

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLORADO  
Lewis T. Babcock, Judge

Civil Case No. 12-cv-01001-LTB-KMT

MICHAEL SCHWARTZ and PATTI SCHWARTZ,

Plaintiffs,

v.

HEATHER MORRISON, ALEXANDER MORRISON, and ROBERTA MORRISON,

Defendants.

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ORDER

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This matter is before me on Plaintiffs' Motion to Strike J. Quinn Campbell, M.S. and Jason R. Skiera, M.S., P.E. [**Doc. # 43**] and Defendants' Response [Doc. # 44]. After considering the parties' arguments, for the reasons below, I DENY the motion.

**I. Background**

Plaintiff Michael Schwartz and Defendant Heather Morrison were involved in low-speed, rear-end motor vehicle collision on March 11, 2009. Plaintiff Michael Schwartz asserts that Defendant Heather Morrison breached her duty to drive the vehicle she had permission to drive, owned by her parents, in a reasonable and safe manner. Plaintiff Michael Schwartz and his wife, Patti Schwartz (collectively "Plaintiffs"), have also asserted claims against Defendants Alexander and Roberta Morrison, as parents and legal guardians of Defendant Heather Morrison (collectively "Defendants").

Defendants deny that Heather Morrison was negligent in causing the motor vehicle

accident. Defendants also deny that the motor vehicle accident caused Plaintiff Michael Schwartz's alleged injuries. Instead, they assert that the medical treatment Plaintiff Michael Schwartz has had since the accident is the result of the natural progression of his long-standing degenerative spinal condition and chronic pain. Defendants also dispute the nature and extent of Plaintiffs' injuries, damages and losses caused by the accident.

At the final pretrial conference hearing on May 3, 2013, Plaintiffs requested, and were granted, leave to file a motion to strike two of Defendants' designed experts. As instructed by the Court, Plaintiffs filed their Motion to Strike J. Quinn Campbell, M.S. and Jason R. Skiera, M.S., P.E. on May 17, 2013 [Doc. # 43], and Defendants filed their Response to Plaintiffs' Motion to Strike J. Quinn Campbell, M.S., and Jason R. Skiera, M.S., P.E. on May 24, 2013 [Doc. # 44].

## **II. Law**

### **A. Fed. R. Evid. 702**

Rule 702 provides that, “[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.”

The first step in analyzing whether expert testimony is admissible under Rule 702 requires the court to determine whether the expert is qualified to render an opinion by “knowledge, skill, experience, training, or education.” *103 Investors I, L.P. v. Square D Co.*,

470 F.3d 985, 990 (10th Cir. 2006). If the expert is sufficiently qualified, then the court must determine whether the expert's opinions are reliable under the principles set forth in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993). *Id.* In determining reliability, the court may consider the following nondispositive factors:

- (1) whether the proffered theory can and has been tested;
- (2) whether the theory has been subject to peer review;
- (3) the known or potential rate of error; and
- (4) the general acceptance of a methodology in the relevant scientific community.

*Daubert v. Merrell Dow*, *supra*, 509 U.S. at 593-94. *See also Kumho Tire Co., Ltd. v.*

*Carmichael*, 526 U.S. 137, 151-52 (1999) (factors set forth in *Daubert* may also be considered where expert relies on skill or experience as opposed to the application of scientific principles). Reliability questions may concern the expert's data, method, or his application of the method to the data. *See Mitchell v. Gencorp Inc.*, 165 F.3d 778, 782 (10th Cir. 1999). The party offering the expert "must show that the method employed by the expert . . . is scientifically sound and that the opinion is based on facts which satisfy Rule 702's reliability requirements." *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1222 (10th Cir. 2003) ("Generally, the district court should focus on an expert's methodology rather than the conclusions it generates.")

Under Rule 702, a district court acts as a "gatekeeper" to ensure that proffered expert testimony "both rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow*, *supra*, 509 U.S. at 597. "Expert testimony which does not relate to any issue in the case is not relevant and, ergo, non-helpful." *Id.* at 591 (quoting 3 Weinstein & Berger ¶ 702[02], p. 702-18). *See also U.S. v. Rodriguez-Felix*, 450 F.3d 1117, 1122 (10th Cir. 2006) ("Under Rule 702, a district court must satisfy itself that the proposed expert testimony is both reliable and relevant, in that it will assist the trier of fact, before permitting a jury to assess such

testimony.”); *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1234 (10th Cir. 2004) (“Even if an expert’s proffered evidence is scientifically valid and follows appropriately reliable methodologies, it might not have sufficient bearing on the issue at hand to warrant a determination that it has a relevant ‘fit.’”)

To satisfy the gatekeeper function mandated in *Daubert*, a trial court must create a sufficiently developed record, make a concrete reliability determination, and make specific findings with adequate discussion on the record regarding its determination. *See Dodge v. Cotter Corp.*, 328 F.3d 1212, 1223 (10th Cir. 2003). The proponent of an expert witness bears the burden of requesting an evidentiary hearing. *See U.S. v. Nacchio*, 553 F.3d 1234, 1251 (10th Cir. 2009). Here, an evidentiary hearing has not been requested by either party in their briefing. While provision for a hearing is not required, a proponent of an expert must have notice that a challenge exists, and an opportunity to present evidence regarding their expert’s qualifications. *Id.* at 1245 n.11. Here, both of these requirements have been met. *Id.*

Otherwise, the manner in which the trial court performs its gatekeeper function is reviewed for an abuse of discretion. *See Kumho Tire v. Carmichael*, *supra*, 526 U.S. at 152 (explaining that the trial court’s broad discretion applies both in deciding how to assess an expert’s reliability, including what procedures to utilize in making that assessment, as well as in making the ultimate determination of reliability); *Dodge v. Cotter*, *supra*, 328 F.3d at 1223 (“Though the district court has discretion in how it conducts the gatekeeper function, we have recognized that it has no discretion to avoid performing the gatekeeper function”); *U.S. v. Velarde*, 214 F.3d 1204, 1208-09 (10th Cir. 2000). Provided the district court performs this role, review is deferential and will not be disturbed unless it is “arbitrary, capricious, whimsical or

manifestly unreasonable,” or the court is “convinced that the district court made a clear error of judgment or exceeded the bounds of permissible choice in the circumstances.” *Dodge v. Cotter, supra*, 328 F.3d at 1208-09 (internal quotation marks omitted).

**B. Fed. R. Evid. 104(a)**

The reliability of expert testimony is also governed by the principles of Fed. R. Evid. 104(a). Fed. R. Evid. 702 , Advisory Committee Notes, 1993 Amendment. Under Rule 104(a), the proponent has the burden of establishing that admissibility requirements are met by a preponderance of the evidence. *Id.* While a district court is “accorded great latitude in determining how to make *Daubert* reliability findings, . . . the court must, on the record, make some kind of reliability determination.” *U.S. v. Velarde, supra*, 214 F.3d at 1204, 1209. Following that determination, the court must decide whether the testimony “fits,” in other words, whether “it involves a reliable method that would aid the jury in resolving a factual dispute.” *See Bitler v. A.O. Smith, supra*, 400 F.3d at 1238.

Once the Rule 702 and Rule 104(a) requirements are met it is a question for the jury as to the weight to be given the evidence. *Daubert v. Merrell Dow, supra*, 509 U.S. at 596 (“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.”); *Compton v. Subaru of Am., Inc.*, 82 F.3d 1513, 1518 (10th Cir. 1996), overruled on other grounds by *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999) (“[A]s long as a logical basis exists for an expert’s opinion the weaknesses in the underpinnings of the opinion go to the weight and not the admissibility of the testimony.”) (quoting *Jones v. Otis Elevator Co.*, 861 F.2d 655, 663 (11th Cir. 1988)).

**C. Fed. R. Evid. 403**

Finally, Fed. R. Evid. 403 provides that, “[t]he court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.”

**III. Discussion**

Both of the expert witnesses at issue are retained by Defendants, and are employed by Vector Scientific, Inc. Mr. Jason Skiera, M.S., P.E., is a registered Professional Engineer and specializes in vehicular accident reconstruction and collision dynamics. Mr. Skiera performed an accident reconstruction analysis of the March 11, 2009 accident. Mr. J. Quinn Campbell, M.S., is a Biomechanical Engineer and specializes in automobile crash safety. Mr. Campbell performed a biomechanical analysis regarding the March 11, 2009 accident. Both are expected to offer expert opinion testimony consistent with their respective written reports.

**A. Jason R. Skiera, M.S., P.E.**

Plaintiffs first object to the testimony of Mr. Skiera on the basis that his testimony is “not reasonably reliable.” Specifically, Plaintiffs contend that Mr. Skiera’s testimony is unreliable because: (1) “[h]e uses two dimensional photographs of the damage to the involved vehicles to determine the speed and delta-V [change in velocity] of the vehicles”; (2) “[h]e did not inspect either vehicle involved in the collision and bases his opinion solely on photographs of the vehicles, damages estimates, and crash test papers”; and (3) he compared the collected evidence from the accident to “crash test studies for crashes dissimilar to the crash at issue here.” [Doc. #43, Ex. A].

In response, Defendants contend that Mr. Skiera's testimony is reliable, and argue that:

- (1) "Plaintiffs' first contention is not only disproved by a plain reading of Mr. Skiera's report regarding the data upon which his opinion is based but also by the next page of Plaintiffs' Motion, which states that Mr. Skiera's opinion is based 'on the accident report, interrogatories and depositions, repair estimates . . . medical reports and photographs'";
- (2) "there is no requirement that an accident reconstruction expert personally physically inspect the vehicles involved in an accident in order to render an admissible opinion," that the evidence Mr. Skiera relied on is typical for experts in his field, and that many courts, including Colorado courts, use accident reconstruction experts who rely on photographs in forming their expert opinions; and
- (3) the crash test studies Mr. Skiera used were, in fact, based on crashes similar to the crash here including comparisons of the same kind of vehicle driven by Defendant Heather Morrison, and comparisons involving accidents between vehicles similar to Plaintiffs' and Defendants'. [Doc. # 44].

As an initial matter, I note that Plaintiffs do not challenge Mr. Skiera's qualifications as an expert, but are instead challenging the reliability/methodology or application of principles in Mr. Skiera's expert testimony. In arguing that Mr. Skiera's testimony is the product of reliable principles and methods commonly used in accident reconstruction, Defendants emphasize the extensive list of materials Mr. Skiera examined in his accident reconstruction report [Doc. # 43, Ex. A, pp. 1-2] which include: 92 photographs of the vehicles and accident; State of Colorado Traffic Accident Report with Driver Statements; separate repair estimates for each vehicle; discovery materials including responses to production for documents and responses to interrogatories; reference materials which include, for example, VIN decode data for both

vehicles, additional specifications for each vehicle, accident reconstruction articles, real and street level photographs of the location of the accident, numerous Institute for Highway Safety Status reports and other news releases, and other articles on low speed accidents. Defendants also correctly note that there is no case precedent that requires accident reconstruction experts to physically examine the vehicles. Rather, the Colorado Supreme Court has persuasively admitted testimony from an accident reconstruction expert based on testimony of witnesses to the accident, physical facts admitted into evidence, and numerous photographs of the accident scene and vehicles after the accident. *Dolan v. Mitchell*, 179 Colo. 359 (1972); *see also Searcy v. Hamburger*, 2004 WL 5503777, Civ. Action No. 02-Z-2260 (MJW) (D. Colo. Jan. 21, 2004) (unpublished opinion) (allowing accident reconstruction expert's testimony based upon his examination of the traffic accident report, witness statements, repair estimates for both vehicles, and photographs of the scene of the accident and both vehicles).

To the extent that Plaintiffs assert that Mr. Skiera's analysis incorrectly compared the vehicles involved in this accident to crash test studies for crashes that are dissimilar to the crash at issue here, Defendants point out that Mr. Skiera conducted a thorough examination through utilizing numerous Status Reports and studies performed by the Insurance Institute for Highway Safety (IIHS). Finally, Plaintiffs' challenge to the articles Mr. Skiera relied on in making his determinations does not rise to the level of striking his testimony as unreliable, but instead merely goes to its weight.

Accordingly, I find Mr. Skiera's methodology underlying his proffered testimony and opinions as to accident reconstruction reliable and his reasoning valid.

**B. J. Quinn Campbell, M.S.**

Plaintiffs raise the following reliability objections to Mr. Campbell's proffered expert testimony, that: (1) he uses improper sources in his investigation, namely relying on Mr. Skiera's speed and delta-V determinations; (2) his conclusions consist of medical opinions about the "medical causation" of Plaintiff Michael Schwartz's injuries, opinions which Mr. Campbell, as an engineer, is not qualified to make; and (3) his testimony is not helpful to the jury "because vehicle damage and inaccurate delta-V figures have nothing to do with injury," and the use of biomechanical engineer testimony in low-speed collisions, as well as the articles and opinions used by Mr. Campbell, are not "generally accepted in the scientific community." [Doc. # 43, Report Ex. B].

In response, Defendants argue that: (1) Mr. Campbell's opinions are limited to "biomechanics, and are based upon sufficient data, reliable and well-accepted scientific principles and sound application of such principles to the facts of this case"; (2) there is a distinction between "biomechanical causation" and "medical causation," and Mr. Campbell only offers opinions about biomechanical causation (meaning the movement of Plaintiff Michael Schwartz's body inside the vehicle during the accident, and the location and nature of any expected movement as a result of the accident); and (3) the use of biomechanical engineers as experts in low-speed collisions is common place and, furthermore, Mr. Campbell's articles and opinions have been commonly used in similar litigation (citing to several cases).

Plaintiffs again do not challenge Mr. Campbell's qualifications as an expert, but are challenging the reliability/methodology or application of principles in his testimony. As an initial matter, I find that Plaintiffs' contention that Mr. Campbell improperly relied on improper

sources is without merit. As Defendants correctly point out, Mr. Campbell's opinions are focused and limited to biomechanics, and the scholarly writings and research they are based upon are reputable and peer-reviewed sources including several Society of Engineer's Technical Reports, a source Plaintiffs themselves cite to. Mr. Campbell's report is based upon sufficient data, reliable and well-accepted scientific principles, and sound application of such principles to the facts here.

Defendants also correctly argue that Mr. Campbell does not make medical causation conclusions, but instead provides an analysis of both how Plaintiff Michael Schwartz's body moved during the accident, and how a typical human body would move under similar circumstances. Mr. Campbell does not make any conclusions as to what injuries Plaintiff could have or did sustain, but merely takes into account his previous spinal condition and the effects such condition would have on his bodily movement during the accident. Defendants note specific language from Mr. Campbell's report stating that Plaintiff's "outcome cannot be predicted by examining the outcomes of human volunteers in similar low-speed rear-end accidents," and the occurrence of Plaintiff's injuries is "best assessed by a qualified medical doctor."

Lastly, I reject Plaintiffs' argument that Mr. Campbell's proffered testimony would not be helpful to the jury because the use of biomechanical engineers in low-speed collisions, and the articles and opinions used by Mr. Campbell, are not "generally accepted in the scientific community." As discussed below, Mr. Campbell's testimony could be helpful to the jury in determining injury causation and determining the significance of Plaintiff's extensive pre-accident history of back and spinal problems. Furthermore, the use of biomechanical engineers

in low-speed collisions is commonly permitted. *See, e.g., Brandt v. French*, 638 F.2d 209, 211 (10th Cir. 1981) (noting that the court allows such experts to perform similar accident reconstruction analysis). Additionally, the sources Mr. Campbell utilizes in forming his opinions are reputable and, as noted above, Plaintiffs' brief cites to many of the same publications including several Society of Engineer's Technical Reports.

Thus, I find Mr. Campbell's methodology reliable and his reasoning valid as to his expert opinions regarding biomechanical causation in this case.

**C. Motion to Strike Both Experts As Unduly Prejudicial Under Fed. R. Evid. 403**

Finally, Plaintiffs also object to both expert witnesses on the basis that their potential probative value is substantially outweighed by the danger of unfair prejudice. [Doc. # 43, pp. 14-15]. Plaintiffs rely upon Colo. R. Evid. 403, which provides that “[a]lthough relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence.” However, where, as here, federal and state evidentiary rules are not in conflict, “the admissibility of evidence in diversity cases in federal court is generally governed by federal law.” *Sims v. Great Am. Life Ins. Co.*, 469 F.3d 870, 880 (10th Cir. 2006); *see also Mascanti v. Becker*, 237 F.3d 1223, 1241 (10th Cir. 2001). Accordingly, the parallel Federal Rule of Evidence, Fed. R. Evid. 403 is applicable.

While Plaintiffs concede that “[t]he purpose of expert testimony is to help explain complex concepts to the jury which are outside of the layperson's general experience” under Fed. R. Evid. 403, Plaintiffs go on to argue that admission of these experts would be improper

because, “[m]ost members of the jury will have no background in engineering and will not be familiar with the formulas used to ‘calculate’ the delta-V forces.” Plaintiffs also argue that the jurors will likely “abdicate their role as jurors and defer to the opinions of experts” when they are faced “with an expert’s impressive credentials and mastery of scientific jargon.” Lastly, Plaintiffs contend that, “[t]he proffered testimony is unreliable, junk science and will confuse and mislead the jury.”

In response, Defendants argue that Plaintiffs have failed to demonstrate that the probative value of the experts’ opinions is substantially outweighed by the risk of prejudice. [Doc. # 44, p. 14]. Instead, Defendants argue that, “[i]t is precisely because [] the subject matter of the experts’ testimony is beyond the ordinary knowledge of laypersons that the testimony is helpful to the jury.” Moreover, they assert that, “the proffered testimony is not confusing or misleading and naturally and logically relates to disputed factual issues in the case.”

Plaintiffs acknowledge the importance of expert witnesses in aiding the jury in understanding complex concepts typically outside the general understanding of a lay person, but then claim that Mr. Skiera and Mr. Campbell’s testimony will be outside the understanding of the jury. Plaintiffs recognize that most members of the jury “will have no background in engineering and will not be familiar with the formulas” used, and that the jury will not “have the experience to understand” the meaning of the experts’ testimony. As such, Plaintiffs contend that the experts’ qualifications will cause the jury to “abdicate their role as fact-finders and defer to the opinions of experts in their desire to reach a just result,” but they do not provide any specific facts or argument as to such risks in this case. Additionally, Plaintiffs make conclusory allegations regarding the potential for unfair prejudice, confusion of the issues, or misleading the

jury by only stating that, “[a]ny probative value of this testimony is substantially outweighed by the very danger that the jury will incorrectly come to the conclusions that the forces of this collision were minor and as such, Mr. Schwartz could not have been hurt.” I am not persuaded by this argument and I find that the probative value of Mr. Skiera’s and Mr. Campbell’s testimony is not substantially outweighed by a danger of unfair prejudice.

#### **IV. Conclusion**

Accordingly, I conclude that both Mr. Skiera and Mr. Campbell are qualified experts whose methodologies are reliable, whose reasoning is valid, and whose proffered expert testimony would not be outweighed by the danger of unfair prejudice. As such, an evidentiary hearing to make such a determination is not required. Thus, both experts shall be permitted to testify.

ACCORDINGLY, IT IS ORDERED that Plaintiffs’ Motion to Strike J. Quinn Campbell, M.S. and Jason R. Skiera, M.S., P.E. **[Doc. # 43]** is DENIED.

Date: June 25, 2013 in Denver, Colorado.

BY THE COURT:

s/Lewis T. Babcock  
LEWIS T. BABCOCK, JUDGE