

**ENSURING THE ADMISSIBILITY OF YOUR
EXPERT'S TESTIMONY AT THE
SUMMARY JUDGMENT STAGE AND BEYOND**

**By:
Joseph F. Brophy
Bishop London Brophy Dodds, P.C.
106 E. 6th St., Suite 700
Austin TX 78701**

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I. INTRODUCTION

Over the last ten years, the Texas supreme court has progressively facilitated the exclusion of expert testimony. Traditionally, assessing the credibility of expert witnesses rested exclusively within the province of the jury. The *Robinson/Havner/Gammill* trilogy and their progeny have provided opponents of expert testimony with a number of procedural vehicles to attack the “reliability” of any opposing expert, regardless of whether the testimony is based on science, experience or otherwise. This paper focuses on challenges to expert testimony in the summary judgment context. The filing of motions to exclude expert testimony in conjunction with the filing of a motion for summary judgment has become commonplace. Accordingly, the litigant who is relying upon expert testimony to defeat a motion for summary judgment should make sure that his expert’s affidavits address the *Robinson* factors, *Gammill’s* analytical gap test and if opining as to causation, that it rule out all other possible causes of a particular injury or condition with reasonable certainty. Failure to do this may well result in the expert’s affidavit being struck and the respondent being left with no evidence upon which to avoid summary judgment.

II. THE ROBINSON/HAVNER/GAMMILL TRILOGY

In *Daubert v. Merrell, Dow Pharmaceuticals, Inc.*, the United States Supreme Court held that FRE 702 requires that scientific evidence be “not only relevant, but reliable.” 509 U.S. 579, 589, 113 Sup. Ct. 2786, 2797, 125 L. Ed. 2d 469, 481 (1993). In determining the reliability of scientific expert testimony, the supreme court held that a number of factors bear on the inquiry, including: (1) whether the theory or technique can be or has been tested; (2) whether the theory or technique has been subjected to peer review or publication; (3) the known or potential rate of error;

and (4) general acceptance within the relevant scientific community. *Daubert*, 509 U.S. at 593. The Court emphasized that the inquiry is “a flexible one.” *Id.*

Courts must keep in mind the statement in *Daubert* that the inquiry is “a flexible one.” *Daubert*, 509 U.S. at 593; *see also*, *Nenno v. State*, 970 S. W. 2d 549, 561 (Tex. Crim. App.--1998), overruled on other grounds by *State v. Terrazas*, 4 S. W. 3d 720, 727 (Tex. Crim. App. – 1999). The U.S. Supreme Court, while setting out four factors relevant to scientific reliability, cautioned that “we do not presume to set out a definitive check list or test.” *Daubert*. 509 U.S. at 593. The factors listed were based upon “general observations” about the nature of scientific evidence. *Id.* And, the standard of evidentiary reliability set forth was derived from Rule 702’s requirement that the expert’s testimony pertained to “scientific knowledge.” *Id.* at 592-92.

While various federal circuits may sometimes purport to disagree with each other, a close examination of the cases shows a general agreement about two important propositions:

1. *Daubert’s* prescription that trial judges act as “gatekeepers” in determining the reliability of expert evidence applies to all forms of expert testimony; and

2. the four factors listed in *Daubert* do not necessarily apply outside of the “hard science” context; instead methods proving reliability will vary depending upon the field of expertise. *Moore v. Ashland Chemical, Inc.*, 126 F. 3d 679, 685-689 (5th Cir. 1997) (general principles of Rule 702 recognized in *Daubert* apply to other species of expert testimony except where self-evident that the court’s remarks apply only to scientific knowledge; reliability of testimony should be evaluated by reference to the standards applicable to the particular field in question; four *Daubert* factors “apply to hard science but not to clinical medicine”); *U.S. v. Jones*, 207 F. 3d 1147, 1156-1158 (6th Cir.) 1997), cert. den., 117 Sup. Ct. 2527, 138 L.Ed. 2d 1027 (1997) (“gatekeeper” and reliability language applicable; but four factors discussed regarding scientific validity should not be extended beyond the scientific realm); *Tyus v. Urban Search Management*,

102 F.3d 256, 263 (7th Cir. 1996), cert. den., 138 L.Ed. 2d 175 (1997) (*Daubert* framework applies to social sciences but “the measure of intellectual rigor will vary by the field of expertise and the way of demonstrating expertise will also vary”); *Freeman v. Case Corp.*, 118 F.3d 1011, 1016 (4th Cir. 1997), cert. den., 118 Sup. Ct. 739, 139 L. Ed. 2d 676 (1998) (“where expert relies on his experience and training and not on a particular methodology to reach his conclusions ‘*Daubert*’ is inappropriate”); *U.S. v. Bighead*, 128 F.3d 1329, 1330 (9th Cir. 1997) (*Daubert*’s tests for admissibility “do not require exclusion of expert testimony that involves specialized knowledge rather than scientific theory”); *Compton v. Subaru of America*, 82 F. 3d, 1513, 1518 (10th Cir. 1996), cert. den., 117 Sup. Ct. 611, 136 L.Ed 2d 536 (1996) (four factors applicable only when a proffered expert relies on some principle or methodology rather than experience or training).

In 1995, the Texas supreme court adopted the *Daubert* analysis for TRE 702 requiring that the expert’s underlying scientific technique or principle be reliable. *E.I. du Pont de Nemours v. Robinson*, 923 S. W. 2d 549 (Tex. 1995). Noting that the increasing use of experts in a variety of cases necessitates a heightened responsibility in the trial courts to ensure reliability, the court granted review to resolve the conflicts in the decisions of the various courts of appeals regarding the proper standard, noting that this was the first opportunity, since the adoption of TRE 702. In addition to the various approaches taken by the courts of appeals, the supreme court noted that in *Kelly v. State*, 824 S.W. 2d 568 (Tex. Crim. App. 1992), decided prior to *Daubert*, the Texas court of criminal appeals had held that TRCE 702 mandated a finding that evidence was relevant and reliable. In *Kelly*, the court found that evidence is reliable if the underlying theory and the technique applying it are valid, and if the technique was properly applied on the occasion in question. The *Kelly* court suggested seven factors, very similar to those set out in *Daubert*, which could affect a trial court’s determination of reliability: (1) general acceptance of the theory and technique by the relevant scientific community; (2) the expert’s qualifications; (3) the existence of

literature supporting or rejecting the theory; (4) the technique's potential rate of error; (5) the availability of other experts to test and evaluate the technique; (6) the clarity with which the theory or technique can be explained to the trial court; and (7) the experience and skill of the person who applied the technique on the occasion in question.

Robinson was a products liability case involving whether a tree fungicide, Benlate, damaged a pecan orchard. *Robinson*, 923 S.W. 2d at 551-52. The plaintiffs' expert used a methodology called "comparative symptomology" to conclude that Benlate caused damage. *Id.* at 551. After the defendant challenged the reliability of the expert's method, the trial court excluded the expert's testimony because his methodology was deemed to be unreliable. *Id.* at 552. The Fort Worth court of appeals reversed, holding that the trial court had invaded the jury's right to determine the credibility of the expert's testimony. *Id.* at 557.

The supreme court reversed, holding that when expert evidence is not grounded in science, it is no more than a "subjective belief or unsupported speculation." *Robinson*, 923 S. W. 2d at 557 (citing *Daubert*, 509 U.S. at 590). To prevent juries from being confused by junk science, the court concluded that trial courts should act as gatekeepers, preliminarily excluding opinions based on unreliable methodologies. *Id.* at 552 (supreme court was clearly motivated by a concern about the law getting ahead of science). Finding the reasoning in *Kelly* persuasive, the supreme court held that to be admissible, under TRE 702, the following must be satisfied: (1) the witness must qualify as an expert; (2) the proposed testimony must be "scientific knowledge"; and (3) the testimony must assist the trier of fact. *Id.* To satisfy the third prong, the evidence must be relevant and reliable as set forth in *Kelly*. Noting that the factors relied on by the trial court will vary from case to case, the *Robinson* court set out the following, non-exhaustive list: (1) the extent to which the theory has been or can be tested; (2) the extent to which the technique relies on the subjective interpretation of the expert; (3) whether the theory has been subjected to peer review and/or publication; (4) the

technique's potential rate of error; (5) whether the underlying theory or technique has been generally accepted as valid by the relevant scientific community; and (6) the nonjudicial uses that have been made of the theory or technique. *Robinson*, 923 S. W. 2d at 557. The burden is on the party proffering the evidence once an objection is raised by the opponent. The supreme court instructed trial courts to apply the relevant factors to assess reliability and then perform a balancing test similar to TRE 403. *Id.*

In *Merrell Dow Pharmaceuticals, Inc. v. Havner*, 953 S. W. 2d 706 (1997), the Texas supreme court held that where expert testimony has been admitted and heard by the jury, a trial or appellate court reviewing the sufficiency of the evidence must first assess the reliability of the expert opinion before giving the evidence weight. In essence, the *Havner* challenge gives opponents a “second bite” at the *Robinson* apple during summary judgment, directed verdict, or on appeal. *Id.* at 714; see Keller, *Bridging the Analytical Gap*, 33 St. Mary’s L.J. 277, 293 (2002). Significantly, the *Havner* court also held that if there are other plausible causes of an injury or condition that could be negated, the expert must rule out the other possible causes with reasonable certainty. *Havner*, 953 S. W. 2d at 720.

After establishing the two bites at the *Robinson* apple in *Havner*, the Texas supreme court expanded the application of *Robinson* and *Havner* challenges. *Gammill v. Jack Williams Chevrolet, Inc.*, 972 S.W. 2d 713 (Tex. 1998); see also Keller, *Jury Erosion*, 32 St. Mary’s L.J. 383, 406-07 (2001). In *Gammill* the court held: (1) that the *Robinson* reliability standard applies not only to “novel” science, but to established scientific methodology as well; (2) that the reliability requirement also applies to non-scientific expert testimony; and (3) that the *Robinson* factors are not the sole standard for determining reliability. *Id.* at 721, 726-27. In so holding, the court crafted an alternative to the six *Robinson* factors – the “analytical gap test.” *Id.* at 727.

Gammill was an automobile products liability case involving the expert testimony of two mechanical engineers. *Gammill*, 972 S. W. 2d at 716-17, 727. The Gammills sued Isuzu alleging that the seat belt their daughter was wearing failed to work properly. *Id.* at 716. The Gammill's expert tested and studied the vehicle's restraint system and concluded that the seatbelt did not function properly during the accident. Defendants moved for summary judgment and moved to strike plaintiffs' experts on grounds that they were not qualified and that under *Robinson*, their opinions were not reliable. *Id.* The trial court struck the plaintiffs' experts finding them unqualified and their opinions unreliable and granted the defendants' summary judgment. *Id.* at 718. The Fort Worth court of appeals affirmed.

In *Gammill*, the supreme court recognized that "there are many factors that a trial court may consider in making the threshold determination of admissibility under Rule 702." The Court noted that the *Robinson* factors are "nonexclusive." *Id.* at 720. "Trial courts may consider other factors which are helpful to determining the reliability of the scientific evidence. The factors a trial court will find helpful in determining whether the underlying theories and techniques of the proffered evidence are scientifically reliable will differ in each particular case." *Id.*

The appellant argued that the scrutiny of reliability required by *Robinson* was reserved for opinions based upon "novel science, as opposed to established science," such as mechanical engineering (as was at issue in *Gammill*). *Id.* at 721. After examining, *Daubert* and the Texas court of criminal appeals' opinion in *Kelly v. State*, the supreme court rejected the appellant's contention, holding that *Robinson* applies to all scientific expert testimony. *Id.* at 722. In so holding, the supreme court directly recognized that there are "many instances when the relevance and reliability of an expert witness' testimony are shown by the witness' skill and experience." *Id.* The supreme court concluded "that whether an expert's testimony is based on 'scientific, technical or other specialized knowledge,' *Daubert* and Rule 702 demand that the district court evaluate the methods,

analysis and principles relied upon in reaching the opinion. The [trial] court should insure that the opinion comports with the applicable professional standards outside the courtroom and that it ‘will have a reliable basis in the knowledge and experience of [the] discipline.’” *Id.* at 725-26. Further, the court held that “Rule 702’s fundamental requirements of reliability and relevance are applicable to all expert testimony offered under that rule. Nothing in the language of the rule suggests that opinions based on scientific knowledge should be treated any differently than opinions based on technical or other specialized knowledge. It would be an odd rule of evidence that insisted that some expert opinions be reliable but not others. All expert testimony should be shown to be reliable before it is admitted.... That said, it is equally clear that the considerations listed in *Daubert* and in *Robinson* for assessing the reliability of scientific evidence cannot always be used with other kinds of expert testimony....The court in discharging its duty as gate keeper must determine how the reliability of particularly testimony is to be assessed.” *Id.* at 726.

Gammill makes it clear that on the one hand, Rule 702 requires all expert testimony to be reliable and relevant. *Id.* However, “*Daubert* does not apply in the sense that the considerations it set out for determining whether the prerequisites are satisfied cannot be applied to all types of evidence.” *Id.* The supreme court reiterated that “the criteria for assessing relevance and reliability must vary, depending on the nature of the evidence.” *Id.* at 727.

III. APPLICATION OF THE ROBINSON FACTORS/THE ANALYTICAL GAP TEST/THE HAVNER CHALLENGE

A. Cases Applying the Robinson Factors

Robinson has been applied in a variety of cases involving novel science, as well as established science. See *Doyle Wilson Homebuilder, Inc. v. Pickens*, 996 S.W.2d 387 (Tex. App.-- Austin 1999) (electrical engineer's expert testimony regarding cause of home fire was properly admitted); *Southern Pacific Transp. Co. v. Maliska*, 1999 WL 354507 (Tex. App.-- Beaumont

1999, pet. den.) (testimony regarding couplings from experienced worker); *Godsey v. State*, 989 S.W. 2d 482 (Tex. App.--Waco 1999) (standard of care for Alzheimer's patients); *Olin Corp. v. Smith*, 990 S.W. 2d 789 (Tex. App.--Austin 1999, pet. den.) (defective ammunition); *Minnesota Min. and Mfg. Co. v. Atterbury*, 978 S.W. 2d 183 (Tex. App.--Texarkana 1998) (breast implants); *General Motors Corp. v. Saenz*, 974 S.W. 2d 407 (Tex. 1999) (alternate design evidence); *Degrate v. Chevron USA, Inc.*, 1998 WL 196451 (Tex. App.--Beaumont 1998 (gas dispersion modeling); *Waring v. Wommack*, 945 S.W. 2d 889 (Tex. App.--Austin 1997) (accident reconstruction engineer); *Cooper Tire & Rubber Co. v. Mendez*, 155 S. W. 3d 382 (Tex. App.--El Paso 2004) (*Robinson* factors to be considered in determining whether scientific evidence is reliable and thus admissible); *Exxon Pipeline Co. v. Zwahr*, 88 S. W. 3d 623 (Tex. 2002) (holding reliability requirement governing admission of expert testimony focuses on principles, research, and methodology underlying expert's conclusions and under this requirement expert testimony is unreliable if it is not grounded in methods and procedures of science and is no more than subjective belief or unsupported speculation); *Emmett Properties, Inc. v. Halliburton Energy Services, Inc.*, 167 S. W. 3d 365 (Tex. App.--Houston [14th Dist.] 2005) (expert's testimony must be both relevant to the issues and based on a reliable foundation); *Alaniz v. Rebello Food & Beverage, L.L.C.*, 165 S. W. 3d 7 (Tex. App. Houston [14th Dist.] 2005) (proponent of expert testimony bears burden of demonstrating its scientific reliability); *Daimler Chrysler Corp. v. Hillhouse*, 161 S. W. 3d 541 (Tex. App.--San Antonio 2004); *Texas Mut. Ins. Co. v. Lerma*, 143 S.W. 3d 172 (Tex. App.--San Antonio 2004) (to be reliable the scientific evidence must be grounded in scientific method and procedure such that it amounts to more than subjective belief or unsupported speculation); *Goodyear Tire & Rubber Co. v. Rios*, 143 S. W. 3d 107 (Tex. App.--San Antonio 2004) (to be reliable expert's testimony regarding scientific, technical, or other specialized knowledge must be grounded in scientific method and procedure such that it amounts

to more than subjective belief or unsupported speculation); *Loram Maintenance of Way, Inc. v. Ianni*, 141 S. W. 3d 733 (Tex. App.--El Paso 2004); *In re Estate of Robinson*, 140 S. W. 3d 782 (Tex. App.--Corpus Christi 2004); *In re R.O.C.*, 131 S. W. 3d 129 (Tex. App.--San Antonio 2004) (in determining admissibility of expert testimony trial court need not determine whether expert witness's conclusions are correct but only whether analysis used to reach such conclusions is reliable); *Perez ex rel. Perez v. Blue Cross Blue Shield of Texas, Inc.*, 127 S. W. 3d 826 (Tex. App.--Austin 2003) (standard for admissibility of expert testimony is same on summary judgment as at trial and in determining whether testimony is admissible trial court does not determine whether expert's conclusions are correct but only whether analysis used to reach the conclusions is reliable); *Burns v. Baylor Health Care System*, 125 S. W. 3d 589 (Tex. App.--El Paso 2003); *Houston Livestock Show and Rodeo, Inc. v. Hamrick*, 125 S. W. 3d 555 (Tex. App.--Austin 2003) (basis for an expert's testimony is that it should be shown to be reliable before it is admitted); *Wiggs v. All Saints Health System*, 124 S. W. 3d 407 (Tex. App.--Fort Worth 2003); *Reed v. Granbury Hosp. Corp.*, 117 S. W. 3d 404 (Tex. App.--Fort Worth 2003); *Ter-Vartanyan v. R. & R. Freight, Inc.*, 111 S. W. 3d 779 (Tex. App.--Dallas 2003); *Couch v. Simmons*, 108 S. W. 3d 338 (Tex. App.--Amarillo 2003) (under rule concerning admissibility of expert witness's testimony, expert testimony is "unreliable" if it is not grounded in methods and procedures of science and is no more than subjective belief or unsupported speculation); *DeLarue v. State*, 102 S. W. 3d 388 (Tex. App.--Houston [14th Dist.] 2003) (accident reconstruction is scientific evidence subject to Daubert-type hearing to test reliability); *Marvelli v. Alston*, 100 S. W. 3d 460 (Tex. App.--Fort Worth 2003) (reliability of expert's scientific testimony must be determined from all the evidence); *Daniels v. Lyondell-Citgo Refining Co., Ltd.*, 99 S. W. 3d 722 (Tex. App.--Houston [1st Dist.] 2003) (where expert testifies that technique or methodology upon which her opinion is based is generally accepted within the scientific community the underlying data should be independently

evaluated in determining whether opinion itself is reliable); *United Services Auto. Ass'n v. Gordon*, 103 S. W. 3d 436 (Tex. App.--San Antonio 2002) (to be reliable expert testimony must be grounded in scientific method and procedure such that it amounts to more than subjective belief or unsupported speculation); *Wolfson v. BIC Corp*, 95 S. W. 3d 527 (Tex. App.--Houston [1st Dist.] 2002); *In re J.B.*, 93 S. W. 3d 609 (Tex. App.--Waco 2002) (expert's testimony is unreliable even when underlying data are sound if the expert draws conclusions from that data based on flawed methodology); *State Farm Fire and Cas. Co. v. Rodriguez*, 88 S. W. 3d 313 (Tex. App.--San Antonio 2002) (to be reliable scientific evidence must be grounded in scientific method and procedure such that it amounts to more than subjective belief or unsupported speculation); *Keo v. Vu*, 76 S. W. 3d 725 (Tex. App.--Houston [1st Dist.] 2002); *Brownsville Pediatric Ass'n v. Reyes*, 68 S. W. 3d 184 (Tex. App.--Corpus Christi 2002) (expert witness testifying as defense expert where defense does not have the burden of proof on the issue but who is testifying only about possible causes that could have led to injuries and damages is subject to same scrutiny by trial judge as expert for plaintiffs to determine if expert's opinions are based on methods and research which are reliable); *In re CDK*, 64 S. W. 3d 679 (Tex. App.--Amarillo 2002); *Schindler Elevator Corp. v. Anderson*, 78 S. W. 3d 392 (Tex. App.--Houston [14th Dist.] 2001); *Union Carbide Corp. v. Mayfield*, 66 S. W. 3d 354 (Tex. App.-- Corpus Christi 2001); *GTE Mobilnet of South Texas Ltd. Partnership v. Pascouet*, 61 S. W. 3d 599 (Tex. App.--Houston [14th Dist.] 2001); *Helm v. Swan*, 61 S. W. 3d 493 (Tex. App.--San Antonio 2001); *Star Enterprise v. Marze*, 61 S. W. 3d 449 (Tex. App.--San Antonio 2001).

B. The Analytical Gap Test

Gammill provides that experts are “non-scientific” when they rely upon individual experience and training to draw conclusions and that the reliability of such experts is not properly measured by the *Robinson*-factor analysis. *Gammill*, 972 S. W. 2d at 722; see *Keller*, 33 St. Mary's

L.J. at 306. The supreme court explained the differences between experts relying on scientific techniques and experts relying on individual skill and experience by quoting the Sixth Circuit's "bee-keeper" metaphor:

"The distinction between scientific and non-scientific expert testimony is a critical one. By way of illustration, if one wanted to explain to a jury how a bumblebee is able to fly, then the aeronautical engineer may be a helpful witness. Since flight principles have some universality, the expert could apply general principles to the case of the bumblebee. Conceivably, even if he had never seen a bumblebee, he still would be qualified to testify, as long as he was familiar with its component parts. On the other hand, if one wanted to prove that bumblebees always take off into the wind, a bee keeper with no scientific training at all would be an acceptable witness if a proper foundation were laid for his conclusions. The foundation would not relate this formal training, but to his first hand observations. In other words, the bee keeper does not know any more about flight principles than the jurors, but he has seen a lot more bumblebees than they have."

Id. at 724-25 citing to *Berry v. City of Detroit*, 25 F.3d 1342, 1349-50 (6th Cir. 1994).

The analytical gap test has been applied to a wide array of expert testimony. See *Kroger Co. v. Betancourt*, 996 S.W. 2d 352, 362-63 (Tex. App.—Houston [14th Dist.] 1999, pet. den.) (analytical gap test applied to testimony of engineering expert who attempted to demonstrate that a straddle jack malfunctioned); *Nissan Motor Co., Ltd. v. Armstrong*, 32 S.W. 3d 701, 708 (Tex. App.—Houston [14th Dist.] 2000, no pet.) (applying the analytical gap test to the testimony of a mechanical engineer); *Ford Motor Co. v. Aguiniga*, 9 S. W. 3d 252, 264-65 (Tex. App.—San Antonio 1999, pet. den.) (applying analytical gap test to affirm admission of testimony from electrical engineer and metallurgist); *Huerta v. Caddell*, 2000 W.L. 245503 at 6 (Tex. App.—Amarillo Mar. 3, 2000, pet den.) (not designated for publication) (affirming trial court's exclusion of engineering expert's testimony regarding mechanical failure because of analytical gap between underlying data and actual facts of case); *State Farm Lloyds v. Mireles*, 2001 W.L. 883008 at 8 (Tex. App.—San Antonio 2001, no pet) (not designated for publication) (application of analytical gap test to testimony of expert concerning foundation damage); *In re D.S.* 19 S.W. 3d 525, 528 (Tex. App.—Ft. Worth 2000, no pet.) (focusing on doctor's qualifications to conclude there is no

analytical gap between his testimony and the data); *J. C. Penney Life Ins. Co. v. Baker*, 33 S.W. 3d 417, 426-28 (Tex. App.—Ft. Worth 2000, no pet.) (applying analytical gap test to osteopathist’s testimony concerning coronary artery disease); *Astran v. Cantu*, 2000 W. L. 1675713, at 304 (Tex. App.—Austin 2000, no pet.) (not designated for publication) (application of analytical gap test to accent reconstructionist’s testimony); *City of Houston v. Mendoza*, 1999 W.L. 1080713, at 8-9 (Tex. App.—Houston [14th Dist.] 1999, no pet.) (not designated for publication) (applying the analytical gap test in determining reliability of a reconstruction expert); *Seariver Mar. Inc. v. Hentz*, 2000 W.L. 298425 at 5-7 (Tex. App.—Houston [1st Dist.] 2000, pet den.) (not designated for publication) (applying analytical gap test to testimony of maritime safety expert); *Guadalupe-Blanco River Authority v. Kraft*, 39 S.W. 3d 264, 265 (Tex. App.—Austin 2001, no pet.) (affirming trial court’s admission of expert testimony based on reliable methodology); *Pleasant Glade Assembly of God v. Schubert*, 174 S. W. 3d 388 (Tex. App.—Fort Worth 2005) (holding that if foundational data underlying opinion testimony are unreliable expert will not be permitted to base opinion on data because any opinion drawn from that data is likewise unreliable and expert's testimony is unreliable even when underlying data are sound if the expert draws conclusions from the data based on flawed methodology); *Ford Motor Co. v. Ledesma*, 173 S.W. 3d 78 (Tex. App.—Austin 2005) (for expert testimony to be considered reliable and admissible there must not be too great an analytical gap between the data or observations and the expert's conclusions); *In re K.L.R.* 162 S.W. 3d 291 (Tex. App.—Tyler 2005) (where the trial court when determining whether proposed expert testimony is admissible must address a field of study aside from the hard sciences, such as the social sciences or a field based primarily upon experience and training as opposed to the scientific method, the requirement of reliability applies, but with less vigor than to the hard sciences, and in that instance, the appropriate inquiry is: (1) whether the field of expertise is a legitimate one; (2) whether the subject matter of the expert's testimony is within the scope of that field; and (3) whether the expert's

testimony properly relies upon and/or utilizes the principles involved in the field); *Taylor v. American Fabritech, Inc.*, 132 S. W. 3d 613 (Tex. App.--Houston [14th Dist.] 2004) (when considering the reliability of proffered nonscientific expert testimony the court considers whether there is an analytical gap between the experts' opinions and the bases on which they were founded); *Allstate Texas Lloyds v. Mason*, 123 S.W. 3d 690, 697-98 (Tex. App.—Fort Worth 2003, no pet.) (trial court properly excludes expert testimony as unreliable if: (1) the foundational data underlying the opinion is unreliable; (2) the methodology used by the expert to interpret the underlying data is flawed; (3) notwithstanding the validity of the underlying data and methodology, there is an analytical gap in the expert evidence; or (4) the expert fails to rule out other plausible causes).

C. The Havner Challenge: Ruling Out Other Possible Causes

A *Havner* challenge typically involves the assertion that in order to present a sufficient factual showing of causation, the plaintiff must rule out all other plausible causes of the injury to overcome a legal sufficiency challenge. *Havner*, 953 S.W. 2d at 720. Since *Havner*, many courts have interpreted it to require that a causation expert's failure to rule out other plausible causes of injury renders his opinion unreliable and, consequently, no evidence of causation. *Weiss v. Mech. Associated Servs.*, 989 S.W. 2d 120, 125 (Tex. App.—San Antonio 1999, pet. den.); *see also State Farm Lloyds v. Mireles*, 63 S. W. 3d 491, (Tex. App.—San Antonio 2001) (failure to rule out other possible causes of a particular injury renders opinion unreliable); *Martinez v. City of San Antonio*, 40 S. W. 3d 587, 593 (Tex. App.—San Antonio 2001) (failure to rule out alternative causes of injury renders opinion unreliable); *Emmett Properties, Inc. v. Halliburton Energy Servs., Inc.*, 167 S. W. 3d 365, 373-74 (Tex. App.—Houston [14th Dist.] 2005) (expert should carefully consider and rule out other causes and failure to do so renders expert's opinion little more than speculation); *Helm v. Swan*, 61 S. W. 3d 493, 497-98 (Tex. App.—San Antonio 2001) (without testimony to rule out a possible cause expert's testimony is mere speculation). *Allstate Texas Lloyds*, 123 S.W.3d at

698 (trial court properly excludes expert testimony as unreliable if expert fails to rule out other plausible causes).

Weiss sued a radiology group, claiming chemicals from the group's neighboring office migrated into her office causing her to suffer from immune system dysfunction. *Id.* at 122-23. *Weiss* proffered the testimony of two expert toxicologists. *Id.* The radiology group filed a *Robinson* challenge and a motion for summary judgment, arguing there was no evidence of causation. *Id.* at 123. The trial court granted summary judgment, holding the evidence, including the expert testimony regarding the emission of chemicals, failed to raise a genuine issue of material fact. *Id.* The trial court's judgment did not reflect whether the trial court admitted or excluded the expert testimony before granting summary judgment. *Weiss*, 989 S. W. 2d at 124.

On appeal, the *Weiss* court determined the trial court would not have abused its discretion if it admitted the expert testimony before granting summary judgment. *Id.* at 125. Both experts, while acknowledging chemicals had not been detected in the building, stated they believed chemicals entered the workplace. *Id.* at 122-23. Assuming the trial court had found the opinion reliable and admitted the expert testimony, the *Weiss* court went on to consider the summary judgment, reviewing the expert testimony under the "opponent friendly" legal sufficiency standard established in *Havner*. *Id.* at 125. The court, in conducting the *Havner* review, examined the reliability of *Weiss*'s experts independent of the trial court's reliability finding. *Id.* at 125. Applying the *Robinson* factors, the *Weiss* court held the expert testimony unreliable, and consequently, no evidence of causation in accordance with *Havner*. *Weiss*, 989 S. W. 2d at 125-26. In finding the experts unreliable, the *Weiss* court focused on the fact that the experts failed to rule out other plausible causes for *Weiss*'s injuries. *Id.* The court held *Weiss*'s testimony about causation was insufficient absent reliable expert testimony to connect the chemicals to the injury, and as such, the *Weiss* court affirmed the judgment of the trial court. *Id.* at 126. *Contrast with*

Helena Chemical Co. v. Wilkins, 18 S. W. 3d 744 (Tex. App.—San Antonio 2000), aff'd 47 S. W. 3d 486 (Tex. 2001).

In *Helena Chemical Co. v. Wilkins*, a farmer sued a grain seller claiming that their crops failed to produce as represented by the seller. 18 S. W. 3d 744, 748 (Tex. App.—San Antonio 2000), aff'd 47 S. W. 3d 486 (Tex. 2001). The seller marketed the grain as having “excellent dry land yield potential.” *Id.* at 747. The parties disagreed as to why the grain seed failed. *Id.* at 748. The plaintiff’s expert concluded that the defendant’s grain seed was not appropriate for crops in Starr County. The jury returned a verdict in favor of the plaintiffs and the defendant appealed. *Id.* at 752.

On appeal, the defendant argued that the plaintiff’s expert failed to rule out all the plausible causes of the injury with reasonable certainty. *Id.* at 754. Specifically, the seller argued that the seed failed because the plaintiff planted a cotton crop the year before the planting of the grain seed and that the previous cotton crop depleted the soil’s moisture, leading to the stunted crop. *Id.* The court of appeals recognized that the plaintiff’s expert had failed to rule out the possibility that the “cotton crop” had caused the injury as opposed to the defendant’s grain seed. *Id.* at 756. However, rather than finding the plaintiff’s expert’s testimony to be unreliable, the court relied on extraneous evidence to satisfy the *Havner* requirement of ruling out alternative causes – the testimony of the plaintiff farmer. *Id.* at 756. Specifically, the plaintiff demonstrated that the cotton-grain rotations are required by the local crop management office and that his neighbor rotated cotton and grain without the adverse effects suffered by the plaintiff. *Id.* The San Antonio court reasoned that the jury could have considered the explanation offered by the plaintiff to rebut the possibility of other causes. *Id.*

On review, the Texas supreme court found that the trial court did not abuse its discretion in admitting the plaintiff’s expert testimony. The supreme court noted that the lack of analytical gaps

in the expert's testimony, coupled with his experience and thorough testimony concerning his methodology demonstrated that his opinions drawn from the underlying data were reliable. *Helena Chemical Co. v. Wilkins*, 47 S. W. 3d 486, 501 (Tex. 2001). In doing so, the supreme court implicitly held that the *Havner* requirement of ruling out alternative causes can be satisfied by either direct expert testimony or evidence extraneous to the expert's opinions. *Id.* at 504. (recognizing evidence other than expert testimony in support of proving a producing cause of the injury.)

IV. EXPERT TESTIMONY CONCERNING “SOCIAL OR SOFT SCIENCES”

The Austin court of appeals has recently provided guidance concerning the appropriate factors to be considered in cases involving expert testimony concerning “social sciences” as opposed to “scientific expert testimony.” *Taylor v. TDPRS*, 160 S. W. 3d 641, 650 (Tex. App.—Austin 2005). *Taylor* involved an appeal from a final decree terminating the parental rights of a child's biological parents, denying conservatorship to the paternal grandmother, and awarding sole conservatorship to the Texas Department of Protective and Regulatory Services. *Taylor*, 160 S. W. 3d at 644. At trial, appellant raised a *Robinson* challenge to the admission of a court-ordered home study prepared by a social worker. *Id.* at 649. Appellant asserted that the social worker was not qualified and that his opinions and testimony were scientifically unreliable. *Id.*

In rejecting the appellant's argument, the Austin court of appeals noted that to be admissible, expert testimony must be (1) uttered by a qualified expert; (2) relevant; and (3) based on a reliable foundation. *Id.* at 650, citing to *Helena Chemical Co. v. Wilkins*, 47 S. W. 3d 486, 499 (Tex. 2001). “The courts have developed various factors to be considered in assessing reliability of an expert's conclusions. *See Gammill*, 972 S. W. 2d at 720 (citing *Robinson*, 923 S. W. 2d at 557). However, some cases involve situations that are not susceptible to scientific analysis, and the *Robinson* factors are not appropriate and do not strictly govern in those instances. *See Gammill*, 972 S. W. 2d 724 (distinguishing between “scientific” and “non-scientific” expert testimony)...The

court of criminal appeals has recognized this dichotomy in criminal cases and has classified scientific expertise into two categories – “hard sciences” and “soft sciences.” *Nenno v. State*, 970 S. W. 2d 549, 560 (Tex. Crim. App. 1998) overruled on other grounds by *State v. Terrazas*, 4 S. W. 3d 720, 727 (Tex. Crim. App. 1999). The *Nenno* court concluded that in fields other than the hard sciences, such as the social sciences, factors like an expert’s education, training and experience are more appropriate factors in testing reliability than the scientific method. Thus, when measuring the reliability of an expert’s opinion in fields within the soft sciences, the *Nenno* court concluded that courts should consider whether: (1) the field of expertise is a legitimate one; (2) the subject matter of the expert’s testimony is within the scope of that field; and (3) the expert’s testimony properly relies upon the principles involved in that field of study.” *Nenno*, 970 S. W. 2d at 560.

The Austin court of appeals noted that while the supreme court has yet to adopt the *Nenno* approach, several of our sister courts have concluded that the *Nenno* framework should be employed to evaluate soft science expert testimony. “*In re J.B.*, 93 S. W. 3d 609, 629-31 (Tex. App.—Waco 2002) (noting that *Robinson* factors cannot always be used with all types of expert testimony); *In re A.J.L. & C.R.L.*, 136 S. W. 3d 294, 298 (Tex. App.—Ft. Worth 2004, no pet.); *In re G. B.* WL 22327191 (Tex. App.—Amarillo 2003, no pet.) (*Robinson* factors apply in many “hard science” situations but different standard applies outside hard sciences – such as social sciences or fields relying primarily upon experience and training as opposed to scientific method). A social study does not lend itself to evaluation by the *Robinson* factors because it is an inherently subjective endeavor and is not susceptible to scientific replication or statistical or rate of error analysis. *Id.* at 650-51. As the El Paso court reasoned:

“Generally speaking, the purpose of a social study is to interview the litigants and those individuals with knowledge of relevant facts, such as extended family members, neighbors, scout leaders, teachers, baby sitters, day-care providers, doctors, sports coaches, and other individuals who have had the opportunity to observe the parenting abilities of the litigants, the relationship between the child and the parents, the living arrangements at both households, and the plans each litigant has adopted for the day-

to-day caretaking of the child. It is designed to be comparative in nature... The Family Code does not detail the individuals to be interviewed nor the issues to be covered by the report for the simple reason that the relevant facts to be developed will largely depend on the disputed issues and the theory or theories which will be litigated. Further, because the trial court has great discretion in determining the overriding best interest of the child, the Legislature has deferred the development of appropriate standards and criteria to either the appropriate state agency or to the court itself.”

Chacon v. Chacon, 978 S. W. 2d 633, 637-38 (Tex. App.—El Paso 1998, no pet.). As a result, the Austin court analyzed the admissibility of the social worker’s testimony under the *Nenno* approach. *Taylor*, 160 S. W. 3d at 651. Under the *Nenno* standard, considering the social worker’s education, training and experience and the thoroughness of her findings and conclusions, the Austin court found that the trial court did not abuse its discretion by admitting the social worker’s testimony. *Id.* at 641-52.

In the *In re JB* case, the Waco court of appeals concluded that when evaluating expert testimony, that a court should first attempt to apply the *Robinson* factors. 93 S. W. 3d 609 (Tex. App.—Waco 2002). Depending upon the type of expert testimony involved, all of the factors, some of the factors or none of the *Robinson* factors may apply. *Id.* at 621. *In re JB* involved the testimony of a psychologist, Dr. Shinder, concerning a parenting assessment. *Id.* at 622. The court concluded that for purposes of assessing the reliability of Dr. Shinder’s testimony, reliability includes three components: (1) foundational reliability; (2) methodological reliability; and (3) connective reliability. *Id.*; see also Brown, *Eight Gates for Expert Witnesses*, 36 Hous. L. Rev. 743, 747-749. The court discussed in detail the testimony of Dr. Shinder and examined the methodological reliability of his testimony by applying the *Robinson* factors. *Id.* at 622-26. The court then ultimately concluded that because Dr. Shinder offered no specific independent sources to support the reliability of his methodology, it was not reliable. *Id.* at 622-26. The court suggested that Dr. Shinder’s “bold assurance” that his method was reliable was not sufficient. *Id.* citing to *Kraft*, 77 S. W. 3d at 808.

V.
**THE USE OF EXPERT TESTIMONY DURING
SUMMARY JUDGMENT PROCEEDINGS**

Summary judgment evidence must be presented in a form that would be admissible in a conventional trial on the merits. Tex. R. Civ. P. 166a(f) (“affidavits...shall set forth such facts as would be admissible in evidence”); *United Blood Servs. v. Longoria*, 938 S.W. 2d 29, 30 (Tex. 1997); *contrast* with *Alcan Aluminum Corp. v. BASF Corp.*, 133 F. Supp. 482, 493 (N.D. Tex. 2001). However, in *Alcan*, the federal district court stated that when determining the admissibility of expert testimony for purposes of a motion for summary judgment, the court “should be more careful about excluding testimony than including testimony.” The responding party must be given an adequate opportunity to defend its admissibility and therefore, the court elected only to conduct a “preliminary review” of the admissibility of the expert’s testimony. “Courts need not, and perhaps often should not, apply *Daubert* at the summary judgment stage.” *Id.* In this case, the court held there existed a genuine issue of material fact independent of the causation expert’s testimony. Therefore, the court need not and did not reach the question of whether the expert’s opinion should be considered for purposes of summary judgment. *Alcan* appears to be in conflict with Texas state courts.

TRE 702 provides that:

“If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise.”

In addition to Rule 702, rules 401, 403 and 703 require that the judge act as a gatekeeper when dealing with the admissibility of expert evidence. *See* TRE 401 (requires evidence to be relevant); TRE 403 (excluding evidence if its probative value is substantially outweighed by the danger of unfair prejudice); TRE 703 (addressing the permissible bases for expert opinions). Former Houston

District Judge Harvey Brown has described the admissibility of expert testimony in terms of “*Eight Gates*.” See Harvey Brown, *Eight Gates for Expert Witnesses*, 36 Hous. L.Rev. 743 (1999).

The “*Eight Gates*” are:

1. Helpfulness: The expert’s testimony must assist the trier of fact. See TRE 702; *K-Mart Corp v. Honeycutt*, 24 S. W. 3d 357, 360 (Tex. 2000);
2. Qualifications: The expert must be qualified to testify on the particular issue. *Broders v. Heise*, 924 S. W. 2d 148 (Tex. 1996);
3. Relevancy: The testimony must be relevant. *Robinson*, 923 S. W. 2d at 549;
4. Methodological Reliability: the methodology employed by the expert must be reliable. *Robinson*, 923 S. W. 2d at 556;
5. Connective Reliability: The reasoning employed by the expert to formulate his opinion must be sound. *Gammill*, 972 S.W.2d at 726 (court may conclude that there is simply too great an analytical gap between data and opinion proffered); *Havner*, 953 S. W. 2d at 714 (a flaw in the reasoning of an expert may render the testimony inadmissible, regardless of the validity or reliability of the information upon which the expert based his opinion);
6. Foundational Reliability: The data which the expert relied upon to formulate his opinion must be reliable. *Havner*, 953 S. W. 2d at 714 (requiring testimony to be based upon sufficient facts or data);
7. Bases for Testimony: The data or information relied upon by an expert must be of a type reasonably relied upon by experts in that field. TRE 703; *Toshiba Machine Co., America v. SPM Flow Control, Inc.*, 2005 WL 3008433 (Tex. App.—Ft. Worth 2005, no pet.);
8. Balancing Test: The testimony’s probative value must not be substantially outweighed by the danger of unfair prejudice. TRE 403. Equally important, special care need be

taken to ensure that any expert testimony presented address and satisfy Robinson/Havner/Gammill and their progeny.

Neither the U.S. nor the Texas supreme court has set forth a procedure for challenging the expert and/or portions of the expert's testimony. TRCP 104 (a) permits a court to conduct a hearing on expert challenges. The difficulty is when a party files a motion for summary judgment to which the opposing party files a response that includes an affidavit from an expert, and the moving party then objects to the affidavit under *Robinson/Havner/Gammill*. Many courts set both motions for the same time. See Brown and Love, *Daubert/Robinson Update*, 21st Annual Advanced Personal Injury Law Course 49 (2005). These courts then hear the motion to strike the expert testimony first and conduct a full evidentiary hearing. During these hearings, some lawyers provide the court with live testimony from experts, while others rely solely on affidavits, reports or depositions or a combination. After ruling on the motion to strike, these courts then rule on the summary judgment motion. In most causation summary judgment motions, if the expert is struck, there will be no evidence in opposition to the summary judgment motion and it will be granted. Fairness in some cases may require a continuance of the summary judgment hearing to allow the party whose expert is struck an opportunity to find a new expert.

In *Praytor v. Ford Motor Co.*, 97 S.W. 3d 237, 246 (Tex. App.—Houston [14th Dist.] 2002, no pet.), the court held that a respondent to a no evidence motion for summary judgment that involves the reliability of expert testimony may request a continuance of the summary judgment proceeding in order to submit additional evidence. The non-movant may also request a “*Robinson* hearing in order to overcome the reliability challenge.”

The *Gammill* court appears to have tacitly approved the procedure for reviewing the admissibility of the experts' opinion under Rule 104(a) before ruling on the motion for summary judgment. *Gammill* was an appeal of a summary judgment for the defendants. In response to the

motion, the plaintiffs contended that a fact issue was raised by the affidavits of their two engineers. In reply, the defendants moved to strike new testimony. After an evidentiary hearing, new testimony was struck and the trial court granted the defendants' motion for summary judgment. The Texas supreme court was not critical of the procedure employed, nor did it change the appellate's standard for review.

A. Satisfying *Robinson/Havner/Gammill* – Ensuring that Your Expert's Testimony is Reliable

Preparing to defend against a *Robinson/Havner/Gammill* challenge starts well before the summary judgment stage. The trial court will exclude an expert's testimony as unreliable if:

1. the foundational data underlying the opinions is unreliable;
2. the methodology used by the expert to interpret the underlying data is flawed;
3. notwithstanding the validity of the underlying data and methodology, there is an analytical gap in the expert evidence; or
4. the expert fails to rule out other plausible causes.

Allstate Texas Lloyds, 123 S.W. 3d at 698.

Accordingly, these considerations should be heeded in connection with the preparation of expert reports and most certainly, in connection with the preparation of an expert's summary judgment affidavit.

1. Foundational Reliability

In addition to addressing methodology, the *Robinson* court also observed that expert opinions must be based on a "reliable foundation." 923 S.W. 2d at 556. In *Havner*, the court found that there was no adequate foundation for the experts' testimony that Benedictin caused the birth defects of the plaintiff's daughter. *Havner*, 953 S. W. 2d at 711. The court held that the "expert's bare opinion will not suffice. The substance of the testimony must be considered." *Id.* Courts will critically examine whether the expert's reliance upon the underlying data is reasonable. *Id.* at 714.

The opinion of an expert must be supported by an adequate foundation of relevant facts, data or opinions. *See General Elec. Co. v. Joiner*, 522 U.S. 136, 118 S. Ct. 512, 139 L. Ed.2d 508 (1997) (facts or data relied upon by expert must be sufficient). Absent such a foundation, the expert's opinions will be struck. Foundation reliability generally encompasses the following:

1. Sufficient facts or data;
2. The opinion must not be contrary to the undisputed facts;
3. The sources relied upon must, in fact, support the opinion;
4. The opinion must not be conclusory; and
5. The expert's assumptions must be supportive.

See Brown & Love, Daubert/Robinson Update at 26-28; *see also Minn. Mining & Man. Co.*, 978 S.W. 2d at 198-99; *Conde v. Velsicol Chem. Corp.*, 24 F. 3d 809 (6th Cir. 1994) *Sullivan v. NFL*, 34 F.3d 1091, 1105 (1st Cir. 1994); *Burroughs Wellcome Co. v. Crye*, 907 S.W.2d 497 (Tex. 1995) Regardless of the reliability of the methodology implored and the care taken to ensure the lack of any gaps between the analysis and conclusions reached, if the expert's opinions are based upon facts not supported by the evidence, or if the sources relied upon by the expert do not support his opinion, the testimony will be inadmissible.

2. Methodological Reliability

The reliability requirement set forth in *Robinson* applies to all forms of expert testimony. *Gammill*, 972 S.W. 2d at 726. However, the appropriate analysis for determining whether the methodology employed is reliable varies depending upon the type of expert testimony in issue. If the case involves issues of science, particularly novel or "junk" science, most if not all, of the *Robinson* factors are likely to apply and the expert must be prepared to address and satisfy those factors to demonstrate the reliability of his methodology. If the case involves non-scientific expert testimony or testimony concerning social or soft sciences, some or all of the *Robinson* factors may

not apply. The *Gammill* court acknowledged that the *Robinson* factor analysis may not be the proper measuring stick to assess the reliability of experts testifying based on individual experience. 972 S. W. 2d at 726. To the extent that the issue involved is not susceptible to scientific analysis, and the expert testimony relies largely upon the expert's experience and training, then the *Nenno* factors are likely to be more appropriate in assessing the reliability of the expert's testimony. See *Coastal Tankships USA, Inc. v. Anderson*, 87 S. W. 3d 591 (Tex. App.—Houston [1st Dist.] 2002, pet. den.) (applying the *Nenno* test in determining the advisability of causation evidence); *In re A.J.L. & C.R.L.*, 136 S. W. 2d 294, 298 (Tex. App.—Fort Worth 2004, no pet.) (applying *Nenno* factors to expert testimony of therapist). Those factors are:

1. “The field of expertise is a legitimate one;
2. The subject matter of the expert's testimony is within the scope of that field; and
3. The expert's testimony properly relies upon the principles involved in that field of study.”

Nenno, 970 S. W. 2d at 560 (Tex. Crim. App. 1998)

Many courts have held that experience alone is not a sufficient basis for expert testimony that is technical or scientific in nature, including causation opinions by physicians. *Minn. Mining & Man. Co.*, 978 S. W. 2d at 183; *Watkins v. Telsmith, Inc.*, 121 F.3d 984 (5th Cir. 1997) (expert opinion based on experience alone insufficient in case involving product that was subject to testing). While other courts have held that expert testimony based on experience is permissible (*i.e.*, reliable) if it passes *Gammill's* connective reliability test (the analytical gap test) by showing that a close connection exists between the expert's experience and the proffered opinions. *J.C. Penney Life Ins. Co. v. Baker*, 232 S.W. 3d 417 (Tex. App.—Fort Worth 2000, no pet.); *Nissan Motor Co. v. Armstrong*, 32 S.W. 3d 701 (Tex. App.—Houston [14th Dist.] 2000, no pet.); *In re*

D.S., 19 S.W. 3d 525 (Tex. App.—Fort Worth 2000, no pet.); *Ford Motor Co. v. Aguiniga*, 9 S.W. 3d 252 (Tex. App.—San Antonio 1999, pet. den.).

3. Closing The Analytical Gap – Connective Reliability

Once it has been determined that the expert is qualified, that his opinions are relevant and that they are based upon a reliable foundation, it still must be demonstrated that there is “connective reliability.” In *Daubert*, the United States Supreme Court held that the reasoning underlying an expert’s opinion and the application of the expert’s methodology must be reliable. *Daubert*, 509 U.S. at 592-93. A precondition to the admission of evidence is that “a valid connection to the case must be shown.” *Id.* at 592. See also *Kuhmo Tire Co., Ltd. v. Carmichael*, 119 Sup. Ct. 1167, 1174-75 (1999) “It is no longer that if the methodology is sound, the possible misapplication in a specific case becomes a question for the jury.” *Daubert* provides that “any step that renders the analysis unreliable...renders the expert’s testimony inadmissible.” This is true whether the step completely changes the reliability of the methodology or merely misapplies the methodology. Capra, *The Daubert Puzzle*, 32 Georgia L. Rev. 699, 710-11 (1998). It is also true when the expert cannot connect foundational data to the expert’s conclusions. When the expert’s logical analysis from premise to conclusion includes a leap of faith, the leap, if big enough, requires excluding the opinion as improper extrapolation. *Id.* at 715, 719.

The Texas supreme court has termed this “leap,” the “analytical gap.” In *Gammill*, the court stated that if “there is simply too great an analytical gap between the data and the opinion proffered” the opinion will not be admissible regardless of the reliability of the methodology employed. Since *Gammill*, Texas courts have reiterated that expert testimony is unreliable if there is too great an analytical gap between the expert’s data and the expert opinions. *Volkswagen of Am., Inc., v. Ramirez*, 159 S.W.3d 897 (Tex. 2004); *Exxon Pipeline Co. v. Zwahr*, 88, S.W. 3d 623,

628-29 (Tex. 2002); *Frias v. Atlantic Richfield Co.*, 104 S. W. 3d 925, 927 (Tex. App.—Houston [14th Dist.] 2003, no pet.).

In *Volkswagen*, the supreme court found expert testimony unreliable due to an analytical gap. *Volkswagen*, 159 S.W.3d at 905-06. The issue in the case was whether a defect in left rear wheel assembly of a Volkswagen Passat caused a fatal two-car accident. There was no dispute that the wheel separated from the Passat. Rather, the parties disputed when the wheel assembly detached and whether the detachment *caused* the accident or *resulted* from it. *Id.* at 901-02.

The plaintiffs offered accident reconstruction expert, Ronald Walker, to support their theory. Walker “testified that while the Passat was traveling in the eastbound lanes of [the highway], its left rear wheel detached from the stub axle but stayed ‘tucked underneath’ the left rear wheel well as the car entered and fishtailed across the grass and concrete median at 50 to 60 miles per hour, collided with the Mustang, and spun partially around before coming to rest.” *Id.* Walker further testified that the “laws of physics’ explain how the wheel was able to remain pocketed in the rear wheel well throughout the turbulent accident sequence.” *Id.* Walker concluded that the wheel was the proximate cause of the accident. An unidentified eyewitness, videotaped at the scene of the accident, stated in the video (which was shown to the jury) that the Passat’s tire blew up before it crossed the median and struck the Mustang. *Id.* at 906.

Volkswagen countered that Walker’s opinion was unreliable because he failed to “conduct tests, cite studies, or perform calculations to support his ‘floating wheel’ theory.” *Id.* at 902. Volkswagen also claimed that there was no defect in the Passat tire, and that the accident was the result of the driver’s reaction to bumping into a Camaro headed in the same direction but in a different lane. Volkswagen offered expert testimony to support its position that the Passat’s wheel separation was a result of the accident and not the cause. *Id.*

In response to Volkswagen's no-evidence argument, the plaintiffs pointed out that their metallurgical expert, Edward Cox, also provided evidence that the defect caused the accident. *Id.* Volkswagen contends that Cox's testimony was no evidence of causation. *Id.* The case proceeded to trial (a second time – the first trial resulted in a unanimous verdict for Volkswagen) and resulted in a multi-million dollar judgment. The Corpus Christi court of appeals affirmed. *Id.* at 903. In a 6-2 opinion, the supreme court reversed, holding that there was no evidence to support causation. *Id.*

The supreme court criticized the court of appeal's decision to allow Walker to testify and stated that the Corpus Christi court misinterpreted *Helena Chemical and Gammill*. *Id.* at 905. The court explained that:

“In *Helena Chemical and Gammill*, we recognized that the factors listed in Robinson for measuring the reliability of scientific evidence cannot be used with certain kinds of expert testimony. *Helena Chemical*, 47 S.W. 3d at 499; *Gammill*, 972 S.W. 2d at 726. However, there still must be some basis for the opinion offered to establish its reliability. [Id.] In some situations, the witness's skill and experience alone may provide a sufficient basis for the expert's opinion. TRE 702; *Gammill*, 972 S.W.2d at 726. That, however, is not the circumstance in this case.”

Id.

It was what Walker *did not* say that troubled the court. He did not explain how the tests he and Cox performed supported his theory. He did not explain how the wheel could remain tucked under the wheel well in such violent conditions, conditions that yielded sufficient force to kill two persons. The court reasoned that: “The answer is not within the common knowledge and requires expert testimony.” *Id.* at 906. Yet Walker's “laws of physics” testimony was “an insufficient explanation.” *Id.* The court was also unclear as to “how the detached wheel could ‘follow the vehicle’ in the wheel well as it crossed the median.” *Id.* More concerning was Walker's failure to perform tests or cite publications in support of his opinion “that the wheel was traveling at a higher velocity than the Passat which, by principles of physics, kept the wheel in the wheel well.” *Id.* Walker failed to show a connection between his data and his opinion. The result was that his

testimony amounted to nothing more than his “bare opinion,” which was insufficient. “[I]t is not so simply because an expert says it is so.” *Id.* (citing *Gammill*, 972 S. W. 2d at 726; *Havner*, 923 S. W.2 d at 712 (internal quotations omitted)).

“Here, Walker does not close the “analytical gap” by explaining how the Passat’s wheel could have behaved as described, especially in light of the fact that there are no other studies, publications, or peer review that support his position. The tucked or floating wheel theory that Walker offered is not supported by objective scientific analysis and is based solely upon his subjective interpretation of the facts. As such, Walker’s opinion is unreliable and constitutes no evidence of causation.”

Id.

Volkswagen challenged Cox’s opinion (the plaintiff’s other expert) in a different manner than it challenged Walker’s. Instead of a *reliability* challenge, Volkswagen contended that Cox’s testimony was *no evidence* of causation. *Id.* at 909.

Cox testified that a “sudden and abrupt catastrophic event” inside the Passat’s left rear wheel bearing assembly set in motion a series of other events that led to the wheel separating from the car and moving outwards along the stub axle” *Id.* Cox believed his theory was consistent with the erratic behavior of the vehicle that led to the need for a corrective steer into the median. Cox also testified that “the bearing failure ‘ha[d] to happen’ before the vehicle entered the median because that was the only opportunity for several pieces of grass from the median to get into grease inside the wheel’s hub.” *Id.* at 911.

The Court was unconvinced that Cox’s testimony amounted to evidence of causation. First, Cox’s testimony that the results of the defect were consistent with erratic vehicle behavior was an “unsupported conclusion.” *Id.* Cox cited no data, testimony, skid marks, or other physical evidence to support this conclusion. In fact, Cox admitted his conclusion was based on Walker’s analysis of when the vehicle began to behave erratically. Second, the Court also pointed out the existence of grass in the wheel hub, a basis of Cox’s “limited causation opinion,” was consistent with the wheel coming off before the Passat entered the median or while the Passat was in the

median. Finally, Cox’s testimony did not answer how the floating wheel stayed in the wheel well as the Passat went through the median and then struck the Mustang. “Failure to explain how the ‘tucked’ wheel stayed in the wheel well is, by itself, near fatal to the [plaintiffs’] opinions on causation.” *Id.* As such, the Court concluded that Cox’s opinions amounted to “no more than mere scintilla of evidence” because they were “conclusory on their face.” *Id.* The Court concluded:

“Certainly in a no-evidence review we indulge all reasonable inferences in favor of the jury’s verdict, as we have done here. *Havner*, 953 S.W. 2d at 711. We are not required, however, to ignore fatal gaps in an expert’s analysis or assertions that are simply incorrect. While juries are important to our legal system, they cannot credit as some evidence expert opinions that are not reliable or are conclusory on their face. These principles are consistent with a legal sufficiency review. *See Havner*, 953 S.W. 2d at 711-12; *Schaefer*, 612 S.W. 2d at 204-05.”

Chief Justice Jefferson and Justice O’Neill dissented. *Id.* at 913. The dissent concluded that Cox’s testimony was legally sufficient to support the jury’s causation finding. *Id.* at 919. The dissent explained that Cox testified that the Passat experienced a “catastrophic failure of the wheel bearing assembly” while it was traveling in the eastbound lane of the highway, before the Passat entered the median. Cox both tested and rejected Volkswagen’s alternative theory – that damage to the wheel bearing assembly occurred after the Passat’s collision with the Mustang. Reasonable jurors could have accepted Volkswagen’s theory and rejected Cox’s (as they did in the first trial), or accepted Cox’s and rejected Volkswagen’s (as they did here), but unlike the jury, this court lacks constitutional authority to weigh conflicting evidence.” *Id.* at 913-14.

4. Ruling Out Other Causes

Finally, if the expert is testifying as to causation, then the expert should rule out all other plausible causes of the injury or condition with reasonable certainty. *Havner*, 953 S.W.2d at 720; *Weiss*, 989 S.W.2d at 125; compare to *Helena Chemical Co.*, 47 S.W.3d at 486. In the event the expert has failed to do this or is unable to do so, then extraneous evidence may be used to attempt

to rule out other possible causes in certain instances. *Helena Chemical Co.*, 47 S.W. 3d at 499-500. However, reliance on extraneous evidence should be limited as much as possible.

B. Other Evidentiary Considerations in the Summary Judgment Context: Sham Affidavits and Conclusory Testimony

1. The Sham Affidavit Doctrine

Texas courts have wrestled for some years with the question of whether a fact issue is presented by submitting an affidavit that conflicts with previous deposition testimony. See *Wilson, The Sham Affidavit Doctrine in Texas*, 66 Tex. B.J. 962 (Dec. 2003). The Texas supreme court first confronted the issue of a conflict between a deposition and an affidavit in 1962 in *Gaines v. Hamman*, 358 S.W.2d 557 (1962). The court held that “there is no basis for giving controlling effect to a deposition as compared to an affidavit.” *Id.* at 562. The Texas supreme court reaffirmed *Gaines* in *Randall v. Dallas Power & Light Co.*, 752 S.W.2d 4 (Tex. 1988). The court once again held that “if conflicting inferences may be drawn from a deposition and from an affidavit filed by the same party in opposition to a motion for summary judgment, a fact issue is presented” and summary judgment should be denied. *Id.* at 5. The “sham affidavit doctrine” is usually traced to the second circuit opinion in *Perma Research and Dev. Co. v. Singer Co.*, 410 F.2d 572 (2nd Cir. 1969). Following *Perma Research*, the federal circuits that have considered the “sham affidavit doctrine” have adopted it in one form or another. *Colantuoni v. Alfred Calcagni & Sons, Inc.*, 44 F.3d 1, 4-5 (1st Cir. 1994), *Martin v. Merrill Dow Pharm., Inc.* 851 F.2d 703, 706 (3^d Cir. 1988); *Barwick v. Celotex Corp.*, 736 F.2d 946, 960 (4th Cir. 1984); *Albertson v. T.J. Stevenson & Co.*, 749 F.2d 223, 228 (5th Cir. 1984); *Reid v. Sears Roebuck and Co.*, 790 F.2d 453, 460 (6th Cir. 1986); *Darnell v. Target Stores*, 16 F.3d 174, 176 (7th Cir. 1994); *Camfield Tires, Inc. v. Michelin Tire Corp.*, 719 F.2d 1361, 1364-65 (8th Cir. 1983); *Radobenko v. Automated Equip. Corp.*, 520 F. 2d 540, 544 (9th Cir. 1975); *Franks v. Nimmo*, 796 F.2d 1230; 1237 (10th Cir. 1986); *Van T. Junkins &*

Assocs. v. U.S. Indus, Inc., 736 F.2d 656, 657-59 (11th Cir. 1984); *Sinskey v. Pharmacia Ophthalmics, Inc.*, 982 F.2d 494, 498 (Fed. Cir. 1992), cert. den., 508 U.S. 912 (1993).

The first court of appeals in Houston was the first court in Texas to adopt the “sham affidavit doctrine.” *Farroux*, 962 S.W.2d 108 (Tex. App.—Houston [1st Dist.], no pet.) In *Farroux* the first court concluded that the plaintiff’s affidavit was a sham submitted solely in an attempt to avoid summary judgment. In *Farroux*, the plaintiff testified in deposition that no physician had ever told him that the Denny’s breakfast caused any of his health problems. In response to Denny’s summary judgment, the plaintiff submitted an affidavit stating that his physician told him his food poisoning was a result of the Denny’s meal. The court held: “a party cannot file an affidavit to contradict his own deposition testimony without any explanation for the change in the testimony, for the purpose of creating a fact issue to avoid summary judgment. If a party’s own affidavit contradicts his oral testimony, the affidavit must explain the reason for the change. Without an explanation of the change in the testimony, we assume the sole purpose of the affidavit was to avoid summary judgment. As such, it presents merely a “sham” fact issue.” *Id.* at 111.

Following the *Farroux* decision, many of the courts appeals adopted some version of the “sham affidavit doctrine.” Thus far, the El Paso, Amarillo, Austin, Texarkana and Houston (14th Dist.) courts of appeals have cited *Farroux* with approval and have adopted the “sham affidavit doctrine.” *Morgan v. Straub*, 2001 WL 925760 (Tex. App.—El Paso 2001); *Trostle v. Trostle*, 77 S.W.3d 908 (Tex. App.—Amarillo 2002, no pet.); *Elson Thermoplastics v. Dynamic Systems*, 49 S.W.3d 891 (Tex. App.—Austin 2001, no pet.); *Burkett v. Welborn*, 42 S.W. 3d 282 (Tex. App.—Texarkana 2001, no pet.); *Blan v. Ali*, 7 S.W.3d 741, 746 n.3 (Tex. App.—Houston [14th Dist.] 1999, no pet.).

When confronted with this issue, the San Antonio court of appeals concluded that a court must examine the nature and extent of the differences and the facts asserted in the deposition in the

affidavit. *Preacher v. Cantu*, 53 S.W.3d 5, 9 (Tex. App.—San Antonio 2001, pet den.). If the differences fall into the category of variations on a theme, consistent in the major allegations but with some variances of detail, this is grounds for impeachment and not a vitiation of the later filed document. If, on the other hand, the subsequent affidavit clearly contradicts the witness's earlier testimony involving the suit's material points, without explanation, the affidavit must be disregarded and will not defeat the motion for summary judgment. *Id.* at 10.

The Waco and Corpus Christi courts of appeal have flatly rejected the “sham affidavit doctrine,” choosing instead to strictly adhere to *Randall*. *Thompson v. City of Corsicana Housing Auth.*, 57 S.W.3d 47 (Tex. App.—Waco 2001, no pet.); *Larson v. Family Violence and Sexual Assault Prevention Center of South Texas*, 64 S.W.3d 506, 513 (Tex. App.—Corpus Christi 2001, pet. den.). Courts that disagree with the “sham affidavit doctrine” generally prescribe to the view that the doctrine requires the court to impermissibly make a determination of the credibility of the witnesses. These courts reason that if a court gives preference to a deposition and disregards a conflicting affidavit, the court is necessarily making an impermissible credibility determination.

2. Conclusory Affidavits

When a party relies on expert testimony as summary judgment evidence, the rule requires proof of the expert's qualifications and the reliability of the expert's conclusions. *Earle v. Ratliff*, 998 S.W.2d 882 (Tex. 1999); *Hess v. McLean Feedyard, Inc.*, 59 S.W.3d 679 (Tex. App.—Amarillo 2000, pet. den.). A trial court properly rejects the affidavit testimony of any expert witness whose qualifications are not established in the summary judgment record. *Boren v. Bullen*, 972 S.W.2d 863, 865 (Tex. App.—Corpus Christi 1998, no pet.). An affidavit by an expert that fails to outline facts upon which the opinion is based not only violates the duty to establish the reliability of the opinions, pursuant to *Robinson* and its progeny, but also contravenes the rule that

conclusory opinions in a summary judgment affidavit are not sufficient to raise a fact issue. *Hess*, 59 S.W.3d at 679.

A conclusory statement is one that does not provide the underlying facts to support the conclusion. *Hodgkins v. Bryan*, 99 S.W.3d 669 (Tex. App.—Houston [14th Dist.] 2003, no pet.). Conclusory statements in affidavits are not proper summary judgment proof if there are no facts to support the conclusions. *Id.* See also *Rizkallah v. Conner*, 952 S.W.2d 580-587 (Tex. App.—Houston [1st Dist.] 1997, no writ); *Ryland Group, Inc. v. Hood*, 924 S.W.2d 120, 122 (Tex. 1996). Further, an objection that an affidavit is conclusory is an objection to the substance of the affidavit and may be raised for the first time on appeal. *City of Wilmer v. Laidlaw Waste System, Inc.*, 890 S.W.2d 459, 467 (Tex. App.—Dallas 1994), *aff'd*, 904 S.W.2d 656, 660-61 (Tex. 1995).

In *Hodgkins*, the plaintiff's expert, Dr. Dollinger did not refer to any recognized studies or otherwise explain the basis for his chance of survival opinion. He did not refer to any scientific journals or text, which might provide some basis for his conclusion. Further, he failed to state what treatment Ms. Hodgkins would have received had her cancer been properly diagnosed and what the rate of success is with that treatment. Because Dr. Dollinger failed to state facts or studies to support his conclusion that Ms. Hodgkins would have survived with prompt treatment, his affidavit was found too lack foundation and was deemed to be conclusory. *Hodgkins*, 99 S.W.3d at 674-75. See also *Mercer v. Daoran Corp.*, 676 S.W.2d 580, 583 (Tex. 1984) (holding that conclusory statements submitted in an affidavit will neither support nor defeat a motion for summary judgment).

C. The Level of Proof Needed to Demonstrate Reliability

The party offering the expert testimony has the burden of demonstrating its admissibility by a preponderance of the evidence. *Robinson*, 923 S.W.2d at 557. See also *Spivey v. James*, 1 S.W.3d 380, 382 (Tx. App.—Texarkana 1999, pet. den.); Brown, *Procedural Issues*, 36 HOUS. L.

REV. at 1135. Rule 104(a) has been interpreted in Texas as requiring proof by preponderance of the evidence. Goode, et al., *Guide to the Texas Rules of Evidence: Civil and Criminal* § 104.1 at 28 & n.8 (Texas Practice 2d ed. 1993).

Both plaintiffs and defendants are required to clear “gatekeeper” hurdles in offering expert testimony. The burden is on the “proponent” of the expert, whichever party that happens to be. “It would be an odd rule of evidence that insisted that some expert opinions be reliable but not others. All expert testimony should be shown to be reliable before it is admitted.” *Gammill*, 972 S.W.2d at 726 (emphasis added). *See also* Brown, *Procedural Issues*, 36 Hous. L. Rev. at 1136 (“The burden is not necessarily on the party with the ultimate burden of proof; it is on the party who offers the expert testimony.”)

The Dallas court of appeals’ opinion in *Costilla* illustrates that an expert’s opinion need not rise to the level of certainty to be reliable. *Costilla v. Crown Equip. Corp.*, 2004 Tex. App. LEXIS 10163 (Tex. App.—Dallas, no pet.). Costilla lost a leg when the stand-up forklift he was operating fell off of a loading dock. He sued Crown, alleging that the forklift was defectively designed, and that he would not have been injured if the forklift had been designed with a door that would have allowed him to exit the forklift. Crown’s expert testified that serious injury was “possible” if an operator remained in the forklift’s compartment during a tip-over. Costilla argued on appeal that the use of the word “possible,” rendered the expert’s conclusion mere speculation because the expert was required to opine that serious injury was “probable.” The appellate court found no abuse of discretion in allowing the testimony even if “[the expert] could not say with certainty whether an operator would be fatally injured or not.” The appellate court also found it significant that Costilla’s counsel cross-examined Crown’s expert and that the jury heard contrary evidence from Costilla’s experts.

VI.
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