UNITED STATES DISTRICT COURT EASTERN DISTRICT OF KENTUCKY CENTRAL DIVISION (at Frankfort)

KERRY HINKLE, Administrator of the)	
Estate of Kiara Hinkle, et al.,)	
Plaintiffs,))	Civil Action No. 3: 11-24-DCR
V.)	
FORD MOTOR COMPANY,)))	MEMORANDUM OPINION AND ORDER
Defendant.)	
)	

*** *** *** ***

Plaintiffs Kerry Hinkle, Administrator of the Estate of Kiara Hinkle, Jason Turner, and Natya Stafford have moved the Court to exclude the testimony of two of Defendant Ford Motor Company's ("Ford") proposed expert witnesses: Catherine Corrigan and James Engle. [Record No. 36] Ford seeks to present expert testimony from Corrigan in the areas of biomechanics, occupant kinematics, occupant protection, injury causation, statistical injury analysis, and injury mechanism. Engle, an automotive engineer employed by Ford, is expected to testify concerning the design, development, testing and implementation of powertrain systems, including the powertrain control modules ("PCM") installed in Ford vehicles. However, the plaintiffs assert that the opinions Ford seeks to elicit from these witnesses are inadmissible and have no bearing on the issues to be resolved by the jury. Additionally, they contend that the subject opinions are not supported by scientific evidence.

Having reviewed the materials submitted by the parties, the Court concludes that the opinions which Ford seeks to present from Corrigan and Engle are relevant to the issues to be resolved by the jury. Further, each witness is qualified by virtue of training, education and experience to testify in the areas designated. As a result, the plaintiffs' motion *in limine* to exclude the testimony will be denied.

I.

Rule 702 of the Federal Rules of Evidence governs the admissibility of expert testimony.

It 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.

Fed. R. Evid. 702.

Rule 702 comprises three requirements: qualification, relevance, and reliability. *See In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 528-29 (6th Cir. 2008) (citing Fed. R. Evid. 702). In assessing the reliability of proposed expert testimony, the Court looks to Rule 702's subsections, asking "whether the testimony is based upon 'sufficient facts or data,' whether the testimony is the 'product of reliable principles and methods,' and whether the expert 'has applied the principles and methods reliably to the facts of the case.'" *Id.* (quoting Fed. R. Evid. 702).

The proponent of expert testimony must establish its admissibility by a preponderance of the evidence. *Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 251 (6th Cir. 2001).

In addition to the requirements that the witness qualifies as an expert and that the opinions he wishes to express are relevant, Rule 702 requires that the opinions be reliable. *In re Scrap Metal*, 527 F.3d at 529. When assessing the reliability of opinions a witness seeks to provide as expert testimony, "the law grants a district court the same broad latitude when it decides *how* to determine reliability as it enjoys in respect to its ultimate reliability determination." *Kumho Tire*, 526 U.S. at 142. Generally, opinions qualify under the reliability threshold when "an expert, whether basing testimony on professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice in the relevant field." *Jahn v. Equine Servs.*, *PSC*, 233 F.3d 382, 388 (6th Cir. 2000) (citing *Kumho Tire*, 526 U.S. at 152).

II.

A. Dr. Catherine Corrigan

Dr. Catherine Corrigan is a vice president and principal of Exponent, an engineering and scientific consulting company. As outlined in the resume attached to her report, Corrigan received a Ph.D. in medical engineering and medical physics from Harvard University and Massachusetts Institute of Technology, Division of Health Sciences and Technology. Additionally, she received a Master of Science degree in Mechanical Engineering from Massachusetts Institute of Technology and a Bachelor of Science degree from the University of Pennsylvania in Bioengineering. She has authored and co-authored a number of peer-reviewed

articles and has made several presentations in her fields of expertise. Corrigan has also testified in several state and federal courts as an expert witness. Her education, training and expertise are directly related to several factual issues to be presented to the jury in this case.

As previously noted, Dr. Corrigan is expected to testify in areas of biomechanics, occupant kinematics, occupant protection, injury causation, statistical injury analysis, and injury mechanism. She is also expected to analyze and address the forces acting on the plaintiffs during the accident as well as Plaintiffs' responses to those forces.

Dr. Corrigan's written report is dated February 8, 2012, and consists of eleven pages of text and a two page bibliography. [Record No. 36; attachment] After identifying the materials received and reviewed, she provides a one-page accident summary taken from the police accident report as well as other materials. The concluding sentence of this section of the report states that, according to an investigating officer, it appeared that Ms. Hinkle was wearing a seatbelt and observed that the lap belt was "properly engaged, however, the shoulder restraint was underneath of her left arm." Further reference is made to factual information regarding the routing of Hinkle's seat belt and shoulder restraint at pages 10 and 12 of the report. At page 12, Dr. Corrigan states that, "[u]nder the forces of this severe rollover, this seat belt configuration would have increased Ms. Hinkle's excursion beyond the plane of the driver's window, as compared with a situation in which the webbing was properly routed across her left clavical area."

According to the plaintiffs, Dr. Corrigan's proposed opinions concerning the accident in issue cannot be made "to the requisite degree of scientific or medical certainty" to qualify under

Daubert and its progeny. More specifically, they assert that Corrigan has not offered any basis for her opinion that Hinkle was not properly wearing her seat belt immediately prior to the accident. This argument is based, in part, on the fact that Corrigan did not examine Hinkle's body following the accident and does not have autopsy evidence that describes the injuries which would be consistent with her opinion on seatbelt use. Additionally, they contend that Corrigan cannot specify whether the blow to Hinkle's head that caused her death would have occurred with (or without) a properly-worn seatbelt. The plaintiffs also challenge this portion of Corrigan's report because she failed to perform any calculations regarding the degree of increased excursion Hinkle may have experienced as a result of the allegedly mis-routed shoulder belt. While these contentions may be the subject of cross-examination, they do not support a motion to exclude Dr. Corrigan's testimony on this or any other area of her expected testimony.

Corrigan's opinions are not premised on the singular notion that Hinkle was wearing her shoulder belt improperly. However, regarding the issue of seat and shoulder belt use, she has identified evidence which is observable in photographs. Corrigan has stated that, based on the severity of the accident, it is possible that Hinkle was wearing her lap and shoulder belts properly at the time of the accident.¹ But it is more likely that she was not doing so. Based on her

¹Corrigan indicates that it is more likely that Hinkle was wearing her shoulder belt under her left arm at the time of the accident, but that it is possible that she could have been wearing it properly. The plaintiffs reverse the "most likely" versus "possible" analysis in their reply by improperly characterizing Dr. Corrigan's testimony and opinion as being that it "is possible" that Hinkle's seatbelt may have been routed under her left arm before the accident. [Record No. 49]

education, training and experience, Corrigan is certainly qualified to express opinions regarding this issue as well as all other issues identified in her report uring the upcoming trial.

B. James Engle

James Engle is an automotive engineer employed by Ford. He received a Bachelor of Science degree in Mechanical Engineering from the University of Michigan – Ann Arbor and a Master of Business degree in Business Administration from the University of Michigan – Dearborn. He is the co-author of a paper entitled, "Accuracy of Powertrain Control Module (PCM) Event Data Recorders (2008).² Engle is expected to offer expert testimony concerning the design, development, testing, and implementation of powertrain systems, including control modules ("PCMs") in Ford vehicles. More specifically, Engle is expected to testify that the PCM event recorder incorporated into the vehicle in issue accurately records and measures various vehicle parameters, including vehicle speed. In this case, the recorder indicated that the vehicle was traveling at speeds of up to and over 90 miles per hour immediately before the accident.

The plaintiffs have moved to exclude this testimony because, the assert, Engle's opinions lack sufficient foundation. They contend that his opinions are based on the paper he co-authored concerning the accuracy of the speed data recorder in the PCM of a different vehicle (a Ford

[Record No. 36, attachment]

²The abstract indicates that,

[[]t]he primary purpose of this paper is to evaluate the accuracy of speed data recorded in Ford PCM under steady state conditions. . . . The secondary purpose is to deliberately create conditions that could result in errors of speed measured, document the conditions, and to quantify the error.

Crown Victoria). While the vehicle involved in this case is an all-wheel drive vehicle (a 2004 Mercury Mountaineer), the Ford Crown Victoria is a rear-wheel drive vehicle having many other distinguishing features and characteristics. Further, the plaintiffs argue that Engle is unable to testify regarding similar studies performed regarding the accuracy of the software utilized in the 2004 Mercury Mountaineer.

Next, the plaintiffs argue that Engle's testimony should be excluded because he did download information from the PCM data recorder of the 2004 Mercury Mountaineer involved in the accident in this case. In fact, they contend, he has never seen the vehicle, is not an electronics engineer, and is not aware of the coding used to program the PCM.

Again, while the plaintiffs' complaints might be relevant to the weight to be given to the expert's expected testimony, they are insufficient to exclude the opinions from being offered by Ford. The Court concludes that Engle is qualified by virtue of his education, training and experience to testify to the areas outlined in Ford's Rule 26 disclosures. Specifically, he is qualified to testify that:

- The 2004 Mercury Mountaineer was equipped with a data recorder on the vehicle's powertrain control module (PCM).
- The data recorder typically captures accelerator pedal position measured as a percentage, brake pedal off or on, vehicle speed, engine rpm, and several other parameters.
- Typically, the data buffer can hold 25 seconds of data.
- The data recorder starts acquiring data assoon as the key is turned to the "on" position. After the key has been in the "on" position more than 25 seconds, the oldest data is overwritten with new data. In this way the most recent seconds of vehicle operation is recorded.

• Seconds before the accident, the vehicle inissue was traveling up to and likely in excess of 90 miles per hour.

And while the plaintiffs may cross-examine Engle regarding his inspection – or lack of inspection – of the vehicle and PCM, it is equally true that Ford's counsel may question the plaintiffs' witnesses regarding the fact that inspection by Engle did not occur due to *their* failure to notify the defendant and its attorneys of Michael McCort's actions in unilaterally downloading the PCM of the 2004 Mercury Mountaineer.

III.

Both Dr. Catherine Corrigan and James Engle are qualified by virtue of their education, training and experience to testify and offer expert opinions regarding the areas in which they have been designated. Accordingly, it is hereby

ORDERED that the plaintiffs' motion *in limine* to exclude expert testimony by Catherine Corrigan and James Engle [Record No. 36] is **DENIED**.

This 19th day of September, 2012.



Signed By: <u>Danny C. Reeves</u> DCR United States District Judge