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**Commonwealth of Kentucky**

**Court of Appeals**

NO. 2006-CA-002236-MR

COMMONWEALTH OF KENTUCKY

APPELLANT

v.

APPEAL FROM GREENUP CIRCUIT COURT  
HONORABLE LEWIS D. NICHOLLS, JUDGE  
ACTION NO. 04-CR-00076

RAYMOND MARTIN

APPELLEE

AND:

NO. 2006-CA-002237-MR

COMMONWEALTH OF KENTUCKY

APPELLANT

v.

APPEAL FROM GREENUP CIRCUIT COURT  
HONORABLE LEWIS D. NICHOLLS, JUDGE  
ACTION NO. 04-CR-00205

CHRISTOPHER A. DAVIS

APPELLEE

OPINION  
REVERSING AND REMANDING

BEFORE: THOMPSON, JUDGE; BUCKINGHAM AND HENRY, SENIOR JUDGES.<sup>1</sup>

HENRY, SENIOR JUDGE: In these consolidated cases, the Commonwealth appeals from orders of the Greenup Circuit Court entered on October 10, 2006. At issue is whether the circuit court erred in ruling that expert medical testimony about shaken baby syndrome was unreliable and therefore inadmissible under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). Because we have concluded that the circuit court abused its discretion in excluding the testimony, we reverse and remand for further proceedings.

Raymond Martin was indicted on May 27, 2004, for assault in the second degree for intentionally injuring E.G., his three-month-old son, by excessively shaking him. Christopher A. Davis was indicted on December 16, 2004, for criminal abuse in the first degree for severely shaking his four-month-old son, A.D. In both cases, the infants displayed the symptoms of subdural hematomas (pooling of blood in the membranes enclosing the brain) and bilateral retinal hemorrhaging (bleeding in both eyes) while they were in the sole care of their fathers. Both infants were admitted to Our Lady of Bellefonte hospital in Ashland, and thereafter were transferred for treatment to the Children's Hospital in

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<sup>1</sup> Senior Judges David C. Buckingham and Michael L. Henry sitting as Special Judges by assignment of the Chief Justice pursuant to Section 110(5)(b) of the Kentucky Constitution and KRS 21.580.

Columbus, Ohio. A.D. underwent a craniotomy to relieve the hematoma on his brain. E.G. has sustained nerve damage which will permanently affect his eyes.

Martin and Davis made motions for a *Daubert* hearing, seeking to exclude the testimony of the Commonwealth's proffered expert witness, Dr. Betty S. Spivack, on the grounds that her testimony to the effect that the injuries of E.G. and A.D. were the result of shaken baby syndrome, was unreliable. The court held a joint *Daubert* hearing because the factual circumstances of the cases were so similar. At the hearing, which was held on March 29, 2006, testimony was heard from the defendants' expert, Dr. Ronald Uscinski, and from Dr. Spivack.

Dr. Uscinski is a distinguished neurosurgeon who serves as a Clinical Associate Professor at Georgetown University School of Medicine in Washington D.C. In Dr. Uscinski's opinion, there is insufficient evidence to support the view that an infant can sustain a subdural hematoma from shaking alone. Dr. Uscinski has not performed any primary research or conducted any studies on this subject, although he has published two short articles (one page and four pages respectively) which set forth his views. It is unclear whether these publications were peer-reviewed. Dr. Uscinski has also made presentations on shaken baby syndrome to several eminent organizations, and has served as an expert defense witness in numerous "shaken baby" cases.

In his testimony before the Greenup Circuit Court, Dr. Uscinski provided an overview of the various studies that have investigated the effects of whiplash and shaking on the brain. In each instance, he described various

weaknesses that, in his opinion, detracted from the value of the studies. For example, in 1968, an attempt was made by Dr. Ayub K. Ommaya to replicate the effects of whiplash on the brain by strapping rhesus monkeys into a seat that was rapidly accelerated and then suddenly stopped. The monkeys were then killed and dissected; nineteen of the fifty monkeys had suffered intracranial injuries such as concussions and subdural hematomas.

Dr. Uscinski opined that Ommaya's research was flawed because he never quantified precisely how much rotational acceleration would be necessary to cause a subdural hematoma in an infant by manual shaking. Dr. Uscinski also pointed out further weaknesses in the study: that it was conducted on monkeys, which have smaller heads and stronger, thicker necks than human beings; that the whiplash action was different from shaking; and that it was possible that some of the monkeys hit their heads on the back of the seat, which suggests that their brain injuries were not due to movement alone. Dr. Ommaya later tested squirrel monkeys and chimpanzees in a similar manner. Using the experimental data from the different animals, Dr. Ommaya extrapolated to determine the threshold force required to injure adult humans. Again, Dr. Uscinski was critical of this study due to the difference in anatomy between humans and monkeys.

Dr. Ommaya's experiment was relied upon in the 1970s by Drs. Guthkelch and Caffey, who wrote seminal articles about shaken baby syndrome. Dr. Guthkelch, a pediatric neurosurgeon, reported in 1971 on 13 infants and toddlers with subdural hematomas from suspected abuse. Ten of these children

had bilateral retinal hemorrhaging. Of these ten, five had no external marks of injury. In two instances, their families reported shaking the children vigorously. Dr. Caffey in 1972 reported on 27 cases where shaking was all or part of the mechanism causing subdural hematomas in children.

Dr. Uscinski then described an experiment published by Dr. A.C. Duhaime in 1987, in which she created three different models of a baby's neck and brain, and had subjects shake the models. They were unable to generate the acceleration hypothesized by Ommaya as necessary in order to cause injury. Duhaime consequently developed the concept of shaken impact syndrome, hypothesizing that an impact was necessary to cause the injuries associated with shaken baby syndrome, but that an impact against a soft surface could create sufficient force to cause concussion and subdural hematomas.

Uscinski also alluded to a recent study by Faris A. Bandak, which relied on a nineteenth-century experiment by Dr. Matthew Duncan in which the cadavers of days-old infants were suspended and weights attached to their ankles. Duncan then recorded the level at which the weights caused decapitation. (This experiment was conducted by Duncan to determine how much force could be used when attempting to assist the delivery of a baby by using forceps.) On the basis of this data, Bandak concluded that shaking violent enough to produce brain damage in an infant would also cause a neck injury before any damage occurred to the brain, because infants' necks are relatively weak and their heads are relatively large and heavy.

The Commonwealth's witness, Dr. Betty Spivack, is a forensic pediatrician on the staff of the Kosair Children's Hospital in Louisville. She is a professor of pediatrics and pathology at the University of Louisville School of Medicine. Her testimony covered much of the same ground as Dr. Uscinski's. She criticized Bandak's methodology, since the nineteenth-century study on which he relied involved gradually increasing the weights on the infants' cadavers rather than on abrupt shaking. She testified that other researchers had attempted to replicate Bandak's results and had been unable to do so. She also criticized Dr. Duhaime's study by pointing out that the models used were not "corroborated" test dummies, and that the volunteers shook the dummies straight back and forth which uses relatively weak, small muscles and does not create high acceleration.

Dr. Spivack also testified regarding various clinical trials and studies. For instance, she alluded to a study performed in 1989 on 36 children who had suffered abusive head trauma. Of this group, 13 showed no evidence of impact. Of the six who were autopsied, five showed no signs of impact. They did have evidence of epidural and subdural hematomas of the cervical spinal cord. Dr. Spivack explained that it was possible to have impact without outward evidence such as bruising. She stated that bilateral, extensive retinal hemorrhages, in conjunction with a hematoma, are a good indicator of a shaking event because in automobile or bike accidents, children who suffer subdural hematomas rarely display retinal hemorrhages. In her opinion, this was borne out by multiple studies which have confirmed that up to 80% of abusive head trauma cases have retinal

hemorrhages. She testified that she is aware of only one documented case where bilateral, extensive retinal hemorrhages were found in an accident case, which occurred when an infant pulled a television weighing over 40 pounds down on his head. Dr. Spivack acknowledged that the scientific studies underlying shaken baby syndrome are not complete and that further research is needed.

On April 17, 2006, the court entered an opinion and order in both cases, ruling that Dr. Spivack's testimony about shaken baby syndrome did not meet the *Daubert* test for scientific reliability. Essentially, the court determined, relying largely on the testimony of Dr. Uscinski, that shaking alone could not cause the type of injuries sustained by the victims. The court drew a distinction between the "scientific" and "clinical" communities, and concluded that there were insufficient studies using the "scientific method" to support Dr. Spivack's opinion. It stated in relevant part:

The existence and maintenance of standards controlling the study of SBS [Shaken Baby Syndrome] certainly exists. However, not all of the studies have observed the scientific method in reaching conclusions. In fact the most damning studies supporting SBS are the ones that failed to follow the scientific method. The more recent studies appear to utilize a more scientific methodology to their research, but their preliminary conclusions appear to support the conclusion that the subdural hematoma and bilateral ocular bleeding are not caused by shaking alone, but require blunt force impact.

Physicians routinely diagnose SBS and that has gained wide or general acceptance in the clinical medical community, if the baby has the two classical medical markers of subdural hematoma and bilateral ocular bleeding without any other manifest injuries. However,

this diagnosis is based on inconclusive research conducted in the scientific research community. SBS has gained wide or general acceptance in the clinical community and research community, if the baby has the two classical medical markers of subdural hematoma, bilateral ocular bleeding, and other manifest observable injuries such as broken bones, bruises, etc. To allow a physician to diagnose SBS with only the two classical markers, and no other evidence of manifest injuries, is to allow a physician to diagnose a legal conclusion. If the physician has the two classical markers (subdural hematoma and bilateral ocular bleeding) coupled with other manifest injuries, then the diagnosis arises to more than a legal conclusion – it becomes a medical opinion.

The Court can only conclude that SBS has not gained wide or general acceptance in the scientific community for the purposes of allowing an expert to testify that a baby has been subjected to abuse when the baby exhibits a subdural hematoma, bilateral ocular bleeding with no other manifest injuries such as bruising, broken bones, etc. The Court can further conclude that based on the medical signs and symptoms, the clinical medical and scientific research communities are in disagreement as to whether it is possible to determine if a given head injury is due to an accident or abuse.

As a result of this apparent conflict between “medical” and “scientific” opinion, the court held that the *Daubert* test had not been met, and that neither party could call a witness to give an expert opinion as to whether a child’s head injury was due to shaken baby syndrome when the only symptoms exhibited by the child were a subdural hematoma and bilateral ocular bleeding. However, the court qualified its holding as follows:

Either party can call a witness to give an expert opinion as to the cause of the injury being due to shaken baby syndrome, if and only [if], the child exhibits a subdural hematoma and bilateral ocular bleeding, and any other



indicia of abuse present such as long-bone injuries, a fractured skull, bruising, or other indications that abuse has occurred.<sup>2</sup>

In response to this latter part of the opinion, the Commonwealth moved for a hearing to determine whether there was evidence of any “other indicia of abuse” present in these two cases. The Commonwealth submitted the depositions of Dr. Phillip Scribano and Dr. Mary Lou McGregor, from the Children’s Hospital in Columbus. Dr. Scribano is the Medical Director of the Center for Child and Family Advocacy at the Hospital. He evaluated both E.G. and A.D. when they were admitted. He testified that A.D. had a small bruise on his lower lip and a bruise on his left ear when he was admitted. In Dr. Scribano’s opinion, the injuries of both babies were consistent with having been violently shaken. Although he could not say with certainty that the injuries were solely the result of shaking, he explained that an impact with a soft surface, such as a changing table or a crib mattress, would increase the acceleration fifty times. He testified that many autopsies of victims of abusive head trauma had shown multiple bruises on the inside of the brain, proving that an impact had occurred, but without any evidence of bruising on the outside. Dr. McGregor, a pediatric ophthalmologist, treated E.G., who displayed severe retinal hemorrhages in both eyes at different layers. She testified that most experts in the field do not think that the blood found in the eyes is caused by the pressure of the hematoma, but rather

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<sup>2</sup> At the subsequent hearing, the trial court clarified the wording of the order by explaining that a subdural hematoma and/or ocular bleeding, plus other indicia of abuse, were what were required by the order.

by shaking. She stated that a CT scan showed that E.G. had subdural and intracranial diffuse hemorrhages, which in her opinion did not occur spontaneously.

Dr. Uscinski's testimony largely consisted of his review of the medical reports prepared at the hospitals in Ashland and Columbus where E.G. and A.D. were treated. He opined that neither child showed any significant evidence of an impact that could have caused the injuries in question.

On October 10, 2006, the trial court issued "findings of fact, conclusions of law and order denying the Commonwealth's expert witness;" the court also entered an "amended order and opinion sustaining motion for *Daubert* hearing" which reaffirmed the holding of its earlier orders. This appeal by the Commonwealth followed.

In *Mitchell v. Commonwealth*, 908 S.W.2d 100 (Ky. 1995), *overruled on other grounds by Fugate v. Commonwealth*, 993 S.W.2d 931 (Ky. 1999), the Kentucky Supreme Court adopted the analysis of *Daubert*, in which the United States Supreme Court set out key considerations for admitting expert testimony under the Federal Rules of Evidence.

When a party proffers expert testimony, the trial court must determine in a preliminary hearing pursuant to KRE 104, "whether the expert is proposing to testify to (1) scientific [, technical, or other specialized] knowledge that (2) will assist the trier of fact to understand or determine a fact in issue." *Goodyear Tire and Rubber Company v. Thompson*, 11 S.W.3d 575 (Ky. 2000). The nonexclusive, flexible factors to be considered in determining the admissibility of the proffered expert

testimony as set forth in *Daubert* and adopted in *Mitchell* are: (1) whether the theory or technique can be or has been tested; (2) whether it has been subjected to peer review or publication; (3) whether there is a known or potential rate of error; and (4) whether the theory or technique has general acceptance within its particular scientific, technical, or other specialized community.

*Florence v. Commonwealth*, 120 S.W.3d 699, 702 (Ky. 2003) (internal citation omitted).

The trial court's findings of fact are reviewed for clear error; the ultimate decision as to admissibility is reviewed for abuse of discretion. *See Miller v. Eldridge*, 146 S.W.3d 909, 915 (Ky. 2004).

We turn first to the Commonwealth's argument that the trial court misallocated the burden of proof at the *Daubert* hearing. The general rule is that the burden of proof is on the party proffering the expert evidence, except when the party is offering expert testimony in a field of scientific inquiry so well-established that it has been previously deemed reliable by an appellate court. In such a case, the trial court may take judicial notice of the evidence, which

relieves the proponent of the evidence from the obligation to prove in court that which has been previously accepted as fact by the appropriate appellate court. It shifts to the opponent of the evidence the burden to prove to the satisfaction of the trial judge that such evidence is no longer deemed scientifically reliable. The proponent may either rest on the judicially noticed fact or introduce extrinsic evidence as additional support or in rebuttal.

*Johnson v. Commonwealth*, 12 S.W.3d 258, 262 (Ky. 1999).

In such circumstances, . . . the expert opinion would be admissible without a *Daubert* hearing but . . . an opposing party would be entitled to be heard with evidence to the contrary. In this respect . . . judicial notice relieves the proponent of the evidence from the obligation to prove in court that which has been previously accepted as fact by the appropriate appellate court.

*Florence v. Commonwealth*, 120 S.W.3d 699, 703 (citations and quotation marks omitted). In other words, “there is a burden shift from the party offering expert testimony to the party opposing testimony.” *Id.* “This would result in a reverse *Daubert* hearing where the party moving to exclude the evidence tries to prove that the challenged expert testimony is based on ‘scientific, technical, or other specialized knowledge’ that is not reliable.” *Goodyear Tire and Rubber Co. v. Thompson*, 11 S.W.3d 575, 579 (Ky. 2000).

The Commonwealth argues that the trial court should have taken judicial notice of shaken baby syndrome, thereby shifting the burden to the appellees to prove that it was no longer reliable evidence – in essence, holding a reverse *Daubert* hearing. Although we agree with the Commonwealth that testimony regarding shaken baby syndrome is widely accepted in courts nationwide, it has not been recognized as reliable in Kentucky for purposes of judicial notice. (For a list of scientific methods and techniques which have been recognized as reliable by our courts, see *Johnson v. Commonwealth*, 12 S.W.3d 258, 262 (Ky. 1999); they include certain types of DNA testing, breath testing to

determine blood alcohol content, HLA blood typing to determine paternity, fiber analysis, ballistics analysis and fingerprint analysis.)

The trial court correctly stated that, after the defendants had cast sufficient doubt on the reliability of the Commonwealth's expert testimony, the Commonwealth bore the burden of showing that the evidence was reliable.

The Commonwealth contends that the court either overlooked or misunderstood its theory of "soft impact," that is, the possibility that, even if an impact is necessary in order to inflict the type of injuries found in these infants, this impact can be against a soft surface which will leave no external mark on the child. This argument relates particularly to the second hearing and the court's determination that there was no evidence of abuse, such as it had determined was required in addition to the subdural hematomas and retinal hemorrhaging, in order to justify admitting the testimony of Dr. Spivack. The Commonwealth points out that both Dr. Spivack and Dr. Scribano testified that an impact may indeed be necessary to inflict the injuries seen here, but that this impact could be a soft impact that leaves no outward mark.<sup>3</sup>

The appellees respond that under the highly deferential standard of review for *Daubert* determinations set forth in *Miller, supra*, the trial court was free to ignore whatever evidence it chose, as long as there was support in the record for the findings that it did make. The appellees also rely on *Miller* for the

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<sup>3</sup> Dr. Spivack's testimony in this regard also cited to recent bio-mechanical studies indicating that an infant's head could impact its own back and chest when shaken violently, which could cause the type of increase in rotational forces necessary to cause intracranial and retinal hemorrhage without external evidence of injury.

proposition that when a lower court fails to make findings of fact, we should infer the lower court's implicit findings, namely, that given the current state of research and testing, the theories of shaking alone or shaking plus impact on a soft surface with no visible injuries were not adequately validated.

We are mindful that the *Miller* court cautioned us strongly against performing a *de novo* review of findings of fact. See *Miller*, 146 S.W.3d at 916-17 (“Appellate courts must be careful to avoid the sort of unfettered review of the record and of the trial court’s rulings that indicates a *de novo* review.”) But there is a second component of the review process under *Miller*, which requires us to determine whether the court’s ultimate decision to exclude Dr. Spivack’s testimony was an abuse of discretion. The test for abuse of discretion is “whether the trial judge’s decision was arbitrary, unreasonable, unfair, or unsupported by sound legal principles.” *Goodyear*, 11 S.W.3d at 581. The trial court’s decision to exclude Dr. Spivack’s testimony was an abuse of discretion, because it was founded on the unsupported legal conclusion that because there was dispute amongst the experts as to the possible cause of the infants’ injuries, it was the court’s role to choose the side it found more convincing and exclude the side it found less convincing, based in part on giving greater weight to “scientific” as opposed to “clinical” studies.

The *Daubert* test is designed to keep out unreliable or “pseudoscientific” expert scientific testimony that would confuse or mislead the jury, or that cannot legitimately be challenged in a courtroom. *Daubert*, 509 U.S. at 592-93, 113 S.Ct. at 2796. “This ‘gatekeeping’ role of the trial court, *Daubert*,

509 U.S. at 597, 113 S.Ct. at 2798, is designed to banish ‘junk science’ evidence from the courtroom[.] *Elsayed Mukhtar v. Cal. State Univ.*, 299 F.3d 1053, 1063 (9th Cir.2002).” *Ragland v. Commonwealth*, 191 S.W.3d 569, 574 -575 (Ky. 2006). The testimony of the Commonwealth’s experts in this case, even accepting the trial court’s assessment of its flaws, could not be described as “pseudoscientific” or “junk science.”

The gatekeeping function of the trial court is restricted to keeping out unreliable expert testimony, not to assessing the weight of the testimony. This latter role is assigned to the jury. Kentucky courts stressed this distinction in roles, noting with approval that a trial court “was aware of the difference between its role as gatekeeper and the jury’s role in determining the weight evidence should have.” *Sand Hill Energy, Inc. v. Ford Motor Co.*, 83 S.W.3d 483, 489-90 (Ky. 2002), *vacated on other grounds by Ford Motor Co. v. Smith*, 538 U.S. 1028, 123 S.Ct. 2072, 155 L.Ed.2d 1056. *See also Toyota Motor Corp. v. Gregory*, 136 S.W.3d 35, 40-41 (Ky. 2004) (“Criticism of Gratzinger’s selection of the inflators he tested goes to the weight of the evidence, not its admissibility.”)

Federal case law abounds with opinions emphasizing this distinction. “The gatekeeper role should not . . . invade the province of the jury, whose job it is to decide issues of credibility and to determine the weight that should be accorded evidence[.]” *United States v. Vesey*, 338 F.3d 913, 917 (8<sup>th</sup> Cir. 2003). “Disputes as to the strength of [an expert's] credentials, faults in his use of [a particular] methodology, or lack of textual authority for his opinion, go to the weight, not the

admissibility, of his testimony.” *McCullock v. H.B. Fuller Co.*, 61 F.3d 1038, 1044 (2d Cir.1995). The “gate-keeping function of the court was never meant to supplant the adversarial trial process. The fact that experts disagree as to methodologies and conclusions is not grounds for excluding relevant testimony.” *LP Matthews LLC v. Bath & Body Works, Inc.*, 458 F.Supp.2d 198, 210 (D.Del. 2006).

[T]he court is *only* a gatekeeper, and a gatekeeper alone does not protect the castle; as we have explained, ‘[a] party confronted with an adverse expert witness who has sufficient, though perhaps not overwhelming, facts and assumptions as the basis for his opinion can highlight those weaknesses through effective cross-examination.’ *Stecyk v. Bell Helicopter Textron, Inc.*, 295 F.3d 408, 414 (3d Cir. 2002).

*United States v. Mitchell*, 365 F.3d 215, 245 (3d Cir. 2004). “Vigorous cross-examination of a study’s inadequacies allows the jury to appropriately weigh the alleged defects and reduces the possibility of prejudice.” *Quiet Technology DC-8, Inc. v. Hurel-Dubois UK Ltd.*, 326 F.3d 1333, 1345 (11<sup>th</sup> Cir. 2003), citing *Hemmings v. Tidyman’s Inc.*, 285 F.3d 1174, 1188 (9<sup>th</sup> Cir. 2002). “By attempting to evaluate the credibility of opposing experts and persuasiveness of competing scientific studies, the district court conflated the questions of the admissibility of expert testimony and the weight appropriately to be accorded such testimony by a fact finder.” *Ambrosini v. Labarraque*, 101 F.3d 129, 141 (D.C. Cir. 1996). As the United States Supreme Court emphasized in *Daubert*, 509 U.S. at 596, “[v]igorous cross-examination, presentation of contrary evidence, and careful



instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.”

In the cases before us, the trial court was presented with two highly qualified physicians who disagreed as to the meaning and weight that should be accorded to various studies, both “scientific” and “clinical.” Other courts have grappled with this problem of “dueling, but well-qualified” experts, and have concluded that

[m]erely because two qualified experts reach directly opposite conclusions using similar, if not identical, data bases, or disagree over which data to use or the manner in which the data should be evaluated, does not necessarily mean that, under *Daubert*, one opinion is *per se* unreliable. *Daubert* does not empower the district judge to simply “pick” one expert over the other, because that expert is more credible or convincing, under the guise of exercising the gate-keeping function. To do so would improperly usurp the jury’s function.

*Allapattah Services, Inc. v. Exxon Corp.*, 61 F.Supp.2d 1335, 1341 (S.D.Fla. 1999).

“That some scientists in a field disagree with an expert's theories or conclusions does not render those theories or conclusions unreliable under *Daubert*[.]” *United States v. Sullivan*, 246 F.Supp.2d 696, 698 (E.D.Ky. 2003).

The trial court found unconvincing clinical studies which found a strong correlation between abuse and the two symptoms of subdural hematoma and retinal hemorrhaging, and illustrated its mistrust of such clinical studies with a hypothetical comparison of a correlation between an increase in teachers’ salaries and beer-drinking. It concluded that:

When Dr. Spivack observed that there was a stronger correlation between retinal hemorrhages with abusive head trauma than with unintentional head trauma, even when the unintentional injury is severe, this does not mean that every time a doctor observes retinal hemorrhages that abuse has occur[red]. It may be that the retinal hemorrhage is cause[d] by something else. In fact, that is exactly what Dr. Uscinski pointed out.

Apart from the fact that a jury would be fully capable of understanding and evaluating Dr. Uscinski's testimony that retinal hemorrhages could have other medical causes, and that Dr. Spivack's testimony could be subjected to vigorous cross-examination, clinical studies and trials which observe such correlations are an integral part of medical research. Experiments utilizing the "scientific" method cannot be performed on living infants. It is unreasonable to conclude that clinical studies and trials are inherently unreliable (and hence inadmissible) because they cannot and do not follow a particular methodology.

We find further support for our holding in the case law of other jurisdictions which shows that Dr. Uscinski has testified as an expert in numerous shaken baby cases, in which the trial courts clearly entrusted to the jury the role of deciding whether his testimony was convincing. *See e.g. People v. Swart*, 860 N.E.2d 1142, 1156 (Ill.App. 2006) (Dr. Uscinski testifying against the state's expert that "a person could not generate the force required to cause her [the victim's] intracranial injury" and disagreeing with the view that "shaken baby syndrome [is] a serious and clearly definable form of child abuse.") We are

confident that Kentucky juries can hear similar conflicting expert testimony and weigh it accordingly.

The orders of the Greenup Circuit Court are reversed, and these cases are remanded for further proceedings consistent with this opinion..

BUCKINGHAM, SENIOR JUDGE, CONCURS.

THOMPSON, JUDGE, CONCURS IN THE RESULT ONLY.

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