

COMMONWEALTH OF MASSACHUSETTS

SUPREME JUDICIAL COURT

No. SJC 11927

COMMONWEALTH

v.

DERICK EPPS

APPELLANT

ON APPELLATE REVIEW

BRIEF OF THE INNOCENCE NETWORK
AS AMICUS CURIAE IN SUPPORT OF APPELLANT

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INTEREST OF AMICUS CURIAE

The Innocence Network (the "Network") is a worldwide association of organizations dedicated to providing pro bono legal and investigative services to convicted individuals seeking to prove their innocence. Network member organizations represent hundreds of prisoners with innocence claims in all 50 states, Puerto Rico, and the District of Columbia, as well as Canada, the United Kingdom, Ireland, Australia, New Zealand, the Netherlands, Argentina, France, Israel, Italy, and Taiwan. Based on its experience exonerating innocent individuals and examining the causes of wrongful convictions, the Network has become keenly aware of the role that unreliable or improper scientific and medical evidence has played in producing miscarriages of justice, particularly in cases such as the instant case where the prosecution is entirely dependent on expert opinions, and in which the "science" underlying the convictions has been exposed as flawed, disputed, or outright false.

In approximately half of the 330 convictions later overturned through DNA evidence in the United

States, flawed or inaccurate forensic and/or medical evidence played a role in the wrongful conviction. Therefore, especially in science-dependent cases such as the present one, the Network is committed to ensuring, as an essential component of a fair and just determination of the facts, that convictions are premised upon accurate scientific and medical evidence—an interest directly implicated by Derrick Epps's case.

STATEMENT OF FACTS

In the interest of brevity, the Network adopts by reference the statement of facts as set forth in Mr. Epps's initial brief.

ISSUE

The Massachusetts Supreme Judicial Court has asked for amicus curiae briefs in Mr. Epps's appeal. In *Epps*, the issue is whether Mr. Epps is entitled to a new trial because of changes in the scientific research on shaken baby syndrome/abusive head trauma since the 2007 trial or trial counsel's failure to use to Mr. Epps' advantage the research that existed at the time of trial.

SUMMARY OF ARGUMENT

Prosecutions based on the disputed scientific or medical hypothesis of shaken baby syndrome or abusive head trauma ("SBS/AHT") pose a serious risk of wrongful conviction. Here, the Commonwealth's medical expert testified that Mr. Epps must have caused intentional injury to his girlfriend's two-year-old daughter, "Cindy," based on medical findings with which she presented and the assumption that there could be no explanation other than abuse. Put simply, this explanation exceeds the limits of science.

The risk that invalid scientific or medical testimony results in wrongful conviction is especially high when the prosecution relies exclusively or nearly so on expert opinion to make its case, as it did here. Given the contemporary understanding in the scientific and medical community that Cindy's triad of medical findings can be attributed to a wide variety of causes completely unrelated to shaking, the SBS/AHT hypothesis alone cannot be used to accurately diagnose abuse.

One clear illustration of SBS/AHT's inadequate and unreliable evidence base is its reliance on confession evidence, rather than scientific data, to

establish its existence as a medical disorder. Rather than examining biomechanical and medical data, for example, many who cling to the outdated hypothesis claim that certain findings must be diagnostic of shaking because sometimes police elicit confessions of shaking or abuse from the caregivers of children with these findings. As one prominent SBS/AHT supporter put it, "[p]eople confess to it. So it has to be possible¹." But confessions do not represent scientific data, and they can be false; about a quarter of all wrongful convictions later overturned because of exculpatory DNA evidence involve false confessions or other false incriminating statements.²

Medical and scientific evidence published after Mr. Epps's trial further casts doubt on the validity of the SBS/AHT diagnosis in this case. While some of the evidence casting doubt on the SBS/AHT hypothesis was known at the time of Mr. Epps's 2007 trial, a

¹ Alan Breed, *Studies Disagree on Shaken Baby Syndrome*, USA Today, April 28, 2007. Available at: http://usatoday30.usatoday.com/news/health/2007-04-28-675188703_x.htm

² See, e.g.: Innocence Project, *False Confessions or Admissions*. Available at: www.innocenceproject.org/causes-wrongful-conviction/false-confessions-or-admissions.

significant change in the medical community has occurred since then, specifically with respect to pediatricians and the American Academy of Pediatrics, a group whose official position on SBS/AHT in 2007 was a significant factor in the testimony of the Commonwealth's expert in this case.

Inadequate representation also contributes to wrongful convictions, especially when questioned forensic evidence is not rigorously tested. In particular, a defense lawyer's failure to investigate a viable scientific defense, like Mr. Epps's counsel's failure to properly investigate medical expert witnesses or alternative causes of Cindy's findings, is manifestly unreasonable, contrary to the Sixth Amendment's guarantee of effective assistance, and just the sort of conduct that can lead to wrongful convictions.

Because trial counsel could have recognized and rebutted the SBS/AHT testimony in this case with the assistance of an appropriate expert, the use of an expert would have made a meaningful difference in Mr. Epps's defense. This is particularly true where the prosecution's experts gave incorrect and unsupported testimony that could have been rebutted by an

appropriate defense expert, who also could have supported the defense's theory that Cindy sustained her injuries from one or more household accidents.

ARGUMENT

I. Prosecutions Based On Disputed Scientific Or Medical Hypotheses, Like The SBS/AHT Hypothesis, Pose A Serious Risk Of Wrongful Conviction.

In the United States alone, DNA evidence has thus far been used to exonerate over 330 people who were convicted of crimes they did not commit. Faulty and misleading forensic or medical evidence contributed to the underlying conviction in nearly half of these cases.³ Here, the Commonwealth's medical expert testified that Mr. Epps had to have caused Cindy's medical findings. Based on today's understanding of shaken-baby syndrome and abusive head trauma ("SBS/AHT"), it is clear that this type of testimony is deeply flawed because, put plainly, it exceeds the limits of science.

The perils of invalid scientific and medical testimony are amplified in cases where, as here, the prosecution relies almost entirely on expert opinions

³ See Innocence Project, *Forensic Oversight*, available at <http://www.innocenceproject.org/fix/Crime-Lab-Oversight.php>.

to attempt to prove the elements of a crime and the identity of a perpetrator. That is, cases alleging unwitnessed child abuse, especially those dependent on the so-called "SBS/AHT hypothesis," carry an even greater danger of wrongful conviction.⁴ In SBS/AHT cases like this one, the problematic, untested, and highly controversial SBS/AHT hypothesis is used as the foundation for every element of the alleged offense; oftentimes, no other evidence is offered to corroborate or establish proof of guilt.

In its classic form, the SBS/AHT hypothesis suggests that abuse caused by the shaking of an infant can be diagnosed when the infant presents with a so-called "triad" of findings: (1) subdural hematoma, (2) retinal hemorrhage, and (3) cerebral edema or encephalopathy. Under the SBS/AHT hypothesis, the logic supposedly follows that if an infant presents with this triad of symptoms, the only explanation is abuse by the adult with the child at the time the symptoms manifested.

⁴ See Deborah M. Tuerkheimer, *Science-Dependent Prosecution and the Problem of Epistemic Contingency: A Study of Shaken Baby Syndrome*, 62 Ala. L. Rev. 513 (2011).

Cases premised on the SBS/AHT hypothesis typically follow three steps. First, the prosecution calls a doctor as an expert witness to testify regarding the cause and manner of the child's death or injuries and to opine that the child's observed medical condition could have been caused *only* by shaking the infant, or shaking and some additional impact. Second, the testifying expert relies on the hypothesis to identify the perpetrator by telling the jury that the last person physically with the child had to be the abuser because the child would have exhibited symptoms immediately upon infliction of the abuse. Finally, the prosecution's expert draws a conclusion about the defendant's purported state of mind by claiming that the injuries in question required such massive force that they could only have occurred through an intentional act.⁵

In the end, the SBS/AHT hypothesis—especially when used as the only means of proving the elements

⁵ Keith A. Findley et al., *Shaken Baby Syndrome, Abusive Head Trauma, and Actual Innocence: Getting It Right*, 12 Hous. J. Health L. & Pol'y 209 (2012); Deborah M. Tuerkheimer, *The Next Innocence Project: Shaken Baby Syndrome and the Criminal Courts*, 87 Wash. U. L. Rev. 1 (2009).

of a crime—simply cannot support the conclusions drawn. The SBS/AHT hypothesis lacks the hallmarks traditionally associated with science (which are required of admissible expert testimony), and the research on which the hypothesis is based is replete with foundational and design flaws. Perhaps most significantly, the SBS/AHT hypothesis is undermined by the problem of circularity: the very signs or conditions being studied for their diagnostic value are used to categorize the cases under study as either abuse or non-abuse.⁶ Put another way, the researchers assume the very conclusion they are studying.

Commentators and researchers in the field of SBS/AHT, including the most ardent supporters of the SBS/AHT hypothesis, acknowledge that circularity plagues the research and that it is difficult to conduct high-quality, unbiased research on the effects of shaking on infants.⁷ While these challenges highlight the deficiencies in the underpinnings of the hypothesis, they cannot excuse

⁶ Findley, *supra* n. 3, at 274.

⁷ Dr. Sandeep Narang, *A Daubert Analysis of Abusive Head Trauma / Shaken Baby Syndrome*, 11 *Hous. J. Health L. & Pol'y* 505, 529-32 (2011); Findley, *supra* n. 3, at 236.

criminal convictions based on inadequate, methodologically questionable research. And while advocates of the classic hypothesis call instead for reliance on the clinical judgment of examining physicians in the absence of a robust scientific foundation, as the Supreme Court has made clear, the *ipse dixit* of a group of purported experts cannot on its own suffice to establish reliable scientific evidence. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 157 (1999) (internal quotation omitted).

II. The SBS/AHT Hypothesis, And Its Specific Application In This Case, Is Not Supported By Contemporary Scientific And Medical Research.

Over the past two decades, a growing body of scientific and medical research has demonstrated that the presence of the so-called "triad" of symptoms associated with SBS/AHT does not prove that a child was abused. Recent research in the fields of evidence-based medicine and biomechanics has demonstrated that the combination of subdural hematoma, retinal hemorrhage, and cerebral edema is diagnostic neither of abuse in general, nor of the specific finding of abuse by shaking. Moreover, recent research has demonstrated that the triad of medical findings thought to be indicative of abuse

cannot be used to determine the level of force applied or the time at which an injury occurred.

A. Subdural Hematoma, Retinal Hemorrhage, And Cerebral Edema Or Encephalopathy Have A Wide Variety Of Causes Unrelated To Trauma Or Abuse.

Taking into account the recent research and developments in the field, the triad of medical findings traditionally associated with the SBS/AHT hypothesis may not be used to make an unequivocal diagnosis of SBS/AHT. More specifically, each of the triad of findings, and the triad together, are now known to be associated with a large number of accidental or non-traumatic causes, thus undermining the level of certainty typically associated with a SBS/AHT diagnosis.⁸

Regarding subdural hematoma, the classic formulation of the SBS/AHT hypothesis suggests that an act of shaking causes the brain's bridging veins and axons to rupture, leading to the bleeding, brain

⁸ See M. Vaughn Emerson *et al.*, *Ocular Autopsy and Histopathologic Features of Child Abuse*, 114 *Am. Acad. Ophthalmology* 1384, 1393 (2007) ("[M]uch of what we think we know about the systemic and ocular findings of child abuse will continue to be the result of speculation rather than based on sound evidence").

dysfunction, and swelling associated with SBS/AHT.⁹ However, the scientific and medical community now recognizes many different reasons for subdural hematoma, including natural and accidental causes. Indeed, according to several studies, bleeding and swelling around the brain in infants is actually more likely to be explained by a non-traumatic cause, given the relatively small amount of bleeding generally found in alleged SBS/AHT cases.¹⁰

With respect to the second of the triad of findings associated with the SBS/AHT hypothesis, retinal hemorrhages are also now known to result from various causes other than abuse. Under the SBS/AHT hypothesis, experts usually testify that an infant's

⁹ See Mary Case *et al.*, *Position Paper on Fatal Abusive Head Injuries in Infants and Young Children*, 22 *Am. J. Forensic Med. & Pathology* 112, 112 (2001).

¹⁰ See Geddes *et al.*, at 1297 (explaining that the subdural bleeding sometimes seen in infants is very different from the bleeding that would be expected to result from the bursting of the high-volume bridging veins thought to be caused by shaking); Waney Squier & Julie Mack, *The Neuropathology of Infant Subdural Hemorrhage*, 187 *Forensic Sci. Int'l* 6, 7-8 (2009); Marta Cohen & Irene Scheimberg, *Evidence of Occurrence of Intradural & Subdural Hemorrhage in the Perinatal and Neonatal Period in the Context of Hypoxic Ischemic Encephalopathy: An Observational Study from Two Referral Institutions in the United Kingdom*, 12 *Pediatric & Dev. Pathology* 169, 175-76 (2009).

eye injuries were caused by violent shaking that resulted in traumatic tearing of the retina. However, research now demonstrates that the scientific basis for such an opinion is anything but conclusive.¹¹ And even proponents of the SBS/AHT hypothesis now concede that retinal hemorrhaging is consistent with a number of other potential causes, both traumatic and non-traumatic.¹²

While retinal hemorrhages may result from trauma caused by tremendous force, they may alternatively result from numerous other traumatic and non-traumatic causes, including short falls, metabolic disease, nutritional deficiencies, genetic syndromes,

¹¹ See A.K. Ommaya et al., *Biomechanics and Neuropathology of Adult and Pediatric Head Injury*, 16 *Brit. J. Neurosurg.* 220, 233 (2002) ("The hypothesis of 'intra-ocular' retinal hemorrhages caused by orbital shaking has not been tested experimentally"); P.E. Lantz et al., *Perimacular Retinal Folds from Childhood Head Trauma*, 328 *Brit. Med. J.* 754, 756 (2004) ("Statements in the medical literature that perimacular retinal folds are diagnostic of [SBS/AHT] are not supported by objective scientific evidence"); accord Gregg T. Leuder et al., *Perimacular Retinal Folds Simulating Nonaccidental Injury in an Infant*, 124 *Archives Ophthalmology* 1782, 1782 (2006).

¹² See, e.g., Alex V. Levin et al., *Clinical Report—The Eye Examination in the Evaluation of Child Abuse*, 126 *Pediatrics* 376, 376 (2010) ("Retinal hemorrhage is an important indicator of possible abusive head trauma, but it is also found in a number of other conditions").

tumors, stroke, infection, hypoxia, hypotension, hypertension, increased intracranial pressure, and medical interventions.¹³

Finally, cerebral edema and encephalopathy are indisputably and universally known to result from any type of insult to the brain. Cerebral edema is defined as "excessive accumulation of fluid in the brain substance," and encephalopathy is defined as "any degenerative disease of the brain." *Dorland's Medical Dictionary* at 568, 590 (29th ed. 2000). The swelling and encephalopathy previously associated with shaking is more likely the result of hypoxia-ischemia, or deprivation of oxygen or oxygenated blood to the brain, a finding that has been acknowledged even by proponents of the SBS/AHT hypothesis.¹⁴

¹³ See Keith A. Findley et al., *Shaken Baby Syndrome, Abusive Head Trauma, and Actual Innocence: Getting It Right*, 12 Hous. J. Health L. & Policy 209, 214 (2012); Evan Matshes, *Retinal and Optic Nerve Sheath Hemorrhages Are Not Pathognomonic of Abusive Head Injury*, 16 Proc. Am. Acad. Forensic Sci. 272, 272 (2010); Mark Goetting & Bonnie Sowa, *Retinal Hemorrhage After Cardiopulmonary Resuscitation in Children: An Etiological Reevaluation*, 85 Pediatrics 585, 587 (1990); Leuder at 1782.

¹⁴ See J.F. Geddes et al., *Neuropathology of Inflicted Head Injury in Children, Microscopic Brain Injury in Infants*, 124 Brain 1299, 1304 (2001) ("[B]rain damage responsible for loss of consciousness in the majority of cases is hypoxic rather than traumatic"); see also,

Significantly, hypoxia-ischemia can result from a variety of accidental and non-traumatic causes, including birth, accidental trauma, metabolic diseases, nutritional deficiencies, genetic syndromes, clotting disorders, tumors, strokes, and infection.¹⁵ In light of the numerous causes of brain swelling and degenerative brain disease, cerebral edema and encephalopathy cannot be considered diagnostic of any particular cause of injury to the brain, let alone trauma or abuse. Brain swelling or general brain injury thus add little support to a diagnosis of SBS/AHT and could be as easily caused by any type of accidental trauma or disease.

Not only are the individual components of the triad not diagnostic of abuse, the same is true for all the components taken together because they are not independent. For example, a fall can cause all

Mark. S. Dias, *The Case for Shaking, Child Abuse and Neglect: Diagnosis, Treatment, and Evidence*, 362, 368 (Carole Jenny, ed., 2011) ("It is becoming increasingly clear from both neuroimaging studies and post-mortem analyses of fatal cases that the widespread cerebral and axonal damage in cases of AHT are, in fact, ischemic rather than directly traumatic in nature").

¹⁵ See Kent P. Hymel et. al., *Intracranial Hemorrhage and Rebleeding in Suspected Victims of Abusive Head Trauma: Addressing the Forensic Controversies*, 7 *Child Maltreatment* 329, 333-37 (2002).

three because a fall could cause a subdural hematoma, which in turn can increase intracranial pressure, causing retinal hemorrhage and edema. The findings in combination thus add little to the diagnosis of abuse because they are often interrelated.

These studies and research undermine the claim that subdural hematoma, retinal hemorrhage and cerebral edema are exclusively diagnostic of abuse or nearly so, particularly in cases like this one, where medical opinion forms the basis for the prosecution and direct evidence of abuse is absent.

B. Confessions And Incriminating Statements Of Individuals Accused Of Abuse Do Not Resolve The Problems With The Scientific Literature

As problems with the science underlying SBS/AHT have come to light and a lack of an evidence base for SBS/AHT claims has become clear, some proponents of the SBS/AHT hypothesis have claimed that the discrepancies can be resolved by examining confessions to shaking or abuse. Some proponents of the hypothesis have gone so far as to say that "confession...is the evidentiary basis for shaking."¹⁶

¹⁶Mark. S. Dias, *The Case for Shaking*, Child Abuse and Neglect: Diagnosis, Treatment, and Evidence, 362, 368 (Carole Jenny, ed., 2011).

Confessions cannot bear that scientific weight. First, confessions are not as reliable as once thought. Approximately 25% of the DNA exonerations within the Innocence Network involve false confessions or incriminating statements.¹⁷ Confessions are particularly problematic in child abuse cases, where the individuals being interrogated often are under extreme psychological stress (because of the injury or death of a child) and where complicated medical evidence is being used as evidence of guilt in an interrogation. In some cases, courts have rejected such confessions, and one prominent jurist referred to such confessions as "worthless as evidence." *Aleman v. Village of Hanover Park*, 662 F.3d 897, 902 (7th Cir. 2011).

Second, many of the statements termed "confessions" by supporters of the SBS/AHT hypothesis cannot reasonably be understood as admissions to violent or criminal acts. Some examples include descriptions of gentle shaking in the course of CPR or other resuscitative efforts. See, e.g., *Cavazos v. Smith*, 132

¹⁷ False Confessions, INNOCENCE PROJECT, <http://www.innocenceproject.org/understand/False-Confessions.php> (innocent defendants made incriminating statements, delivered outright confessions, or pled guilty in about 25% of DNA exoneration cases).

S. Ct. 2, 4, 181 L. Ed. 2d 311 (2011); *Aleman* at 901. Statements termed "confessions" by supporters of the hypothesis have included "burpings" and other benign practices.¹⁸

Third, confessions in SBS/AHT cases often conform to the suggestions of interrogators, rather than to the actual medical data. There are real risks to shaping medical opinion to conform to confessions, particularly those produced through the high-pressure interrogation tactics so frequently utilized in child abuse and child homicide interrogations. The New York Court of Appeals recognized this danger in 2014 in the case of Adrian Thomas. *People v. Thomas*, 22 N.Y.3d 629, 8 N.E.3d 308 (2014). Adrian Thomas was convicted of murdering his infant son, Matthew, in 2009. A misdiagnosis of a skull fracture by a physician led that doctor to conclude that Matthew must have been suffering from SBS/AHT. That the skull fracture was misdiagnosed is not in dispute. *Id.* at 637. Another delayed/missed diagnosis is crucial to the facts of Mr. Thomas's case; doctors later found that Matthew was suffering from a bacterial infection that had thoroughly colonized his body and caused septic shock.

¹⁸ Findley et. al. at 258.

Armed with the physician's misdiagnosis of a skull fracture, however, police engaged in a lengthy, high-pressure interrogation of the distraught father, during which they threatened to arrest his wife if he would not confess, told him that by confessing he could save his son's life (even though Matthew was already brain dead), and falsely assured him that if he only confessed, he would not be arrested and could go home. *Id.* at 638-9. The interrogation culminated in Mr. Thomas's confession that he had thrown his son onto a mattress after becoming frustrated. When the jury heard this confession at trial, Mr. Thomas was convicted.

The New York Court of Appeals reversed the conviction, finding that Mr. Thomas's confession was involuntarily made and should not have been put before the jury. *Id.* at 646. Significantly, the court wrote:

"His subsequent confession provided no independent confirmation that he had in fact caused the child's fatal injuries. Every scenario of trauma induced head injury equal to explaining the infant's symptoms was suggested to defendant by his interrogators. Indeed, there is not a single inculpatory fact in defendant's confession that was not suggested to him."

Id. at 646.¹⁹

¹⁹Mr. Thomas's interrogation and prosecution was explored at length in the documentary film *Scenes of a*

In *Aleman*, the 7th Circuit Court of Appeals took a similar—perhaps even stronger—view of the supposed “confession” in an SBS/AHT case. *Aleman v. Vill. of Hanover Park*, 662 F.3d 897 (7th Cir. 2011). Mr. Aleman was babysitting for 11-month-old Joshua Schrik when Joshua collapsed. *Id.* at 901. Mr. Aleman performed CPR on Joshua, which he initiated by gently shaking the infant. *Id.* During a police interrogation, officers told Aleman—falsely—that doctors knew the shaking during CPR had caused Joshua’s injuries. This account of what the doctors had said was a lie, but it caused Aleman to “confess”: “...if the only way to cause [the injuries] is to shake that baby, then, when I shook that baby, I hurt that baby.... I admit it. I did shake the baby too hard.” *Id.* at 902.

In evaluating the supposed “confession,” the Court wrote:

If a question has only two answers—A and B—and you tell the respondent that the answer is not A, and he has no basis for doubting you, then he is compelled by logic to “confess” that the answer is B. That was the vise the police placed Aleman in. They told him the only possible cause of Joshua's injuries was that he'd been shaken right before he collapsed; not being an expert in shaken-baby syndrome, Aleman could not deny the officers' false representation of medical opinion. And since he was

Crime, Dirs. Grover Babcock and Blue Hadaegh. New Box Productions, 2011.

the only person to have shaken Joshua immediately before Joshua's collapse, it was a logical necessity that he had been responsible for the child's death. Q.E.D. A confession so induced is worthless as evidence, and as a premise for an arrest.

Id. at 907 (emphasis added). Here, as in *Thomas*, the confession does not change the medical facts of Joshua's death, or add anything significant to the medical opinion. The fact that police were able to coerce Aleman to agree with them does not render their false representation of medical opinion more probably true.

The confession in *Harris v. Thompson*, 698 F.3d 609 (7th Cir. 2012), similarly disagrees with the medical evidence. On May 14, 2005, four-year-old Jaquari Dancy was found in his bedroom, asphyxiated by an elastic band that had come loose from a fitted bed sheet. The medical examiner initially reported the death as accidental. Id at 615. Police questioned Ms. Harris over a period of 27 hours, during which, she said, she was threatened, pushed, called names and denied food, water and use of a bathroom. Id at 616. At first, police said, she told them she had strangled Jaquari with a telephone cord because he would not stop crying after she disciplined the boys for leaving the apartment. Id at 615. This

statement was indisputably false; as the court noted, the telephone cord played no role in Jaquari's death. Id at 614, 615. Later, Harris gave a video-taped confession saying she had strangled the boy with the elastic band. Id at 615. After the confession, the medical examiner revised his report, classifying Jaquari's death as a homicide. Id at 615. Harris, a recent college graduate with a degree in psychology and a job in a nursing home, was charged with first-degree murder. Jaquari's brother, Diante, told police Jaquari liked to play as if he were Spiderman by wrapping the band around his neck and jumping off the bed, but the court excluded his testimony as incompetent. Id at 617. Despite the fact that Jaquari's father testified that he had seen Jaquari wrap the band around his neck in the past and Harris testified that the confession was false and the product of lengthy and coercive interrogation, the jury convicted Harris.

The 7th Circuit reversed, finding that it was error to bar Diante's testimony. The court also discussed false confessions at some length, noting that research involving false confessions gave the jury reason to doubt the reliability of Ms. Harris's confession, specifically noting her state of intense stress and

grief over the loss of her son as factors that may have led to a false confession. *Id.* at 631. On remand, the state dismissed all charges.²⁰

As in *Aleman* and *Thomas*, the dangers of conforming the medical opinion to the confession in Ms. Harris's case is clear; the fact that the police were able to induce Ms. Harris to "confess" that she strangled Jaquari with the telephone cord did not somehow make it true. Jaquari jumped off the bed and was strangled with the bed sheet no matter what police were able to pressure his mother to say.

Similarly, in *Butler v. State*, 608 So.2d 314 (Miss. 1992), a false confession produced a flawed assessment of cause of death. Sabrina Butler, a 17-year-old mother in Mississippi, brought her infant son to the hospital when she found him not breathing. The hospital's attempts to revive the baby were unsuccessful, and the baby was found to have serious internal injuries. After police questioning, Butler signed a statement that she had punched the baby in the stomach when he wouldn't

²⁰ See National Registry of Exonerations, Nicole Harris <http://www.law.umich.edu/special/exoneration/Pages/cas edetail.aspx?caseid=4202>.

stop crying. She was charged with murder, convicted by a jury in 1990, and sentenced to death. The Supreme Court of Mississippi granted Butler a new trial because the prosecutor impermissibly commented on the defendant's choice not to testify. *Id.* In 1995, at her new trial, the defense called a medical expert who testified that the baby had an undiagnosed medical condition that likely caused his collapse, and the injuries could have been caused by efforts to revive the baby. The defense also called the neighbors who saw Ms. Butler attempting CPR, and the physician who performed the autopsy, who testified that his work had been less than thorough. Butler was acquitted.²¹

Finally, a confession to a crime in one case does not mean that a crime must have been committed in another, totally unrelated case. Even if a validly obtained confession in one case indicated that shaking or abuse *could* have caused that particular child's injuries, that would not suggest that shaking caused the findings in a case like this one in which there is no confession. At most, this would simply place shaking on

²¹ See National Registry of Exonerations, Sabrina Butler <http://www.law.umich.edu/special/exoneration/Pages/cas edetail.aspx?caseid=3078>.

the lengthy and ever increasing list of potential causes.²²

C. While Some Evidence Questioning SBS/AHT Existed in 2007, Major Shifts in Medical and Legal Thinking About SBS/AHT Occurred After That Time

In light of the dispute and evolving understanding in the medical community with respect to the SBS/AHT hypothesis, courts around the country have begun to reverse convictions based on SBS diagnoses by medical experts. Recognizing the recent developments in evidence-based medicine and biomechanical research, courts have begun to question the viability of the SBS/AHT hypothesis as utilized in criminal prosecutions.

In recent years, both federal and state courts have overturned convictions obtained through the use of a medical expert utilizing the SBS/AHT hypothesis to demonstrate alleged guilt. Much of this legal change occurred after Mr. Epps's conviction. For example:

- Wisconsin v. Edmunds (2008) - in *Edmunds*, a Wisconsin state appellate court ordered a new trial for a defendant convicted in an SBS/AHT case on the basis of expert medical

²² Findley et al., *Getting it Right* at 261

testimony, holding that newly discovered evidence undermined the validity of the SBS/AHT hypothesis. See *Wisconsin v. Edmunds*, 308 Wis. 2d 374, 392 (Wis. Ct. App. 2008). The court held "there has been a shift in mainstream medical opinion since the time of [the defendant]'s trial as to the causes of the types of trauma [the infant] exhibited." *Id.* at 391. Citing the "emergence of a legitimate and significant dispute within the medical community" regarding the SBS/AHT hypothesis, the court found that a jury might have reasonable doubt as to the defendant's guilt. *Id.* at 392. The state subsequently dismissed all charges against Edmunds.

- *Del Prete v. Thompson* (2014) - in *Del Prete*, a federal court in Illinois found that newly discovered evidence discrediting the SBS/AHT hypothesis demonstrated the innocence of a woman convicted on the basis of an SBS diagnosis in 2005. See *Del Prete v. Thompson*, 10 F. Supp. 3d 907, 958 (N.D. Ill. 2014). The court found that new evidence based on today's understanding of SBS/AHT "[gave] rise to abundant doubt, not merely reasonable doubt, regarding Del Prete's guilt." *Id.* at 957. The court observed that recent scientific developments discrediting the SBS/AHT hypothesis "arguably suggest[] that a claim of shaken baby syndrome is more an article of faith than a proposition of science." *Id.* at 957 n.10.
- *Dobson v. Maryland* (2014) - in *Dobson*, a Maryland court ordered a new trial for a defendant convicted in 2010 under the SBS/AHT hypothesis, finding that the defendant had received ineffective assistance of counsel when her trial attorney failed to call expert witnesses to challenge the SBS diagnosis of the prosecution's experts. See Order at 26-27,

Dobson v. Maryland, No. 20-K-09-9572 (Cir. Court, Kent County, Apr. 7, 2014).

- *People v. Bailey* (2014) - in *Bailey*, a New York court granted a new trial on the basis of newly discovered evidence for Renee Bailey, who was convicted in 2002 on the basis of a SBS diagnosis of abuse. See *People v. Bailey*, 47 Misc. 3d 355, 374 (Sup. Ct. Monroe County 2014). The court determined that "there has been a compelling and consequential shift in mainstream medical opinion since the time of the Defendant's Trial as to the causes of the types of trauma that [the infant] exhibited." *Id.* at 373.

See also, *Ex Parte Brandy Del Briggs*, 187 S.W.3d 458 (2005); *Ex Parte Cathy Lynn Henderson*, 384 S.W.3d 833 (2012); *State v. Schoonmaker*, 143 N.M. 373 (2008).

In the end, the recent and escalating judicial recognition of developments in the scientific understanding of the SBS/AHT hypothesis undermine the validity of convictions secured wholly or in large part on the basis of this un-validated medical hypothesis. It is clear that convictions like that of Mr. Epps, based almost exclusively on the SBS/AHT hypothesis, lack the scientific foundation necessary to sustain a diagnosis of SBS/AHT and, it surely follows, guilt beyond a reasonable doubt.

Given the contemporary understanding in the scientific and medical community that the triad of

medical findings often associated with shaking can be attributed to a wide variety of causes unrelated to abuse, the SBS/AHT hypothesis cannot be used to diagnose abuse in the absence of other direct evidence of abuse. Although some prosecution experts associate certain findings with shaking, the literature is clear that there are many other possible causes for subdural hematoma, retinal hemorrhage, and cerebral edema or encephalopathy, either alone or in combination. In fact, numerous studies identify patients who present with this triad of findings, but who do not have any history of shaking incidents.²³ Put simply, this combination of findings does not on its own give rise to a definitive diagnosis of abuse.

C. Testimony Given At Trial That A Short Fall Could Not Have Caused The Injuries In This Case Was Erroneous, But In 2007, The American Academy's Official Position Was That Short Falls Could Not Cause The Findings Often Associated with Shaking.

²³ See, e.g., John Plunkett, *Fatal Pediatric Head Injuries Caused by Short-Distance Falls*, 22 Am. J. Forensic Med. & Pathology 1, 2-7 (2001); Michael T. Prange et al, *Anthropomorphic Simulations of Falls, Shakes, and Inflicted Impacts in Infants*, 99 J. Neurosurg. 143, 149 (2003); Scott Denton & Darinka Mileusnic, *Delayed Sudden Death in an Infant Following an Accidental Fall*, 24 Am. J. Forensic Med. & Pathology 371, 373-75 (2003); Werner Goldsmith & John Plunkett, *A Biomechanical Analysis of the Causes of Traumatic Brain Injury in Infants and Children*, 25 Am. J. Forensic Med. & Pathology 89, 94-96 (2004).

Dr. Celeste Wilson, a pediatrician, was incorrect when she testified that a fall or series of falls could not have caused Cindy's medical findings. Epps Trial Transcript, Volume 4 ("TT4") at 85. This testimony was erroneous; short falls can and do cause findings like Cindy's. At the time of trial, the hypothesis that findings like Cindy's could only be caused by shaking and could not be caused by a short fall had been disproven, though this was not well known or universally accepted within the community of pediatric practitioners. It had been disproven because studies (including perhaps most notably Dr. John Plunkett's 2001 study including a videotaped short fall of a toddler that resulted in death (*supra*)) had been identified and published. After Mr. Epps's trial, this research became even stronger when biomechanical analyses showed that the fall in Plunkett's 2001 study could be recreated and such a fall exceeded estimated injury thresholds²⁴. Put another way, in 2009, objective laboratory analysis confirmed Dr. Plunkett's 2001 conclusion. Science,

²⁴ See Van Ee et al., Child ATD Reconstruction of a Fatal Pediatric Fall, Proc. ASME (2009).

however, does not turn on a dime, and the law is even slower to change.

At the time of trial in this case, in 2007, the American Academy of Pediatrics ("AAP") endorsed a presumption of abuse when an infant presented with intracranial injuries and plainly had been telling its members since 2001 that "the constellation of these injuries does not occur with short falls"²⁵ In 2009, however, the AAP revised its position, removing the presumption of abuse when an infant presents with intracranial injuries, removing the language about the impossibility of short falls as a cause of findings like Cindy's and acknowledging that "the mechanisms and resultant injuries of accidental and abusive head injury overlap."²⁶

Other sources, particularly in the pediatric literature, reflect this change over time. For example, an article published in 2005 by strong supporters of the SBS hypothesis stated that, as an

²⁵ American Academy of Pediatrics, Committee on Child Abuse and Neglect, *Shaken Baby Syndrome: Rotational Cranial Injuries-- Technical Report*, 108 *Pediatrics* 206 (2001).

²⁶ Cindy W. Christian & Robert Block, *Abusive Head Trauma in Infants and Children*, 123 *Pediatrics* 1409 (2009).

indicator of abusive injury, "the triad has stood the test of time"²⁷; now, few, if any, pediatricians would make that claim. Indeed, one of the authors of the foregoing article now claims that "the triad is a myth" and that no trained pediatrician would make a diagnosis of SBS/AHT based on the triad.²⁸

When Dr. Wilson testified that a fall could not have caused Cindy's injuries and that she could confidently diagnose shaking in 2007, it is true that there was already evidence in the scientific and medical literature that she was wrong, but *she was testifying entirely in keeping with the official position of her professional organization at the time.* The same is true for her testimony that Dr. Plunkett's research was not accepted by the AAP. TT4 at 112. It may have been true in 2007, but it is not true today. Now, of course, that position has changed significantly. Position statements of large,

²⁷ Richards et. al. *Shaken Baby Syndrome*, 91 Arch Dis Child 205 (2005).

²⁸ Carole Jenny, Presentation on The Mechanics: Distinguishing AHT/SBS from Accidents and Other Medical Conditions, slide 33, 2011 New York City Abusive Head Trauma/Shaken Baby Syndrome Training Conference (Sept. 23, 2011), (PowerPoint available at http://www.queensda.org/SBS_Conference/SBC2011.html).

established medical organizations (like the AAP) necessarily do not reflect the newest, most cutting-edge research on a particular topic. Rather, they are a better measure of longer-term shifts in understanding about a particular topic and reflect the incorporation of new information in a group at large. When examining a "sea change" in the scientific community, a group's position statement is a better measure of the shifts in that group's way of thinking than the mere existence of articles, even if those articles are reliable and published in peer-reviewed publications, or the mere existence of dissenters, even if those dissenters' views are truthful and scientifically sound.

In evaluating evidence in alleged SBS/AHT cases, courts have begun to incorporate this information. In *Bailey*, a toddler fell from an eighteen-inch-tall chair, suffered serious brain injuries, and later died. *People v. Bailey*, 47 Misc. 3d 355, 374 (Sup. Ct. Monroe County 2014). At trial, the prosecution claimed that a short fall could not have caused her injuries, which included retinal hemorrhages, intracranial injury, and cerebral edema. At a three-week evidentiary hearing in 2014, experts for both

the prosecution and defense agreed that short falls can cause fatal injuries. *Id.* at 20. Indeed, even the prosecution's experts agreed that the testimony presented against Bailey at trial—that short falls cannot kill—was false. *Id.* at 12. The court concluded that "even falls of just a few feet generate levels of force and velocity that exceed known thresholds for brain injury." *Id.*, at 8, 22. Other courts have reached similar conclusions about the shifting science of SBS/AHT. See also *Edmunds* and *Del Prete*, *supra*.

Even more recently, the reality of this threat has become particularly alarming in jurisdictions like Massachusetts (and Middlesex County), where courts have become entangled in high-profile SBS/AHT prosecutions that have been either overturned or dismissed based on medical reviews that debunk the "triad" or "constellation" approach taken by those who adhere to the SBS/AHT hypothesis.²⁹

²⁹ See, e.g., Zachary T. Sampson, *Lawyers argue evidence from separate case could help prove nanny's innocence*, Boston Globe, available at: <http://www.bostonglobe.com/metro/2014/08/14/court-hearing-focus-shaken-baby-syndrome-two-middlesex-county-prosecutions/SyPtkQPvdzAuSU6kE08zcI/story.html>; Peter Schworm *et al.*, *In stunning reversal, nanny's*

Importantly, without the AAP's confident assertions that, with very few, if any, exceptions, findings like Cindy's were the result of a violent assault, physicians (including perhaps Dr. Wilson) would likely have been more inclined to investigate other potential causes of her findings, such as the easy bruising and possible bleeding disorder her mother described.

III. If The Evidence Undermining the Diagnosis of SBS/AHT is Not New, Then Counsel Was Ineffective When Failing to Investigate and Call Expert Witnesses for the Defense

Ineffective assistance of counsel is a major cause of wrongful convictions across the country. One study has found that inadequate assistance of counsel contributed to almost 25 percent of DNA exonerations.³⁰ Another study identified inadequate defense counsel as a primary factor contributing to wrongful convictions and highlighted counsels' "failure to fully investigate or to offer alternative

case dropped, Boston Globe, available at: <https://www.bostonglobe.com/metro/2015/08/31/state-medical-examiner-office-changes-finding-finds-homicide-infant-death/yQSNRpNQwWw5Ha29Bhqs4H/story.html>.

³⁰ Brandon L. Garrett, *Innocence, Harmless Error, and Federal Wrongful Conviction Law*, 2005 Wisc. L. Rev. 35, 75 (2005).

theories and/or suspects" in mounting a defense.³¹ Here, given the dearth of direct evidence introduced against Mr. Epps and the deeply flawed medical testimony relied upon by the prosecution, the dangers of ineffective assistance of defense counsel make the Court's intervention in this case critical.

A. Failure To Investigate A Viable, Scientific Defense Is Manifestly Unreasonable And Is Conduct That Can Lead To Wrongful Convictions.

In a case like Mr. Epps's, where the prosecution rests largely or entirely on expert opinion, any reasonable defense strategy would necessarily involve challenging the testimony of the prosecution's witnesses regarding SBS/AHT. Under the standard established by this Court, counsel's conduct was "manifestly unreasonable" and constitutes grounds for a finding of ineffective assistance. *Commonwealth v. Walker*, 460 Mass. 590, 598-99 (2011).

The "affirmative obligation under State and Federal law 'to conduct an independent investigation of the facts' . . . exists because the Sixth Amendment

³¹ New York State Bar, *Final Report of the New York State Bar Association's Taskforce on Wrongful Convictions*, 6, available at <https://www.nysba.org/WorkArea/DownloadAsset.aspx?id=26663>.

right to counsel is a cornerstone of a fair trial.” *Commonwealth v. Hampton*, 88 Mass.App.Ct. 162 (2015). The Sixth Amendment imposes on counsel a duty to investigate because reasonably effective assistance must be based on professional decisions, and informed legal choices can be made only after an investigation of options. *Strickland v. Washington*, 466 U.S. 668, 680 (1984); see also *Commonwealth v. Baker*, 440 Mass. 519, 529 (2003) (“Until [defense counsel investigated the accuracy of the Commonwealth’s expert testimony], he simply had no way of making a reasonable tactical judgment.”). This Court must review defense counsel’s investigation for objective reasonableness at the time of trial. *Strickland*, 466 U.S. at 689. This standard cannot be met when, as here, an attorney fails to investigate the prosecution’s scientific evidence. See *Dugas v. Coplan*, 428 F.3d 317, 332 n. 21(1st Cir. 2005) (finding ineffective trial counsel assistance where counsel failed to “thoroughly investigate the ‘not arson’ defense and seek expert assistance” for his indigent client). This is especially true when defense counsel knows what evidence the prosecution will use, such as forensic science or a theory founded on such science, and fails

to investigate or even attempt to challenge that science and/or theory.

In *Wiggins v. Smith*, the U.S. Supreme Court found counsel's performance deficient because "counsel chose to abandon their investigation at an unreasonable juncture, making a fully informed decision . . . impossible." *Wiggins v. Smith*, 539 U.S. 510, 527-28 (2003). Here, counsel abandoned his search for a defense expert after discussing the case with one physician who was a supporter of the SBS/AHT hypothesis, despite being aware of the existence of contradictory medical literature and expert opinions. Further, simply consulting with an appropriate expert could have strengthened counsel's ability to cross examine the Commonwealth's expert and challenge her assertions. See, e.g., *Dugas*, 428 F.3d at 331 (discussing effect consulting an expert can have on cross-examination and finding that defense counsel "demonstrated a clear lack of understanding of arson investigation and the principles invoked by the state's many expert witnesses"); *Commonwealth v. Baran*, 74 Mass. App. Ct. 256, 277 (2009) (an expert could have strengthened cross-examination and provided material for rebuttal). Instead, defense

counsel's cross-examination of the prosecution's medical expert, Dr. Wilson, demonstrates his inability to effectively challenge the SBS/AHT hypothesis. Instead of rigorously testing the science or asking the expert to confront alternative explanations or studies that conflict with her opinions, counsel asked her simply if she was aware of Dr. Plunkett's research. TT4 at 95.

While "strategic choices made after thorough investigation of law and facts relevant to plausible options are virtually unchallengeable," here, counsel did no such thing. *Strickland*, 466 U.S. at 690-91. Instead, by not even properly researching the medical issues—issues that formed virtually the entire foundation for the prosecution's case—Mr. Epps's attorney failed to investigate the "facts relevant to plausible options." See *id.* Further investigation would likely have led him to an expert like Dr. Scheller, the physician who testified at Mr. Epps's post-conviction hearing that Cindy's medical findings could be accounted for by a fall from a stool or down stairs. TMNT at 35-37.

B. *Hinton v. Alabama* Requires A Thorough Investigation Before The Selection Of An Expert.

In *Hinton v Alabama*, the U.S. Supreme Court found counsel's performance deficient with respect to his failure to obtain an adequate expert. *Hinton v. Alabama*, 571 U.S. ___, 134 S. Ct. 1081 (2014). In so doing, the court recognized the risk of wrongful convictions based on faulty forensic science and that "this threat is minimized when the defense retains a competent expert to counter the testimony of the prosecution's expert witnesses." *Hinton*, 134 S. Ct. at 1090. No such threat was minimized in Mr. Epps's case. On the contrary, at Mr. Epps's trial, defense counsel's failure to combat the prosecution's evidence with competent expert testimony served only to exacerbate the threat of wrongful conviction.

In *Hinton*, a unanimous Supreme Court held that a "trial attorney's failure to request additional funding in order to replace an expert he knew to be inadequate . . . constituted deficient performance." *Id.* at 1088. Counsel can be ineffective where, like in *Hinton*, defense counsel's decision is based on a mistake of law or on an incomplete investigation of the facts. Here, like in *Hinton*, no such investigation took place. According to *Hinton*, this

failure to investigate constitutes ineffective assistance of counsel.

This case does not require this Court to weigh "the relative qualifications of experts hired and experts that might have been hired." See *id.* at 1089. The question is not whether any particular doctor was more qualified (or more powerful) than the other; the question is whether counsel performed a "thorough investigation of the . . . facts" before choosing between an expert who could support his theory, and one who could not. Mr. Epps's trial counsel made no such investigation.

This Court should heed the warnings of *Hinton* that a robust investigation by trial counsel is not only required under the law, but necessary to curb the very real threat of wrongful convictions based on the "unsupportable and untested opinions of prosecution experts." *Hinton, supra* at 1089 ("Prosecution experts, of course, can sometimes make mistakes. Indeed, we have recognized the threat to fair criminal trials posed by the potential for incompetent or fraudulent prosecution forensics experts . . . [s]erious deficiencies have been found

in the forensic evidence used in criminal trials")
(internal quotations omitted).

**IV. With The Assistance Of An Appropriate Expert,
Trial Counsel Could Have Recognized And
Effectively Rebutted The SBS/AHT Testimony In
This Case.**

Much of the state's expert testimony in this case was deeply flawed on multiple levels. If defense counsel had presented expert testimony, Mr. Epps would have been able to demonstrate this to the jury—or at least present a powerful alternative theory for Cindy's injuries. And in the end, the jury was left with only the unrebutted, faulty SBS/AHT testimony presented by the prosecution's expert.

**A. The Prosecution's Experts In This Case Gave
Incorrect Testimony That Could Have Been
Rebutted By A Defense Expert.**

The prosecution's expert witness gave medical testimony that could have been rebutted by a competent defense expert. In particular, her testimony definitively concluding that Cindy's injuries must have been caused by violent shaking was erroneous, as was her testimony that a short fall could not have caused the injuries presented, and conveyed a level of certainty unsupported by the science.

**i. Experts testified at trial that
violent shaking must have caused**

Cindy's brain injuries. At a minimum, this assertion implies a scientifically unsupportable level of certainty.

Dr. Wilson testified at trial that violent shaking caused Cindy's brain injuries. TT4 at 70. She also testified that findings like Cindy's could be accidental if caregivers reported a fall from 70 feet or an unrestrained, high-speed car crash. TT4 at 87. This is mere speculation, utterly unsupported by objective data or in scientific literature. Given today's understanding of SBS/AHT, this assertion conveys a level of certainty that exceeds the limits of science and medicine.

ii. The prosecution's expert testified that falls could not have caused Cindy's brain injuries. This is false.

Injuries more serious than Cindy's, including fatal injuries, have been observed in children who suffer accidental falls from short distances.³² In one study, researchers performed a biomechanical

³² See, e.g., Plunkett, *supra*, Lantz et al., *Fatal acute intracranial injury, subdural hematoma, and retinal hemorrhages caused by stairway fall*, 56 J. of Forens. Sci. 1648 (2011), Steinbok et al., *Early Hypodensity on Computed Tomographic Scan of the Brain in Accidental Pediatric Head Injury*, 60 Neurosurgery 689 (2007).

recreation of a videotaped fatal fall and confirmed that the force attendant to such a fall exceeded thresholds for subdural hematoma, retinal hemorrhage, and cerebral edema.³³ The dangers of short distance falls have since been confirmed by other physicians and scientists.³⁴ Devastating injuries to the brain have been associated with accidental falls of all kinds, including household falls or falls from furniture, and the presence or purported severity of brain injuries cannot serve to indicate the type or degree of force that created them.³⁵ Simply put, there is nothing about Cindy's injuries that show they must have been caused by intentional abuse.

B. Expert Testimony Could Have Supported The Theory That Cindy Sustained Her Injuries Falling Off A Stool Or Down Stairs.

The introduction of competent expert testimony combatting the unsupportable conclusions and flawed testimony presented by the prosecution would invariably have aided Mr. Epps's trial defense and would almost certainly have cast doubt as to guilt.

³³ See Van Ee et al., *Child ATD Reconstruction of a Fatal Pediatric Fall*, PROC. ASME (2009).

³⁴ See, e.g., Steinbok et al., *supra* n. 32.

³⁵ *Id.*

As discussed above, numerous scientific examples discredit the theory that violent shaking must have caused Cindy's injuries. Testimony like that offered by Dr. Scheller at Mr. Epps's post-conviction hearing—that the fall from a stool and/or down stairs could in fact have caused the injuries sustained by Cindy—would invariably have had a meaningful impact on Mr. Epps's defense.

Courts in other jurisdictions have found ineffective assistance of counsel where counsel did not properly investigate or call expert witnesses in SBS/AHT cases.

People v. Baumer (MI, 2009)

In 2009, a Michigan Circuit Court reversed a defendant's conviction for first-degree child abuse, finding that "trial counsel was ineffective for failing to retain experts to challenge plaintiff's experts." *People v. Baumer*, Case No. 2004-2096-FH (Macomb County Cir. Ct., Nov. 30, 2009). At trial, the prosecution's experts testified that the injuries were caused by shaking. *Id.* at 7. At a subsequent post-conviction hearing trial counsel testified that "he was fully aware that an expert radiologist was necessary to contest plaintiff's expert radiologist's

findings of nonaccidental trauma." *Id.* at 8. Nevertheless, trial counsel presented only the testimony of a pediatric forensic pathologist, "who simply testified that she disagreed with the interpretation of the CT scans and MRIs, but that she was not qualified to provide an expert alternative interpretation." *Id.* Here, in Mr. Epps's case, counsel testified at the evidentiary hearing that he did not attempt to obtain Cindy's brain scans.

During post-conviction proceedings, the defendant presented "substantial evidence that experts were available at the time of trial to challenge the testimony of plaintiff's experts" and to establish alternative mechanisms for the injuries. *Id.* The trial court found that defense counsel's performance was deficient and "deprived defendant of a substantive defense" causing the defendant to suffer actual prejudice. *Baumer* at 9. The review of the radiology in Ms. Baumer's case was crucial; when appropriate defense experts analyzed the radiology, they discovered that the baby had an undiagnosed disease, specifically, venous sinus thrombosis.

People v. Ackley (MI, 2015)

A recent Michigan Supreme Court case, bears striking resemblance to this one. People v. Ackley, 497 Mich. 381 (2015). In *Ackley*, the defendant was watching his girlfriend's child and found her unresponsive on the floor next to the bed where she had been napping. *Id.* at 384. There was no direct evidence of abuse. At trial, the prosecution presented the testimony of five expert witnesses who all testified that based solely on the injuries, the child must have died from SBS/AHT. *Id.* The defense called no witnesses to support its theory that the child was injured when she fell from the bed, despite the availability of court funds for the purpose. *Id.* The defendant appealed his conviction arguing that his counsel's failure to secure an expert constituted ineffective assistance of counsel. *Id.* at 384-385. In an affidavit admitted at a post-conviction hearing, an expert stated that he would have testified in support of the defense that the child's injuries were likely the result of an accidental fall, not SBS/AHT. *Id.* at 387. The Michigan Supreme Court, considering the defendant's motion for post-conviction relief, held that "[g]iven the centrality of expert testimony to the prosecution's proofs and the highly contested nature of the underlying medical issue," the defense counsel's failure to call an

expert witness was not objectively reasonable. Id. at 389. The Court specifically commented on counsel's claim he wanted to avoid a "battle of the experts": "while we cannot say that a battle of the experts would have ensured the defendant's acquittal, counsel's failure to prepare or show up for the battle sufficiently "undermine[s our] confidence in the outcome" of this case to entitle the defendant to relief. Id. The Court reversed the Court of Appeals decision and granted the defendant a new trial. Id. at 397-398.

Melonie Ware (GA, 2009)

Melonie Ware's was convicted under the SBS/AHT hypothesis when a child in her care collapsed suddenly and died. Her conviction was overturned for ineffective assistance of counsel. At her retrial, new counsel presented experts and other evidence that the child was suffering from complications related to sickle cell disease and the resultant clotting problems caused his internal bleeding.³⁶

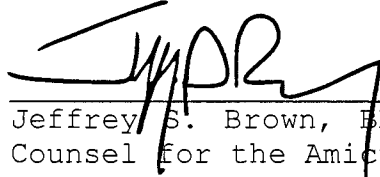
See also, Briggs; Schoonmaker; supra.

³⁶ National Registry of Exonerations, Melonie Ware, available at <https://www.law.umich.edu/special/exoneration/Pages/casetail.aspx?caseid=3814>

CONCLUSION

For the reasons discussed above, Mr. Epps is entitled to a new trial pursuant to Massachusetts Rule of Criminal Procedure 30(b), either free from the scientifically unsupportable opinions of the prosecution's experts or with the aid of a rebuttal expert witness to more accurately represent today's understanding of SBS/AHT.

Respectfully submitted



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November 23, 2015

CERTIFICATE OF SERVICE

I, Jeffrey S. Brown, hereby attest and certify under the pains and penalties of perjury Mass. R. App. P. 13(d) that 23rd day of November, 2015, I caused two copies of the foregoing amicus curiae brief to be served by mailing the same on this date to:

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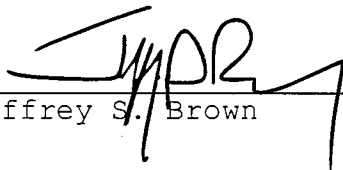
November 23, 2015



Jeffrey S. Brown

CERTIFICATION

I, Jeffrey S. Brown, hereby certify that I have complied with all rules of court pertaining to amicus curiae briefs including, but not limited to: Mass. R. A. P. 16(e) (references to the record); and Mass. R. A. P. 17 (amicus curiae).

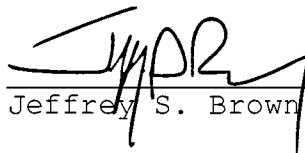


Jeffrey S. Brown

Affidavit of Jeffrey S. Brown

I, Jeffrey S. Brown, hereby swear and affirm pursuant to Mass. R. App. P. 13(a) that the foregoing brief was placed into the mail on November 23, 2015, which was within the time fixed for filing the foregoing.

Signed under the pains and penalties of perjury this 23rd day of November, 2015.



Jeffrey S. Brown