UNITED STATES DISTRICT COURT WESTERN DISTRICT OF KENTUCKY OWENSBORO DIVISION

CIVIL ACTION NO: 4:16-CV-00138

WILLIAM STEFAN WHITE

PLAINTIFF

V.

TRANSPORTATION SERVICES, INC. et al.

DEFENDANTS

MEMORANDUM OPINION AND ORDER

This matter is before the Court on Plaintiff's Motion to Exclude Defendants' Proposed Animations [DN 279], Plaintiff's Motion to Strike Expert and to Exclude Testimony of Fred Turek [DN 280], and Plaintiff's Motion to Strike Expert and to Exclude Opinions, Photographs and Testimony of David Cades [DN 281]. Fully briefed, these matters are ripe for decision. For the reasons set forth below, Plaintiff's motions are **DENIED**.

I. BACKGROUND

This case arises out of an automobile accident that occurred on August 6, 2016 in Madisonville, Kentucky. The collision occurred when Krystal White was driving down I-69 with her infant daughter in the backseat of the car. She collided with a semi-truck owned by Transportation Services, Inc. ("TSI") and driven by Genaro Sanchez Ramirez. Deposition testimony indicates that Ramirez's route required him to take the ramp at Morton's Gap to exit I-69 but Ramirez unintentionally overshot the exit. When he did so, Ramirez put his semi-truck into reverse and backed down the highway to get back to the Morton's Gap exit. At some point near the exit, Krystal rear-ended Ramirez's truck and was pronounced dead at the scene. Plaintiff's infant daughter suffered injuries as well.

This lawsuit was initiated by Krystal White's husband, William Stefan White, on behalf of himself, as administrator of the Estate of Krystal White, and as guardian for his two minor children.

Plaintiff alleges that TSI, Ramirez, Morales, and LF are liable for negligence, negligence per se, negligent infliction of emotional distress, and gross negligence.

Plaintiff has now filed three motions to exclude: The first seeks to exclude proposed animations by Dr. Scott Noll. The second asks to strike the testimony of Dr. Fred Turek. The third aims to strike Dr. David Cades as an expert witness and exclude photographs he has offered. The Court will rule on each motion in turn.

II. STANDARD OF REVIEW

Fed. R. Evid. 702 permits opinion testimony by witnesses who are sufficiently qualified to testify as experts:

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

Fed. R. Civ. P. 702. The Sixth Circuit has interpreted Rule 702 so as to impose three requirements for expert testimony:

First, the witness must be qualified by "knowledge, skill, experience, training, or education." Fed. R. Evid. 702. Second, the testimony must be relevant, meaning that it "will assist the trier of fact to understand the evidence or to determine a fact in issue." Id. Third, the testimony must be reliable. Id.

In re Scrap Metal Antitrust Litig., 527 F.3d 517, 528–29 (6th Cir. 2008).

In determining whether testimony is reliable, the Court's focus "must be solely on principles and methodology, not on the conclusions they generate." Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579, 595 (1993). The Supreme Court identified a non-exhaustive list of factors that may help the Court in assessing the reliability of a proposed expert's opinion, including: (1) whether a theory or technique can be or has been tested; (2) whether the theory has

been subjected to peer review and publication; (3) whether the technique has a known or potential error rate; and (4) whether the theory or technique enjoys "general acceptance" within a "relevant scientific community." Id. at 592–94. Yet, these Daubert facts "are not dispositive in every case and should be applied only where they are reasonable measures of the reliability of expert testimony." In re Scrap Metal, 527 at 529 (internal quotation marks omitted). The purpose of the rule is "to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." Kumho Tire Co. v. Carmichael, 526 U.S. 137, 152 (1999). "Red flags that caution against certifying an expert include reliance on anecdotal evidence, improper extrapolation, failure to consider other possible causes, lack of testing, and subjectivity." Newell Rubbermaid, Inc. v. Raymond Corp., 676 F.3d 521, 527 (6th Cir. 2012).

III. DISCUSSION

A. Dr. Noll's Animation

First, Plaintiff seeks to exclude an accident reconstruction animation provided by Scott Noll. Dr. Noll is an expert in the field of accident reconstruction. Using his expertise, Dr. Noll was able to take testimony from eye witnesses and create an animation of the scene of the accident that forms the basis for this case. By looking at these animations, Dr. Noll concluded, "Ms. White was inattentive for a minimum period of time in the range of 6.1 seconds to 10.2 seconds." (Noll Report [DN 201-8] at 10.)

Plaintiff argues that "animations purporting to recreate events must be carefully scrutinized to avoid misleading the jury." (Mem. in Support of Pl.'s Mot. to Exclude Defs.' Proposed Animation [DN 279-1] at 5.) Indeed, other courts have held that "video taped evidence purporting

to recreate events at issue must be substantially similar to the actual events to be admissible." Hinkle v. City of Clarksburg, 81 F.3d 416, 425 (4th Cir. 1996). Although the Sixth Circuit has never ruled on the standard for admitting accident reconstructions, its application of the "substantially similar" standard in other admissibility determinations implies that the Sixth Circuit would also require accident reconstruction animations to be substantially similar to the events they represent. See United States v. Metzger, 778 F.2d 1195, 1204 ("Experimental evidence may be properly admitted only if the test was conducted under conditions substantially similar to those of the events.").

In this case, Plaintiff argues that Dr. Noll's animations are not substantial similar to the accident in this case because the animations are beset with inaccuracies. However, the alleged inaccuracies are based on inconsistencies among eye witness testimony. For example, Christine Oelschlager's truck was included in the accident reconstruction but other witnesses do not recall seeing Ms. Oelschlager's truck at the scene of the accident. Additionally, Plaintiff complains that Dr. Noll's reconstruction shows Ramirez's semi-truck moving slowly forward when Plaintiff claims, "Eyewitness[es] unanimously testified, however, that the semi appeared to be stopped and idling at the impact." (Mem. in Support of Pl.'s Mot. to Exclude Defs.' Proposed Animation [DN 279-1] at 2.)

However, all the perceived inaccuracies are supported by witness testimony. Christine Oelschlager was on the scene of the accident, testifying that she passed Ramirez's semi before the collision occurred. Furthermore, when asked, "Was the trailer moving as you were driving past it?" Ms. Oelschlager testified, "Yeah. Yeah it seemed to have been – it was moving still toward us, I believe, but it seemed that just about the same time, lucky timing, that it was starting to pull forward." (Oelschlager Dep. [DN 86] at 15.)

In his report, Dr. Noll states, "As there is no physical evidence that outlines the paths traveled by the witnesses, the reconstruction of their motions must be based upon an analysis of their testimony." (Noll Report at 7.) Although the animation may not coincide exactly with all the testimony because some eye witnesses may tell different stories, Dr. Noll's accident reconstruction is sufficiently substantially similar to the actual accident because it is based directly on eye witness testimony.

Furthermore, Dr. Noll's accident reconstruction animations are offered as demonstrative evidence to illustrate the principles Dr. Noll employs in rendering the opinions he has in this case and to aid the jury in understanding his testimony. As the Fourth Circuit noted, the "animation is not meant to be a recreation of the events, but rather it consists of a computer picture to help you understand [the expert's] opinion" presented at trial. Hinkle, 81 F.3d at 425. This representation of Dr. Noll's theory of the accident is different than purporting to recreate the accident. The difference is "between a jury believing what they are seeing a repeat of the actual event and a jury understanding that they are seeing an illustration of someone else's opinion of what happened." Datskow v. Teledyne Continental Motors Aircraft Prods., 826 F. Supp. 677, 686 (W.D.N.Y. 1993). This demonstrative evidence is acceptable so long as "the distinction is made clear" to the jury. The Court and the Plaintiff will see that this distinction is made clear. For this reason, Plaintiff's Motion to Exclude Defendants' Proposed Animations [DN 279] is **DENIED**.

B. Dr. Turek

Dr. Fred Turek is a sleep expert, specifically in the fields of fatigue and circadian rhythm. He intends to testify about Krystal White's awake-rest history over the eight days preceding the accident to conclude that Krystal was chronically sleep deprived when she rear-ended the semi-

truck. To reach this conclusion, Dr. Turek has utilized Krystal's work schedule and cellphone records to determine the periods in which Krystal may have been asleep.

Plaintiff argues that Dr. Turek's testimony should be excluded for three reasons. First, they argue that Dr. Turek's opinion concerning Krystal's sleep opportunities is not the product of reliable principles and methods. Next, Plaintiff believes the testimony should be excluded because Dr. Turek did not personally review the data or do the calculations necessary to reach his conclusions. Lastly, Plaintiff contends that Dr. Turek should not be permitted to give testimony in terms of medical probability because he is not a physician and did not examine Krystal personally.

Reliability

First, Plaintiff challenges Dr. Turek's methodology for determining the periods when Krystal was asleep and awake. In his report, Dr. Turek explains, "When evaluating a driver's level of physiological alertness or level of fatigue at any given time, such as at the time of an accident[,] it is necessary to recreate and verify his or her awake-rest history as well as his or her work/off-duty schedule leading up to the accident." (Turek Report [DN 201-4] at 10.) To do this, Dr. Turek used Krystal's work schedule and cell phone records to determine the periods of Krystal's sleep opportunities. Any period during which Krystal was not working and not receiving calls, text messages, or large data on her cell phone indicative of user-initiated activity, Dr. Turek refers to as a sleep opportunity. Using this data, Dr. Turek concluded that based on both the 8-day period before the accident and the 24-hour period before the accident, Krystal had little sleep opportunities, causing her to become "chronically sleep deprived and would likely have placed her at a high risk for experiencing microsleep and/or a severely diminished state of alertness at the time of the accident." (Id. at 15.)

Plaintiff argues that Dr. Turek's methodology of using cell phone records to determine when Krystal was awake is unreliable. Rather than assuming large data activity indicates Krystal was awake, Plaintiff contends that it is possible that her phone transmitted data on its own or that someone else in her household may have been using her phone. "Turek did not take into account the possibility that . . . Krystal's mother, husband, and two children, could have interacted with Krystal's phone during the time periods when the data was being used, while Krystal slept." (Mem. in Support of Mot. to Strike Expert and to Exclude Testimony of Fred Turek [DN 280-1] at 12.) Furthermore, "Turek also does not factor in the potential that Krystal was using a streaming service to play music, completing an automatic update, whether a background app was using data, or any other activities that could constitute usage that would skew his report." (Id.) Plaintiff claims that Dr. Turek would have gotten more reliable data if he had reviewed Krystal's cell phone rather than merely looking at the records.

Dr. Turek argues that the methods he employed in reaching his conclusions represent the industry standard. For example, his use of an awake-rest history is the same methodology used by the National Transportation Safety Board ("NTSB") when evaluating a high fatality crash. According to Dr. Turek, NTSB investigators regularly use records obtained directly from telephone providers to build a timeline of phone activity for purposes of determining a driver's awake-rest history. Dr. Turek also contends that objective data such as cell phone records are more reliable than subjective testimony about when an individual was asleep.

Even more, Dr. Turek has stated that he was cautious in his data analysis, sharing Plaintiff's concern that cell phone data activity does not necessarily indicate cell phone usage. He explained, "For multimedia and texting, we only [considered] the outgoing. We made the decision not to put incoming in because we wouldn't know if she was actively involved in the usage of the phone

during incoming, and we limited our analysis to the outgoing." (Turek Dep. [DN 261] at 123.) Likewise, with data transfers, Dr. Turek "decided to be conservative and only include uploading or downloading which was more than one megabyte." (Id. at 125.) As he described, because cell phones often receive data without user interaction (for example, receiving an email), Dr. Turek did not include data activity smaller than one megabyte in his analysis in an effort to narrow down when Krystal was actually using her phone. (Id. at 125–26.) Although Dr. Turek has not considered all other sources of data activity such as Krystal's family using her phone, his deposition sheds light on his attempts to make his findings accurate.

For these reasons, the Court does not find Dr. Turek's testimony unreliable. Plaintiff will still have the opportunity to share his concerns with the jury that Krystal's cellphone activity may have been initiated by someone else or by the phone without her prompting. As the Defendants stated, "If Plaintiff wishes to present such hypotheticals to weigh on the accuracy of Dr. Turek's testimony, then cross-examination remains the proper means to do so." (Defs.' Resp. in Opposition to Pl.'s Mot. to Exclude Testimony of Defs.' Expert [DN 285] at 11.)

Personal Review

Next, Plaintiff takes issue with Dr. Turek's conclusions because other individuals besides Dr. Turek performed some of the data review and calculations necessary to draw such conclusions. Dr. Turek works at Circadian Expert Services where he has a "team of people" who provide him with information. (Turek Dep. at 139.) For example, he did not personally review Krystal's cell phone records but rather "somebody who is very competent in looking at phone records" reviewed the records and reported the findings to Dr. Turek. (Id.) Similarly, with Krystal's work schedule, another team member reviewed that information to determine when Krystal was working.

The Court rejects the argument that Dr. Turek's conclusions should be excluded because he used a team to assist in his analysis. Dr. Turek has stated, "The use of a multidisciplinary investigation teams is considered best practice in the field of accident investigation." (Turek Affidavit [DN 285-4] ¶ 7). In addition, an expert is not required to personally collect all the data that will be necessary to draw his or her conclusions. Just as a doctor may utilize charts prepared by an x-ray technician to conclude that a patient has a broken leg, a sleep expert can utilize the charts of awake-sleep history prepared by his team to conclude the subject was sleep deprived.

Medical Probability

Lastly, Plaintiff argues that Dr. Turek should not be permitted to testify about Krystal's condition to a degree of medical probability as he is not a physician. Defendants do not dispute this and have confirmed within their Response that "Dr. Turek will offer all opinions at trial in terms of a reasonable degree of scientific certainty, not medical probability." (Defs.' Resp. in Opposition to Pl.'s Mot. to Exclude Testimony of Defs.' Expert at 9.)

C. Dr. Cades

Lastly, Plaintiff seeks to exclude the testimony of Dr. David Cades. Dr. Cades is an expert in human factors analysis. He is expected to testify about conditions on the roadway on the night in question and conclude that "Ms. White was not a reasonably alert and attentive driver at the time of the incident; her lack of an appropriate braking and/or steering maneuver contributed to the potentially avoidable collision." (Cades Report [DN 287-1] at 21.) Plaintiff asks the Court to strike Dr. Cades as an expert and argues that Dr. Cades' opinions, photographs, and testimony should be excluded because part of his data was not conducted at Morton's Gap, where the accident occurred, but rather at an exemplar location in Nashville, Tennessee. Plaintiff claims that this

exemplar location bears no resemblance to Morton's Gap in appearance, lighting, or topography and therefore, the methodology used in reaching Dr. Cades' conclusions is unsound and unreliable.

Defendants respond, "The photographs complained of by Plaintiff is demonstrative of Dr. Cades opinions and do not form the basis of his opinion nor the methodology used." (Defs.' Resp. in Opposition to Pl.'s Mot. to Exclude Testimony of Defs.' Expert [DN 287] at 8.) Rather, Dr. Cades' report makes clear that he did actually visit Morton's Gap to form his opinions.

Still, Plaintiff argues that even in the case that Dr. Cades' testimony is not excludable, the photographs he took at the exemplar location should be excluded so that the jury is not confused and made to believe that the photographs demonstrate what Krystal would have seen on the night of the accident. Plaintiff supports their argument that the photos should be excluded by citing to another Western District of Kentucky case that excluded a demonstration video that made use of an exemplar. In Dortch v. Fowler, video and photos demonstrating an accident were excluded because they did not closely replicate actual events. No. 3:05-CV-219-JDM, 2007 WL 1749490 (W.D. Ky. June 15, 2007). In that case, there were substantial differences between the exemplar and the actual events. "Among other things, the exemplar truck moved only 1 to 2 miles per hour, on a parking lot, without pulling a trailer; whereas the actual truck (tractor and trailer) was traveling 30 to 35 miles per hour, uphill, on a left-curving two-lane roadway, carrying a load for delivery." Id. at *5. As the Sixth Circuit has made clear, "Experimental evidence may be properly admitted only if the test was conducted under conditions substantially similar to those of the event." United States v. Metzger, 778 F.2d 1195, 1204 (6th Cir. 1985).

The research conducted at the Nashville exemplar location tested lighting conditions. Dr. Cades obtained two vehicles, a Chrysler Sebring, which was the same make that Krystal drove, and a TSI tractor trailer. At the exemplar location, Dr. Cades "took nighttime photographs of the

exemplar tractor and trailer . . . to demonstrate the visibility of the tractor and trailer, as well as the performance of . . . its lights and retroreflective tape under conditions similar to those during Ms. White's approach." (Cades Report at 7.) Because these photographs were not taken at the scene of the accident, the Court must determine whether the Nashville site was substantially similar in light conditions as Morton's Gap.

The parties do not agree whether the lighting conditions in the Nashville exemplar location are substantially similar to Morton's Gap. Plaintiff argues that "the ambient and moon lighting differ from the night of the collision and the day the exemplar photos were taken." (Pl.'s Reply in Support of their Mot. to Exclude Testimony of Defs.' Expert David Cades [DN 297] at 4.) Defendants argue, "The ambient illumination in this area was similar to the illumination that would have been present at the incident site." (Cades Report at 7.)

In this case, Dr. Cades took measures to make sure that the photographs he took at the exemplar location were substantially similar to the accident scene. Dr. Cades explained that he took multiple exposures of each photograph and then used a method approved in his field "to adjust the image to best match the lighting conditions and visibility of the tractor trailer at the scene." (Id.) Dr. Cades states, "This method has been scientifically validated and represents the state of the art for recreating accurate photographic representations of low-illumination scenes." (Id.) Because it was impossible to conduct his research on an interstate highway, Dr. Cades used another form of methodology acceptable in his field to collect the necessary data on lighting. The Court will make sure the jury knows the photos were not taken at the accident scene and Plaintiff's cross-examination will certainly point out any differences between the Nashville exemplar and the incident scene, which will bear on the weight given to this evidence by the jury.

IV. CONCLUSION

For the reasons set forth above, **IT IS HEREBY ORDERED** that Plaintiff's motions are **DENIED**.

Joseph H. McKinley, Jr., Chief Judge United States District Court

August 22, 2018

cc: counsel of record