

**COURT OF APPEALS  
DECISION  
DATED AND FILED**

**October 14, 2025**

Samuel A. Christensen  
Clerk of Court of Appeals

**NOTICE**

This opinion is subject to further editing. If published, the official version will appear in the bound volume of the Official Reports.

A party may file with the Supreme Court a petition to review an adverse decision by the Court of Appeals. See WIS. STAT. § 808.10 and RULE 809.62.

**Appeal No. 2024AP845-CR  
STATE OF WISCONSIN**

**Cir. Ct. No. 2021CF4176**

**IN COURT OF APPEALS  
DISTRICT I**

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**STATE OF WISCONSIN,**

**PLAINTIFF-RESPONDENT,**

**V.**

**ANTONIO A. HOMAN,**

**DEFENDANT-APPELLANT.**

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APPEAL from an order of the circuit court for Milwaukee County:  
ELLEN R. BROSTROM, Judge. *Affirmed.*

Before White, C.J., Donald, and Geenen, JJ.

**Per curiam opinions may not be cited in any court of this state as precedent  
or authority, except for the limited purposes specified in WIS. STAT. RULE 809.23(3).**

¶1 PER CURIAM. Antonio A. Homan is charged with first-degree reckless homicide. It is alleged that Homan shook Zachary,<sup>1</sup> a 12-month-old child, causing his death. Homan appeals a nonfinal order of the circuit court<sup>2</sup> granting the State’s motion to exclude defense witness Kenneth Monson, Ph.D., a biomechanical engineer, from testifying as an expert at trial. The circuit court concluded that although Dr. Monson is qualified in the field of biomechanical engineering, his specialized knowledge is inapplicable to this case that involves the traumatic shaking of an infant. The circuit court also concluded that the principles and methods underlying Dr. Monson’s report and testimony were unreliable because they ignored facts presented in the victim’s medical records.

¶2 We conclude that the circuit court did not erroneously exercise its discretion by excluding Dr. Monson. Accordingly, we affirm the circuit court’s order.

### **BACKGROUND**

¶3 According to the criminal complaint, first responders were dispatched to a Milwaukee home in response to a report of an unresponsive child, Zachary. Zachary was taken to Children’s Hospital of Wisconsin with no pulse and was not breathing on his own. There was bruising to Zachary’s face, chest, and legs, and testing revealed that he had no measurable brain activity. Zachary had bilateral subdural and retinal hemorrhages consistent with sustaining

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<sup>1</sup> For ease of reading, we use pseudonyms to refer to the minor victim and his family in this case.

<sup>2</sup> This court granted leave to appeal the order. *See* WIS. STAT. RULE 809.50(3) (2023-24). All references to the Wisconsin Statutes are to the 2023-24 version.

significant brain injury. An examining doctor concluded that Zachary suffered “abusive head trauma, formerly shaken baby syndrome” and was not expected to survive.

¶4 Zachary’s mother, Marie, and her boyfriend, Homan, were at the scene when detectives arrived to investigate what happened to Zachary. Homan told police that the day before the incident, Marie picked him up in Chicago and drove him back to her home in Milwaukee. Homan went to sleep without seeing Zachary. The next day, Homan and Marie stayed home all day with Zachary, who appeared lethargic and slept most of the day. At approximately 4:00 p.m., Marie gave Zachary a bath, put him down for a nap, and he slept until 6:00 p.m. At 10:00 p.m., Marie left to pick up Homan’s mother, who had agreed to watch Zachary while Marie drove Homan back to Chicago.

¶5 While Marie was gone, Homan heard Zachary gasp for air. Homan ran into the bedroom and picked up Zachary. Zachary was turning red, and his eyes rolled back. Homan placed Zachary on the ground and began CPR. He then called Marie to tell her that something was wrong with Zachary. Marie called 911, and within minutes, she arrived back home. Moments later, first responders arrived. Based on the severity of Zachary’s injuries and the lack of any explanation that would account for them, Marie and Homan were arrested.

¶6 After his arrest, Homan gave another statement to police. Homan admitted that while Marie was picking up Homan’s mother, he was watching Zachary alone when Zachary let out a loud cry from his bedroom. Homan became frustrated, picked Zachary up, and shook him. Zachary’s head snapped back, and he let out a gasp. Zachary stopped breathing, but Homan could still hear his heart beating. Homan carried Zachary into the living room and began performing CPR.

While performing CPR, Homan called Marie and told her that Zachary was having breathing problems. He did not tell her that he shook Zachary.

¶7 A few days after being taken to the hospital, Zachary was removed from life support and died. An autopsy was performed, finding that Zachary suffered bilateral hemorrhaging, brain trauma, and optic nerve sheath hemorrhaging to both eyes. The medical examiner provided a preliminary cause of death as blunt force trauma to the head and a preliminary manner of death as homicide. Homan was charged with first-degree reckless homicide.<sup>3</sup>

¶8 As relevant to this appeal, Homan sought to introduce the testimony of Dr. Monson, a biomechanical engineer. The State objected, arguing that Dr. Monson’s area of expertise was unrelated to the medical diagnosis of abusive head trauma. The State also argued that the application of biomechanics to the field of infant head trauma is not an accurate or reliable science.

¶9 The circuit court held a hearing at which Dr. Monson testified. Dr. Monson’s curriculum vitae was admitted into evidence, and he testified regarding his qualifications and expertise as a professor of mechanical engineering and his research into injury biomechanical engineering. Dr. Monson explained that “[m]echanics is the study of how objects respond to the application of force,” and that “[b]iomechanics is the application of the principles of mechanics to biological systems like the human body.”

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<sup>3</sup> Homan was originally charged with physical abuse of a child—recklessly causing great bodily harm, but this charge was amended to first-degree reckless homicide after Zachary died.

¶10 Dr. Monson testified that the principles of biomechanics are useful in determining whether a brain injury would be expected under given sets of circumstances. Regarding this prediction, researchers compare: (1) the acceleration experienced by the subject's head, and (2) the value of head acceleration which would be expected to cause head injuries, referred to as the "injury threshold." Dr. Monson concluded that the scientific research in the biomechanical engineering field on traumatic brain injury did not support the conclusion that shaking alone could directly produce Zachary's injuries. However, Dr. Monson conceded that biomechanical science did not conclusively disprove the assertion that shaking alone could cause Zachary's injuries.

¶11 Dr. Monson explained that much of his knowledge of injury thresholds is drawn from the study of automobile accidents. He admitted that the only injury thresholds currently available to biomechanical researchers are those associated with single acceleration events (e.g., an automobile accident or a fall). That is, there is no injury threshold associated with the repeated shaking of an infant. Dr. Monson testified that he "cannot say whether or not shaking would be ... expected to cause accumulating damage in the brain," and he admitted that according to one study on which he relied, "repeated relatively mild accelerations, similar to those associated with shaking, are more injurious than a single acceleration[.]"

¶12 The circuit court granted the State's motion to exclude Dr. Monson's testimony. It found that while Dr. Monson was an expert in biomechanical engineering, he was not qualified to testify in this case. It further found that Dr. Monson's specialized knowledge would not help the jury, as the trier of fact in this case, and that Dr. Monson ignored facts presented in Zachary's medical records undermining the reliability of his scientific principles and methods.

¶13 Homan filed a motion to stay the circuit court proceedings pending an appeal to this court, which the circuit court denied. Homan then filed a motion for emergency temporary relief in this court. We granted an emergency temporary stay of the circuit court’s order, and later, we granted Homan’s petition for leave to appeal.<sup>4</sup>

### DISCUSSION

¶14 Homan argues that the circuit court erroneously excluded Dr. Monson from testifying at trial. He claims that Dr. Monson’s report and testimony satisfy WIS. STAT. § 907.02(1) and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and Dr. Monson should be allowed to testify. The State argues, and the circuit court agreed, that although Dr. Monson is qualified in the field of biomechanical engineering, his specialized knowledge will not assist the jury in this case because his specific expertise relates to single acceleration events like automobile accidents that are too dissimilar to a traumatic shaking episode or episodes of an infant. Homan responds that “[c]oncerns related to the boundaries of [Dr. Monson’s] testimony can and should be addressed through cross-examination and by providing the jury with the appropriate instructions, not by outright exclusion, as the circuit court did here.”

¶15 WISCONSIN STAT. § 907.02(1) governs the admissibility of expert testimony. *State v. Hogan*, 2021 WI App 24, ¶18, 397 Wis. 2d 171, 959 N.W.2d 658. The statute was amended in 2011 to adopt the federal standard from *Daubert*. *Hogan*, 397 Wis. 2d 171, ¶18. It states:

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<sup>4</sup> The stay is lifted upon release of this opinion.

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if the testimony is based upon sufficient facts or data, the testimony is the product of reliable principles and methods, and the witness has applied the principles and methods reliably to the facts of the case.

WIS. STAT. § 907.02(1).

¶16 We examine a circuit court’s rulings under WIS. STAT. § 907.02(1) “both independently as a question of law and also under the erroneous exercise of discretion standard.” *Seifert v. Balink*, 2017 WI 2, ¶88, 372 Wis. 2d 525, 888 N.W.2d 816. “The interpretation and application of a statute presents a question of law” that we review independently. *Id.*, ¶89. However, “[o]nce satisfied that the circuit court applied the appropriate legal framework,” we review “whether the circuit court properly exercised its discretion in determining which factors should be considered in assessing reliability, and in applying the reliability standard to determine whether to admit or exclude evidence.”<sup>5</sup> *Id.*, ¶90. “In other words, a circuit court has discretion in determining the reliability of the expert’s principles, methods, and the application of the principles and methods to the facts of the case.” *Id.*, ¶92. “A [circuit] court’s decision on admissibility or exclusion of expert evidence is an erroneous exercise of discretion when a decision rests upon a clearly erroneous finding of fact, an erroneous conclusion of law, or an improper application of law to fact.” *Id.*, ¶93. The test is not whether we agree with the ruling of the trial court, but whether appropriate discretion was in fact exercised. *State v. Shomberg*, 2006 WI 9, ¶11, 288 Wis. 2d 1, 709 N.W.2d 370.

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<sup>5</sup> There is no dispute that the circuit court “applied the appropriate legal framework” to determine whether Dr. Monson’s testimony was admissible.

**I. The circuit court did not erroneously exercise its discretion by excluding Dr. Monson’s testimony.**

¶17 In this case, the State argues, and the circuit court agreed, that although Dr. Monson is qualified in the field of biomechanical engineering, his specialized knowledge will not assist the jury in this case because his specific expertise in the biomechanics of single acceleration events like automobile accidents is too dissimilar to a traumatic shaking episode or episodes of an infant. Homan asserts that Dr. Monson’s testimony would help the jury understand other medical evidence in the case and that concerns about the boundaries of Dr. Monson’s testimony should be addressed in cross-examination and by providing the jury with appropriate instructions, as opposed to excluding Dr. Monson from testifying.

¶18 “To determine whether expert testimony is admissible under [the *Daubert*] standard, a court must engage in a three-step analysis, considering whether: (1) the witness is qualified; (2) the witness’s methodology is scientifically reliable; and (3) the testimony will assist the trier of fact to determine a fact in issue.” *Bayer ex rel. Petrucelli v. Dobbins*, 2016 WI App 65, ¶20, 371 Wis. 2d 428, 885 N.W.2d 173. Our supreme court has identified five determinations that a circuit court must make before admitting expert testimony under WIS. STAT. § 907.02(1):

(1) Whether the scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue; (2) whether the expert is qualified as an expert by knowledge, skill, experience, training, or education; (3) whether the testimony is based upon sufficient facts or data; (4) whether the testimony is the product of reliable principles and methods; and (5) whether the witness has applied the principles and methods reliably to the facts of the case.

*State v. Jones*, 2018 WI 44, ¶29, 381 Wis. 2d 284, 911 N.W.2d 97.



¶19 In his brief, Homan discusses Dr. Monson’s credentials, and there is no doubt that Dr. Monson is accomplished in the field of biomechanics. The circuit court recognized as much, but it concluded that Dr. Monson was not qualified to testify in this case. The court observed that much of Dr. Monson’s research dealt with single acceleration events, in particular, car accidents. This case, however, does not involve a single acceleration event. It involves a shaking episode or episodes of an infant, and Dr. Monson testified that there is no injury threshold associated with repeated shaking of an infant. “A circuit court has discretion in determining the reliability of the expert’s principles, methods, and the application of the principles and methods to the facts of the case.” *Seifert*, 372 Wis. 2d 525, ¶92. We conclude that the circuit court did not erroneously exercise its discretion by placing importance on the fact that this case involves a “traumatic shaking episode, or multiple episodes, of an infant,” and for that reason, Dr. Monson’s principles and methods were unreliable.

¶20 For similar reasons, we conclude that the circuit court did not erroneously exercise its discretion by concluding that Dr. Monson’s testimony would not assist the trier of fact. The circuit court observed that there is no injury threshold associated with a shaking episode of an infant, and testimony regarding injury thresholds for single acceleration events like car accidents or falls would likely confuse rather than assist the jury. This is a reasonable conclusion based on Dr. Monson’s testimony as applied to the allegations against Homan, and the circuit court did not erroneously exercise its discretion by excluding Dr. Monson’s testimony on this basis.

## CONCLUSION

¶21 For the foregoing reasons, we conclude that the circuit court did not erroneously exercise its discretion by excluding Dr. Monson’s testimony.

*By the Court.*—Order affirmed.

This opinion will not be published. See WIS. STAT. RULE 809.23(1)(b)5.

