

**UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF FLORIDA  
JACKSONVILLE DIVISION**

KATHLEEN WORLEY and TERRY  
WORLEY, her husband,

Plaintiffs,

vs.

Case No: 3:12-cv-1041-J-MCR

STATE FARM MUTUAL AUTOMOBILE  
INSURANCE COMPANY, an insurance  
corporation,

Defendant.

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**ORDER**

**THIS CAUSE** is before the Court on Defendant's Motion to Exclude or Limit the Testimony of Plaintiffs' Accident Reconstruction and Biomechanical Expert (Doc. 36) filed October 11, 2013. Plaintiffs filed a response in opposition (Doc. 43) on November 1, 2013. The undersigned conducted a hearing on this motion December 4, 2013, with counsel for all parties present. Accordingly, the matter is now ripe for judicial review.

**I. BACKGROUND**

This case stems from a motor vehicle accident occurring on September 1, 2010. Plaintiff, Kathleen Worley, was traveling north on Monument Road when she was rear ended by a vehicle operated by Marcus Thomas. As a result of the accident, Plaintiff is alleging injuries to her neck, low back, and right knee. A key issue in this matter is the determination of whether there were forces sufficient in the accident to cause the type of injuries alleged by Plaintiff. In support of their position, Plaintiffs retained Linda L. Weseman, P.E. as their accident reconstruction and biomechanical expert.

In the instant motion, Defendant seeks to exclude from trial several portions of Ms. Weseman's testimony. Specifically, Defendant seeks to exclude Ms. Weseman's opinions: regarding the change in velocity of Plaintiff's vehicle, that a person with pre-existing conditions, like Plaintiff, could have sustained permanent injury; that women are more prone to whiplash-type injuries at low impact speeds than men; and that Plaintiff's head was turned and looking to the left at the time of impact, which increased her vulnerability to injury. Additionally, Defendant seeks to exclude a video Ms. Weseman intends to show during trial.

## II. ANALYSIS

Rule 702 of the Federal Rules of Evidence governs testimony by expert witnesses and provides:

A witness who is qualified as an expert, by knowledge, skill experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Rule 702 compels the Court to "perform a 'gatekeeping' function concerning the admissibility of expert testimony to ensure that speculative and unreliable opinions do not reach the jury." Gilliam ex rel. Waldroup v. City of Prattville, 667 F.Supp.2d 1276, 1294 (M.D. Ala. 2009) (citing Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 589 n.7, 113 S.Ct. 2786, 2794 (1993)). "The burden of laying the proper foundation for the admission of expert testimony is on the party offering the expert, and the admissibility must be shown by a preponderance of the evidence." Allison v.

McGhan Med. Corp., 184 F.3d 1300, 1306 (11<sup>th</sup> Cir. 1999). Under Eleventh Circuit law, expert opinion evidence is admissible if:

(1) the expert is qualified to testify competently regarding the matters he intends to address; (2) the methodology by which the expert reaches his conclusions is sufficiently reliable as determined by the sort of inquiry mandated in Daubert; and (3) the testimony assists the trier of fact, through the application of scientific, technical, or specialized expertise, to understand the evidence or to determine a fact in issue.

Hudgens v. Bell Helicopters/Textron, 328 F.3d 1329, 1338 (11<sup>th</sup> Cir. 2003).

In the instant case, Defendant claims Ms. Weseman's testimony fails to satisfy each of these criteria. Defendant contends Ms. Weseman is not qualified to testify as to certain matters, her opinions are not reliable, and her testimony will not assist the jury. The Court will examine each of these arguments.

#### **A. Qualifications**

As to Ms. Weseman's qualifications, it appears both sides agree she is qualified to testify in the areas of accident reconstruction and biomechanics. Defendant argues Ms. Weseman intends to testify as to medical issues and that she lacks the proper qualifications to do so. Plaintiffs respond that Ms. Weseman will not testify as to whether Plaintiff suffered a permanent injury as a result of the crash. However, the opinions Defendant takes issue with are Ms. Weseman's opinions that Plaintiff's gender and her pre-existing conditions rendered her more vulnerable to injury. Further, Defendant argues Ms. Weseman will improperly testify as to the "quality of Plaintiff's pre-existing conditions." (Doc. 36, p.4). Essentially, the issue for the Court to decide is whether such opinions or testimony amount to medical opinions beyond the expertise of Ms. Weseman.

To make this decision, the Court will first examine what a biomechanical engineer's work entails.

Biomechanical engineers apply “the principles in mechanics to the facts of a specific accident and provide information about the forces generated in that accident.” They may also “explain how the body moves in response to those forces, and ... determine what types of injuries would result from the forces generated.”

Bowers v. Norfolk Southern Corp., 537 F. Supp. 2d 1343, 1377 (M.D. Ga. 2007) aff'd, 300 F. App'x 700 (11<sup>th</sup> Cir. 2008) (quoting Smelser v. Norfolk Southern Ry. Co., 105 F.3d 299, 305 (6<sup>th</sup> Cir. 1997), *abrogated on other grounds*, Morales v. American Honda Motor Co., 151 F.3d 500, 515 & n. 4 (6<sup>th</sup> Cir. 1998)). Accordingly, in the context of trial testimony, “biomechanical engineers typically are found to be qualified to render an opinion as to the forces generated in a particular accident and the general types of injuries those forces may generate.” Id. However, they are not often permitted to provide opinions regarding the “precise cause of a specific injury.” Id. (quoting Smelser, 105 F.3d at 305). “This is because biomechanical engineers lack the medical training necessary to identify the different tolerance levels and **preexisting medical conditions** of individuals, both of which ‘could have an effect on what injuries resulted from an accident.’” Id. (quoting Smelser, 105 F.3d at 305)(emphasis added).

Ms. Weseman, therefore, is qualified to testify generally as to the effects on an individual of the forces in an accident similar to the one at issue in this case. She is also qualified to testify generally as to how hypothetical individuals with specific body sizes, genders, and specific preexisting conditions may respond to the forces of an accident similar to the one here, assuming such testimony satisfies the remaining Rule 702 and Daubert considerations. However, Ms. Weseman is not qualified to testify

regarding Plaintiff's preexisting conditions and whether the forces in the accident caused Plaintiff's injuries.

## **B. Reliability**

Next, Defendant challenges the reliability of Ms. Weseman's opinions. Defendant claims her opinions are unreliable because they are based "on assumptions, incomplete information, all of the available information to her was not examined and evaluated, and testing has not been conducted to test the validity of the opinions expressed." (Doc. 36, p.4). First, Defendant argues Ms. Weseman improperly based her opinions on assumptions and incomplete information. Specifically, Defendant challenges Ms. Weseman's opinions regarding the position of the vehicles and that Plaintiff was looking to the left at the time of the collision because such opinions were based on aerial photographs obtained from Google Earth. Defendant claims Ms. Weseman was unable to testify as to whether the photos accurately depicted the scene of the accident as of September 1, 2010. Additionally, Defendant argues Ms. Weseman failed to speak with Plaintiff regarding how far to the left Plaintiff was looking.

Courts must "ensure that speculative, unreliable expert testimony does not reach the jury." McCorvey v. Baxter Healthcare Corp., 298 F.3d 1253, 1256 (11<sup>th</sup> Cir. 2002). However, experts are "entitled to state reasonable assumptions." Maiz v. Virani, 253 F.3d 641, 667 (11<sup>th</sup> Cir. 2001). "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 [nevertheless] admissible evidence." Daubert, 509 U.S. at 596. The reliance on photos from Google Earth and Ms.

Weseman's assumptions regarding Plaintiff looking to the left are just the sort of things Defendant should address on cross-examination.

Defendant also challenges Ms. Weseman's methodology in determining the change in velocity ("Delta-V") in this case. At the outset, the undersigned notes that Ms. Weseman determined the Delta-V in the accident at issue was five miles per hour, virtually the same Delta-V determined by Defendant's expert. Plaintiffs assert Ms. Weseman reached her opinion regarding the Delta-V based on the bumper rating of Plaintiff's vehicle. (Doc. 43, p.3). Defendant does not challenge this method. Instead, Defendant argues Ms. Weseman made a series of assumptions in reaching her opinion regarding the Delta-V. However, as Plaintiffs explain, these assumptions did not factor into Ms. Weseman's conclusion that the Delta-V was five miles per hour, but rather, all indicated that the Delta-V could have been more than five miles per hour. Nevertheless, Ms. Weseman admitted she could not confirm a Delta-V of greater than five miles per hour. Should Ms. Weseman make allusions to a greater Delta-V, Defendant will be free to vigorously cross-examine her regarding such. The Court will not, however, exclude her testimony.

Next, Defendant argues Ms. Weseman's methodology is suspect because she did not know Mr. Thomas had a passenger in his vehicle and did not review Mr. Thomas's deposition. Again, these issues are more appropriately left to cross-examination.

Finally, Defendant claims Ms. Weseman failed to conduct any testing to support her conclusion regarding Plaintiff's knee making contact with the knee bolster. Plaintiffs object that no such testing is possible, short of the crash test dummy shown in the

video, to which Defendant has objected. Again, the Court believes Defendant may point out to the jury the lack of testing as this issue is more an objection going to the weight of Ms. Weseman's testimony rather than the admissibility of it. See Quiet Technology DC8, Inc. v. Hurel-Dubois UK LTD, 326 F.3d 1333, 1345 (11<sup>th</sup> Cir. 2003) ("in most cases, objections to the inadequacies of a study are more appropriately considered an objection going to the weight of the evidence rather than its admissibility").

### **C. Assistance to Trier of Fact**

Defendant argues Ms. Weseman's opinions regarding Plaintiff's increased vulnerability to injuries because of her gender, her preexisting conditions, and the fact that she was looking to the left will not assist the trier of fact. To support this assertion, Defendant has quoted portions of Ms. Weseman's deposition testimony in which she stated that the injury threshold for an individual is lessened if the individual is looking to the left or right, however, the amount of the lessening has not and cannot be quantified. She also stated that women are more susceptible to whip-lash injuries at low speed, however, the amount of this increases susceptibility has not been determined. Additionally, Ms. Weseman testified that Plaintiff's preexisting conditions and the fact that she was a petite female increased her vulnerability to injury, but again, she had no way to measure how much. Defendant claims such vague testimony does not assist the trier of fact and therefore, should be excluded.

During the hearing, counsel for Plaintiffs pointed out that Defendant's expert, Dr. James Ipser, agreed that several of these factors would increase an individual's vulnerability to injury. Counsel for Defendant responded that the inability to quantify the amount of vulnerability rendered the information vague and therefore, not helpful to a

jury. Moreover, counsel claimed that such testimony would amount to a medical opinion, of which Ms. Weseman is not qualified to render.

The Court believes Defendant may question Ms. Weseman regarding the inability to quantify the amount of increased vulnerability on cross examination. The fact that the increase in vulnerability cannot be quantified does not render the testimony inadmissible and the undersigned does not believe it will confuse or mislead the jury. A jury is capable of understanding that the amount of increased vulnerability is not capable of quantification. See Abrams v. Ciba Specialty Chemicals Corp., No. 08-cv-68, 2010 WL 779276, at \*7 (S.D. Ala. Mar. 2, 2010) (“Daubert does not inflexibly demand quantification of expert opinions in order for them to be admissible.”). Indeed, it appears Defendant’s own expert agrees that at least some of the factors listed by Ms. Weseman would increase an individual’s vulnerability to injury. Accordingly, the Court believes this testimony should not be excluded simply because it cannot be quantified. See United States v. Barnes, 481 F. App’x 505, 514 (11<sup>th</sup> Cir. 2012) (holding that it was not abuse of discretion for district court to admit opinions of forensic experts whose methodologies did not allow for quantification, but that were generally accepted).

As to Defendant’s argument that this testimony amounts to medical opinions, the Court does not agree. As noted above, the Court has already ruled that Ms. Weseman cannot render medical opinions. However, testimony that in general, women, people with preexisting conditions, and looking to the left may make an individual more susceptible to an injury is not a medical opinion.

Finally, Defendant asks the Court to exclude a video Ms. Weseman intends to show at trial. According to Plaintiff, this video shows a crash test dummy in a collision



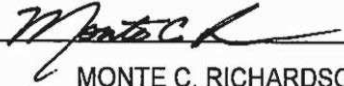
and how the dummy's knee impacted with the knee bolster, a part of the vehicle located under the steering wheel. Plaintiff believes this video is relevant and helpful to the jury because Plaintiff suffered a knee injury in the accident when her knee struck the knee bolster and the "mechanics of how the knee strikes this bolster in response to a crash are not immediately apparent, and the average juror will find it difficult to visualize." (Doc. 43, p.6). However, as Defendant points out, the video depicts an accident occurring at thirty miles per hour. Ms. Weseman agreed that the speed and magnitude of the movements shown in the video would be different than those involved in Plaintiff's accident. Accordingly, the Court agrees with Defendant that showing this video would mislead the jury and simply advising the jury of the difference in speed, is not sufficient to remedy this. Any probative value of the video is far outweighed by its potential to mislead or confuse the jury. Therefore, the video will be excluded pursuant to Rule 403 of the Federal Rules of Evidence. See Frazier, 387 F.3d at 1263 ("[b]ecause of the powerful and potentially misleading effect of expert evidence, [] sometimes expert opinions that otherwise meet the admissibility requirements may still be excluded by applying Rule 403") (internal citations omitted).

Accordingly, after due consideration, it is

**ORDERED:**

The Defendant's Motion for Miscellaneous Relief (Doc. 36) is **GRANTED in part and DENIED in part** as set forth in the body of this Order.

**DONE** and **ORDERED** in Jacksonville, Florida this 10<sup>th</sup> day of December,  
2013.

  
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MONTE C. RICHARDSON  
UNITED STATES MAGISTRATE JUDGE

Copies furnished to:

Counsel of Record