IN THE

SUPREME COURT OF THE UNITED STATES

LISA M. WEST - PETITIONER

vs.

STATE OF MISSOURI – RESPONDENT

ON PETITION FOR WRIT OF CERTIORARI TO

SUPREME COURT OF MISSOURI

PETITION FOR WRIT OF CERTIORARI

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QUESTIONS PRESENTED

1. Whether this court should require a *de novo* review of the trial court's handling of scientific testimony to determine whether *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993) [hereinafter *Daubert*] type standard for the admissibility of scientific testimony was applied in this case consistent with changes made to Missouri law[1] while this case was pending followed as necessary, by an abuse of discretion review of the trial judge's handling of scientific testimony.

2. Whether this court should overturn the conviction and sentence in this case because the testimony of Dr. Mary Case regarding her alleged (but scientifically baseless) ability to distinguish traumatically from non-traumatically caused injuries

4. Whether this court should correct and reverse the prior opinions issued by Missouri's Eastern District Court of Appeals (*State v. Johnson*, 402 S.W.3d 182 (Mo. App. E.D. 2013) [hereinafter *Johnson*]) and by Missouri's Southern District Court of Appeals (*State v. Evans*, 517 S.W.3d 528 (Mo. Ct. App. S.D. 2015) [hereinafter *Evans*]) because the decisions are the product of an unfair "shell game" and because what they say about Dr. Mary Case's use of BAPP staining obscures the inherently unreliable and scientifically flawed nature of her application of the stain and her testimony related thereto.

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JURISDICTION

The date on which the highest state court decided the merits: April 24, 2018 [Appendix A]

A timely petition for rehearing and/or transfer to the Missouri Supreme Court was denied: May 30, 2018 [Appendix B]

An application for transfer to the Missouri Supreme Court was denied: August 21, 2018 [Appendix C] and a Mandate was issued on August 24, 2018 [Appendix D]

STATEMENT OF THE CASE

This case involves a young woman, Ms. Lisa West, convicted on the "strength" of trial testimony provided by two key State witnesses. Dr. Mary Case was allowed to testify that she can make scientifically reliable determinations about traumatic or non-traumatic causation of injuries found on the eighteen month old child in Lisa West's care; despite the fact that her determinations are not connected to actual scientific methods. Second, Dr. Ann Dimaio was permitted to opine that the child in Ms. West's care died from "Shaken Baby Syndrome" which is also scientifically baseless.

Significant deficiencies in Dr. Mary Case's alleged ability to distinguish traumatically caused from non-traumatically caused injuries were documented in the Petition for Writ of Certiorari [hereinafter Evans Petition] filed with this court on behalf of Ryan N. Evans on February 22, 2016. *Ryan N. Evans v. Missouri*, 136 S.Ct. 1530 (Mem) (2016) [hereinafter *Evans v. Missouri*] The Evans Petition is attached at Appendix E.

The trial attorney in this case, faced with *State v. Johnson*,

clearly faulty science was allowed during her trial in the form of Dr. Case's testimony about her alleged (but non-existent scientifically) abilities to determine traumatic causation or the "Shaken Baby Syndrome" testimony principally propounded by Dr. Dimaio but supported by Dr. Case.

ZERO CONNECTION TO ACTUAL SCIENCE

As the Evans Petition pointed out (citing to the eight (8)[1]

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[1] 1. Geddes, J., Vowles, G., Beer, T., & Ellison, D. (1997). The diagnosis of diffuse axonal injury: Implications for forensic practice. *Neuropathology and Applied Neurobiology*, 339-347 [hereinafter "Geddes I"].

2. Oehmichen, M., Meiner, C., Schmidt, V., Pedal, I., König, H., & Saternus, K. (1998). Axonal injury – a diagnostic tool in forensic neuropathology? *Forensic Science International*, 67-83. [hereinafter Oehmichen]

3. Geddes, J., Whitwell, H., & Graham, D. (2000). Traumatic axonal injury: Practical issues for diagnosis in medicolegal cases. *Neuropathology and Applied Neurobiology*, 105-116. [hereinafter Geddes II]

4. Geddes, J., Vowles, G., Hackshaw, A., Nickols, C., Scott, I., & Whitwell, H. (2001). Neuropathology of inflicted head injury in children: II. Microscopic brain injury in infants. *Brain*, (124), 1299-1306. [hereinafter Geddes III]

5. Reichard, R., White, C., Hladik, C., & Dolinak, D. (2003). Beta-Amyloid precursor protein staining of nonhomicidal pediatric medicolegal

damaged tissue in the brains of persons who survive for a while (between 3 and 24 hours) following collapse. Appendix E, 51. Third, not enough is known on the subject for definitive, dogmatic solutions like Dr. Case's. Appendix E, 52.

It is important that, as the literature makes clear, the amount of axonal damage made visible using BAPP staining when collapse and death are simultaneous is zero percent (0 %) whereas the amount of visible axonal damage identified using BAPP staining (which only eighty two percent (82%) of one group of doctors agree ***may*** show traumatic causation) when a victim's survival (whether actual survival or, as in this case, "survival" only via a ventilator) is greater than three (3) to twenty four (24) hours is one hundred percent (100 %). In other words, the literature used by the State at the *Frye* hearing in *State v. Evans* and at trial (as well as the one article shown at trial in this case and to the trial judge in *Johnson*) identifies a defined "brick wall" of time (between three (3) and twenty four (24) hours) that by

can if they based their testimony on actual science). See *Flawed Convictions, "Shaken Baby Syndrome" and the Inertia of Injustice"* by Deborah Tuerkheimer (Oxford Press April 2014) [hereinafter *Flawed Convictions*]. See also Deborah Tuerkheimer, *The Next Innocence Project: Shaken Baby Syndrome and the Criminal Courts*, 87 Wash. U. L. Rev. 1 (2009) [hereinafter *Shaken Innocence*]. Available at: http://openscholarship.wustl.edu/law_lawreview/vol87/iss1/1

FURTHER PROOF DR. CASE'S THEORY IS SCIENTIFICALLY BASELESS

The *National Research Council of the National Academies, Strengthening Forensic Science in the United States: A Path Forward* (2009) [hereinafter *National Academy of Sciences Report* or *NAS Report*] was cited in two recent US Supreme Court cases (*Melendez-Diaz v. Massachusetts*, 557 U.S. 305, 129 S.Ct. 2527, 174 L.Ed.2d 314 (2009) [hereinafter *Melendez-Diaz*] and *Anthony Ray Hinton v. Alabama*, ___ U.S. ___, 134 S.Ct. 1081, 188 L.Ed.2d 1 (2014) [hereinafter cited as *Hinton*]).

The *NAS Report*, *Melendez-Diaz*, and *Hinton* collectively make it clear that it is increasingly imperative for courts at all

other at the rate of eighty two percent (82%) that is hardly an error rate since they could all be wrong and it means they disagree at the rate of eighteen percent (18%) which is scientifically unacceptable given that government labs are shut down for ten percent (10%) error rates. *NAS Report* at 44.

Dr. Case testified in both *State v. Evans* and in this case that her subjective determinations about traumatic causation lack scientific controls. Appendix E, 41-44. Oddly, however, the protocol she allegedly uses calls for the use of "controls without head injury." Appendix E, 41 and Appendix G.

Her bias toward the prosecution was documented in teaching notes she admitted (in both *State v. Evans* (Appendix E, 44-45) and in this case (Appendix F, [LF 1753, L 18-1756, L 7])) she has used since 1978 entitled a "Prosecutorial Approach to Child Abuse/Neglect." *Id.* The notes suggest, among other things, that prosecutors should charge both parents if a child dies while both are home and neither parent will incriminate the other. *Id.*

Her documented failure to even seek peer review while falsely suggesting to others that she may have closes the door on

Dr. Case suggested in this case that the seventh (7^{th}) article listed in footnote 1 (her "Mini-Symposium") is a publication (albeit not peer reviewed) of her methodology because it describes how she followed Dr. Jennian F. Geddes attempts to make such distinctions in 2001.

One specific claim from the 2008 "Mini-Symposium" is that she was able to make her magical distinctions using Dr. Geddes techniques (not her own)—even though Dr. Geddes was equivocal about the legitimacy of her 2001 work at the time and has since said it not a scientifically reliable way to make the distinctions. This is what —as follows: "using the same sampling techniques, staining techniques and identification of VAI and dTAI patterns as used in the 2001 Geddes studies, the inflicted head injury group shows 27% with VAI patterns of BAPP expression and 73% with dTAI pattern of BAPP expression." ["Mini Symposium", 577]

There are numerous problems with that assertion including, most prominently, that Dr. Geddes (and numerous others) were never dogmatic about having any ability to reliably

(6) of the eleven (11) were authored, at least in part, by Dr. Geddes herself.

For example, in Geddes IV, a Letter to the Editor of the

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5. Geddes, J., Letter to Editor, *British Medical Journal*, Volume 328, March 27, 2004, 719-720. [hereinafter Geddes VII]

6. Reece, R., Letter to the Editor, *British Medical Journal*, Volume 328, May 29, 2004, 1316-1317. [hereinafter Reece]

7. Geddes, J., Author's Reply, *British Medical Journal*, Volume 328, May 29, 2004, 1317-720. [hereinafter Geddes VIII]

8. Donahoe, M., Letters to the Editor, The evidence base for shaken baby syndrome, Meaning of signature must be made explicit, *British Medical Journal*, Volume 329, September 23, 2004, 741. [hereinafter Donahoe]

9. Lantz, P., The evidence base for shaken baby syndrome, Response to Reece et. al. from 41 physicians and scientists, *British Medical Journal*, Volume 329, September 23, 2004, 741. [hereinafter Lantz]

10. Case, M., Distinguishing accidental from inflicted head trauma at autopsy, *Pediatric Radiology*, (44 (Suppl 4)), May 15, 2014, S632-S640. [hereinafter Case II]

11. Geddes, J., Whitwell, H., Inflicted head injury in infants, *Forensic Science International*, Vol 146, May 24, 2004, 83-88. [hereinafter Geddes IX]

[Geddes I and V]; Ommaya et. al., 2002; Plunkett, 2001), and in a situation in which no one except the carer knows what took place, and where objective signs of trauma—let alone *inflicted* trauma—may be absent it is essential that every effort he made to establish objective criteria before labeling an injury' abusive, and including it in a scientific study.

But perhaps it is pertinent to ask whether authors of scientific papers should in fact be distinguishing between inflicted and accidental injury? We admit we are as guilty as Dr. Reichard and his colleagues in this respect (Geddes et al., 2001a.b [Geddes I and V]), and the justification is of course that those of us who do medicolegal work in this area desperately need solid scientific data on which to base our expert opinions. Nevertheless, a head injury is a head injury, and we are beginning to come to the conclusion that unless the circumstances of the injury are known in detail from independent witnesses, it is scientifically much more honest to recognize that from a biomechanical engineering perspective, the loading conditions are the loading

the article discusses brain tissue examined at one hundred (100) times magnification. "Mini Symposium" at 577. There is also a difference between the sixteen (16) locations Dr. Case claims in her protocol to take sections from [Appendix G] versus the locations she says Dr. Geddes used in 2001. "Mini Symposium" at 578. The protocol says it applies to children *under* age four (4) years [Appendix G emphasis added] whereas the article mentions children as old as four (4) or five (5) ("Mini Symposium" at 578) and also describes work done with children under nine (9) months and from thirteen (13) months to eight (8) years ("Mini Symposium" at 578) and another with children ranging from one (1) month to eight (8) years with controls of up to ten (10) years. "Mini Symposium" at 578.

The eleventh (11th) article listed in footnote 2 is entitled "Distinguishing accidental from inflicted head trauma at autopsy" and was published in *Pediatric Radiology* by Dr. Case in 2014. Instead of describing any aspect of how she employs BAPP staining (as she claimed she could do in *State v. Evans*, *Johnson*, and in

identified through a fingerprint match as the culprit in a bombing in Madrid Spain in 2004. *Id.* In fact, the entire "scientific" community, including an "independent" expert hired by Mr. Mayfield opined that he was the one and only "match" that could exist to the print found at the scene of the explosion. *Id.* When the actual culprit, an Algerian named Ouhnane Daoud, was found to also have matching fingerprints the entire field of fingerprint experts were shocked and, according to the film, will no longer testify that any particular fingerprint can only match one person. *Id.*

Mr. Mayfield's case forced fingerprint experts to realize that they had not been applying actual science to their craft in that, *inter alia*, they had no established criteria concerning the number of points of similarity; no known error rate (a de facto assumed error rate of zero); etc. *Id.*

Unfortunately, there is no "Ouhnane Daoud" in existence able to prove Lisa West's innocence in a manner similar to what happened to Brandon Mayfield. Equally unfortunately, if there was such a person in existence they would be buried by the overzealous bias that drives experts like Dr. Mary Case and the

Dr. Case from purveying the scientifically invalid testimony regarding her "magical" abilities to distinguish traumatically from non-traumatically caused injuries and will also prevent any of the fundamentally flawed "Shaken Baby Syndrome" testimony purveyed by Dr. Ann Dimiao and supported by Dr. Case in this case from being used in the future); that legislation, however, has done nothing so far to shield the Appellant from the significant Constitutional deprivations she has experienced.

Further, unless immediately overturned, *Johnson* and *State v. Evans* will continue to stand in the way of defendants and trial attorneys (prosecution and defense) involved in cases tried prior to August 28, 2018 trying to accomplish what every participant in our justice system should want: actual fairness in criminal trials.

CONCLUSION

Please grant this Petition.

/s/ Mark Prugh

Mark C. Prugh

Attorney for Petitioner

No. _____

IN THE

SUPREME COURT OF THE UNITED STATES

RYAN N. EVANS - PETITIONER

vs.

STATE OF MISSOURI – RESPONDENT

APPENDIX

PETITION FOR WRIT OF CERTIORARI TO

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PETITION FOR WRIT OF CERTIORARI

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Missouri Court of Appeals, Eastern District,

DIVISION FOUR.

STATE of Missouri, Respondent,

v.

Lisa M. WEST, Defendant/Appellant.

No. ED 104541

FILED: April 24, 2018

OPINION

Lisa M. West (Defendant) appeals from the judgment upon her conviction following a jury trial for involuntary manslaughter in the first degree, in violation of Section 565.024, RSMo 2000.[1] The trial court sentenced Defendant to five-years' imprisonment. We affirm.

Factual and Procedural Background

Defendant was charged by substitute information in lieu of indictment with involuntary manslaughter in the first

Defendant, who seemed frantic and hysterical. Defendant told Victim's mother that Victim had fallen down the stairs; Defendant asked whether she should call 911. When asked what had happened, Defendant told Victim's mother that she went downstairs into the basement to turn on the light, Victim followed her, and Victim fell and hit his head on the corner of the wall. When asked how Victim was doing, Defendant told Victim's mother that Victim was not opening his eyes, he was moaning a little bit, and he was breathing "funny." Victim's mother told Defendant to call 911. Victim's mother testified that Defendant never mentioned Victim's presence on the stairs or that Victim had hit his head on the floor.

At 8:21 a.m., Officer Spencer Grarup ("Officer Grarup") arrived at Defendant's house to assist with the medical call. Officer Grarup testified that he observed Victim lying on the floor of the living room, unresponsive. Officer Grarup also testified that Victim had a pulse, but he had abnormal breathing and dilated eyes, which caused the

enclosing the stairway and found no dents, scuffs or anything consistent with a child having hit his head on the wall. Additionally, no blood, other bodily fluids, or hair were observed on the stairs.

At approximately 8:24 a.m., Captain David Dalton ("Captain Dalton") and Monica Foeller ("Ms. Foeller"), paramedics with the St. Charles County Ambulance District, arrived at Defendant's home. The paramedics found Victim lying on his back, flaccid, unresponsive to verbal or painful stimuli, breathing "slightly fast" and irregularly, with an irregular heartbeat and dilated pupils in both eyes that were unresponsive to light. Victim's symptoms were consistent with traumatic brain injury and significant pressure on his brain, which are usually seen in victims of high speed motor vehicle accidents. Victim's body did not have any outward signs of trauma, including any injuries—such as bruises, red *512 marks, carpet burns, etc.—typically seen on children who had fallen down the stairs.

mother left on the morning of the incident, Defendant took Victim out of the high chair when he was done eating and put him by the aquarium. Defendant testified that she went downstairs to turn on the lights, went to use the restroom because she was feeling nauseated, heard "a noise," heard the baby crying, ran out, and found Victim at the bottom of the landing with his head against the wall. Defendant testified that her son "was a couple steps up from" Victim. Defendant testified that she picked Victim up and brought him upstairs, called Victim's mother, and then called 911.

Defendant denied physically harming Victim but admitted that Victim was in her care when he got hurt.

After Victim arrived at Cardinal Glennon Children's Hospital, Dr. Ann DiMaio[2] ("Dr. DiMaio"), an attending physician in the pediatric emergency department and member of the child protection team at the hospital, testified that she examined Victim in the emergency room. Dr. DiMaio testified that she observed Victim was

she had commonly seen children in the emergency room who had fallen down stairs. She testified that the "majority of injuries of children who fall down stairs are minor [such as] bumps or lumps, ... some cuts, abrasions, bruises," and that no child in her experience *513 had died as the result of falling down stairs. Dr. DiMaio testified that she had never seen a fatal subdural hematoma in a child who had fallen down the stairs under their own power and that the only reasonable explanation for Victim's injury was abusive head trauma. Dr. DiMaio also testified that Victim's retinal hemorrhages were consistent with abusive head trauma and would have been "immediately incapacitating." Dr. DiMaio concluded that Victim's death was caused by abusive head trauma.

Dr. Kamal Sabharwal ("Dr. Sabharwal") also testified on behalf of the State. Dr. Sabharwal, a medical examiner for multiple counties in the St. Louis area, is board certified in anatomic pathology and forensic pathology and testified that he performed Victim's autopsy. Dr. Sabharwal

Dr. Mary Case ("Dr. Case"), the chief medical examiner for several counties in the St. Louis area, who was board certified in anatomical pathology, forensic pathology, and neuropathology, testified for the State that she examined Victim's brain and eyes following Dr. Sabharwal's autopsy. Dr. Case testified that she had written a subchapter in the Encyclopedia of Forensic and Legal Medicine regarding stairway falls involving children, in which she had summarized numerous existing studies, including the results of those falls. Dr. Case testified that based on her years of experience and knowledge on the subject, young children are most vulnerable to "inertial brain injury," in which there is a "very marked, abrupt movement of the head," and that violent movement often results in subdural hemorrhages, subarachnoid hemorrhages, diffuse axonal injury, and retinal hemorrhages, all injuries which were observed in Victim. Dr. Case agreed with Dr. Sabharwal's conclusion that the discoloration of Victim's right eye was caused by trauma

children who fall down the stairs under "their own power" tend not to suffer fatal injuries. Dr. Case also opined that the evidence showed Victim's diffuse brain injury would have resulted in a "very rapid onset of unconsciousness," and therefore it could not have occurred before Victim was dropped off at Defendant's house.

At the close of all evidence, the jury found Defendant guilty, as charged, of first-degree involuntary manslaughter.[3] Following the jury's recommendation, the trial court sentenced Defendant to five-years' imprisonment. This appeal follows.[4]

Dr. Case's Testimony

In Point I, Defendant argues that the trial court erred in allowing Dr. Case, even absent a Frye[5] hearing, to testify at trial about her ability to distinguish traumatically caused from non-traumatically caused brain injuries because "the protocol/methodology lacked even the basic requirements for being scientifically reliable ... such that it should have been excluded." We disagree.

[Defense Counsel]: .... I don't know that there's any reason to do a Frye hearing when we've already had a decision from the Court of Appeals and the State Supreme Court not taking it up as ample precedent on this very issue.

THE COURT: I think so too. So long as you're willing to stipulate that we don't need to hear any evidence on it, then I can rule on it based upon your motion.

[Defense Counsel]: I hope—that's exactly why I put the case in like the way I did.

THE COURT: .... So if you're willing to stipulate that I can review the ruling from Rolla that addresses the—that case and take for this case the same findings made by that judge relating to the opinions that are expected to be addressed by ...—[Dr.]Case in this case, then maybe we can resolve it just by me issuing an order on Monday.

A timely and specific objection to challenged testimony at trial is necessary to preserve the issue for appellate review. Evans, 517 S.W.3d at 539. Moreover, even plain error review is waived where, as here, "counsel has affirmatively acted in a manner precluding a finding that the failure to object was a product of inadvertence or negligence, such as by affirmatively stating that the defendant has no objection to the admission of particular evidence." State v. Boston, 530 S.W.3d 588, 590-91 (Mo. App. E.D. 2017) (citing State v. Johnson, 284 S.W.3d 561, 582 (Mo. banc 2009)).

Even if Defendant had not waived appellate review, the trial court did not plainly err in finding sufficient foundation for the admission of Dr. Case's expert testimony because the procedure had been generally accepted by the relevant scientific community.

This court has previously upheld findings that the procedure at issue here was generally accepted in the

evidence was error, the ruling is not prejudicial when other properly admitted evidence establishes essentially the same facts." Id.

The trial court did not plainly err in preventing Dr. Case from testifying about her interpretation of the results of the BAPP staining procedure because: 1) Defendant waived appellate review of its admission by telling the trial court that it could rely on Evans in determining the *516 admissibility of such testimony; 2) the procedure has been generally accepted in the relevant scientific community; and 3) Defendant was not prejudiced by its admission, in that it was cumulative of other medical testimony concluding that Victim's injuries were inflicted rather than accidental. Point I is denied.

"Shaken Baby Syndrome" and "Abusive Head Trauma"

In Point II, Defendant argues that the trial court plainly erred in failing to *sua sponte* prevent or strike testimony regarding "shaken baby syndrome" and "abusive head trauma or injury" because all such testimony was "false

no error in the admission of testimony regarding shaken baby syndrome and abusive head trauma. See State v. Richter, 504 S.W.3d 205, 209-10 (Mo. App. W.D. 2016); Evans, 517 S.W.3d at 541; State v. Candela, 929 S.W.2d 852, 864 (Mo. App. E.D. 1996).

Here, the record demonstrates that all three of the State's expert witnesses acknowledged there was some "controversy" within the medical community as to the validity of a shaken baby syndrome or abusive head trauma diagnosis; however, all three disagreed with those in the minority, who discounted such a diagnosis.

During cross-examination of Dr. DiMaio, defense counsel asked if she was aware of any medical literature suggesting that young children who fell down the stairs under "their own power" could suffer fatal injuries, such as subdural hematomas, retinal, hemorrhages, and encephalopathy, resulting from such falls. Dr. DiMaio distinguished these cases from a plethora of other cases documenting 900,000 children who had fallen down the

and Dr. Sabharwal answered that he was aware of other cases in which that had occurred, but that he did not believe that was the cause of injury in Victim's case. Dr. Sabharwal agreed that "there is controversy" within the forensic and medical community concerning both a diagnosis of shaken baby syndrome and abusive head trauma.

Finally, during her testimony, Dr. Case stated that in 2001, as chair of a committee for the National Association of Medical Examiners she co-wrote a position paper "discussing the consensus among forensic pathologists on the topic of abusive head trauma" and whether shaking without impact can "damage a child fatally." Dr. Case testified that while a "small number" of members within the organization doubted the existence of "shaken baby syndrome," the "controversy" was in regards to whether or not the isolated mechanism of shaking a child could result in serious damage. Dr. Case confirmed that, currently, major medical organizations, such as the Center for

denied.

Ineffective Assistance of Counsel

In Point III, Defendant attempts, unsuccessfully, to raise an ineffective assistance of counsel claim on direct appeal. "Missouri courts have held that 'a claim of ineffective assistance of counsel ... is not cognizable on direct appeal.' " State v. Webber, 504 S.W.3d 221, 230 (Mo. App. W.D. 2016) (quoting State v. Nettles, 481 S.W.3d 62, 69 (Mo. App. E.D. 2015)). "A claim of ineffective assistance of counsel is not cognizable on direct appeal but must be presented pursuant to the procedure set forth in Rule 29.15 or 24.035 which provide for the development of a full and complete record." Id. (quoting State v. Brown, 438 S.W.3d 500, 506 n. 5 (Mo. App. S.D. 2014)). "These rules provide the exclusive procedure through which post-conviction relief because of ineffective assistance of counsel may be sought." Id. Accordingly, Point III is denied without further review.

Actual Innocence

[Defendant] to the child's death" and, therefore, the trial court erred in "confirming the jury's guilty verdict." We disagree.

Our review of a challenge to sufficiency of the evidence to support a conviction is limited to a determination of whether the State introduced sufficient evidence at trial from which a reasonable trier of fact could have found each element of the offense to have been established beyond a reasonable doubt. State v. Oliver, 293 S.W.3d 437, 444 (Mo. banc 2009). We accept as true all evidence and reasonable inferences favorable to the verdict, disregarding contrary inferences "unless they are such a natural and logical extension of the evidence that a reasonable juror would be unable to disregard them." Id. Additionally, we may draw inferences from either direct or circumstantial evidence, so long as the inferences are logical, reasonable, and drawn from established fact. State v. Burnett, 492 S.W.3d 646, 650 (Mo. App. E.D. 2016).

Pursuant to Section 565.024, "[a] person commits the

unconsciousness" and that the injury could not have occurred before Victim was dropped off at Defendant's house.

After police arrived, Defendant provided several inconsistent statements regarding the incident that caused Victim's injuries, including whether she was upstairs, downstairs, or on the stairs at the time of the incident, whether Victim tripped on his sandal, whether Victim hit his head against the stairway wall or the floor, whether her children were also present on the stairs, and whether she first called 911 or Victim's mother after the incident.

Officers who arrived at the scene testified that they did not find any marks on the stairway walls that would have been consistent with an impact by Victim's head, and no blood, bodily fluid, or hair was identified. Additionally, when police first arrived, Victim was lying in the front living room, not downstairs. Several witnesses independently observed that Victim did not have any

228. When the mother of a baby arrived to pick the baby up, he was non-responsive and his breathing was labored. Id. at 229. The child was rushed to the hospital, but died from his extensive injuries, which included subdural and retinal hemorrhages. Id. at 230. In Yoksh, the circumstantial evidence included the following: (1) the defendant was the only adult in the house when the child received his injuries; (2) the child's crying irritated him; (3) the child was acting normally, and appeared to be healthy, before the defendant was alone with him. Id. at 233. Finally, in Yoksh, as in the case at hand, there were conflicting statements made to the police right after the incident occurred. Id. The court opined that those conflicting statements also "undermines the defendant's version of the events." Id.

In the instant case, as in Yoksh, the record established that Defendant was left alone with a previously healthy baby who fell unconscious in her care and then required treatment for traumatic head injuries. Furthermore, in

to seek and enforce justice for [Victim] or the [Victim's] family," because such statements improperly shifted the role of the jury away from determining whether the State had proven that Defendant committed all the necessary elements of the crime charged beyond a reasonable doubt. During the State's opening statement, the prosecutor stated, "Maybe [Defendant] regretted it, but the unimaginable damage was done and can never be undone and justice demands that there be a consequence." Later, the prosecutor concluded, "A life was taken just after it got started. And we're here to ask you people for *520 justice for [Victim]." At this point, counsel from both sides approached the bench, and, outside the hearing of the jury, Defense counsel renewed the objection from the motion in limine regarding comments about "justice for [Victim]." Defense counsel then argued that the prosecutor had violated the court's order sustaining his motion. The prosecutor stated, "I don't recall that order." Defense counsel then asked for a mistrial. The trial court

mother and a father who lose their child. It's unbelievable. And they deserve all of our sympathy, all of our sympathy. But it isn't going to solve anything by convicting and imprisoning [Defendant] on this evidence." The following morning, the trial court noted that they had "continued to address the issue of the comment made by the prosecutor in opening relating to justice for the child ... [and] continued to look at authority for that." Relying on State v. Kee, 956 S.W.2d 298 (Mo. App. W.D. 1997), where the prosecutor had made a comment "very similar" to the one in the instant case, the trial court stated that it would modify its previous rulings and follow Kee, thereby directing the prosecutor that he was "no longer restricted from making that argument and further arguments in the case."

Later, during closing argument, the prosecutor stated, "[Victim's family] ask for only one thing. All they want is the truth. All they want is the truth. [A]ll they want is accountability." At the end of closing argument, the

scope of argument." State v. Kee, 956 S.W.2d 298, 303 (Mo. App. W.D. 1997). Even if closing argument is found improper, reversal is justified "only where the defendant demonstrates *521 that the argument had a decisive effect on the jury's determination." Kee, 956 S.W.2d at 303. "In order to have a decisive effect, there must be a reasonable probability that, had the comments not been made, the verdict would have been different." Id.

In Kee, the court held that a similar comment clearly fell within the parameters of permissible argument under Missouri law. Kee, 956 S.W.2d at 304. "A prosecutor is permitted to argue general propositions regarding ... the jury's duty to uphold the law." Id. The court held that the prosecutor's reference in closing argument to protecting battered women, upholding law, and doing justice did not inflame passions and prejudices of jury, and was permissible reference to personal safety of community's citizens, jury's duty to uphold law, and proposition that protection of public rests with jury. Id.; see also State v.

State v. Merrick, 257 S.W.3d 676, 680 (Mo. App. S.D. 2008)). The State violates a defendant's due process rights pursuant to the holding in Brady when a prosecutor "suppresses evidence that is favorable to the defendant and material to either guilt or punishment." State v. Salter, 250 S.W.3d 705, 714 (Mo. banc 2008). In order to prove a Brady violation occurred "[t]he evidence at issue must be favorable to the accused, either because it is exculpatory, or because it is impeaching; that evidence must have been suppressed by the State, either willfully or inadvertently; and prejudice must have ensued." Taylor v. State, 262 S.W.3d 231, 240 (Mo. banc 2008) (quoting Strickler v. Greene, 527 U.S. 263, 281-82, 119 S.Ct. 1936, 144 L.Ed.2d 286 (1999)). "Brady, however, only applies in situations where the defense discovers information after trial that had been known to the prosecution at trial." Salter, 250 S.W.3d at 714 (citing State v. Myers, 997 S.W.2d 26, 33 (Mo. App. S.D. 1999)). "If the defendant had knowledge of the evidence at the time of the trial, the

in the same place that State's witnesses/experts ... claimed to have observed a point of impact contusion."

During the hearing on Defendant's motion, defense counsel argued that the State had not disclosed the photograph and that consequently defense counsel did not have an opportunity to cross-examine any of the State's witnesses concerning the particular bruise. The prosecutor denied that the photograph showed a bruise. Additionally, the prosecutor stated that the photograph had, in fact, been disclosed to Defendant and that the photograph published in the newspaper was simply a "cropped" and enlarged version of the photograph it had disclosed to Defendant.

As proof of the disclosure, the State provided the court with copies of an email and two attached photographs. The court reviewed the exhibits and agreed that "[o]ne of the [the two photographs] may well be a larger scale photo of [the Defendant's exhibit] attached to the motion for new trial, which may well be a cropped portion of that photo."

denied Defendant's motion for a new trial.

Here, contrary to Defendant's claim, there is no evidence that the State failed to disclose a photograph of Victim taken two days before he allegedly fell in Defendant's home. At the hearing on Defendant's motion for a new trial, the State produced evidence that it had disclosed the photograph to the defense prior to trial; Defendant produced no evidence controverting the State's claim. Additionally, the State offered into evidence at trial a companion photograph of Victim that was taken on the same day, and it was admitted without objection from Defendant.

Based on the record before us, the trial court did not abuse its discretion in denying Defendant's motion for a new trial as Defendant failed to show that the State committed a Brady violation by suppressing any exculpatory evidence. Point VII is denied.

Instruction No. 6

In Point VIII, Defendant argues the trial court erred in

ultimate issue of guilt or innocence, and need not be unanimous as to the means by which the crime was committed.' " State v. Watson, 407 S.W.3d 180,184 (Mo. App. E.D. 2013); Richter, 504 S.W.3d at 211 (quoting State v. Fitzpatrick, 193 S.W.3d 280, 292 (Mo. App. W.D. 2006)).

During voir dire, defense counsel argued that the jury had to agree "unanimously on the act [or method] that occurred that results in this particular conviction." The prosecutor argued that because it was the "same" crime and not a "different" crime, the jury was only required to "unanimously agree on this crime." The prosecutor further argued that here it was "medically impossible to know which [method] happened." The trial court stated that it would take a look at State v. Celis-Garcia, 344 S.W.3d 150 (Mo. banc 2011) to prepare for instructions or final argument to the jury.

Before swearing in the jury, and at the State's request, the trial court addressed the issue of the proper verdict

defendant is alleged to have committed of involuntary manslaughter in the [first] degree that happened on one day and that ... each of those are a mechanism for causing the crime of recklessly causing the death of [Victim], which is the ultimate issue in this case." Defendant responded: *524 "We do agree that some kind of modification of the instructions is needed or an instruction to comply with Celis-Garcia. We agree with the Court on that."[10] The trial court noted that Instruction No. 6 was being given because it believed Celis-Garcia and State v. Watson, 407 S.W.3d 180 (Mo. App. E.D. 2013) were "applicable to this situation." The trial court concluded that in giving this instruction, it was assuring "a unanimous verdict as to which mechanism has been proven by the State."

As given, Instruction No. 5 stated, in pertinent part, that the jury would find Defendant guilty of involuntary manslaughter in the first degree if it found beyond a reasonable doubt that Defendant "caused the death of

added.]

Here, while the jury should not have been required to unanimously find which specific means Defendant used to recklessly cause Victim's death in order to find her guilty of involuntary manslaughter in the first degree, the trial court nevertheless instructed the jury to do so in Instruction No. 6. Moreover, both the State and Defendant argued in closing argument that the jury had to unanimously agree that one of those particular means had been proven. Therefore, Defendant suffered no prejudice as the result of any presumed trial court error because the trial court's instructions required the jury's verdict to be unanimous and required the State to bear its burden. See Watson, 407 S.W.3d at 185-87 (jury instruction stating that jury must unanimously agree on one act to support offense and that they must agree to same act was sufficient to satisfy defendant's right to jury unanimity); Richter, 504 S.W.3d at 211-12 (a disjunctive submission of alternative means by which a single crime

disagree.

"An appellate court may grant a new trial based on the cumulative effects of errors, even without a specific finding that any single error would constitute grounds for a new trial." Koontz v. Ferber, 870 S.W.2d 885, 894 (Mo. App. W.D. 1993). "However, relief will not be granted for cumulative error when there is no showing that prejudice resulted from any rulings of the trial court." Id. Here, for most of the identified issues, Defendant cites no authority to support her claim of error. Because Defendant "has failed to persuasively identify any error during the trial, the point must fail." Giles v. Riverside Transp., Inc., 266 S.W.3d 290, 300 (Mo. App. W.D. 2008). Additionally, given the evidence of guilt presented at trial, Defendant fails to show that the alleged errors resulted in manifest injustice. Koontz, 870 S.W.2d at 894. Point IX is denied.

Conclusion

The judgment is affirmed.

than Instruction No. 6 because it "specifically list[ed] the s
instructed the jury that "unless you can unanimously agree a
you cannot find the Defendant guilty of involuntary manslaugh
court.

Supreme Court of Missouri
en banc
SC97232 ED10454l

May Session, 2018

State of Missouri,
Respondent,

vs. (TRANSFER)

Lisa M. West,
Appellant.

Now at this day, on consideration of the Appellant's application to transfer the above entitled cause from the Missouri Court of Appeals, Eastern District, it is ordered that the said application be, and the same is hereby denied.

STATE OF MISSOURI-Set.

I, Betsy AuBuchon, Clerk of the Supreme Court of the State of Missouri, certify that the foregoing is a full, true and complete transcript of the judgment of said Supreme Court, entered of record at the May Session, 2018, and on the 21si day of August, 2018, in the above-entitled cause.

IN TESTIMONY WHEREOF, I have hereunto set my

STATE OF MISSOURI, }
CITY OF St. Louis SS

In the Missouri Court of Appeals
Eastern District

MANDATE

STATE OF MISSOURI,

Plaintiff/Respondent,

vs.

LISA M. WEST,

Defendant/Appellant.

No. ED104541

Appeal from the Circuit Court
of St. Charles County
No. 1411-CR03507, Div. 4

The Court, being sufficiently advised of and having considered the premises, adjudges that the judgment rendered by the St. Charles County Circuit Court in cause No. 1411-CR03507 be affirmed, and that respondent recover of said appellant its costs and charges

No. _____

IN THE

SUPREME COURT OF THE UNITED STATES

RYAN N. EVANS - PETITIONER

vs.

STATE OF MISSOURI – RESPONDENT

ON PETITION FOR WRIT OF CERTIORARI TO

SUPREME COURT OF MISSOURI

PETITION FOR WRIT OF CERTIORARI

PRUGH LAW OFFICE
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Attorney for Petitioner

given that the court in Johnson upheld the denial of a Frye hearing to the Defendant in that case, Marquisio Johnson, in reliance on the transcript and faulty, unappealed, and unchallenged Frye ruling from this case.

d. Whether the Missouri Court of Appeals, Southern District, erred and unconstitutionally denied the Appellant due process of law by ruling that the Appellant's trial attorney failed to properly preserve the issue of scientific reliability for appeal (despite litigating the issue via a Frye hearing in October 2009; not waiving the objections made during the Frye hearing at trial and, in fact, objecting to the testimony at trial; by filing a timely voluminous post trial motion complaining that fraudulent science had been applied at trial; and submitting five (5) points of error spanning fifty (50) pages of the appellate brief on direct appeal challenging the trial court's approach to scientific evidence including specifically the unreliable testimony of Dr. Mary E. Case).

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STATUTES AND RULES

OTHER

JURISDICTION

The date on which the highest state court decided the merits: September 25, 2015 [Appendix A]

A timely petition for rehearing and/or transfer to the Missouri Supreme Court was denied: October 14, 2015 [Appendix B]

An application for transfer to the Missouri Supreme Court was denied: November 24, 2015 [Appendix C]

STATEMENT OF THE CASE

I. INTRODUCTION.

In State v. Evans, ···· S.W.3d ···· (Mo. Ct. App. S.D. 2015) (hereinafter State v. Evans), the Missouri Southern District Court of Appeals, with the trial judge in this case (Judge Mary W. Sheffield) sitting as the Chief Judge of the Southern District when the appeal was decided—has resolved important federal questions against the Petitioner in a manner that deprived him of due process of law in violation of the Missouri and United States Constitutions. The court's erroneous rulings have resulted in a conviction supported by wholly unreliable scientific evidence from, Dr. Mary E. Case, being upheld despite appropriate pre-trial (in the form of a hearing conducted pursuant to Frye v. U.S., 293 F. 1013, 34 A.L.R. 145 (App. D.C. 1923) [hereinafter Frye]), trial (in the form of a spoken objection to the lack of foundation made obvious regarding Dr. Case's wholly

concerns with Dr. Case's unreliable scientific testimony for consideration on appeal except as "plain error."

II. SUMMARY OF RELEVANT FACTS, LAW.

This case involves a young man, Mr. Ryan N. Evans, convicted on the "strength" of expert testimony that was scientifically unreliable to the point of fraud. Mr. Evans had accompanied the child, Skyler Ray Barrett, along with the child's mother, to the local hospital on October 22, 2006 for symptoms that lingered until his collapse of October 23, 2006 and death on October 24, 2006. [Appendix E, TR 3202 L 7-9, 3203 L 4] The child suffered not a single "death blow" as even the State's star witness, Dr. Case, conceded when she testified that, the child's skull was undamaged (she did not quibble with there "not being a dent" on his skull [Appendix E, TR 1687, L 4-23]) and although there was no place that gave the appearance the child had been hit with an object [Appendix E, TR 1687, L 15-19] and although she could not say where he may have been hit

at the hospital—both of whom testified that their treatment most probably caused all bruising found at autopsy—yet their truth was unfairly obscured by the court letting a highly credentialed (though not highly ethical) expert (Dr. Case) falsely portray non-science as science.

A minority of states still allow the less scientifically stringent Frye standard versus the more rigorous Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993) [hereinafter Daubert] type analysis to be applied in criminal cases. The great leveler (in terms of addressing appropriate standards for scientific reliability) is the National Research Council of the National Academies, Strengthening Forensic Science in the United States: A Path Forward (2009) [hereinafter National Academy of Sciences Report or NAS Report] cited in two recent US Supreme Court cases Melendez-Diaz v. Massachusetts, 557 U.S. 305, 129 S.Ct. 2527, 174 L.Ed.2d 314 (2009)

hearing rendered by the trial judge in this case; and that the decision at Appendix A is the only one (1) of three hundred twenty seven (327) prior decisions by Missouri State and Federal appellate courts on point between 1879 and 2015 that required a specific trial objection following a fully litigated Frye hearing are errors and omissions that underscore the validity of this Petition. The core of the Petition, however, remains: unreliable and bogus scientific testimony was unlawfully permitted to convict Mr. Evans.

III. SCIENTIFIC RELIABILITY: THE ONLY FAIR STANDARD.

A. General. The NAS Report established that scientific reliability should be the ultimate benchmark for the admissibility of evidence in America's courtrooms. This Honorable Court has, thus far, cited the report in two seminal cases: Melendez-Diaz and Hinton.

> relevant evidentiary principles are not set out in any set of rules, but rather have been developed by common law and by statute. [citations omitted]. These principles govern the admission of evidence in civil ***and criminal*** cases. [emphasis added]

State Board of Registration for the Healing Arts v. McDonagh, 123 S.W.3d 146, 154 (Mo. Sup. Ct. en banc 2003) [hereinafter McDonagh] Then Chief Michael A. Justice Wolff of the Missouri Supreme Court said this in his concurring opinion in McDonagh:

> Forget Frye. Forget Daubert. Read the statute. Section 490.065 is written, conveniently, in English. It has 204 words. Those straightforward statutory

James W., Admissibility of Expert Testimony in State Courts, Aircraft Builders Council, Inc., Law Report, (Fall 2010), which lists Missouri as a Daubert-type State and cites "McDonagh (indicating that Daubert provides useful guidance in interpreting and applying section 490.065, but where the approaches differ, the statute's standard must govern)." Id., at 11.

Yet the reality is that courts in Missouri continue to force criminal litigants (like the Petitioner, Mr. Ryan N. Evans) through the unfair "knot hole" of Frye and are, at present unfortunately, anything but enlightened. Indeed, the decision below cites to the Missouri Supreme Court decision in Dorsey v. State, 448 S.W.3d 276 (Mo. Sup. Ct. *en banc* 2014) [hereinafter Dorsey] (see Appendix A, page A-14) and Dorsey, according to the opinion appealed, stated that "[f]or criminal cases, Missouri follows the standard for admissibility of results of scientific procedures enunciated in Frye." Dorsey at 297.

Legitimate concerns with the reliability of Dr. Case's stated ability to determine which injuries she examined were and which were not caused by trauma surfaced during her deposition. Her claimed ability seemed dubious, even to the non-scientific members of the Defense team. Upon learning from medical consultants that Dr. Case's claim under oath to have published the protocol (her exact words in the deposition were that "[i]t is a protocol that I have published." [Appendix D, page D-31, LF 171]) was false and that her claimed ability to distinguish causation of injury (simplified in some court documents and testimony as being the ability to distinguish "TAI" from "HIE") cannot be done in a scientifically reliable manner, the Defense filed the most widely accepted vehicle for raising the issue under Missouri law at the time: the Frye Motion. The Defense's Frye Motion was filed on March 4, 2009 [Appendix D, LF 47-48] and it claimed that Dr. Case should be precluded from testifying about the

During the Frye hearing Dr. Case was asked during both direct and cross examination about basic scientific principles and how she thought her work complied with or did not comply with them. She was asked by both sides, with the State's attorney going first each time, about whether she thought her work met the scientific requirement to have a known error rate and whether or not her work included required control maintenance standards. During cross examination Dr. Case specifically acknowledged the NAS' standards (the ones documented in the NAS Report referenced in Melendez-Diaz and Hinton) and answered questions based on her general understanding of how her work complied or did not comply with those standards. [Appendix E, TR 518-520 and TR 561-563] While she expressed an inability to quote the NAS standards she answered numerous questions about those standards from both sides. [Appendix E, TR 488-490 and TR 561-563]

focusing on – and this issue has nothing to do with BAPP staining. That's accepted science. What we're focusing on is your grading methodology where you put in subjectively a plus or a minus – a plus two, a plus three, a plus four." [Appendix E, TR 518, L 24-519, L 4]

Following the Frye hearing the Court ruled:

> "The Court having heard the evidence, makes a finding that BAPP testing is generally accepted in the scientific community, that Dr. Case's protocol/ methodology was called into question as to her results on traumatic axonal injuries as compared to HIE; the court finds that the dispute did not prevent the admissibility of the test but goes to the weight of the witness and the test which can be presented to the Jury. The procedure has been sufficiently established to have gained general acceptance in the field of neuropathology or biomechanical engineers." [Appendix D, LF 18]

Missouri Supreme Court—see Appendix C despite its inherent lack of cogence on this point and despite two amicus briefs from the Innocence Project that should have caused some awakening—see Appendices F and G).

The ruling is also unsupportable for other reasons associated with its lack of basic scientific validity. Dr. Case testified that her protocol was comprised of one page. [Appendix D, LF 245] Her application of the protocol/methodology to her examination of Skyler Ray Barrett's brain was recorded on a one page document, she said. [Appendix E, TR 497, L2-5] [Appendix D, LF 244]

When asked at her deposition whether the protocol she used was a standard one in general use she replied: "It is not a standard protocol. It is ***my protocol.*** . . . ***It is a protocol that I have published.*** It's a protocol that I have lectured about and talked about, but it's not somebody else's standard. It is a standard that I use for looking at traumatic brain injury in young children."

asked "in fact, you have no publications that describe your protocol, do you?" [Appendix E, TR 500, L 11] She answered: "That is correct." [Appendix E, TR 500, L 12] When asked why not she responded "I don't have a lot of publications that that don't describe a lot of things. I am a fairly busy person. I don't publish every absolutely everything that I do. I'm sorry." [Appendix E, TR 500, L 15-18] When reminded that she had claimed under oath at her deposition to have published on the protocol she switched gears and claimed—despite bringing a lot of documents to the Frye hearing; none of which, beyond the one page [Appendix D, LF 245], described how her protocol worked—that "[i]t has been published outside of a peer-review article. It has been published in in for example, in workshops and things like that for other people to use. So I guess I erred in saying that it was published in that regard. I did not specify that it was peer review published." [Appendix E, TR 502, L 2-7]

injury, and so it's a quantitative estimation of how much we have there." [Appendix D, LF 173] When asked what might change her opinion in this case Dr. Case said:

> "I can't imagine any information that would change my opinion in this case. What I see is what I see. My opinion -- and it's not really so much an opinion. You've asked me opinions based on other things. But primarily when I -- I did a ***diagnostic procedure***, I looked at slides, I rendered my opinions about the ***appearance and patterns***. I can't think of anything that would change that." [Appendix D, LF 234] (emphasis added)

While her deposition testimony hinted that her testing might be more subjective (qualitative) than objective (quantitative) she consistently claimed both types of criteria were important to her ultimate conclusions during the deposition as follows:

TR 497, L 18-19] Dr. Case responded "I look at the slide, and if I can see abnormal axons, if there are just 5 or fewer, then I grade that as a negative. If there are 6 to 150, that's a plus one. If there's 150 to 300, that's plus two. Over 300, that's plus three." [Appendix E, TR 497, L 20-24] That part of her explanation made sense until, without being asked another question, she went into an immediate confession that she no longer bothers to follow the only possible objective component of her protocol (the numerical grading system), saying: "And I will be very frank with you. I / don't I don't count them. It's more of a thing that early on I did. But because I have become so accustomed to doing it, I can look at it and tell that's a plus one, that's a plus three." [Appendix E, TR 497, L 25 - 498, L 5]

Although her deposition testimony claimed both objective and subjective criteria had been important to her ability to distinguish TAI from HIE, by the time of the Frye hearing she had decided that the quantitative

Dr. Case could not disagree at the Frye hearing with the notion that her use of the protocol (particularly after she clarified that the numbers do not matter and she based her conclusions on an examination of patterns only) was highly subjective as follows:

> "Q. Okay. And so this is a you would agree, a highly subjective test? A. I would agree that it is subjective. It is something that I am looking at and making a subjective evaluation of, yes. In that way it is individual and subjective. Q. Well, you just nuanced that a little bit. Do you, you don't disagree that it's highly subjective? A. I'm not gonna quibble over your terminology. You can call it what you will. I call it subjective. You can call it highly subjective. I will say that that's up to you." [Appendix E, TR 498, L 11-22]

In reality, of course, her determinations are purely (not just highly) subjective and cannot be reliable scientific determinations.

kind of information that you want – if it's there, you want to describe it. So / this is a very routine activity very much in the practice of what we do." [Appendix E, TR 474, L 22-25 – 475, L 1-2] The second time she had just mentioned being able to distinguish TAI from HIE and was asked "[a]nd what you've just described to us, and and those just beliefs and the findings are also generally accepted in your community medical community as being reliable?" [Appendix E, TR 477, 7-10] She answered:

> "They are accepted and done by people. Not every forensic pathologist does this. This is done by certain forensic neuropathologists, for example. And I brought some papers today that you can look at if you'd be interested in. Other people are doing the same things. Many in fact, most forensic pathologists would like to have this done, but they don't have the neuropathologist to do this. There you know, in

On his third and final attempt to get Dr. Case to unequivocally say that what she did was accepted in the relevant scientific community the State's attorney succeeded by leaving any mention of the protocol out of the question stem as follows:

> "Q. And I know I've asked you this question several times throughout, but with respect to the theory and techniques that you've employed in this case, those are generally accepted in the forensic pathology community, the neuropathology community, are they not? A. They are very much so, yes. Q. And they are relied upon? / A. They are relied upon."
>
> [Appendix E, TR 490, L 19 – 491, L1]

The principle reason (beyond the fact that it's never been published) her self-authored protocol cannot be considered generally accepted in the relevant scientific community is that, although she alleges she has given it to people, it has clearly never been

Burch, a forensic pathologist and her coworker for decades. Dr. Burch testified: "Q. Okay. Well, do you even know how she [applies her protocol to distinguish TAI from HIE]? A. I -- I know she does it microscopically. And I cannot perform the -- the examination myself. That's I -- that's why I refer brain exams to her in these cases. Q. Why can't you, Doctor? How long have you been a forensic pathologist? A. Over 20 years." [Appendix E, TR 2196, L 11-17]

Dr. Burch also testified that Dr. Case is the only person he knows that can distinguish traumatic injury from hypoxic injury. [Appendix E. TR 2196, L 3] Dr.'s Jan Leetsma, a fellow neuropathologist, [Appendix E, TR 3007, L 24 and 3010 L 19], Plunkett [Appendix E, TR 2597, L 14-16], George Nichols [Appendix E, TR 2876, L 6 – 2877, L 18], and Stephens [Appendix E, TR 2467, L 3-17] all agreed at trial that there is no reliable way to do what Dr. Case claims she can do.

technician in Boston who -- who was doing the technique, to make sure that the stains were being done in an identical way. And it took a while to get the stains working. Once they get to work, then you continue that process. It's not something that just a regular histologist can go in and set up overnight. It is a very complicated procedure. . . . Every time -- every time a slide is read, someone can read it incorrectly. So there are a number of avenues where errors could be made. It is not -- nothing is full-proof. But these are -- these are stains that exist on the slides, and they can be read by other people. Q. And -- and what I'm getting at, though, is there may not be a known rate of error for how often bat—BAPP fails or something like that? A. Probably the best -- the best way to look at that is in the paper . . . by Dolinak and Reichard. / . . . that paper has looked at inter-reviewer consistency.

Also, as Dr. Plunkett pointed out in his testimony, the rate at which Doctors agree is not the same as a known error rate since all of them could be wrong. [Appendix E, TR 591]

The ultimate proof that Dr. Case was, de facto, operating on a claimed (but non-existent) zero percent error rate comes from her testimony when asked if anything could cause her to change her mind about source of injuries in this case she said "*I* did a diagnostic procedure, *I* looked at slides, *I* rendered my opinions about the appearance and patterns. I can't think of anything that would change that." [Appendix D, LF 234] (emphasis added) Her trial testimony also reflects that she is used to getting away with operating far beyond the normal requirements of science as follows: "the pathologist always has kind of the last look and the last word. And what you can see is exactly what's there." [Appendix E, TR 1643, L 1-3]

245] (emphasis added) Not using scientific controls when using a protocol that requires them makes the scientific reliability of her testimony zero.

When she testified at trial she tried to suggest that she had employed some type of control as follows:

> "So we have a positive BAPP control. And so then I have -- for each section that I took, then I have two more slides. Instead of 16, now I have 32. There's a positive and a negative for each one. There is a -- the one that you will see up there says positive on it, and then there is a negative control for each slide, which means this -- the stain was not applied to it. Q. Why do you do that? Why do you have control slides? A. Whenever you have a special stain, you always have a control to make sure the stain was working." [Appendix E, TR 1600, L 3-13] (emphasis added)

procedures of both laboratories ***and service providers***." NAS Report at 194 (emphasis added)

Dr. Plunkett testified that Dr. Case's alleged ability to reliably distinguish TAI from HIE "is baseless. And it's contradicted by the one scientific study [Dr. Oehmichen's] that's actually looked at it." [Appendix E, TR 598, L 18-19]

Observer bias can completely undermine good science and Dr. Case not only does not bother to apply science appropriately, she exhibits the kind of bias that has been of growing concern to the Supreme Court and the NAS. See Melendez-Diaz at 321 and NAS Report at 122-124.

Dr. Case's bias is evident in how she conducts her testing, in how she testifies, in her willingness to lie, and in the documented way she teaches others to do the same. She specifically confirmed at trial, for example, authorship of Defendant's trial Exhibit O-6 [Appendix

court's general handling of scientific reliability in this case even more unfairly biased and Constitutionally offensive.

Dr. Case's willingness to change her testimony on key points is a transparent attempt to enhance her credibility to whomever she is currently testifying before is also strong evidence of inappropriate and unacceptable bias in favor of the prosecution. For example, at trial she said she did not really personally create the protocol (after being so adamant about it in previous sworn testimony) but said, instead, that she had obtained it from an article in 1994 she had forgotten about. [Appendix E, TR 1631, L1-1633. L 25] That probably made her appear more objective to the jury or anyone else who had not witnessed her previous ardor on personal ownership (despite cross examination).

Although the State tried to impeach Dr. Plunkett as biased, a Texas court opinion featuring both Dr. Case and Dr. Plunkett (issued three (3) months after the trial

staining was applied in this case can be properly left to a jury. [Appendix D, LF 18]

The problem with the treatment BAPP staining has received in this case is two-fold. First, as mentioned above, BAPP's reliability is being used to mask an unscientific manipulation that has nothing to do with the stain. Just as nothing that may cause a scuff on a game-used baseball to be noticeable enhances the reliability of rank speculation, even if examined microscopically, about whether the ball was hit fair or foul and, if fair, whether for an out, a single, double, fielder's choice, etc., nothing about the use of BAPP staining to find injuries makes speculation about their cause any more reliable. The use put to BAPP staining in this case flies in the face of both Missouri's[5] and the

[5] Missouri's Constitution states "That no person shall be deprived of life, liberty or property without due process of law." V.A.M.S. Const. Art. 1, § 10. See also Art. 1, § 18(a).

Practical issues for diagnosis in medicolegal cases. *Neuropathology and Applied Neurobiology,* 105-116 [hereinafter Geddes II]; Geddes, J., Vowles, G., Hackshaw, A., Nickols, C., Scott, I., & Whitwell, H. (2001). Neuropathology of inflicted head injury in children: II. Microscopic brain injury in infants. *Brain,* (124), 1299-1306 [hereinafter Geddes III]; Reichard, R., White, C., Hladik, C., & Dolinak, D. (2003). Beta-Amyloid precursor protein staining of nonhomicidal pediatric medicolegal autopsies. *Journal of Neurotrauma,* 237- 247 [hereinafter Reichard]; Dolinak, D. & Reichard, R. (2006). An overview of inflicted head injury in infants and young children, with a review of ß-Amyloid precursor protein immunohistochemistry. *Arch Patrol Lab Med.* (130), 712-717 [hereinafter Dolinak]; and Case, M. (2008) ***MINI-SYMPOSIUM,*** Inflicted Traumatic Brain Injury in Infants and Young Children. *Brain Pathology,* 571-582 [hereinafter Case Non-Peer Review Mini-symposium]; Johnson, M., Stoll, L., Rubio, A., Troncoso, J., Pletnikova, O., Fowler, D., & Li, L. (2011). Axonal injury in young pediatric head trauma: a comparison study of ß-Amyloid precursor protein (ß-APP) immunohistochemical staining in traumatic and nontraumatic deaths. *American Academy of Forensic Sciences.* 1-8 [hereinafter Johnson Stoll].

collapse to death being pronounced—perhaps so the BAPP staining could show positive reactivity. See Geddes I; Oehmichen; and Dolinak. Third, that not enough is known on the subject for definitive, dogmatic solutions such as those proffered by Dr. Case. Oehmichen; Geddes II; Geddes III; and Dolinak.

To recap this crucial point, the State's literature actually makes it clear that the amount of axonal damage made visible using BAPP staining when collapse and death are simultaneous is zero percent (0 %) whereas the amount of visible axonal damage identified using BAPP staining (which only eighty two percent (82%) of one group of doctors agree ***may*** show traumatic causation) when a victim's survival (whether actual survival or, as in this case, "survival" only via a ventilator) is greater than three (3) to twenty four (24) hours is one hundred percent (100 %). In other words, the literature used by the State at the Frye hearing and at trial (as well as the one article shown at trial in this

to the wrong answer on scientific evidence and testimony in a manner that mandates immediate corrective relief by the United States Supreme Court.

B. First: It is a Constitutional Due Process Violation for the Trial Judge on this Case to Also Sit as the Chief Judge of the Court of Appeals When the Appeal was Denied.

The Due Process Clauses of the Fifth and Fourteenth Amendments provide that minimally fair due process must be provided to those deprived by the government of life, liberty, or property, as long as the amount of process sought does not outweigh the associated costs, risk of error, and adverse impact on the government and all Judges in all States must not only avoid actual bias but must meet a stringent objective standard requiring that they avoid even the appearance of impropriety. See Liljeberg v. Health Servs. Acquisition Corp., 486 U.S. 847, 865, 108 S.Ct. 2194, 100 L.Ed.2d 855 (1986) and Smulls v. State, 71 S.W.3d 138,

> transcript, the trial court concluded that BAPP staining was a procedure generally accepted in the scientific community . . . Based on this record, a Frye hearing was not necessary to admit Dr. Case's testimony on BAPP staining.

Johnson at 186-187. It appears that the Defense in Johnson unwisely attacked BAPP staining generally (or may have been wrongly accused of doing so as in this case). Regardless, there is nothing about Johnson that can support a further refusal to focus on the real issue: Dr. Case's bogus use of her protocol/methodology.

D. Third: It is a Violation of Due Process of Law to Apply a New and Unfair Standard for Preserving Error Following a Full Frye Hearing.

Missouri law states that a general objection preserves error where the specific ground for exclusion was obvious to both the judge and opposing counsel. State v. Peterson, 545 S.W.2d 717, 720 (Mo. Ct. App.

trial lawyer failed to preserve an issue for appeal following a contested Frye hearing:[12] this case.

REASONS FOR GRANTING THE WRIT

This Petition must be granted because the Missouri courts have violated the most obvious requirements of due process by permitting Dr. Mary E. Case's unscientific testimony by misconstruing (and allowing Dr. Case to misconstrue) what BAPP staining can and cannot do and by allowing the stain to mask a wholly unscientific endeavor; by immunizing Dr. Case's present and future false and unscientific testimony from further scrutiny by relying on Johnson (a case that used the faulty and yet to be challenged Frye hearing and ruling from this case) instead of actually considering the serious defects uncovered during the Frye hearing and

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[11] The most recent is this case: State v. Evans.

[12] In fact, the only other such case that even mentions Frye is State v. Hoy, 219 S.W.3d 796, 809 (Mo. Ct. App. 2007) in which the Defense said at trial that a Frye hearing was unwarranted then later tried to appeal on the lack of such a hearing.

THE COURT: Does she only have one page of the transcript?

MR. SINDEL: There is several pages of the transcript. I have given her the entire transcript.

THE COURT: Okay. So she has the ability to read it?

MR. SINDEL: Yes.

THE COURT: Doctor, if you need more time to read it to try to pick up the context of that, feel free to do so.

A. And I'm doing that. I don't see where it tells what we're actually referring to. It looks like it's a continuation of Oehmichen.

Q. (By Mr. Sindel) On that page aren't you, in fact, referring to previous testimony you gave at this same hearing? It says you testified about an error rate.

A. And I don't know what —— what this is in regards to. You'll have to point it out.

MR. GROENWEGHE: What pages are you missing?

MR. SINDEL: Page 99, 98, backwards.

MR. GROENWEGHE: The only page I have that you gave me is Page 17 through 20 of some transcript. I don't remember which one.

MR. SINDEL: Okay. I solved it. Page 35 ——

MR. GROENWEGHE: Your Honor, I'm still in the dark on this. If he's going to cross—examine a witness I put on, I should be able to see the transcript. 1749

THE COURT: Did you give any thought to copying that during the break we just had since that was an issue?

MR. SINDEL: It wasn't discussed, your Honor.

THE COURT: So there was no question about that before? It seemed to me there was. I don't know what else to do. Why don't you let him see your copy, Mr. Sindel, and then maybe the doctor can —

Q. So at that time you were familiar with the Dolinak and Reichard paper?

A. At that time had just locked at it because we — — again, I just had a recess and I got to read the paper.

Q. Well, this was during the course of the examination by the prosecutor; right?

A. Correct.

Q. And you answered. You went on, That paper has looked at inter—reviewer consistency. How often do they read alike when you have people that are experienced in making these observations and the rate is 82 percent?

A. Meaning they agree 82 percent.

Q. Correct?

A. Right.

Q. That was your wcrds, correct, 82 percent?

A. That's what I've given here.

reviewed the article and that's what your testimony was; correct?

A. Correct.

Q. Can you make a diagnosis of abusive head trauma based on retinal hemorrhages alone?

A. No.

Q. And can you make a diagnosis of abusive head trauma based on a subdural hematoma alone?

A. No.

Q. And everything that you testified to here today is your opinion; correct?

A. That is correct. 1752

Q. Do you remember in talking about the role of the prosecution and the police in investigating cases of child abuse, you talked about the dilemma when there are two adults in the household and both of them claim they did not abuse the child?

MR. GROENWEGHE: Objection. First of all, that has no relevancy to this case. There was only one

adult in the household that was capable of doing this.

Secondly, he's not even talking about what he's referring to ——

THE COURT: Sustained.

MR. GROENWEGHE: —— so everyone is at a loss.

Q. (By Mr. Sindel) All right. This is the article —— or the presentation that you made on child abuse; correct?

A. Those are the notes, the handout notes for one of the lectures that I give on child abuse.

Q. Okay. And in that you indicated, if that's the circumstance, charge them both; correct?

MR. GROENWEGHE: Objection, Judge. This is irrelevant and collateral. We do not have two adults in that house. This has nothing to do with Mason Beach directly or indirectly. 1753

THE COURT: What is the relevance of this?

MR. SINDEL: I don't have to disclose something I'm not going to introduce into evidence. I don't think I have to disclose my entire Cross—Examination strategy. This is also work product.

MR. GROENWEGHE: Well, you're using a document you didn't disclose, yet I've been required to disclose everything.

THE COURT: Overruled.

MR. GROENWEGHE: Your Honor, could I at least have a moment to look at this before I have to

THE COURT: Yes. Yes.

(Proceedings resumed in open court.)

Q. (By Mr. Sindel) Again, in your handout that you give to the individuals who are listening to your 1755 lecture, you talk about the dilemma of whom to charge when there are two adults, both of whom deny knowledge of abuse and neglect; correct?

Q. (By Mr. Sindel) And at the very least, one 1756

A. That's where I am talking about the results of the study --

Q. You don't --

A. —— that is published. And it is a study that was done using that protocol, just as all of the cases I've ever done have used that protocol.

Q. Right. And Footnote 14 is not a peer-reviewed publication either, is it?

A. That's a presentation.

Q. Right. And, in fact, you have no publications that describe your protocol, do you?

A. That is correct.

Q. okay. why not?

A. I -- I don't have a lot of publications that -- that don't describe a lot of things. I —— I am a fairly busy person. I don't publish every —· absolutely everything that I do. I'm sorry.

Q. what size sections? You testified earlier that you take sections.

A. The -— the sections that I use are the standard sections that go on a microscopic slide. They're not large ——

Q. I--

A. —— microscopic slides.

Q. i understand that. But what are the dimensions of that slide?

A. You know, I don't know. I -- I'd have to get one and measure it. I -- I can't tell you off the top of my head.

Q. Do we have anything in the courtroom that might -- it might be comparable to?

A. I can think of a few things, but I -- it's bigger 68

13. Section of midbrain

14. and 15. 2 sections of rostral and mid pons

16. dura

The fixed tissue will be embedded in paraffin, cut at 6 microns, and each section will be stained with both H & E and P- amyloid precursor protein. PAPP sections will be examined microscopically by one of the two investigators and graded by the following key:

SITE

For each of 15 sites

GRADE

+to+++

The number of stained axons in each 6 micron thick section counted at 200 X magnification: 0 to 5 axons(-); 6 to 150 axons(+); 151 to 300 (++); over 300 (+++).

when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

U.S.C.A. Const. Amend. XIV,§ 1

All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

opinions or inferences upon the subject and must be otherwise reasonably reliable.

4. If a reasonable foundation is laid, an expert may testify in terms of opinion or inference and give the reasons therefore without the use of hypothetical questions, unless the court believes the use of a hypothetical question will make the expert's opinion more understandable or of greater assistance to the jury due to the particular facts of the case.