alcohol content (BAC) test results from Scottsdale Crime Laboratory (SCL) in prosecutions for driving while intoxicated (DWI), state showed by preponderance of the evidence that expert reliably applied scientific principles and methods involved in testing to facts of each individual defendant's case; trial court found no evidence that any of defendants' SCL BAC test results were inaccurate or incorrect, occasional failure of test apparatus to produce useable test results was not relevant to cases in which results were produced, and other identified issues did not involve testing of defendants' blood. 17A A.R.S. Rules of Evid., Rule 702(d).

[13] Automobiles 48A ↪ 423

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak423 k. Competency of technician. Most Cited Cases

Evidence in prosecutions for driving while intoxicated (DWI) was sufficient to support finding that laboratory which carried out testing was compliant with international standard specifying general requirements for competence to carry out tests and/or calibrations at time of testing, where laboratory's certification under such standard included finding that it had been compliant with standard for six months before issuance of certification, and trial court indicated that it did not rely on testimony of defense experts suggesting that laboratory had not been compliant. 17A A.R.S. Rules of Evid., Rule 702(c).

[14] Automobiles 48A ↪ 422.1

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak422.1 k. In general. Most Cited Cases

Automobiles 48A ↪ 424

48A Automobiles

48AIX Evidence of Sobriety Tests

48Ak422 Conduct and Proof of Test; Foundation or Predicate

48Ak424 k. Reliability of particular testing devices. Most Cited Cases

For purposes of determining admissibility of blood alcohol content (BAC) test results from Scottsdale Crime Laboratory (SCL) in prosecutions for driving while intoxicated (DWI), neither failure of testing instrument to return results on some blood samples nor discrepancy between sample pairs greater than allowable under applicable standard established that principles and methods relied upon were insufficiently reliable to comply with evidentiary rule governing expert testimony, where instrument returned results on all samples of defendants' blood and none of defendants' sample pairs showed greater than allowable discrepancy. 17A A.R.S. Rules of Evid., Rule 702(d).

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[15] Criminal Law 110 🔑469

110 Criminal Law
110XVII Evidence
110XVII(R) Opinion Evidence
110k468 Subjects of Expert Testimony
110k469 k. In general. Most Cited Cases

Expert witnesses need not be subjectively certain or totally convinced about their opinions or other testimony for the testimony to be admissible. 17A A.R.S. Rules of Evid., Rule 702.

[16] Criminal Law 110 🔑472

110 Criminal Law
110XVII Evidence
110XVII(R) Opinion Evidence
110k468 Subjects of Expert Testimony
110k472 k. Matters involving scientific or other special knowledge in general. Most Cited Cases

For purposes of the rule governing expert testimony, the inquiry into reliability focuses on whether the evidence is derived by the scientific method; proposed testimony must be supported by appropriate validation, that is, good grounds, based on what is known. 17A A.R.S. Rules of Evid., Rule 702(d).

[17] Criminal Law 110 🔑472

110 Criminal Law
110XVII Evidence
110XVII(R) Opinion Evidence
110k468 Subjects of Expert Testimony
110k472 k. Matters involving scientific or other special knowledge in general. Most Cited Cases

Requirement of the state evidentiary rule governing expert testimony that the expert's testimony pertain to

scientific knowledge establishes a standard of evidentiary reliability. 17A A.R.S. Rules of Evid., Rule 702(d).

[18] Automobiles 48A 🔑422.1

48A Automobiles
48AIX Evidence of Sobriety Tests
48Ak422 Conduct and Proof of Test; Foundation or Predicate
48Ak422.1 k. In general. Most Cited Cases

State established by preponderance of the evidence, in prosecutions for driving while intoxicated (DWI), that defendants' blood alcohol content (BAC) test results obtained from Scottsdale Crime Laboratory (SCL) were admissible under rule of evidence governing expert testimony; state established that SCL BAC test results defendants were scientifically valid, nothing suggested that specific SCL BAC test results for defendants were inaccurate, and trial court was not persuaded that any of defendants' tests were performed improperly, despite taking note of defendants' evidence to the contrary. 17A A.R.S. Rules of Evid., Rule 702.

*632 Maricopa County Attorney's Office By Lisa Marie Martin, Phoenix, for Petitioner.

W. Clifford Girard Jr., Attorney at Law By W. Clifford Girard Jr., for Real Parties in Interest.

Scottsdale City Prosecutor's Office By Kenneth M. Flint, Scottsdale, for Amicus Curiae City of Scottsdale.

Law Offices of Michael J. Dew By Michael J. Dew, for Amicus Curiae Phoenix Public Defender Office.

Judge SAMUEL A. THUMMA delivered the opinion of the Court, in which Presiding Judge RANDALL M. HOWE and Judge PATRICIA A. OROZCO joined.

OPINION

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THUMMA, Judge.

¶ 1 Real parties in interest are defendants facing aggravated driving under the influence (DUI) charges for violating Arizona Revised Statutes (A.R.S.) section 28-1383 (2014) ^{FN1} in Maricopa County Superior Court. On the dates of the alleged offenses, law enforcement officers drew two vials of blood from *633 each Defend-

ant. The Scottsdale Crime Laboratory (SCL) then tested blood from one of those vials with the following results:

FN1. Absent material revisions after the relevant dates, statutes and rules cited refer to the current version unless otherwise indicated.

| Defendant | Date of Alleged Offense | Date of SCL Testing | SCL Blood Alcohol Content Test Results |
|---------------|-------------------------|---------------------|--|
| Tohannie | 11/28/2009 | 12/2/2009 | 0.203 |
| Herman | 3/2/2010 | | |
| • First Test | 3/10/2010 | | 0.192 |
| • Second Test | | 8/24/2011 | 0.180 |
| Rotmil | 7/31/2010 | 8/3/2010 | 0.143 |
| Porter | 9/13/2010 | 9/21/2010 | 0.217 |
| Hall | 3/29/2011 | 3/29/2011 | 0.199 |
| Farinas | 7/3/2011 | 8/4/2011 | 0.245 |
| Quan | 11/5/2011 | 11/11/2011 | 0.224 |
| Aslanyan | 11/27/2011 | 11/30/2011 | 0.183 |
| Crowley | 11/29/2011 | 12/6/2011 | 0.197 |
| Dinola | 11/28/2009 | 12/21/2011 | 0.248 |
| Day | 2/4/2012 | 2/8/2012 | 0.318 |

For each Defendant, these blood alcohol content (BAC) test results far exceed the 0.08 threshold for DUI and, except for Defendant Rotmil, exceed the 0.15 threshold for extreme DUI. *See* A.R.S. §§ 28-1381(A)(2), -1382(A)(1). Although the second vial of blood is available for independent testing by Defendants, the record does not contain any independent test results conducted by any of the Defendants.

¶ 2 To test the blood, the SCL used a Clarus 500 gas chromatograph serial number 650N9042003 manufactured by PerkinElmer (the 2003 Instrument), an autosampler, a

personal computer and a printer. Stated simply, after calibration, several dozen vials are placed in the carousel of the 2003 Instrument. The vials contain blood samples (each individual has two samples tested at a time, with the second sample called a replicate) along with control samples. The vials are sampled, one by one, and analyzed by the 2003 Instrument, a process that takes several hours. The data are then processed (creating graphs showing the chemical properties of the compounds tested for called chromatograms) and results are calculated and printed. The output is checked for consistency with expected results, control samples and quality controls, and replicates are checked to make sure that results are within plus or minus five percent of each other according to SCL protocol. A

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second analyst then performs a technical review, which is followed by an administrative review.

¶ 3 The 2003 Instrument was put in service in August 2009 and, since that time, has analyzed approximately 21,000 samples. Defendants allege the 2003 Instrument has several unresolved flaws. These allegations have resulted in substantial motion practice in the Superior Court as well as a prior special action by the State in which this court accepted jurisdiction and granted relief^{FN2} and now this special action by the State. As relevant here, Defendants moved to preclude the State from introducing into evidence at trial the SCL BAC test results, claiming the results were inadmissible under Arizona Rule of Evidence 702.^{FN3}

FN2. *State ex rel. Montgomery v. Superior Court*, CA-SA 12-0226 (Nov. 6, 2012) (decision order accepting special action jurisdiction, granting relief and vacating order requiring disclosure of 2011 subject testing data). Additional motion practice before the Superior Court has included claims the State violated disclosure and discovery obligations and related requests for sanctions, issues that are not part of this special action.

FN3. Although Defendants' motions had various titles, the relief requested was a pretrial ruling that the SCL BAC test results were inadmissible under Arizona Rule of Evidence 702. *See State v. Superior Court*, 108 Ariz. 396, 397, 499 P.2d 152, 153 (1972) ("The primary purpose of a motion in limine is to avoid disclosing to the jury prejudicial matters which may compel a mistrial. It should not, except upon a clear showing of non-admissibility, be used to reject evidence.").

*634 ¶ 4 At Defendants' request, the Superior Court held evidentiary hearings lasting parts of 17 days. After considering testimony, exhibits and related argument, the Superior Court issued a lengthy, detailed Minute Entry dated August 21, 2013 (and clarified on November 11,

2013). The Minute Entry first found that the State had shown by a preponderance of the evidence that the SCL BAC test results complied with Ariz. R. Evid. 702(a), (b) and (c). The Minute Entry then found the State had failed to show that "the expert has reliably applied the principles and methods to the facts of the case" as required by Ariz. R. Evid. 702(d). More specifically, the Minute Entry states that "the principles and in particular, the methods [of the SCL BAC testing] were not properly applied." Accordingly, the Minute Entry found "the blood tests and results as to each" Defendant were not admissible.

¶ 5 The State filed this special action seeking relief from the Minute Entry and, at the State's request, this court stayed the cases pending resolution of this special action. The court has considered the parties' briefs and appendices, the amicus briefs and oral argument. Accepting jurisdiction and finding that, under the legal standard discussed below, the SCL BAC test results are admissible under Arizona Rule of Evidence 702, the court grants the State's request for relief, vacates the Minute Entry finding the SCL BAC test results were not admissible under Arizona Rule of Evidence 702, vacates the stay entered pending resolution of this special action and remands these cases for further proceedings.

ANALYSIS

I. Special Action Jurisdiction.

[1][2] ¶ 6 The court has "discretion to accept special action jurisdiction, and will accept jurisdiction if a petitioner does not have an 'equally plain, speedy, and adequate remedy by appeal,' or 'if a case presents an issue of first impression and one of statewide importance that is likely to recur.'" *Ariz. Dep't of Econ. Sec. v. Superior Court (Angie P.)*, 232 Ariz. 576, 579, ¶ 4, 307 P.3d 1003, 1006 (App.2013) (citations omitted); *see also* Ariz. R.P. Spec. Act. 1(a). "Special action jurisdiction is particularly appropriate when statutes or procedural rules require immediate interpretation," *Escalanti v. Superior Court*, 165 Ariz. 385, 386, 799 P.2d 5, 6 (App.1990), and for petitions "present[ing] a purely legal issue of first impression that is of statewide importance," *State ex rel. Thomas v. Duncan*, 216 Ariz. 260, 262, ¶ 5, 165 P.3d 238, 240 (App.2007)

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(citation omitted).

¶ 7 The parties agree that the State has no immediate right to appeal. *See generally State v. Bejarano*, 219 Ariz. 518, 200 P.3d 1015 (App.2008) (discussing cases). In arguing this court should decline special action jurisdiction, Defendants claim that the Superior Court found the SCL BAC test results were inadmissible based on issues of witness credibility. Specifically, Defendants argue that the Minute Entry is based on issues “of fact and credibility—not mistaken legal interpretation” and that the factual findings relied on by the Superior Court “are limited to the credibility of a few members of one crime lab.”

[3] ¶ 8 Defendants cite no authority for the proposition that the Superior Court should or properly could exclude evidence under Arizona Rule of Evidence 702 based on witness credibility, as opposed to evidentiary reliability or scientific validity.^{FN4} Indeed, the Arizona Supreme Court stated decades ago *635 that “[n]o rule is better established than that the credibility of the witnesses and the weight and value to be given to their testimony are questions exclusively for the jury.” *State v. Clemons*, 110 Ariz. 555, 556–57, 521 P.2d 987, 988–89 (1974); *see also State v. Lehr*, 201 Ariz. 509, 517, ¶ 29, 38 P.3d 1172, 1180 (2002) (“ ‘Admissibility is for determination by the judge unassisted by the jury. Credibility and weight are for determination by the jury unassisted by the judge’ ”) (quoting *State v. Sanchez*, 328 N.C. 247, 400 S.E.2d 421, 424 (1991)); *Logerquist v. McVey*, 196 Ariz. 470, 499, ¶ 104, 1 P.3d 113, 142 (2000) (McGregor, J., dissenting) (noting inquiry “focuses not on the credibility of a witness, but upon the scientific validity of the proffered evidence”) (citing *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993)); Ariz. R. Evid. 702 cmt. to 2012 amend, (noting amendments to Arizona Rule of Evidence 702 discussed below are “not intended to supplant traditional jury determinations of credibility”). In this case, however, the issue need not be resolved because the Minute Entry expressly disavowed reliance on any witness credibility assessment. Accordingly, the record factually does not support Defendants’ argument that the SCL BAC test results were deemed inadmissible based on

witness credibility or that the special action challenging that ruling turns on witness credibility.

FN4. Defendants cite *Miller v. Pfizer, Inc.*, 356 F.3d 1326 (10th Cir.2004) for the proposition that “a trial court does not abuse its discretion by making credibility determinations” in deciding admissibility under Arizona Rule of Evidence 702. *Miller*, however, does not support this proposition. Instead, *Miller* commended the trial court for *not* exceeding the proper scope of the inquiry “by, for example, considering [the expert’s] credibility or weighing the evidence.” 356 F.3d at 1335 (citing *Ambrosini v. Labarraque*, 101 F.3d 129, 141 (D.C.Cir.1996) (“By attempting to evaluate the credibility of opposing experts and the persuasiveness of competing scientific studies, the district court conflated the questions of the admissibility of expert testimony and the weight appropriately to be accorded such testimony by a fact finder.”) and *McCulloch v. H.B. Fuller Co.*, 61 F.3d 1038, 1045 (2d Cir.1995) (noting “evaluating witness credibility and weight of the evidence” is “the ageless role of the jury”)).

[4] ¶ 9 Fairly read, the Petition seeks legal interpretation regarding Arizona Rule of Evidence 702, which is a purely legal issue of statewide importance. *See State ex rel. Thomas*, 216 Ariz. at 262, ¶ 5, 165 P.3d at 240; *Escalanti*, 165 Ariz. at 386, 799 P.2d at 6. Accordingly, and because the State has no equally plain, speedy or adequate remedy by appeal, in exercising its discretion, the court accepts special action jurisdiction. *See Ariz. R.P. Spec. Act. 1(a)*.

II. The Merits Of The Petition.

[5][6] ¶ 10 This court “review[s] de novo matters involving interpretation of court rules,” *State v. Fitzgerald*, 232 Ariz. 208, 210, ¶ 10, 303 P.3d 519, 521 (2013), and a fact-based “decision to permit or exclude expert testimony for an abuse of discretion,” *McMurtry v. Weatherford Hotel, Inc.*, 231 Ariz. 244, 249, ¶ 10, 293 P.3d 520, 525 (App.2013). The State, as the proponent of the evidence, has the burden to show by a preponderance of the evidence

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that the SCL BAC test results are admissible. *See, e.g.*, Fed.R.Evid. 702 advisory committee's notes to 2000 amend, (citing *Bourjaily v. United States*, 483 U.S. 171, 175, 107 S.Ct. 2775, 97 L.Ed.2d 144 (1987)).

A. Arizona Rule Of Evidence 702.

¶ 11 The admissibility of the SCL BAC test results implicates significant recent changes to Arizona Rule of Evidence 702. Effective January 1, 2012, Arizona Rule of Evidence 702 was amended to conform to Federal Rule of Evidence 702 and now provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

(b) the testimony is based upon sufficient facts or data;

(c) the testimony is the product of reliable principles and methods; and

(d) the expert has reliably applied the principles and methods to the facts of the case.

In making these changes, the Arizona Supreme Court set forth the following detailed comment:

The 2012 amendment of Rule 702 adopts Federal Rule of Evidence 702, as restyled. The amendment recognizes that trial courts should serve as gatekeepers in assuring that proposed expert testimony is reliable and thus helpful to the jury's determination of facts at issue. The amendment is not intended to supplant traditional jury determinations of credibility and the weight to be afforded otherwise admissible testimony, nor is the amendment intended to permit a challenge to the testimony of every expert, *636 preclude the testimony of experience-based experts, or prohibit testimony based on competing methodologies within a field of expertise.

The trial court's gatekeeping function is not intended to replace the adversary system. 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.

A trial court's ruling finding an expert's testimony reliable does not necessarily mean that contradictory expert testimony is not reliable. The amendment is broad enough to permit testimony that is the product of competing principles or methods in the same field of expertise. Where there is contradictory, but reliable, expert testimony, it is the province of the jury to determine the weight and credibility of the testimony.

This comment has been derived, in part, from the Committee Notes on Rules—2000 Amendment to Federal Rule of Evidence 702.

Ariz. R. Evid. 702 cmt. to 2012 amend. To date, no Arizona Supreme Court case has construed these amendments to Arizona Rule of Evidence 702 and only a few Arizona Court of Appeals decisions have done so, none of which address BAC test results.^{FN5} Because the rules are now textually identical, “federal court decisions interpreting [Federal Rule of Evidence 702] are persuasive but not binding” in interpreting Arizona Rule of Evidence 702. *Ariz. State Hosp. v. Klein*, 231 Ariz. 467, 473, ¶ 26, 296 P.3d 1003, 1009 (App.2013). Similarly, advisory committee notes to Federal Rule of Evidence 702 provide guidance in interpreting Arizona Rule of Evidence 702. *See State v. Salazar-Mercado*, 232 Ariz. 256, 260, ¶ 11, 304 P.3d 543, 547 (App.2013).

FN5. *See State v. Buccheri-Bianca*, 233 Ariz. 324, 312 P.3d 123 (App.2013) (affirming admission of generalized expert testimony, sometimes called “cold expert” testimony, under Ariz. R. Evid. 702); *State v. Perez*, 233 Ariz. 38, 308 P.3d 1189 (App.2013) (affirming exclusion of polygraph test results under Ariz. R. Evid. 702); *State*

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v. Salazar–Mercado, 232 Ariz. 256, 304 P.3d 543 (App.2013) (affirming admission of generalized expert testimony under Ariz. R. Evid. 702); *State v. Delgado*, 232 Ariz. 182, 303 P.3d 76 (App.2013) (affirming admission of “strangulation expert” testimony under Ariz. R. Evid. 702); see also *Ariz. State Hosp. v. Klein*, 231 Ariz. 467, 474, ¶ 33, 296 P.3d 1003, 1010 (App.2013) (finding Ariz. R. Evid. 702 “applies to expert testimony offered in a discharge hearing pursuant to A.R.S. § 36–3714”); *McMurtry*, 231 Ariz. at 251, ¶ 17, 293 P.3d at 527 (noting testimony of hospitality industry expert admissible under Ariz. R. Evid. 702, both before and after January 1, 2012 amendments).

[7][8] ¶ 12 In addition to the text of Arizona Rule of Evidence 702, Arizona courts have noted the United States Supreme Court in *Daubert* set forth several “non-exclusive factors for determining whether scientific evidence is admissible,” including:

- “whether the scientific methodology has been tested;”
- whether the methodology has been “subjected to peer review;”
- “the ‘known or potential rate of error;’ ”
- “whether the methodology has ‘general acceptance;’ ” and
- “the existence and maintenance of standards controlling the technique's operation.”

Klein, 231 Ariz. at 473, ¶ 27, 296 P.3d at 1009 (citing *Daubert* for first four factors); *State v. Bible*, 175 Ariz. 549, 586 n. 32, 858 P.2d 1152, 1189 n.32 (1993) (quoting *Daubert* for last factor); see also Fed.R.Evid. 702 advisory committee's notes to 2000 amend, (listing “other factors relevant in determining whether expert testimony is sufficiently reliable to be considered by the trier of fact.”). Each

factor “ ‘may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony.’ ” *Klein*, 231 Ariz. at 473, ¶ 28, 296 P.3d at 1009 (quoting *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999)).

¶ 13 The United States Supreme Court's decision in *Daubert* resulted in amendments to Federal Rule of Evidence 702 that made “[n]o attempt ... to ‘codify’ these specific factors.” Fed.R.Evid. 702 advisory committee's notes to 2000 amend, (also noting amendments to Fed.R.Evid. 702 were “broad enough to require consideration of any or all *637 of the ... factors where appropriate”). The 2012 amendments to the Arizona Rules of Evidence adopted the text of Federal Rule of Evidence 702, meaning Arizona Rule of Evidence 702 similarly does not codify the *Daubert* factors. Moreover, the court in *Klein* was not asked to address the interaction between the text of Arizona Rule of Evidence 702 and the *Daubert* factors. See *Klein*, 231 Ariz. at 473, ¶ 27, 296 P.3d at 1009. Fairly read, however, the *Daubert* factors focus on general principles and methods, an inquiry addressed in Ariz. R. Evid. 702(c). Accordingly, the *Daubert* factors are discussed in the context of Ariz. R. Evid. 702(c). Accord 4 *Weinstein's Federal Evidence* § 702.05[2][c] at 702–93–103 (2d ed.2013) (citing cases using similar approach in construing Fed.R.Evid. 702(c)); see also *id.* § 702.04 at 702–51–80 (listing factors relevant to Fed.R.Evid. 702(a) inquiry) (citing cases); *id.* § 702.05[2][b] at 702–91–92 (listing factors relevant to Fed.R.Evid. 702(b) inquiry) (citing cases); *id.* § 702.05 [2][d] at 702–104–110 (listing factors relevant to Fed.R.Evid. 702(d) inquiry) (citing cases). With this background, the court addresses the Arizona Rule of Evidence 702 analysis applicable to the SCL BAC test results for Defendants.

B. Application Of Arizona Rule Of Evidence 702.

a. The SCL BAC Test Results Comply With Ariz. R. Evid. 702(a).

[9] ¶ 14 A proponent of expert testimony must show by a preponderance of the evidence that “the expert's scientific, technical, or other specialized knowledge will help

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the trier of fact to understand the evidence or to determine a fact in issue.” Ariz. R. Evid. 702(a). The Superior Court found the State showed by a preponderance of the evidence that “the criminalist’s scientific and technical knowledge [regarding the SCL BAC test results] is relevant and would assist the trier of fact in understanding the evidence,” as required by Ariz. R. Evid. 702(a). The record fully supports this finding.

b. The SCL BAC Test Results Comply With Ariz. R. Evid. 702(b).

[10] ¶ 15 The proponent of expert testimony must show by a preponderance of the evidence that “the testimony is based upon sufficient facts or data.” Ariz. R. Evid. 702(b). The Superior Court found the State showed by a preponderance of the evidence that the SCL BAC test results are “based on sufficient facts or data.” Again, the record fully supports this finding.

c. The SCL BAC Test Results Comply With Ariz. R. Evid. 702(c).

¶ 16 The proponent of expert testimony must show by a preponderance of the evidence that “the testimony is the product of reliable principles and methods.” Ariz. R. Evid. 702(c). The Superior Court found the State showed by a preponderance of the evidence that the SCL BAC test results are “based on reliable principles and methods.” The record fully supports this finding as well.

[11] ¶ 17 Applying the non-exclusive *Daubert* factors, the parties stipulated and the Superior Court found that gas chromatography (the SCL BAC testing method) “is accepted within the scientific community.” This stipulation indicates that the SCL BAC test results meet at least three of the factors listed in *Daubert*. See *Klein*, 231 Ariz. at 473, ¶ 27, 296 P.3d at 1009 (“whether the scientific methodology has been tested;” whether the methodology has been “subjected to peer review;” and “whether the methodology has ‘general acceptance’ ”).^{FN6} The Superior Court also found that the SCL has policies and procedures consistent with, and that supplement, the international standards discussed below, indicating the SCL BAC test results met another *Daubert* factor. See *Bible*, 175 Ariz. at 586 n. 32,

858 P.2d at 1189 n. 32 (“[T]he existence and maintenance of standards controlling the technique’s operation.”).

FN6. To the extent the SCL BAC test results might constitute novel scientific evidence, this stipulation indicates the blood test results would have been admissible (with a proper evidentiary foundation) under Arizona Rule of Evidence 702 as it existed prior to January 1, 2012. See, e.g., *Bible*, 175 Ariz. at 586, 858 P.2d at 1183 (citing authority).

¶ 18 The remaining *Daubert* factor—“the ‘known or potential rate of error’ ”—bears *638 special mention. *Klein*, 231 Ariz. at 473, ¶ 27, 296 P.3d at 1009. As discussed more fully below, the Superior Court found no suggestion that any claimed issue with performance of the 2003 Instrument resulted in any inaccuracy, let alone a false positive, for any of the SCL BAC test results for Defendants’ blood. Similarly, with one possible exception discussed more fully below, the Superior Court was “not persuaded” that any SCL BAC testing for any named Defendant was done improperly. These findings, which are fully supported by the record, indicate the SCL BAC test results met this fifth *Daubert* factor.

d. The SCL BAC Test Results Comply With Ariz. R. Evid. 702(d).

¶ 19 The proponent of expert testimony must show by a preponderance of the evidence that “the expert has reliably applied the principles and methods to the facts of the case.” Ariz. R. Evid. 702(d). The State argues that Defendants’ failure to independently test their blood samples supports the admissibility of the SCL BAC test results under Ariz. R. Evid. 702(d). As the proponent of the evidence, however, the State has the burden to show admissibility by a preponderance of the evidence. It is true that, if independent testing had been performed, the results of such testing (if consistent with, or significantly inconsistent with, the SCL BAC test results) might have been relevant in determining the admissibility of the SCL BAC test results. It is also true that the lack of independent testing may be relevant in other contexts. See *State v.*

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Fields, 196 Ariz. 580, 583, ¶ 9, 2 P.3d 670, 673 (App.1999) (in accepting special action jurisdiction and vacating discovery order, noting defendants had not conducted “independent testing of the blood samples each was apparently offered or provided, although this would be the best evidence of the only material issue, the accuracy of the reported BACs”); *State ex rel. Montgomery*, 1 CA-SA 12-0226, at 10 (same; quoting *Fields*). In determining whether the SCL BAC test results are admissible under Ariz. R. Evid. 702(d), however, such lack of independent testing is not relevant in determining whether the State met its burden to show admissibility.

¶ 20 The Minute Entry broadly framed the inquiry as “whether the methods or actions by the [SCL] in its daily operations are sufficiently reliable to comply with [Ariz. R. Evid.] 702(d).” In finding the SCL BAC test results inadmissible, the Minute Entry states “that the principles and in particular, the methods were not properly applied, as required” by Ariz. R. Evid. 702(d). In doing so, however, the Minute Entry focused on issues with the 2003 Instrument that (1) resulted in a failure to produce any usable test results (as opposed to test results that overinflated BAC levels or that yielded false positives) or (2) were unrelated to the accuracy of the SCL BAC testing of Defendants' blood.^{FN7}

FN7. The Superior Court properly noted that several of Defendants' objections go to the weight of the evidence, not admissibility, including controls and calibrations of the 2003 Instrument; validation of SCL BAC test results by a second criminalist and sample integrity and shelf-life. The Superior Court also properly noted that, for these issues, Defendants would be able to cross-examine the State's witnesses and present controverting evidence at trial.

[12] ¶ 21 As applied, the focus of Ariz. R. Evid. 702(d) is the admissibility of the specific SCL BAC test results that the State offered for a specific Defendant in a specific case. Thus, the inquiry is whether those specific SCL BAC test results are the product of reliable application of prin-

ciples and methods. Given this narrow inquiry, it is particularly significant that the Superior Court found no evidence that any of Defendants' SCL BAC test results were inaccurate or incorrect. Indeed, after 17 days of evidentiary hearing, the Superior Court succinctly found:

No testimony has shown that any of the consolidated [D]efendants' tests were inaccurate. The State, in fact, presented evidence to the contrary. With one possible exception, the Court is not persuaded that any of the named [D]efendants' tests were done improperly.^{FN8}

FN8. This possible exception is the March 2010 SCL BAC testing for Defendant Herman, whose blood was retested more than a year later as discussed below.

*639 These findings, which are fully supported by the record, strongly indicate that the SCL BAC test results for Defendants are admissible under Ariz. R. Evid. 702(d).

¶ 22 The record shows that the 2003 Instrument occasionally failed to produce usable BAC test results and that the 2003 instrument was not taken out of service to resolve those issues. There was no showing, however, that such failures to provide test results meant that usable BAC test results produced by the 2003 Instrument were not reliable. Although inconvenient, when no usable BAC test results were produced, no data of any type was provided. In that case, there was no output to analyze and there could be no overinflated BAC levels, false positives or other test results the reliability of which could be analyzed, let alone questioned. As the Superior Court correctly noted, just because the 2003 Instrument might be “non-conforming doesn't necessarily mean the results are inaccurate.” As in the prior special action, it remains the case that there is no showing how testing that produces no results renders SCL “BAC test results less reliable.... ‘[N]one of the anomalies alleged has been shown to impair the reliability of the test [results].’ ” *State ex rel. Montgomery*, 1 CA-SA 12-0226, at 8 (citation omitted).

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¶ 23 Other objections by Defendants involve issues with data or testing unrelated to SCL BAC testing of Defendants' blood. The SCL identified and documented issues regarding such unrelated testing and took corrective action (including rerunning tests) as indicated by SCL protocol. More importantly, these issues do not involve Defendants' blood, there is no suggestion that these issues had any impact on the testing of Defendants' blood and, as noted previously, the Superior Court found no evidence indicating that any of Defendants' SCL BAC test results were inaccurate or incorrect. *See, e.g., Daubert*, 509 U.S. at 595, 113 S.Ct. 2786 (“The focus, of course, must be solely on principles and methodology, not on the conclusions that they generate.”); *Best v. Lowe's Home Ctrs., Inc.*, 563 F.3d 171, 181 (6th Cir.2009) (“Admissibility under [Fed.R.Evid.] 702 does not require perfect methodology.”); *Primiano v. Cook*, 598 F.3d 558, 564 (9th Cir.2002) (“[T]he test under *Daubert* is not the correctness of the expert's conclusions but the soundness of [the] methodology.”) (citation omitted).

[13] ¶ 24 Defendants argue that the SCL was not in compliance with International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) specification 17025:2005. ISO/IEC 17025:2005 is “an international standard ... that specifies the general requirements for the competence to carry out tests and/or calibrations. These requirements have been used by accrediting agencies to determine what a laboratory must do to secure accreditation.” 2 Edward F. Fitzgerald, *Intoxication Test Evidence* § 57:2 (2d ed.2013). On June 2, 2011, the SCL was certified by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board International (ASCLD/LAB–International), meaning the SCL was “found to meet the requirements of ISO/IEC 17025:2005.” This certification required compliance with ISO/IEC 17025:2005 for six months before issuance, meaning that the SCL would have been in compliance with these standards by December 2010. *See* 2 Edward F. Fitzgerald, *Intoxication Test Evidence* § 57:18 (2d ed.2013) (noting ASCLD/LAB “must confirm that a laboratory has in fact been ISO [IEC] 17025[:2005]-compliant for the six-month period preced-

ing the ultimate accreditation inspection of the laboratory”). Although Defendants' experts suggested the SCL was not ISO/IEC 17025:2005 compliant, the Superior Court made plain that it was “not relying on the opinions of the defense experts.” Moreover, the Superior Court found that the SCL BAC test results met the standard of admissibility under Ariz. R. Evid. 702(c) (“the testimony is the product of reliable principles and methods”), the inquiry that would most directly address ISO/IEC 17025:2005 compliance. Apart from these findings, Defendants cite no case where test results were found inadmissible based on ISO/IEC 17025:2005 compliance concerns (let alone, when testing was done by an ASCLD/LAB–International *640 certified, ISO/IEC 17025:2005 compliant laboratory).

[14] ¶ 25 Defendants point to three issues with SCL BAC testing on days when a Defendant's blood was tested prior to December 2010 (when the SCL would have been ASCLD/LAB–International, ISO/IEC 17025:2005 compliant). During December 2009 testing of Defendant Tohannie's blood (showing a BAC of 0.203) and March 2010 testing of Defendant Herman's blood (showing a BAC of 0.192), the 2003 Instrument failed to provide test results for some vials from other individuals. Nothing suggests that this lack of data had any impact on the testing of Defendant Tohannie's or Defendant Herman's blood, which did yield test results. In fact, retesting of Defendant Herman's blood in August 2011 revealed a BAC of 0.180, a result consistent with the March 2010 0.192 BAC result, given that alcohol in blood samples naturally degrades over time. September 2010 testing of Defendant Porter's blood showed a 0.217 BAC. During the same test run, 4 of the 35 or so sample pairs had results where the primary and replicate samples differed by more than the five percent SCL standard. Defendant Porter's test results (0.217 BAC and 0.225 BAC), however, had no such disparity. Consistent with protocol, the SCL reported the lower of the two levels in the BAC test results for Defendant Porter. Nothing suggests that any issue with the other samples had any impact on the testing of Defendant Porter's blood.

[15] ¶ 26 Finally, the Minute Entry expresses concern that individuals outside the SCL, including defense coun-

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sel, were the first to notice some of the issues regarding the 2003 Instrument raised at the evidentiary hearing. Although Defendants point to email exchanges, including some dated after the conclusion of the evidentiary hearing, those exchanges do not involve any SCL BAC testing for any Defendant. To the extent those exchanges can be characterized as questions by SCL personnel about their confidence in the 2003 Instrument, “[e]xpert witnesses need not be subjectively certain or totally convinced about their opinions or other testimony for the testimony to be admissible.” 4 *Weinstein’s Federal Evidence* § 702.05[2][d] at 702–110 (2d ed.2013) (citing *Daubert*, 509 U.S. at 590, 113 S.Ct. 2786); see also *Daubert*, 509 U.S. at 590, 113 S.Ct. 2786 (“Of course, it would be unreasonable to conclude that the subject of scientific testimony must be ‘known’ to a certainty; arguably, there are no certainties in science.”). Moreover, even with knowledge of these exchanges, the Superior Court found nothing to suggest the SCL BAC test results of Defendants’ blood “were inaccurate” or “were done improperly.”

* * * * *

[16][17][18] ¶ 27 The applicable admissibility standard is whether the State demonstrated by a preponderance of the evidence that “the expert has reliably applied the principles and methods to the facts of the case.” Ariz. R. Evid. 702(d). There are many, at times irreconcilable cases construing Fed.R.Evid. 702(d), and the Arizona Supreme Court will provide final direction regarding which of those cases properly provides guidance in interpreting Arizona’s rule. For now, it is sufficient to note that the inquiry into reliability focuses on whether the evidence is “derived by the scientific method. Proposed testimony must be supported by appropriate validation—*i.e.*, ‘good grounds,’ based on what is known. In short, the requirement that an expert’s testimony pertain to ‘scientific knowledge’ establishes a standard of evidentiary reliability.” *Daubert*, 509 U.S. at 590, 113 S.Ct. 2786. As the United States Supreme Court elaborated:

[S]cientists typically distinguish between “validity” (does the principle support what it purports to show?)

and “reliability” (does application of the principle produce consistent results?). Although “the difference between accuracy, validity, and reliability may be such that each is distinct from the other by no more than a hen’s kick,” our reference here is to *evidentiary* reliability—that is, trustworthiness. In a case involving scientific evidence, *evidentiary reliability* will be based upon *scientific validity*.

Daubert, 509 U.S. at 590 n. 9, 113 S.Ct. 2786 (citations omitted). Applying these principles, the State has shown by a preponderance of the evidence that the SCL BAC test *641 results for Defendants are scientifically valid. Similarly, the Superior Court found nothing to suggest that the SCL BAC test results for Defendants were inaccurate, noted evidence to the contrary and was not persuaded that any of Defendants’ tests were done improperly. See also Fed.R.Evid. 702 advisory committee’s notes to 2000 amend. (“ ‘The evidentiary requirement of reliability is lower than the merits standard of correctness.’ ”) (citation omitted). On this record, and viewed through the correct legal lens, the State has shown by a preponderance of the evidence that the SCL BAC test results for Defendants are admissible under Arizona Rule of Evidence 702. Accordingly, the Minute Entry erred in concluding the SCL BAC test results for Defendants were inadmissible.

¶ 28 In reaching this conclusion, the court notes the Superior Court’s concerns about a lengthy “battle of the experts” at trial if the SCL BAC test results were found admissible. At trial, each Defendant will be able to cross-examine and present evidence about claimed deficiencies in the specific SCL BAC test results at issue. Such presentations may lengthen these trials. However, reliance on the adversarial system at a trial—not the per se exclusion of evidence admissible under Arizona Rule of Evidence 702—is what the Arizona Supreme Court appeared to contemplate in directing that “[c]ross-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.” Ariz. R. Evid. 702 cmt. to 2012 amend.

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CONCLUSION

¶ 29 The court accepts special action jurisdiction. Concluding that under the legal standard discussed above, the SCL BAC test results are admissible under Arizona Rule of Evidence 702, the court grants the State's request for relief, vacates the Minute Entry finding that the SCL BAC test results were not admissible under Arizona Rule of Evidence 702; vacates the stay entered pending resolution of this special action and remands these matters for further proceedings.

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STATE V. HIGHLAND
JUSTICE COURT (RPI
HYLAND), (UNPUBLISHED
RULING IN LOWER COURT
SPECIAL ACTION APRIL
2013)

RETROGRADE
EXTRAPOLATION

SUPERIOR COURT OF ARIZONA
MARICOPA COUNTY

LC2012-000688-001 DT

04/03/2013

HONORABLE KAREN POTTS

CLERK OF THE COURT
J. Calhoon
Deputy

STATE OF ARIZONA
WILLIAM G MONTGOMERY

LISA MARIE MARTIN

v.

HIGHLAND JUSTICE COURT (001)
HONORABLE DANIEL DODGE (001)
MARGARET HYLAND (001)

JOHN W BALDRIDGE

REMAND DESK-LCA-CCC

RULING

The Court has considered the State's Petition for Special Action and Appendix thereto, Real Party in Interest Margaret Hyland's Response and Appendix thereto, the State's Reply, the State's Motion to Strike Appendix Exhibit 1 and Pages 12-14 of Hyland's Response to Petition for Special Action, Hyland's Response thereto, and the oral argument of counsel. In essence, the State seeks an order reversing the Justice Court's ruling precluding the admission of the numerical value of Real Party in Interest's blood alcohol concentration ("BAC") by retrograde extrapolation as calculated by the State's expert. In making this ruling, the Justice Court relied on its "gatekeeper" function under newly amended Ariz.R.Evid. 702.

Real Party in Interest is charged with: (1) Count 1, driving while under the influence of an intoxicating liquor and being impaired to the slightest degree, in violation of A.R.S. §28-1381(A)(1); (2) Count 2, driving with a BAC of .08 or more within two hours of being in physical control of her vehicle, in violation of A.R.S. §28-1381(A)(2); and (3) Count 3, driving with a BAC of more than .15 but less than 0.20 (extreme DUI) within two hours of being in physical control of her vehicle, in violation of A.R.S. §28-1382(A)(1).

Real Party in Interest filed a Motion in Limine to Preclude the Admission of Numerical Value of Her Blood Alcohol Test prior to trial on the grounds that because the blood was drawn

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more than two hours after Real Party in Interest was in physical control of the vehicle, the State would have to introduce, through a qualified expert, legally sufficient relation-back/retrograde analysis evidence of her BAC. And, Real Party in Interest argues, the State's expert in this case did not have sufficient facts/data upon which to base such an expert opinion rendering that opinion inadmissible under newly amended Ariz.R.Evid. 702. The Justice Court set an evidentiary hearing in order to determine if the expert opinion to be offered by the State met the criteria of Ariz.R.Evid. 702.

Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable scientific principles and methods;
- (d) and the expert has reliably applied the principles and methods to the facts of the case.

Real Party in Interest first argues that the Justice Court abused its discretion by setting a pretrial evidentiary hearing (commonly referred to as a "Daubert hearing") to evaluate the expert testimony of Criminalist Erin Boone, the State's designated expert. The Arizona Supreme Court has made clear that "trial courts should serve as gatekeepers in assuring that proposed expert testimony is reliable and thus helpful to the jury's determination of facts at issue." *Ariz. R. Evid. 702, Comment to 2012 Amendment*. The decision to have a Daubert hearing on the admissibility of the expert testimony under Rule 702 is firmly within the sound discretion of the Justice Court. *Arizona State Hospital/Arizona Community Protection and Treatment Center v. Klein*, __ P.3d __, 2013 WL 433003 (App. 2013) ("Whether to set a pretrial hearing to resolve such a dispute is peculiarly within the discretion of the superior court...") Like the Superior Court in *Klein*, there is nothing to indicate that the Justice Court in this case abused its discretion in holding a Daubert hearing in regard to the expert testimony in issue. Indeed, it would have been difficult for the Justice Court to determine if this particular expert met the requirements of Rule 702 without examining the expert's opinion and the factual basis of that opinion.

In this case, the State's expert, Erin Boone, is a Criminalist employed by the Arizona Department of Public Safety Crime Laboratory who has a Bachelor of Science degree in chemistry. She also has seventeen years of experience in two separate law enforcement crime laboratories conducting alcohol analysis and toxicology, is certified by the Department of Public Safety to conduct blood proficiency testing, and has testified as an expert in forensic alcohol analysis over 200 times. *State's Appendix to Petition for Special Action, Exhibit 4, Transcript of Proceedings, 12:3-14:6*. Ms. Boone's credentials are not contested.

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Ms. Boone testified at the Daubert hearing that she analyzed the blood sample drawn on the Real Party in Interest, Margaret Hyland, 2 hours and 53 minutes after the time of driving. *Id. at 14:11-15:23*. Ms. Boone performed a retrograde extrapolation of this blood sample. A retrograde extrapolation is taking an alcohol concentration from one point in time and estimating what it will be at another point in time. *Id. at 14:5-9*.

Ms. Boone conducted a retrograde extrapolation of the .188 alcohol concentration for 70 minutes earlier in time, which brought the concentration within the two hour time frame mandated by A.R.S. §§28-1381(A)(2) and 1382(A)(1), *i.e.* as alleged in Counts 2 and 3. *Id. at 16:10-17:21*. Ms. Boone applied a range of elimination rates to the alcohol concentration in order to reach a BAC 70 minutes earlier. *Id. at 16:18-17:12*. An elimination rate is how fast the body eliminates alcohol. *Id.* The elimination rates used by Ms. Boone in this case ranged from a low of .010, and average of .018, and a high of .030 per hour. *Id.* Using this analysis, Ms. Boone concluded that Ms. Hyland had an alcohol concentration 70 minutes prior to the blood draw of .199 using the low elimination rate, .209 using an average eliminate rate, and .223 using a high elimination rate. *Id. at 17:13-21*.

Ms. Boone testified that she did not need an eating history for Ms. Hyland to conduct this analysis because Ms. Hyland had been in custody for 2 hours and 53 minutes during which time she had not consumed anything, rendering it past the time that Ms. Hyland would have been still absorbing alcohol into her bloodstream. *Id. at 17:23-19:16*. Thus, Ms. Hyland was in an elimination phase wherein the body is breaking down the alcohol and getting it out of the body faster than it is being absorbed, making the consumption of food a non-factor. *Id.*

Ms. Boone admitted that she did not consider Ms. Hyland's weight, height, age, gender, the time at which she stopped drinking, what she had to eat, or her metabolism rate in rendering her opinions. *Id. at 24:4-23*. Ms. Boone further concluded that Ms. Hyland had fully absorbed the alcohol for her analysis, based upon the fact that the percentage of the general population who would still be in the absorption phase if no food had been consumed food for the past 2 hours and 53 minutes would be less than two percent, based upon studies recognized and relied upon by the scientific community. *Id. at 34:1-15*. Ms. Boone also testified that absorption rates vary among individuals, depending upon the nature of food consumed, stress, drinking patterns and the type of drink consumed, the contents of one's stomach, and others. *Id. at 38:14-39:19*.

Ms. Hyland's expert, Mr. Beardsley, testified that there are two types of retrograde analysis, classical and subtractive. *Id. at 42:21-43:13*. The analysis used by Ms. Boone was classical. Subjective takes into account the person's weight, gender, food consumption, and alcohol consumption. *Id.* He also testified that it takes 10-20 minutes to reach a post-absorption rate for the average person on an empty stomach; for others, it could take up to 45 minutes, and

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for persons who have consumed a large amount of food having cream or fatty content it can take much longer. *Id. at 45:16-25*. Mr. Bearsley cited a time of 4 hours as the longest time he's seen for a person to reach post-absorption and that person had consumed a couple of pounds of food. *Id. at 44:7-17*. The longest average time to post-absorption Mr. Beardsley had seen based upon scientific data was two hours with most averages under an hour. *Id. at 46:1-4*.

Based upon the foregoing, Ms. Hyland argues that the data upon which Ms. Boone based her analysis does not meet the criteria of Rule 702(c) and (d) in that her opinion is not based on sufficient facts or data nor is it the product of a reliable scientific method. Indeed, Ms. Hyland claims the facts upon which it is based is "speculative". The Court disagrees for several reasons.

First, both experts recognized that there are two methods of performing a retrograde analysis as recognized by the scientific community. In this case, the State's expert used one of those methods. The use of one method over another is not a reason to preclude that method; indeed it for the trier of fact to determine, under the facts and circumstances of the case, the weight to be given to the methods used after considering the testimony of the expert and the unique facts of the case. Here, the Comments to Rule 702 expressly recognize the difference between the gatekeeper function and the weight of the evidence:

The 2012 amendment of Rule 702 adopts Federal Rule of Evidence 702, as restyled. The amendment recognizes that trial courts should serve as gatekeepers in assuring that proposed expert testimony is reliable and thus helpful to the jury's determination of facts at issue. **The amendment is not intended to supplant traditional jury determinations of credibility** and the weight to be afforded otherwise admissible testimony, **nor is the amendment intended to permit a challenge to the testimony of every expert, preclude the testimony of experience-based experts, or prohibit testimony based on competing methodologies within a field of expertise. The trial court's gatekeeping function is not intended to replace the adversary system.** 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.

A trial court's ruling finding an expert's testimony reliable does not necessarily mean that contradictory expert testimony is not reliable. **The amendment is broad enough to permit testimony that is the product of competing principles or methods in the same field of expertise. Where there is contradictory, but reliable, expert testimony, it is the**

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province of the jury to determine the weight and credibility of the testimony.

Comments to Ariz.R.Evid. 702 (emphasis added). The Court finds that the Justice Court overstepped its gatekeeper function in this case by supplanting the role of the trier of fact in determining the weight of competing but reliable expert testimony.

Second, the claim that Ms. Boone's testimony was based upon "speculation" is not supported by the record. Rather, Ms. Boone used a broad range of average elimination rates and reached conclusions about the time it takes to reach post-absorption based upon scientific studies. Indeed, her rates fell within 98% of the population--hardly a speculative number. By precluding Ms. Boone's testimony, the Justice Court chose one competing but reliable method over another.

Third, the Court also finds that the standard used by the Justice Court, clear and convincing evidence, is not the proper standard in determining if the testimony of Ms. Boone is admissible. Rather, the standard is preponderance of the evidence.

The Court finds that the Justice Court order precluding the testimony of Ms. Boone under Ariz.R.Evid. 702 was an abuse of discretion.

The Court further finds that Exhibit 1, the Affidavit of Chester Flaxmayer, was improperly included in Ms. Hyland's Appendix to Response to Petition for Special Action because it was not part of the lower court record. Thus must be stricken from the record, together with any reference or argument relating to such Affidavit.

IT IS ORDERED granting the State's Petition for Special Action and reversing the Justice Court's November 13, 2012 Order granting the Defendant's Motion to preclude admission of numeric value of the blood alcohol concentration test.

IT IS FURTHER ORDERED striking the Affidavit of Chester Flaxmayer, attached as Exhibit 1 to Ms. Hyland's Appendix to Response to Petition for Special Action.

/s/

HONORABLE KAREN A. POTTS
JUDGE OF THE SUPERIOR COURT

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DAUBERT TIP SHEET

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When faced with a request for a *Daubert* hearing or a Motion in Limine to preclude your expert:

- Always respond in writing setting forth enough facts to preserve your issues for review.
- Is this really a *Daubert* issue? For instance, despite defense arguments to the contrary, admitting breath tests results through the statutory method does not implicate *Daubert* or Rule 702.
- Can a hearing be avoided? Whether to set a *Daubert* hearing is within the court's discretion. *Ariz. State Hosp. v. Klein*, 231 Ariz. 467, 474, ¶ 31, 296 P.3d 1003, 1010 (App. 2013).
- Efforts to avoid a hearing may succeed by demonstrating how well-established the principle at issue is or even asking the court to take judicial notice of its acceptance. "Indeed, theories that are so firmly established as to have attained the status of scientific law, such as the laws of thermodynamics, properly are subject to judicial notice under Federal Rule of Evidence 201." *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579, 592 n.11 (1993).
- In demonstrating the principle is well-established, use both law and facts. For example, cite cases showing that Arizona has accepted the use of retrograde extrapolation for 25 years. Cite and attach articles that the method used by your expert is accepted.

- Because we are new to *Daubert*, the defense motions pick cases from other jurisdictions. Carefully analyze them. For instance, many of the retrograde motions rely on a Texas (*Mata*) case which is distinguishable on many levels, including that Texas is a DUI “time of offense” state rather than “time of test” state as Arizona and requires a higher standard of proof to admit expert testimony.
- What authorities should we look at? Be sure to read our new Rule 702 and the comments. Federal Rule 702’s comments also contain lots of helpful annotations. Federal court decisions interpreting Rule 702 are persuasive but not binding in interpreting the Arizona Rule. Arizona Rules of Evidence, Prefatory Comment to 2012 Amendments; *Ariz. State Hosp. v. Klein*, 231 Ariz. 467, 473, ¶ 26, 296 P.3d 1003, 1009 (App. 2013); *State v. Delgado*, 232 Ariz. 182, 186, ¶ 11, 303 P.3d 76, 80 (App. 2013). Likewise, the Advisory Committee Notes to Federal Rule 702 provide guidance in interpreting the Arizona Rule. *State v. Salazar-Mercado*, 232 Ariz. 256, 260, ¶ 11, 304 P.3d 543, 547 (App. 2013); *State v. Bernstein (RPI Herman)*, ___ Ariz. ___, ¶ 11, 317 P.3d 630, 636 (App. 2014).
- If the court nevertheless orders a hearing, request to limit its scope if applicable.
- Make clear at the outset that the State’s burden is only to show by a preponderance of the evidence that the expert can testify. *State v. Bernstein (RPI Herman)*, ___ Ariz. ___, ¶ 10, 317 P.3d 630, 635 (App. 2014).
- Prepare your expert in line with applicable *Daubert*/702 factors.
- Stay on the record.

- Remember if your expert or evidence is precluded in a pretrial hearing and you must have that evidence to move forward, the prosecution does not have a right to appeal because the evidence was not excluded on constitutional grounds. It can only seek a special action. So if you need to ask for a stay.