

No. 22-7546

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**In the Supreme Court of the United States**

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ROBERT LESLIE ROBERSON, III, PETITIONER

*v.*

TEXAS

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*ON PETITION FOR A WRIT OF CERTIORARI TO THE  
COURT OF CRIMINAL APPEALS OF TEXAS*

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**BRIEF OF AMICUS CURIAE  
WITNESS TO INNOCENCE IN SUPPORT OF  
PETITIONER**

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### **INTEREST OF *AMICUS CURIAE*<sup>1</sup>**

Witness to Innocence (WTI) is a non-profit organization of exonerated death-row inmates and their loved ones. Through public speaking, testifying in state legislatures, media work, and active participation in the nation’s cultural life, its members educate the public about wrongful convictions. WTI also provides a network of peer support for the exonerated, most of whom received no compensation or access to reentry services when released from death row. WTI is particularly concerned with this case because its members have been personally affected by pervasive problems involving unreliable forensic evidence and its application in courtrooms across the country. WTI advocates for reforms to prevent wrongful convictions and has a strong interest in ensuring that criminal convictions are based on valid and reliable scientific evidence—an interest directly implicated by petitioner Robert Roberson’s case.

### **SUMMARY OF THE ARGUMENT**

When a tragedy occurs, people want to know why. They want to make sense of suffering and death. That is especially true when the victim is an infant. The hypothesis that shaking can fatally injure a baby—later termed “Shaken Baby Syndrome” (SBS)—was doctors’ attempt to explain why infants with no external signs of trauma were showing up in hospitals with three symptoms, collectively known as the “SBS triad”: bleeding in the area between the brain and the skull (subdural hemorrhage), brain swelling (cerebral edema), and bleeding behind the eyes (retinal hemorrhage).

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<sup>1</sup> No counsel for any party authored this brief in whole or in part, and no entity or person, aside from *amicus curiae*, its members, or its counsel, made any monetary contribution intended to fund the preparation or submission of this brief. All parties were given timely notice of this filing.

According to the SBS hypothesis, absent a high-speed vehicle crash or a fall from a significant height, this constellation of injuries could be caused only by violent shaking inflicted by the person who had physical custody of the child at the time the symptoms arose.

The SBS hypothesis provided prosecutors with a straightforward causal explanation and a clear perpetrator. Since the 1970s, prosecutors have used SBS to charge over 3,000 people with abuse or murder, most of them caregivers or parents like petitioner, who was convicted for the death of his two-year-old daughter, Nikki. See Matthew Clarke, '*Shaken Baby Syndrome*' *Diagnoses Discredited, Convictions Questioned*, CRIM. LEGAL NEWS (May 15, 2018), <https://bit.ly/45qFIWl>.

However, over the past two decades, scientific research has revealed that the symptoms associated with SBS can be caused by other means, including, for example, short falls and underlying medical issues generally associated with oxygen deprivation. Consequently, SBS has come under increased scrutiny by medical experts and courts due to the lack of scientific proof behind the hypothesis. Scientific advancements regarding SBS have allowed numerous individuals to mount successful challenges to their convictions, often only after having spent years or decades in prison or even on death row. Their struggles, like those of people wrongly convicted based on other unreliable forensic theories, illustrate the human toll of uncritical acceptance of plausible-sounding scientific theories. WTI submits this brief to tell the stories of some of these SBS exonerees. Like petitioner, they are representative of the double tragedy that has befallen many parents and caregivers, who not only had a child in their care suffer injury, illness, or death, but also were wrongly convicted of harming or even killing them.



## ARGUMENT

### A. Widely Disputed Scientific Theories, Such As SBS, Have Resulted In A High Number Of Wrongful Convictions

Throughout the U.S. criminal justice system, scientific theories, in the form of forensic evidence, often play a critical role in criminal prosecutions. While some have been carefully developed, rigorously tested, and corroborated by the scientific community, others have been widely accepted within our legal system, often because of their intuitive plausibility, despite the fact that they have not been tested or proven. Indeed, some theories remain hotly debated in scientific and medical communities, yet are presented as fact by prosecutors and expert witnesses in support of criminal convictions. One such example is SBS.

Unreliable forensic theories typically have several common attributes, including: (i) being supported by limited or no scientific evidence or research; (ii) being presented as conclusive, with no acknowledgement of error rates; (iii) relying on subjective criteria or interpretation; and (iv) oversimplifying a complex science. See Sophia Kovatch et al., *Is It Forensics or Is It Junk Science*, PROPUBLICA (Jan. 31, 2023), <https://bit.ly/432esMo>. It is often the case that, despite limited supporting evidence and medical uncertainty, unreliable forensic evidence becomes widely accepted in the courts, resulting in countless criminal convictions. See, e.g., *Strengthening Forensic Science in the United States: A Path Forward*, NAT'L RES. COUNCIL at 4 (2009) (“[I]n some cases, substantive information and testimony based on faulty forensic science analyses may have contributed to wrongful convictions of innocent people. This fact has demonstrated the potential danger of giving undue weight to evidence and testimony derived from imperfect testing analysis.”).

Consider the trajectory of bloodstain-pattern analysis, a form of unreliable forensic evidence that purports to reconstruct a crime scene by analyzing the bloodstains left behind. In 1957, the Supreme Court of California first determined that bloodstain-pattern analysis was reliable enough to be admitted at trial; the theory then gained widespread acceptance through our legal system during the 1980s and 1990s. See Leora Smith, *How a Dubious Forensic Science Spread Like a Virus*, PROPUBLICA (Dec. 13, 2018), <https://bit.ly/3OBKKJu>.

However, bloodstain-pattern analysis was untested. *Ibid.* Even though it was not developed in an accredited lab, nor peer reviewed or “rigorously assessed in a large-scale study,” it went largely unchallenged for decades. R. Austin Hicklin et al., *Accuracy and Reproducibility of Conclusions by Forensic Bloodstain Pattern Analysts*, 325 FORENSIC SCI. INT’L 1 (2021). In recent years, the theory has been called into question, resulting in numerous, long-overdue exonerations. See, e.g., Pamela Colloff, *Bloodstain Analysis Convinced a Jury She Stabbed Her 10-Year-Old Son. Now, Even Freedom Can’t Give Her Back Her Life.*, PROPUBLICA (Dec. 20, 2018), <https://bit.ly/3BSJE4B>.

Bloodstain-pattern analysis is just one example of the dangers of unreliable forensic evidence. Many widely accepted forensic techniques have recently been called into question by scientific and medical experts, including bite-mark evidence, firearms-matching evidence, and hair and fiber evidence. When left unchecked, dubious forensic evidence can result in wrongful convictions and ultimately undermine the goals of the U.S. criminal justice system.

To counteract the risk of wrongful convictions, some jurisdictions have enacted laws that provide legal avenues to challenge convictions based on dubious forensic evidence. In 2013, Texas became the first state to enact

such a law—the very law through which petitioner sought relief below. Article 11.073 of the Texas Code of Criminal Procedure, known as the Junk Science Writ, allows individuals to seek post-conviction habeas relief where their convictions were based on forensic evidence that has been undermined by subsequent research.

Although Texas’s Junk Science Writ has resulted in new trials or acquittals, justice has not always been served, as petitioner’s case demonstrates. Although the SBS hypothesis presents many of the hallmarks of unreliable forensic evidence, and although reconsideration has resulted in numerous exonerations throughout the country, the Texas Court of Criminal Appeals hastily dismissed petitioner’s claim in a three-page opinion. But a review of some of the numerous exonerations in cases grounded in SBS evidence shows why petitioner’s case demands a more searching review.

Indeed, members of this Court cast doubt on the use of the SBS hypothesis in the courtroom nearly twelve years ago, highlighting the need for increased scrutiny. In *Cavazos v. Smith*, which concerned a grandmother’s assault conviction based on the SBS hypothesis, Justice Ginsburg authored a dissent, joined by Justices Breyer and Sotomayor, noting that “[d]oubt has increased in the medical community ‘over whether infants can be fatally injured through shaking alone.’” 565 U.S. 1, 13 (2011) (Ginsburg, J., dissenting) (quoting *State v. Edmunds*, 746 N.W.2d 590, 596 (Wisc. Ct. App. 2008)). Justice Ginsburg highlighted the shift in medical acceptance of the SBS hypothesis, observing that “[i]n light of current information, it is unlikely that the prosecution’s experts would today testify as adamantly as they did in 1997.” *Id.* at 14. “What is now known about SBS hypotheses,” Justice Ginsburg concluded, “seems to me worthy of considerable weight in the discretionary decision whether to take up this tragic case.” *Id.* at 15.

An analysis of SBS wrongful convictions illustrates that such cases are often predicated on fallacies that send innocent individuals to prison—or, in an egregious case like petitioner’s, may send them to their death. As Justice Ginsburg explained, those flaws warrant considerable weight in deciding whether to grant review.

**B. The Debunked Belief That Medical Conditions Cannot Cause SBS Symptoms Has Led To Wrongful Convictions**

One of the primary dangers of disputed forensic evidence is that controversial conclusions are accepted as fact. As a result, jurors may reject alternative explanations. This exaggerated certainty has been a pervasive problem with the SBS hypothesis—because the SBS hypothesis maintains that the triad of symptoms could have only been caused by a caregiver’s abuse, medical experts, investigators, and prosecutors are quick to reject alternative explanations.

Early medical consensus on SBS, particularly in the years before petitioner’s 2003 conviction, held that the constellation of injuries associated with SBS could not result from underlying medical conditions.<sup>2</sup> Accordingly, when the symptom triad was present, the idea that the injuries could have been caused by an illness was hastily dismissed. This is particularly true where other fallacies or assumptions associated with SBS were present, including where the infant had external injuries that were

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<sup>2</sup> Three years after petitioner’s conviction, medical experts published an influential book describing medical conditions that mirror SBS symptoms. Those conditions include, among others, prenatal, perinatal and pregnancy-related conditions, birth trauma and congenital malformations, accidental injuries, hematological diseases, infectious disease, and autoimmune and vasculitis conditions. See Andrew P. Sirotnak, *Medical Disorders That Mimic Abusive Head Trauma*, in L. Fraiser et al., *Abusive Head Trauma in Infants and Children* 191-226 (1st ed., 2006).

mistaken for abuse (but often caused by lifesaving measures such as CPR) or where the caregiver reacted in a way investigators or prosecutors deemed inappropriate. See *infra* Section E. Now, medical experts agree that the constellation of injuries associated with SBS actually can be caused by a number of medical conditions.

Unfortunately, at the time of his 2003 trial, petitioner did not have the benefit of research linking the SBS symptoms to medical conditions. Even if he had, the SBS hypothesis was then so widely accepted that it left little room for alternative explanations. In many SBS cases like petitioner's, the presence of the symptoms triad resulted in a rush to judgment that made it effectively impossible to propose alternative explanations. Several exonerations highlight how the uncritical acceptance of SBS resulted in a failure to explore medical conditions as the cause of the SBS triad.

**Julie Baumer** was convicted of first-degree child abuse by a Michigan jury in 2003 for the severe injury of her six-week-old nephew, Phillip. See National Registry of Exonerations, *Julie Baumer*, <https://bit.ly/45r53Q1> (last accessed June 8, 2023). Phillip's mother, Victoria, experienced a difficult delivery, which resulted in Phillip spending his first week in the newborn-intensive-care unit. *People v. Baumer*, No. 2004-002096-FH, 2007 WL 1095236, at \*1 (Mich. Ct. App. Apr. 12, 2007). Victoria suffered from drug addiction and gave Phillip to her sister, Julie, to raise. In October 2003, Julie Baumer brought her nephew to the emergency room with complaints that he was fussy and refused to eat. *Ibid.* An attending physician noted that Phillip was in a coma, severely dehydrated, hypoglycemic, in kidney failure, and anemic. *Ibid.* A CT scan revealed subdural bleeding and a skull fracture, although the fracture was not near the site of the hemorrhage. National Registry of Exonerations, *Julie Baumer, supra*. Phillip also had retinal bleeding.

*Ibid.* Medical specialists determined that the injuries were inflicted 12-48 hours before Phillip's arrival at the hospital. *Baumer*, 2007 WL 1095236, at \*1. A radiologist concluded that Phillip's injuries were best explained by blunt force trauma and shaking. *Ibid.* Although Phillip survived, he was disabled. Emily Bazelon, *Shaken-Baby Syndrome Faces New Questions in Court*, N.Y. TIMES (Feb. 2, 2011), <https://bit.ly/3onODay>.

Two doctors from Phillip's treating hospital testified that his injuries stemmed from either shaking or blunt force trauma, likely inflicted within the 12-24 hours before Phillip's CT scan. *Baumer*, 2007 WL 1095236, at \*3. In the face of such apparent certainty, Baumer's defense did not present any medical expert offering an alternative explanation. Baumer was sentenced to 10 to 15 years in prison.

Following Baumer's conviction, new lawyers took a fresh look at her case. National Registry of Exonerations, *Julie Baumer*, *supra*. They sent Phillip's brain scan to a radiologist, who concluded that the scans revealed a stroke, likely from an underlying infection. Bazelon, *supra*. Another radiologist and a forensic pathologist concurred, and concluded that Phillip's skull fracture was old and could have resulted from his difficult delivery. *Ibid.*

With the help of her new defense team, Baumer's conviction was overturned in November 2009. At Baumer's second trial, the defense presented six expert witnesses who testified that Phillip suffered from venous sinus thrombosis, or childhood stroke. National Registry of Exonerations, *Julie Baumer*, *supra*. The effects associated with that condition closely mirror those of SBS, including brain bleeding and subdural effusion.<sup>3</sup> Baumer

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<sup>3</sup> See generally Randy Papetti, Paige Kaneb & Lindsay Herf, *Outside The Echo Chamber: A Response to the "Consensus*

was acquitted of all charges at her second trial and was ultimately awarded compensation for her wrongful conviction. *Ibid.*

**Drayton Witt** was convicted by an Arizona jury in 2002 for the death of his girlfriend's five-month-old son, Steven. National Registry of Exonerations, *Drayton Witt*, <https://bit.ly/426pHLJ> (last accessed June 8, 2023). Steven's short life had been plagued by medical problems—in the weeks before his death, Steven exhibited flu-like symptoms and suffered from seizures. *Ibid.* Steven appeared to suffer a seizure in May 2002 while in Witt's care. *Ibid.* Steven was rushed to the hospital, where he arrived in cardiac arrest and later died. *Ibid.* A physician from Steven's treating hospital observed injuries such as retinal bleeding and concluded that Steven appeared to be the victim of SBS. *Ibid.* An autopsy later revealed the SBS triad, further cementing the preliminary diagnosis. *Ibid.* Witt, the last person to have custody of Steven, was indicted and subsequently convicted for his murder.

The Arizona Justice Project later re-examined Witt's case, enlisting eight medical experts to review Steven's injuries. *Ibid.* And just as in Baumer's case, the medical experts ruled out SBS and presented alternative hypotheses for Steven's death. *Ibid.* One such expert suggested a "classic picture of venous thrombosis," an

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*Statement on Abusive Head Trauma in Infants and Young Children*," 59 SANTA CLARA L. REV. 299, 343-46 (2019); see also Keith Findley, Patrick D. Barnes, David A. Moran & Waney Squier, *Shaken Baby Syndrome, Abusive Head Trauma, and Actual Innocence: Getting It Right*, 2 HOUS. J. HEALTH L. & POL'Y 209, 238-40 (2012) ("While some researchers and clinicians struggled to differentiate between accidental and inflicted impact, others began to consider—or more precisely re-consider—the role of natural conditions [such as venous thrombosis] or birth trauma as causal or contributing factors for the triad.").

alternative overlooked at Witt's trial. *Ibid.*; see also DEBORAH TUERKHEIMER, *FLAWED CONVICTIONS: "SHAKEN BABY SYNDROME" AND THE INERTIA OF INJUSTICE* 41 (2014). In fact, the physician who performed Steven's autopsy and who testified for the State at Witt's trial signed an affidavit stating that, in light of subsequent medical and scientific developments, he "[could] not stand by [his] previous conclusion and trial testimony that Steven Witt's death was a homicide" and that he "believe[s] Steven's death was likely the result of a natural disease process, not SBS." National Registry of Exonerations, *Drayton Witt, supra*. Witt was granted a new trial and all charges were later dismissed.

Baumer and Witt are just two among many SBS exonerees whose convictions resulted from a failure to consider alternative causes for the symptom triad, particularly underlying illnesses. Petitioner's situation is remarkably similar; because Nikki presented with the SBS triad, plausible alternative medical explanations for her death were overlooked. Nikki experienced several severe medical conditions during her short life, including chronic ear infections and breathing apnea. Pet. 4. In the days leading up to her death, Nikki had experienced vomiting, coughing, diarrhea, and a high fever. Pet. 4-5. Upon her hospital admission, the treating doctor observed brain swelling and bleeding on Nikki's CT scan, but quickly dismissed Nikki's recent illness as an explanation in favor of abuse. Pet. 6. The failure to investigate Nikki's underlying medical conditions continued following her death and throughout petitioner's trial. The medical examiner conducting Nikki's autopsy did not investigate her medical history, did not consider a toxicology report, and seemingly ignored the presence of macrophages in Nikki's lung tissue that were indicative of a virus. Pet. 8. Expert witnesses at trial also did not consider potential alternative medical causes for Nikki's



death, Pet. 8-13—the sole hypothesis was that Nikki died from a combination of shaking and blunt force trauma.

In seeking a new trial, petitioner's attorneys presented experts who found evidence of advanced viral pneumonia in Nikki's lungs—a condition that causes hypoxia, which in turn can cause the triad of SBS injuries. Pet. 20-23. Experts also testified that certain prescription drugs Nikki was taking might have contributed to her death. Pet. 21-22. Medical experts explored *none* of these alternative explanations previously. Instead, they rushed to judgment due to the presence of the SBS triad, effectively closing the door on alternative medical explanations that are now gaining acceptance in the medical community.

**C. The Debunked Belief That Short Falls Cannot Cause SBS Triad Symptoms Has Led To Wrongful Convictions**

Another alternative cause of infant injury that has been frequently overlooked is an accidental fall. Classic SBS hypothesis insists that the symptom triad cannot be caused by short-distance falls, but instead appears only after severe abuse. Accordingly, once doctors identified injuries consistent with SBS, they were quick to dismiss that an accidental fall could cause such injuries. SBS thus provided prosecutors with a straightforward explanation of the manner of death and evidence of *mens rea* stemming from the parent or caregiver's supposed frustration or anger. Deborah Tuerkheimer, *The Next Innocence Project: Shaken Baby Syndrome and the Criminal Courts*, 87 WASH. U. L. REV. 1, 5 (2009). In the decades since the inception of the SBS hypothesis, biomechanical research has found that, in fact, short falls from as little as three feet can cause serious brain injuries and even death in infants.

This now-debunked belief has resulted in the tragic conviction of numerous parents and caregivers who were

present when a child experienced a fatal short-distance fall. The “sea-change in scientific consensus” came only after many such defendants had spent years in prison for crimes that did not occur. See, e.g., *Hanson v. Baker*, 766 F. App’x 501, 502 (9th Cir. 2019) (affirming grant of habeas relief to man convicted of murder relying “almost exclusively on testimony from medical experts” that child’s injuries indicated “Shaken Baby Syndrome and that short falls cannot cause fatal head injuries”). In recent decades, “the scientific integrity of [such] testimony \* \* \* has been undermined. Medical experts now agree, and documentary evidence proves, that short falls can cause fatal head injuries in children \* \* \*.” *Ibid.*

**Kenneth Marsh** was convicted by a California jury in 1983 for the death of his two-year-old child, Phillip, and sentenced to prison for a term of 15 years to life. California Innocence Project, *Kenneth Marsh*, <https://bit.ly/43jpE7z> (last accessed June 8, 2023); *Toddler’s Accidental Death Ends With Babysitter’s Murder Conviction - The Ken Marsh Story*, JUST. DENIED, no. 25, Summer 2004, at 4, <https://bit.ly/42Ig50t>. Marsh had rushed Phillip to the hospital after he found him on the floor, severely injured from falling from a couch onto a fireplace hearth. Despite the child’s medical history, which included a bleeding disorder, a doctor injected Phillip with Mannitol, which exacerbated his cerebral bleeding. His brain continued to swell, his blood pressure dropped, and he died the following day. Although police initially treated the incident as an accidental fall, hospital doctors claimed, before performing an autopsy, that the child could not have suffered traumatic brain swelling and bleeding as a result of a fall. Prosecutors charged Marsh with murder. At trial, medical experts claimed that the only way the child could have sustained the injuries was through abuse, and that Marsh must have shaken Phillip to death.

Marsh was incarcerated for nearly 21 years. *Marsh v. Cty. of San Diego*, No. 05CV1568, 2008 WL 11411591, at \*1 (S.D. Cal. Sept. 23, 2008). He described what happened as “an accident that turned [his] life into a living nightmare.” *Toddler’s Accidental Death Ends With Babysitter’s Murder Conviction - The Ken Marsh Story*, *supra*. He explained:

I was convicted of a crime that didn’t happen, and sentenced to life in prison. I was only twenty-eight years old at the time. How can this happen?

*Ibid.*

In a 2002 habeas petition, medical experts submitted that much of the medical evidence used to convict Marsh was inaccurate, and that his son could have died from a short fall in combination with the treating doctor’s Mannitol injection. *Ibid.* After an independent expert reviewed the evidence, the State asked the court to grant the writ. The court did so, and the State dismissed the charges. California Innocence Project, *Kenneth Marsh*, *supra*. Marsh received compensation for his wrongful imprisonment.

In 2004, a Colorado jury found **Krystal Voss** guilty of child abuse for the death of her infant son, Kyran. Alan Prendergast, *Krystal Voss’s ‘Shaken Baby’ Conviction Finally Tossed*, WESTWORD (Aug. 9, 2017), <https://bit.ly/3MRPBnJ>; National Registry of Exonerations, *Krystal Voss*, <https://bit.ly/3Ww9J2R> (last accessed June 8, 2023). She was sentenced to 20 years in prison. Voss had rushed her limp and unresponsive son to the emergency room, explaining that Kyran had fallen off a friend’s shoulders and hit his head on the ground earlier that day. *Ibid.* A doctor noted bruises on the child’s abdomen and signs of subdural hematoma. At trial, the prosecution’s medical expert asserted that the injuries were consistent with SBS, and that the child was a victim of violent shaking. Echoing the prevailing medical

wisdom, the expert testified that a fall could not have caused the injuries.

More than a decade later, Voss's lawyers filed a new trial motion. The defense presented expert testimony explaining that the injuries were consistent with a short fall and earlier testimony "rel[ie]d] upon literature that is now more than 30 years old." National Registry of Exonerations, *Krystal Voss, supra*. Even the pathologist who performed Kyran's autopsy testified that, based on intervening medical advancements, he would have changed the cause of death from "homicide" to "undetermined." *Ibid*.

A judge vacated Voss's conviction and ordered a new trial; a month later, the State dismissed the charges. In 2002, Voss received compensation for her wrongful conviction.

**Zavion Johnson** was convicted in 2002 of second-degree murder for the death of his four-month-old daughter, Nadia. *Johnson v. Felker*, No. CV-07-357-RHW, 2010 WL 1904858, at \*1-3 (E.D. Cal. May 10, 2010). Johnson was sentenced to prison for 25 years to life and served nearly 17 years before his conviction was reversed. His daughter was taken to the hospital when Johnson and his family noticed her raspy breathing and increasing unresponsiveness. Earlier that day, she had slipped from Johnson's arms and fell while he was bathing her. Johnson's one-year-old brother had also hit her with a toy. She died the following day.

The autopsy report showed retinal hemorrhages and subdural hematoma. Although Johnson told investigators about the fall and the toy incident, prosecutors rejected that claim and instead relied on the SBS hypothesis to secure his conviction. At trial, three prosecution experts testified that the cause of death was "multiple injuries to the head and brain as the result of being violently shaken," and that Johnson's claimed short fall could not

account for the injuries. *Id.* at \*3. Testimony by more than a dozen witnesses that Johnson was a gentle and caring father led the jury to believe that he “was a good young man, very loving to his girlfriend and their baby girl, and that it would seem horribly out of character for him to murder his baby.” Northern California Innocence Project (NCIP), *Zavion Johnson*, <https://bit.ly/42Zniua> (last accessed June 8, 2023). They nevertheless convicted him based on the State experts’ “overwhelming” medical evidence. *Ibid.* One juror later recalled that, “without that evidence, we certainly would not have convicted Zavion Johnson.” Press Release, *Updated Medical Science Frees NCIP Client Zavion Johnson After 17 Years in Prison*, NCIP (Dec. 8, 2017), <https://bit.ly/3ODON8i>.

Years later, the Northern California Innocence Project reviewed the case in light of scientific advancements, soliciting opinions by medical experts, including the original pathologist who testified against Johnson, that the child’s injuries were consistent with the fall Johnson had originally described. Two other prosecution witnesses conceded that, in light of new scientific evidence, the child’s injuries could have resulted from an accidental fall. *After 15 Years in Prison, Father Is Freed Because of Questionable Evidence in Shaken Baby Case*, L.A. TIMES (Dec. 9, 2017), <https://bit.ly/3OCKUjP>. A court reversed his murder conviction in 2017, and the State dropped all charges. Johnson recently received compensation from the California Victim’s Compensation Board. Press Release, *Updated Medical Science Frees NCIP Client Zavion Johnson After 17 Years in Prison*, *supra*.

These stories feature remarkable similarities to petitioner’s case. Like the medical experts in those cases, the doctor attending to Nikki’s injuries rejected petitioner’s explanation of Nikki’s apparent fall out of bed. Consistent with the then-prevailing medical consensus,

the doctor concluded that it “would basically be impossible” for a short fall to cause Nikki’s injuries. Pet. 6. Petitioner’s conviction was secured in part based on this now-debunked assumption. Just as in the exonerees’ cases, petitioner’s habeas court heard new evidence that short falls can cause the exact kind of internal bleeding observed in Nikki. Pet. 18-19. But petitioner remains on death row despite the change in medical consensus that eventually freed Marsh, Voss, Johnson, and many others.

**D. The Debunked Belief That Infants Would Exhibit Symptoms Immediately After Suffering Trauma, Such That The Last Caregiver Must Have Inflicted The Injuries, Has Led To Wrongful Convictions**

Another notable fallacy of the SBS hypothesis is the belief that a shaken infant will manifest symptoms almost immediately after abuse. Then-prevailing assumptions about the tight temporal link between the event and the symptoms meant that an SBS diagnosis clearly identified the culpable party or at least significantly narrowed the suspect pool. Under this view, once doctors diagnose SBS based on the presence of the symptom triad, “[a]ll that remains is to identify the last person with the conscious child. That person becomes the suspect, who can then be confidently pursued.” Tuerkheimer, *The Next Innocence Project, supra*, at 32. Whereas the other SBS tenets helped to establish the *actus reus* (by holding that the symptoms triad could only result from violent shaking) and *mens rea* (that the shaking sufficient to cause such injuries was necessarily so violent that it could not have been accidental), the belief that a child would immediately display injuries helped to establish *identity*—the last person with the child had to be the perpetrator.

Scientific research has since shown that this belief, too, was wrong. Medical experts now agree that an infant can experience a “lucid interval,” *i.e.*, a period of time

between an impact event or illness and the manifestation of symptoms during which the child can appear symptom-free. *Id.* at 19.

Because medical experts had long dismissed the concept of lucid intervals, parents and caregivers have been wrongly prosecuted simply because they were the last person to care for the child.

**Clarence Jones** is one example. Because he was alone with his son Collin when the child began exhibiting symptoms, Jones immediately became the primary suspect. Once the attending physician suspected child abuse based on the child's injuries, the detective confronted Jones: "If you didn't cause the injuries to Collin, then who did?" *Jones v. State*, No. 0087, 2021 WL 346552, at \*2 (Md. Ct. Spec. App. Feb. 2, 2021). Consistent with that theory, the State argued at trial that, because the child exhibited SBS symptoms, he must have been shaken by the last person to have been with him. Mid-Atlantic Innocence Project, *Victory for Clarence Jones!* (July 8, 2021), <https://bit.ly/433W4me>. That theory was supported by testimony of the State's expert, who rejected the concept of lucid intervals, and dated the child's injuries contemporaneously with his collapse and hospital admission, "even when the medical records did not necessarily support that conclusion." *Jones*, 2021 WL 346552, at \*18. As the Maryland Court of Special Appeals explained when it ordered that guilty verdict set aside, "even assuming that shaking could cause the constellation [of injuries], the lucid interval hypothesis brings into question the presumption that the last person with the child \* \* \* is medically or legally responsible." *Ibid.*

**Randy Liebich** served nearly 15 years in prison after an Illinois jury convicted him of murdering his partner's two-year old child, Steven. National Registry of Exonerations, *Randy Liebich*, <https://bit.ly/3WygukF> (last accessed June 8, 2023). Liebich was babysitting

Steven when he started vomiting and began breathing irregularly after choking on food. In the days beforehand, the child's mother had struck him. The defense at trial argued that Steven died of complications from the mother's mistreatment. But the medical examiner concluded that Steven's injuries were the result of trauma occurring just hours before the child's admission to the hospital, while in Liebich's care, and a doctor testified that the injuries were so severe that, had they been inflicted a day earlier, the child would have died earlier. *Ibid.*

In post-conviction proceedings that led to Liebich's exoneration, the prosecution's medical examiner admitted that, upon her review of the medical records, she discovered that the child had acute pancreatitis resulting from injuries prior to the day of the incident, and that "given the pathology," it was "improbable" that the injuries occurred on the day of the incident. *Ibid.* Instead, the child's collapse appeared to be the result of a process that had begun days earlier. *Ibid.* Another medical examiner and a pathologist likewise submitted affidavits describing the "considerable consensus" that had emerged since Liebich's conviction "that children may have lucid intervals." *People v. Liebich*, No. 2-13-0894, 2016 WL 1222198, at \*10 (Ill. App. Ct. Mar. 28, 2016). Liebich's conviction was vacated in 2018. The State then dismissed the charges after receiving a letter from the medical examiner who had testified against Liebich, in which she stated that the child's death "did not occur through actions taken on \* \* \* the day [the child] was admitted to the hospital." See National Registry of Exonerations, *Randy Liebich*, *supra*. Instead, he "died from abdominal injuries that were present at least two days before hospital admission." *Ibid.* Liebich received a certificate of innocence in 2022, and the Illinois Court of Claims awarded him compensation for his wrongful conviction. *Ibid.*



Again, petitioner’s conviction was based in part on the same faulty assumptions that led to Jones’s and Liebich’s convictions. The pediatrician who testified for Texas opined that the alleged shaking would have immediately caused Nikki’s symptoms, thus clearly indicating to the jury that petitioner, as the last person to care for Nikki, must have been the one to cause her injuries. Pet. 12-13. Like Jones and Liebich, petitioner was the presumed perpetrator based on the then-prevailing view that a child cannot experience lucid intervals following the onset of injury or illness. Despite the change in scientific consensus, petitioner—whose conviction is based on the same flawed theory—still sits on death row.

#### **E. Wrongful Convictions Are Often Predicated On A Suspect’s “Inappropriate” Reaction**

Finally, another particularly concerning aspect of SBS cases is the extent to which false convictions are predicated on subjective opinions about the appropriateness of the caregiver’s reaction to an infant’s injury, illness, or death. In numerous SBS cases, treating physicians, police, and prosecutors have testified regarding an accused’s supposedly “inappropriate” reaction. Such a reaction is considered an indication of abuse and, coupled with the other fallacies and assumptions described above, has been invoked to support an SBS diagnosis.

For example, a Mississippi jury convicted **Sabrina Butler** in 1990 for the death of her nine-month-old son, Walter. National Registry of Exonerations, *Sabrina Butler*, <https://bit.ly/432wyOk> (last accessed June 8, 2023). Butler, then 18, returned home following a short jog to find Walter not breathing and unresponsive. Butler rushed Walter to the hospital, but attempts at resuscitation failed. An autopsy determined that Walter had died of internal injuries, and revealed abrasions, bruises, and scars on Walter’s body. During

interrogations, Butler had offered police conflicting explanations regarding Walter's injuries—she referred to a non-existent babysitter and ultimately signed a statement that she had punched Walter in the stomach. *Ibid.* Butler's trial focused heavily on these statements, and she was convicted and sentenced to death. Butler later recounted the questioning, saying:

I was alone with no lawyer or parent with me. I told [the officer that] I tried to save my baby. He wrote down what I said and threw it in the garbage. He yelled at me for three hours. No matter what I said, he screamed over and over that I had killed my baby. I was terrified. I was put in jail and not allowed to attend Walter's funeral.

*Ibid.*

Butler was later granted a new trial, at which her defense team presented evidence that Walter's external injuries resulted from Butler's incorrect attempt to perform CPR and that Walter had died from a rare genetic kidney condition. Butler was acquitted and later awarded compensation. Years later, Butler gave birth to a daughter, who was diagnosed with (and successfully treated for) the same genetic kidney condition as Walter.

**Shawn Brown** was convicted of voluntary manslaughter in 2010 for the death of his son, Shawn Jr., and later exonerated. The jury heard testimony that, while other family members gathered in Shawn Jr.'s hospital room to pray, Brown was watching television and seemed detached. National Registry of Exonerations, *Shawn Brown*, <https://bit.ly/3BRKpuH> (last accessed June 8, 2023). Authorities monitoring **Clarence Jones** following Collin's death noted that Jones did not cry. Madeleine O'Neill, *25 Years After 'Shaken Baby' Conviction, Baltimore County Man Once Again Tries to Prove His Innocence*, DAILY RECORD (Apr. 2, 2023),

<https://bit.ly/3qar4lZ>. Expectations about the “proper” way to react following tragedy are not unique to SBS cases, but caregivers’ reactions to infant injury and death feature heavily in SBS cases, particularly where the accused is a parent or family member of the victim, and such evidence often overshadows other evidence at trial.

Petitioner’s case presents a tragic example of this misconception. Petitioner, who has an eighth-grade education and is autistic, evidently failed to react to Nikki’s death in a way that was satisfactory to investigators. Pet. i. Hospital staff and authorities noted petitioner’s flat affect when discussing Nikki’s injuries and interpreted his reaction as a lack of grief over her death. Pet. 6. Petitioner was diagnosed with autism only after his 2003 conviction, and thus his seemingly inappropriate reaction was unexplained at his trial and taken as an indication of a guilty conscience. Because of this misconception and other fallacies associated with SBS as discussed above, petitioner now faces death by lethal injection.

### CONCLUSION

Without this Court’s intervention, it appears that petitioner will be the first individual executed for an SBS conviction. In light of recent scientific developments debunking essential pillars of the SBS hypothesis, highlighted by the stories of the exonerees above, petitioner’s case warrants a more searching review. This Court should grant review or, alternatively, summarily reverse.

Respectfully submitted.

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