**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.
_____/

**ORDER**

**THIS CAUSE** is before the Court on Plaintiffs' Motion to Strike or Limit the Testimony of Dr. James R. Ipser (Doc. 37) filed October 11, 2013. Defendant filed a response in opposition (Doc. 45) 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 alleges 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 its position, Defendant retained James R. Ipser, Ph.D. as an expert. According to

Plaintiff, Dr. Ipser is an astrophysicist with a Ph.D. is theoretical physics. Dr. Ipser will offer opinions regarding the change in velocity Ms. Worley experienced during the crash (commonly referred to as "Delta-V") and the force of impact on Ms. Worley's vehicle. Additionally, Dr. Ipser will testify as to "equivalent ways of reproducing the force of impact" on Ms. Worley, including: (1) allowing the car to "roll backwards at a pace of 3.5 mph, a walking pace, into a wall or car stop;" (2) placing the occupant compartment "on a sled, facing backwards" and letting "the sled slide down a completely smooth slide through a vertical drop of 9 inches," then stopping "the sled suddenly at the bottom of the slide;" and (3) placing the "occupant compartment on a swing," pulling the swing forward until it rises through a vertical height of 9 inches, releasing the swing, and stopping it suddenly at the bottom of its arc. (These will be referred to as the "equivalents"). (Doc. 45, Ex. 2). Finally, Dr. Ipser plans to testify about numerical values for the forces experienced by Plaintiff and how those forces could be compared with daily activities. For example, Dr. Ipser opines that the forces experienced by Plaintiff during the accident are of a similar magnitude to the daily activities of sneezing, bending over and picking up a 10 – 20 pound object, flopping into a car seat from 9 inches, riding a roller coaster, or "leaning against a wall with one's shoulder while the feet are about 2 feet from the wall." (These will be referred to as the "analogies"). (Doc. 45, Ex. 2).

In the instant motion, Plaintiffs object to any testimony from Dr. Ipser regarding the equivalents and the analogies.

## 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 (11th 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 (11th Cir. 2003).

In the instant case, Plaintiffs argue Dr. Ipser's testimony fails to satisfy each of these criteria. Additionally, Plaintiffs argue Dr. Ipser's testimony should be excluded

because its probative value is outweighed by its potential to mislead and/or confuse the jury pursuant to Rule 403 of the Federal Rules of Evidence. The Court will examine each of these arguments.

**A. Qualifications**

As to Dr. Ipser's qualifications, Plaintiffs argue Dr. Ipser is not qualified in the areas about which he is expected to testify. Plaintiff's primary concern is that Dr. Ipser is not a biomechanical engineer and therefore, is not qualified to testify as to biomechanics.[1] Rule 702 provides that a witness's expert status may be based on "knowledge, skill, experience, training, or education." Fed.R.Evid. 702; see also United States v. Frazier, 387 F.3d 1244, 1260-61 (11th Cir. 2004) (*en banc* ) (recognizing that "experts may be qualified in various ways" and that "[w]hile scientific training or education may provide possible means to qualify, experience in a field may offer another path to expert status"). Dr. Ipser has a bachelor's degree in physics, a master of science degree in theoretical physics, and a Ph.D. in theoretical physics. He is a certified accident reconstructionist and a member of the Society of Accident Reconstructionists and the International Society of Biomechanics. He has taken undergraduate courses in kinetics and a continuing education course on biodynamics at the University of Florida in 2000. Moreover, he has attended numerous seminars and conferences regarding biomechanics. Further, he taught a course at the University of Florida on biomechanical physics. Dr. Ipser has been a consultant in accident reconstruction and biomechanics since 1993

[1] Plaintiffs also argue Dr. Ipser is not qualified to give medical opinions, however, Plaintiffs have not directed the Court to any proposed medical opinions to be given by Dr. Ipser, so the Court will not address this argument in this Order. Should Dr. Ipser attempt to testify as to medical opinions at the trial, the Court will revisit the issue at that time.

The Court concludes that Dr. Ipser satisfies the qualifications prong of the Daubert analysis for the opinions he will be permitted to provide to the jury. That Dr. Ipser is not a biomechanical engineer may be presented to the jury to address the weight and credibility of his testimony, not its admissibility. See Rushing v. Kansas City Southern Ry. Co., 185 F.3d 496, 507 (5th Cir. 1999) ("As long as some reasonable indication of qualifications is adduced ... qualifications become an issue for the trier of fact rather than for the court in its gate-keeping capacity."), *superseded by rule on other grounds as recognized in* Mathis v. Exxon Corp., 302 F.3d 448, 459 n. 16 (5th Cir. 2002).

**B. Reliability and Whether Testimony will Assist Trier of Fact**

Next, Plaintiffs argue that Dr. Ipser's testimony regarding the equivalents and the analogies is not reliable and that it will not assist the trier of fact. Indeed, Plaintiffs take the position that Dr. Ipser's testimony on these topics will mislead and confuse the jury and therefore, it should be excluded. The Court will examine Plaintiffs' arguments regarding Dr. Ipser's testimony with respect to both the equivalents and the analogies.

**1. Equivalents**

With respect to the equivalents, Dr. Ipser intends to testify as to equivalent ways of reproducing the force of impact on Ms. Worley including: a car rolling backwards into a wall or car stop, an occupant compartment on a sled sliding backwards, and an occupant compartment on a swing. Plaintiffs argue this testimony is both unreliable and will not assist the jury.

When determining the reliability of an expert opinion, courts consider several factors: "(1) whether the expert's theory can be and has been tested; (2) whether the

theory has been subjected to peer review and publication; (3) the known or potential rate of error of the particular scientific technique; and (4) whether the technique is generally accepted in the scientific community." Quiet Tech. DC-8, Inc. v. Hurel-Dubois UK Ltd., 326 F.3d 1333, 1341 (11th Cir. 2003). "These factors are illustrative, not exhaustive; not all of them will apply in every case, and in some cases other factors will be equally important in evaluating the reliability of proffered expert opinion." Frazier, 387 F.3d at 1262. Indeed, "the task of evaluating the reliability of expert testimony is uniquely entrusted to the district court under Daubert" and a district court has "considerable leeway in the execution of its duty." United States v. Brown, 415 F.3d 1257, 1266 (11th Cir. 2005) (quotations and citations omitted).

In the present case, Plaintiff argues all of the above factors weigh against admitting Dr. Ipser's testimony regarding the equivalents. However, at the hearing, Plaintiffs focused on the lack of testing. Counsel for Plaintiffs pointed out that the equivalents are not supported by any testing and/or that the testing upon which they rely was flawed.[2] Defendant responded by arguing that Plaintiffs' expert, Ms. Weseman, agreed that the equivalents produced the same amount of force. However, Defendant did not point out that Ms. Weseman went on to explain that while she had no issue with Dr. Ipser's application of Newton's laws, there were additional things that needed to be considered in biomechanics in conjunction with Newton's laws. (Doc. 45, Ex. 1, p.100). Dr. Weseman went on to state that she believed Dr. Ipser's opinions regarding the equivalents was misleading because while the magnitude of the force may be the same

[2] The only equivalent to be tested was the sled equivalent. Plaintiffs point out that the testing was conducted by one of Dr. Ipser's students and consisted of four healthy males. Dr. Ipser admitted that 40 or 50 tables of data were generated by this test, however, Dr. Ipser only had access to two of those tables.

in the equivalents, the force magnitude "is irrelevant in terms of its effect on the human body or bears little relevance." (Doc. 45, Ex. 1, pp. 101-102).

Defendant has not directed the Court to any evidence or testimony showing Dr. Ipser's methodology was reliable. "The proponent of expert testimony always bears 'the burden to show that . . . the methodology by which the expert reach[ed] his conclusions is sufficiently reliable . . .'" Frazier, 387 F.3d at 1260 (quoting McCorvey v. Baxter Healthcare Corp., 298 F.3d 1253, 1257 (11th Cir. 2002)). Defendant simply has failed to meet this burden.

Even had Defendant attempted and succeeded in establishing the reliability of Dr. Ipser's methodology with respect to the equivalents, the undersigned believes the testimony is inadmissible as it will not assist the trier of fact. To be found to assist the trier of fact, expert testimony must offer something "beyond the understanding and experience of the average citizen." United States v. Rouco, 765 F.2d 983, 995 (11th Cir. 1985). Dr. Ipser's testimony regarding the equivalents is offered to assist the jury in comprehending the force of impact experienced by Plaintiff. Dr. Ipser opined that the force of impact was "less than or of the order of 1.75g." (Doc. 45, Ex. 2). Counsel for Defendant argues that an average juror cannot comprehend what 1.75g's would mean.

The Court is not convinced. A juror is certainly able to understand the concept of a low speed rear-end collision and the forces involved. Indeed, the undersigned believes a juror would more easily understand the forces associated with a rear-end collision than the forces involved in the proposed equivalents. No juror has ever seen or experienced an occupant compartment on a swing or a sled. Further, the vehicle rolling backwards scenario is not any more helpful in explaining force of impact than the

actual accident. Accordingly, the undersigned finds Dr. Ipser's testimony regarding the equivalents would not assist the trier of fact.

**2. Analogies**

With respect to the analogies, Dr. Ipser intends to testify about that the forces experienced by Plaintiff are comparable to forces experienced during various daily activities like sneezing, bending over and picking up a 10 – 20 pound object, flopping into a car seat from 9 inches, riding a roller coaster, or leaning against a wall. During the hearing, counsel for Plaintiffs noted that Dr. Ipser's opinions regarding the analogies are based solely on a study published in 1992: "Acceleration Perturbations of Daily Living, A Comparison to 'Whiplash'" (the "Daily Living study"). (Doc. 49, Ex. 1). Counsel for Defendant did not refute that assertion. Counsel went on to identify a review published in 1999 severely criticizing the study relied upon by Dr. Ipser. (Doc. 49, Ex. 2). The review stated that the Daily Living study utilized an inadequate sample size as well as an nonrepresentative sample, made unsupported conclusions, utilized misleading illustrations, and was based on an inappropriate study design. Clearly, this review indicates that Dr. Ipser's methodology is not generally accepted. Defendant has not responded by pointing out any evidence showing that Dr. Ipser's methodology is generally accepted or reliable based on any of the other factors. As such, the Court must once again conclude Defendant has failed to satisfy its burden of showing the method by which Dr. Ipser reached his conclusions regarding the analogies was reliable. See Frazier, 387 F.3d at 1260.

As with the equivalents, even if the Court were confident regarding the reliability of Dr. Ipser's methodology, the testimony regarding analogies is inadmissible pursuant

to Rule 403 of the Federal Rules of Evidence because any probative value it may provide to the jury is far outweighed by its potential to mislead or confuse them. 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). The testimony regarding the analogies is offered to "place the forces, expressed in terms of g's, in a context [the jury] can understand." (Doc. 45, p.11). As with the equivalents, the Court is not convinced a jury needs further explanation to understand the force at issue in this accident. However, the analogies, unlike the equivalents, are at least activities with which the jury would have experience and to which they could relate. Nevertheless, any value of these analogies is outweighed by the potential to mislead or confuse the jury. Dr. Ipser admitted during his deposition that the analogies involved different forces, in different directions and different biomechanics than the accident at issue. (Doc. 37, Ex. 8, pp.33-37, 81, 127-28). Therefore, the Court will exclude any testimony regarding the analogies from the trial.

Accordingly, after due consideration, it is

**ORDERED:**

Plaintiffs' Motion to Strike or Limit the Testimony of Dr. James R. Ipser (Doc. 37) is **GRANTED in part** as provided in the body of this Order.

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

MONTE C. RICHARDSON
UNITED STATES MAGISTRATE JUDGE

Copies furnished to:

Counsel of Record